Exploring the role of managers in quality and safety work in nursing homes and homecare services

A multiple case study

by

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Summary

Introduction: Working on quality and safety in nursing home and homecare services is difficult. Ever-increasing demands from an ageing population and political pressure to keep patients at home are among the challenges facing nursing homes and homecare. There is less knowledge of patient safety risks and adverse events in primary care than in specialised healthcare.

Aim: This thesis explores the role of managers in quality and safety work in nursing homes and homecare services. Moreover, the thesis designs, implements, and evaluates a leadership intervention in nursing homes and homecare services to support managers' quality and safety work.

Methods: This study was designed as a two-phase longitudinal multiple case study consisting of design and pilot testing; and implementation and evaluation of the SAFE LEAD intervention. The intervention is based on a leadership guide and includes several workshops and learning activities facilitated by researchers. In phase 1, the intervention was designed with researchers, co-researchers and managers from two nursing homes and one homecare service. The pilot test of the leadership intervention was conducted in one nursing home and one homecare service. Data collection consisted of focus group interviews and observation of managers. Phase 2 started by exploring quality and safety challenges as perceived by managers and employees in two nursing homes and two homecare services prior to participation in the leadership intervention. The study then continued with a longitudinal study of the implementation and evaluation of the leadership intervention and its influence on managers quality and safety work. Data collection in phase 2 included focus group interviews, observations, workshops and site visits with managers and employees. Data analyses in phases 1 and 2 included deductive content analysis and interweaving of observation and interview data.

Results: The results describe all activities from development to evaluation of a leadership intervention and its influence on managers' quality and safety improvement work in nursing homes and homecare services.

Paper I detailed the involvement of stakeholders and demonstrated how a participatory approach was important for adaptations of a leadership guide to nursing home and homecare contexts. An intervention that managers could use in their work practice was developed and pilot tested in one nursing home and one homecare service. A key finding in Paper I is the role of context and the need to tailor intervention material (web and booklet) to the context and to the needs, time constraints, language, and interests of managers.

Paper II explored managers' and employees' perceptions of quality and safety challenges in two nursing homes and two homecare services before the intervention took place. Managers and employees found that quality and safety challenges depended on several factors and implied multiple trade-offs. Managers struggled with external change processes, budget cuts that affected common understanding of and commitment to quality and safety improvement at managerial and staff levels.

Paper III showed that the intervention workshops and leadership guide contributed to a common understanding and commitment to quality and safety in the management teams. The leadership intervention influenced managers' work practice in different ways depending on capacity and needs in the organisations. The leadership guide and the workshops created a social and reflexive arena for quality and safety work in which managers could focus on these topics. Moreover, it provided the managers with a tool for clearer sense of quality and safety work in different settings. Managers found it important that someone established a structure and took responsibility for scheduling and organising quality meetings. However, management continuity and the establishment of structures were crucial for the intervention to be adopted.

Conclusion: The longitudinal insight in this thesis broadens the understanding of contextual impact on quality and safety work in nursing homes and homecare services and showed the comprehensive work with translating knowledge into practice. The thesis demonstrates the importance of participatory approach and involvement of stakeholders when designing a leadership intervention. Managers and employees perceived interrelated quality and safety challenges and found context work to be time consuming to make quality and safety improvement common efforts in the organisations. The leadership intervention created a place for reflection for managers and brought a more structured process and commitment to organisational quality and safety work.

Abbreviations

KTA: Knowledge to Action Framework

NTP: Normalisation Process Theory

NSD: Norwegian Centre for Research Data

N.d.: No date

OQ: Organising for Quality

PDSA: Plan, Do, Study, Act

QUASER: Quality and Safety in Europe by Research

REK: Regional Committees for Medical and Health Research Ethics

SAFE-LEAD: Improving Quality and Safety in Primary Care - Implementing a Leadership Intervention in Nursing Homes and Homecare

SEIPS: Systems Engineering Initiative for Patient Safety

USHT: Centre for Development of Institutional and Homecare Services

WHO: World Health Organisation

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1 Introduction

Managers play an important role in working on quality and safety in healthcare (Bate et al., 2008; Jha & Epstein, 2010; Künzle et al., 2010 Leape et al., 2009). Still, quality and safety improvement is poorly rooted in management of primary care, such as nursing homes and homecare, and managers have limited use of research-based improvement tools in their work (Meld. St. 26. 2014-2015; Meld. St. 10. 2012-2013; Meld. St. 11 2014–2015). There is increasing knowledge of this topic in the specialised healthcare service, but we still lack comparable knowledge in primary care. This thesis investigates the role of managers in quality and safety work in nursing homes and homecare and addresses managers' ordinary work challenges in approaching quality and safety and their use of improvement tools in these settings.

1.1 Quality and safety in primary care

The increasing demands from an ageing population, patients' more complex needs, and the desire to have patients remain at home have put pressure on healthcare services in western countries (Dixon-Woods et al., 2012; Jha et al., 2010; Lang et al., 2008; Lindblad et al., 2018; Vaughn et al. 2019; Vincent & Amalberti, 2016; Strømme et al., 2020). The World Health Organization (WHO) indicates that globally, as many as four out of ten patients are harmed while receiving healthcare in primary and ambulatory care settings. The most serious errors are related to diagnosis, prescription and the use of medicines (WHO, 2018). Other preventable types of harm include pressure ulcers, falls, venous thromboembolism and catheters causing urinary tract infections (Vincent & Amalberti, 2015).

Patient safety risks and adverse events in primary care are less known than in specialised healthcare settings (Guise et al., 2014; Henriksen et al., 2009; McDonald et al., 2013). At the same time, homecare is rapidly

growing and there is a need to identify the type and patterns of safety concerns for users, family members and caregivers (Larsson et al., 2018; Lang et al., 2008). Caregivers in homecare travel alone to patients and it can be difficult to access medical supplies without the support of colleagues (Lang et al., 2008). This can also be seen with earlier discharge from hospital and the increasing number of patients receiving homecare, lack of resources for continuing competence development and the isolated nature of homecare environment (Gautun & Syse 2017; Lang et al., 2008; Schildmeijer et al., 2018). Homecare services are struggling with fragmentation of care, discontinuity and multiple care givers that lack overview of patient status and an unregulated environment (Glette et al., 2018; Lang et al., 2008). In homecare, performing clean or sterile procedures may be almost impossible and there is a risk that homecare staff transferring infection from one home to another (McDonald, 2013). All forms of homecare need to be negotiated to a much greater extent than other settings due to patient preferences and these values will often take priority over medical guidelines (Stajduhar, 2002; Vincent & Amalberti 2016). Employees in homecare services are working alone in decision making with patients and the increased pressure on homecare services has created a disparity between demands for competence and workers' actual competence (Bing-Jonsson et al., 2016; Bjerkan et al. 2020; Genet et al., 2011; Haltbakk et al., 2019; Maybin et al. 2016).

In nursing homes, frail and vulnerable patients often have extensive needs for nursing care. A minor adverse event can cause serious injury (Andersson et al., 2018). Norwegian research by Glette et al. (2018) shows that managers and employees experience patients in nursing homes as sicker and more complex and patient care as becoming more time consuming. Most serious adverse events are caused by medication errors, falls, delayed or inappropriate intervention and missed nursing care (Andersson et al., 2015; Andersson et al., 2018; Panesar et al., 2016). The most common contributing factors were lack of competence, incomplete documentation, teamwork failure, inadequate

communication (Andersson et al., 2018), heavy workload and time pressure (Al-Jumali & Docette, 2017) and distances in the ward and the storing of information in different places (Odberg et al., 2020). Medication errors by nurses are often attributed to medication packaging, poor communication, unclear medication orders, and to workload and staff rotation (Hammoudi et al., 2017). A qualitative observational study in nursing homes found that interruptions during medication administration can be characterised as passive, active or technological interruptions such as background noise, discussions or use of mobile applications (Odberg et al., 2017). Nursing homes also have the risk of infection being spread among residents (FHI, 2020). This is linked to the shortage of registered nurses and part-time jobs that require many workers to work in several locations (Kirkevold et al., 2020).

The implementation of information and communication technologies in healthcare settings, in both nursing homes and homecare, has the potential to improve the quality and safety of services, but it may also introduce new potential risks to patients (Bates & Gawande, 2003; Battles & Keyes, 2002; Guise et al., 2014; Johannesen et al., 2019b; Lyngstad et al., 2014). Medical and technical advances have enabled patients to undergo the advanced treatment of complex and long-term illnesses at home. But, as care becomes more complex, interaction among professionals from home healthcare, nursing homes, general practitioners, specialist care and social care can impose risk (Lang et al., 2008). Electronic patient journal systems that do not document and communicate patient information internally and between departments is also a potential safety risk in primary care settings (Bjerkan et al., 2020; Sogstad & Skinner, 2020; Vassbotn et al., 2018). To summarise, minor incidents, discontinuity, and multiple care providers with limited overview of patient status and development may have cumulative negative effects in primary care (Vincent & Amalberti, 2016).

The role of managers in quality and safety

Management involvement and commitment in activities are crucial in the development of cultures and systems to improve quality and safety (Birken et al., 2012; Clegg et al., 2005; Husabø et al., 2018; Jha & Epstein, 2010; Leape et al., 2009; Oldenhof et al., 2013; Oldenhof et al., 2016). Managers at different organisational level are important in the effort to improve quality and safety in healthcare. Middle managers have a role in bridging information gaps and their boundary-spanning role allows them to influence senior management and front-line staff (Birken et al., 2012; Clegg et al., 2005; Oldenhof et al., 2013; Oldenhof et al., 2016). Middle managers can be described as coordinators, communicators, campaigners and conflict managers, with responsibility for translating and conveying information into day-to-day activities for front-line staff (Birken et al. 2012; Zjadewicz et al., 2016). Effective communication is key for clinical leaders to influence and empower staff to share and learn from each other (McSherry et al., 2016). Parand et al. (2014) found that senior hospital managers' activities related to quality and safety were undertaken in relation to strategy, use of data, and organisational culture. Leadership is the foremost requirement of any quality improvement effort (WHO, 2018). In Norway, managers in nursing homes and homecare services need to balance external and internal factors such as type of service, infrastructure, staffing, competence, commitment, culture of improvement and user orientation (Forås & Andreassen et al., 2020). There is a knowledge gap in how this operates in practice and how managers work with quality and safety over time and with different tools. This thesis reduces this knowledge gap by exploring the role of managers in quality and safety work.

Research-based tools in quality and safety work

It has always been challenging to translate research into practice and to bridge the gap between research and the complexities of practice (Dopsen et al., 2009; Greenhalgh, 2018). Translating research into

practice involves many processes, systems, and interactions between the researchers and knowledge users. Research-based tools such as clinical practical guidelines are designed to facilitate evidence-based decision making (Brouwers et al., 2013; Greenhalgh, 2018). However, the development of these knowledge tools requires active involvement and collaboration between researcher and knowledge users. Several knowledge translation frameworks acknowledge the social nature of knowledge implementation (Rycroft-Malone & Bucknall, 2010; Stetler et al., 2009). They help researchers and practitioners who implement quality and safety improvement initiatives and identify contextual factors for better use of knowledge. However, the research evidence from specific use of tools and frameworks in the nursing home and homecare setting is limited. There has also been a call for implementation of research-based tools for managers in Norway and sound evaluation of factors in and barriers to success (Meld. St. 29 2012–2013; Meld. St. 26 2014-2015; NOU, 2015). This PhD thesis helps to close this knowledge and practice gap.

The role of context in quality and safety work

Context can be conceptualised as a set of events or factors that surround improvement efforts (Damschroder et al., 2009; McDonald, 2013). The context can be the internal (structure of the organisation, the work culture, competence) or the external (laws, external policies, funding) setting of the organisation. Therefore, organisational change processes are context-dependent, and the processes are likely to differ among healthcare organisations (Ferlie & Dopsen, 2009). Efforts to improve healthcare quality and safety occur in many situations, and improvements may be suitable for some organisations but not others (Ferlie & Dopsen, 2009). Moreover, the contextual factors should be taken into account in research and interventions in healthcare services (Batalden & Davidoff, 2007; Coles et al., 2017; Dixon-Woods et al., 2012; Kaplan et al., 2012). The settings that nursing homes and homecare services work within vary greatly, and there are few studies on how

contextual factors affect their quality and safety work. Furthermore, the way in which managers handle contextual factors as part of their quality and safety work has been insufficiently investigated (Kaplan et al., 2010; Wiig et al., 2019). The thesis therefore contributes to understand how contextual factors influence nursing home and homecare managers' work in improving quality and safety.

1.2 The Norwegian healthcare context

Norway is a parliamentary democracy, divided into three administrative levels: the state, 11 counties and 356 municipalities (Kartverket, 2021; Ringard et al., 2013). The Norwegian healthcare system is semi-decentralised. The parliament is the national decision-making body. In the specialised healthcare services the responsibility is held by the state, administered by the four Regional Health Authorities, which govern the hospital trusts. The municipal healthcare services have no direct steering line from the national authorities. Therefore, Norwegian municipalities have freedom in the organising of their primary care services. The municipalities are responsible for the provision of all primary care services, including rehabilitation, physiotherapy and nursing homes, midwife, homecare, and after-hours emergency services. They are also responsible for public health and preventive measures (Ringard et al., 2013; Saunes et al., 2017). This thesis focuses on nursing homes and homecare services, as part of the primary care services.

Nursing homes provide 24-hour care, treatment or rehabilitation that is more intensive than patients can receive at home. Nursing homes can have several departments such as long-term care, sheltered care for dementia, rehabilitation and short-term care. The nursing homes employ interdisciplinary professionals such as physiotherapists, occupational therapists, chaplains and general practitioners who hold full-time positions or make visits. Homecare services provide healthcare services in the patient's home, usually assisting with personal hygiene,

administration of medication, wound and palliative care (Ringard et al., 2013).

The organisational structure of the Norwegian healthcare system is built on the principle of equal access to services for all inhabitants, regardless of their social or economic status, country of origin and geographical location. This long-standing feature of the Norwegian welfare system has been enshrined in national healthcare legislation and strategic documents (Ringard et al., 2013; Saunes et al., 2017). Although everyone formally has an equal right to healthcare, there are variations in the real access to healthcare services as a result of geographical differences, organisation, size and diversity in settlement (Health and care services act, 2011; NOU, 2018). Local needs and conditions are taken into account in the assessment and prioritisation when municipalities offer healthcare services (NOU, 2018).

The Coordination Reform and the municipality's responsibility

The Coordination Reform from 2012 gives the municipality increased responsibility for meeting patients' needs for coordinated healthcare services, and the municipalities are obligated to co-finance the secondary healthcare service and are economically responsible for patients considered ready for discharge from the hospitals (Health and Care Service Act, 2011; Innst. 212 S 2009-2010; Meld. St. 47 2008-2009). The reform was established to ensure patient treatment at the lowest level possible and for healthcare services to be provided closer to where the patients live (Grimsmo et al., 2015). This led to an increase in patients who were ready for discharge and the patients were often sicker and needed more complex treatment and where little flexibility was shown in relation to the municipalities' need for time to plan (Gautun & Syse, 2013; Gautun & Syse, 2017; Glette et al., 2018). In this way, the Coordination Reform put pressure on the nursing homes and homecare services with demands for increased competence and was expected to improve patient safety.

Increased attention on quality and safety in the Norwegian healthcare context

Since 2010, there have been patient safety campaign, programmes and action plans towards quality and safety improvement in Norway (Helsedirektoratet, 2005; Helsedirektoratet, 2017; Helsedirektoratet, 2019; Kunnskapssenteret, 2014a; Kunnskapssenteret 2014b; Meld. St. 10 2012-2013; Meld. St. 11 2014-2015; Meld. St. 26 2014-2015; Meld. Meld. St. 13 2016–2017; St. 11 2018 –2019; Meld. St. 9 2019-2020; Meld. St. 11 2020-2021). The specialised healthcare service has been required to participate in these campaigns and programmes, while the participation of municipalities is voluntary. In the municipalities, the Centres for Development of Institutional and Homecare Services (USHT) have played a central role in the dissemination of patient safety campaign work, but it has been up to the individual municipality to decide on its own involvement (Kunnskapssenteret, 2014a; Kunnskapssenteret 2014b; Forås & Andreassen, 2020). Efforts have been directed towards better coordination of healthcare services, and increased attention to quality and patient safety (Meld. St 47 2008-2009; Meld. St. 10 2012-2013; Meld. St. 11 2014-2015; NOU, 2018). The increased attention to quality and safety is seen from white papers and actions plans at the national level and includes systematic leadership involvement in quality and safety improvement, a new management regulation (2017) (Forskrift om ledelse og kvalitetsforbedring i helse- og omsorgstjenesten, 2017) and the establishment of The Norwegian Health Investigation Board (2019) (UKOM, 2019).

Reporting systems, quality indicators, and regulatory demands

One thousand of the most severe adverse events were mandatorily reported to the Norwegian Board of Health Supervision in 2020 (Andresen, 2020). Of these events, 700 were from hospitals and 150 from primary care. This used to be a reporting system for hospitals only, but from 2019 it has been mandatory for the municipalities, which are

responsible for providing primary care (nursing homes, homecare, general practitioners). The Norwegian Board of Health Supervision argues there is a large degree of underreporting from the municipalities as this is a new system (Andresen, 2020).

The Norwegian compensation system for patient injuries is an agency under the Ministry of Health and Care Services. It processes compensation claims from patients who believe they have suffered an injury after treatment or failure in the healthcare service. Moreover, several cases with serious consequences for the patient in hospitals, have not been found again in the error reporting system. The Norwegian compensation system describes that the local error reporting system does not provide an accurate picture of the type of injuries that most patients sustain. This makes it difficult to learn from the adverse events and prevent them from recurring, and compromises patient safety (Norwegian Patient Injury Compensation, 2021).

A management regulation on quality improvement from 2017 is based on four elements that are important in a management system: planning, implementing, evaluating, correcting and clarifying the manager's responsibility for quality and safety improvement work (Plan, Do, Study, Act, or PDSA) (Forskrift om ledelse og kvalitetsforbedring i helse- og omsorgstjenesten, 2017). This regulation elaborates on the requirements and responsibility for managers to understand quality and safety challenges and risks and to ensure systematic improvement work. The management regulation is important for managers to provide professionally sound healthcare services and work on quality and safety improvement (Forskrift om ledelse og kvalitetsforbedring i helse- og omsorgstjenesten, 2017; Øyri et al., 2021; Øyri et al., 2020a; Øyri et al., 2020b). This holds managers in nursing home and homecare services accountable for quality and safety improvement (Meld. St. 11 2020–2021). Crucial in this regard is thus, the competencies of managers within nursing homes and homecare services and their interactions with

municipal and other actors in establishing and implementing a quality and safety agenda within their own organisations, as well as to build improvement capacity.

In terms of national quality indicators, there are fewer quality indicators in nursing home and homecare settings than in the specialised healthcare services (Meld. St. 9 2019–2020). The policymakers and health authorities (e.g., Directorate of Health, Ministry of Health and Care Services, Norwegian Institute of Public Health) have tried to reduce the gap with increased focus on indicators such as hospital readmission rates, waiting time for a nursing home placement, waiting time for homecare services, nutrition, competence level (proportion of employees with education in municipal health care services), dental services last 12 months, hours of doctor per resident in nursing homes, and activities for residents with dementia or disability (Helsedirektoratet, n.d.; Meld. St. 9, 2019–2020).

An important first step in preventing harm in primary care is to understand how often patient safety incidents occur, what type of incidents occur, and what impact they have (Rubin & Meyer, 2021; Panesar et al., 2016). In Norway, we do not have such a system; this responsibility rests with the healthcare organisations and services themselves.

1.3 The SAFE-LEAD project

This thesis is part of a larger research project titled ‘Improving Quality and Safety in Primary Care - Implementing a Leadership Intervention in Nursing Homes and Homecare (SAFE-LEAD)’ (Wiig et al., 2018). The aim of the SAFE-LEAD project was to build leadership competence in quality and safety among managers in primary care and support their quality and safety improvement work. The SAFE-LEAD project builds

on the European Union's Seventh Framework Program-funded project, 'Quality and Safety in Europe by Research' (QUASER) (Fulup, 2013; Robert et al., 2011) by translating and implementing the research-based *QUASER Guide* (Anderson et al., 2019), into Norwegian nursing homes and homecare settings. The SAFE-LEAD leadership guide comprises seven quality and safety challenges that managers often face. The SAFE-LEAD project applies a mixed-methods design and explores the implications of the leadership guide on managers' and staff's knowledge, attitudes, and practices.

The thesis is limited to the study of managers' challenges in quality and safety work from the perspectives of managers and employees in the SAFE-LEAD project. More specifically, the thesis translates, adapts and pilot-tests a leadership intervention, then implements it. The PhD project studies this development and implementation through a qualitative case study. Other publications from the project have used the quantitative material (Ree, 2020; Ree & Wiig, 2019a; Ree & Wiig, 2019b) (see Appendix 1 for survey).

1.4 Aim and research questions

The aim of this thesis was to explore the role of managers in quality and safety work in nursing homes and homecare services from the perspectives of the managers themselves and their employees. This thesis designs, implements, and evaluates a leadership intervention in nursing homes and homecare services to support quality and safety work.

The following research questions (RQ) guided this study:

RQ:1 How can a leadership intervention for improving quality and safety be designed for implementation in nursing homes and homecare contexts? (Paper I)

RQ:2 What are the perceived current challenges in the quality and safety work of managers and employees in nursing homes and homecare services? (Paper II)

RQ:3 How does a leadership intervention influence managers' work practice to improve quality and safety in nursing homes and homecare and what are the necessary requirements for the intervention to be adopted? (Paper III)

1.5 Key concepts

The role of managers

The thesis conceptualises managers as employed in a nursing home or homecare services. Managers are part of a management team and have responsibility for quality and safety. The management teams in the thesis are selected by their organisations and can consist of unit managers, department managers, coordinators, and professional development nurses. In addition, the role of managers in quality and safety work is treated in terms of managers' opportunity and responsibility to structure, engage, communicate, and motivate for quality and safety work and improvement in nursing home and homecare services.

Quality and safety

Quality and safety are often used and described together in the descriptions of healthcare services. The Norwegian authorities base their definition of quality on six dimensions, one of which is safety (Helsedirektoratet, 2005). Quality in healthcare services means that the healthcare service must be effective, safe and secure, involve and empower users, be coordinated and characterised by continuity; use resources wisely, and be accessible and fair (Helsedirektoratet, 2005; Meld. St. 10 2012-2013). The definition meets the requirements of regulations, guidelines, and professional perspectives on how to provide

the highest quality of care. The definition used by Norwegian authorities is in line with Institute of Medicine's definition of quality in healthcare (Institute of Medicine 2001; Institute of Medicine 2005).

This thesis applies a narrower definition of quality in line with the original QUASER guide. Here 'quality' is defined as clinical effectiveness, patient safety and patient centredness (Doyle & Bell, 2013; Robert et al., 2011). In addition, as care coordination is central to the understanding of quality in Norwegian primary care, it was incorporated into the SAFE-LEAD study's conceptualisation of quality early in the project. This addition was based on input from co-researchers with clinical knowledge and experience (Johannessen et al., 2019a). The thesis uses the quality and safety concept as a pair, consistent with Norwegian governments. Patient safety is however conceptualised in line with Vincent (2011) as 'the avoidance, prevention and amelioration of adverse outcomes or injuries stemming from the process of healthcare' (Vincent, 2011, p. 4).

Quality and safety work

The thesis applies the concept 'quality and safety work' which here is considered as the work managers are doing as part of their job that is of relevance for quality and safety improvement. This relates to both the systematic improvement work, and to tasks that may influence patient quality and safety. In this way, the thesis is less concerned with quality and safety outcomes than with the work processes.

1.6 Structure of thesis

The thesis consists of two parts. The first six chapters constitutes the thesis synopsis. Chapter 1 presents the background and aim of the study. Chapter 2 describes the theoretical framework, including Organising for Quality and the Knowledge To Action framework. Chapter 3 explains

the methodological approach and details on design, case selection, data collection, analysis, ethics, research rigour and quality, and the role of the researcher. Chapter 4 presents the results from the two phases of the multiple case study. Chapter 5 discusses the study findings and the methodological strengths and limitations. Chapter 6 presents conclusions, implications for practice and recommendations for further research. The second part contains three published, peer-reviewed research articles.

Paper I

Johannessen, T., Ree, E., Strømme, T., Aase, I., Bal, R., Wiig, S. (2019). Designing and pilot testing of a leadership intervention to improve quality and safety in nursing homes and homecare (the SAFE LEAD intervention). *BMJ Open*, 9:e027790.

Paper II

Johannessen, T., Ree, E., Aase, I., Bal, R., Wiig, S. (2020). Exploring challenges in quality and safety work in nursing homes and homecare– a case study as basis for theory development. *BMC Health Services Research*, 20, 277.

Paper III

Johannessen, T., Ree, E., Aase, I., Bal, R., Wiig, S. (2021). Exploring managers' response to a quality and safety leadership intervention: findings from a multiple case study in Norwegian nursing homes and homecare services. *BMJ Open Quality*,10:e001494

2 Theory

Theory can be used as a framework to understand social phenomena and interpret findings (Bryman, 2016). Several quality and safety theoretical models (Reimann et al., 2012) and implementation frameworks (Graham et al., 2006; McDonald, 2013; Rycraft-Malone & Bucknall, 2010) could be relevant for this thesis, but this thesis has chosen two frameworks to guide and interpret the research process. The theoretical background of this thesis is based on Organising for Quality (OQ) (Bate et al., 2008) and Knowledge to Action (KTA) (Graham et al., 2006). The OQ is used to understand the role of managers in quality and safety work and to understand how managers organise quality and safety in nursing homes and homecare services. The OQ guides the understanding of context, the quality and safety challenges in primary care settings, and is a dynamic framework to understand the interaction among organisational and human and contextual factors and how these influence each other. The KTA, a knowledge translation framework, is used to guide and understand the development and implementation of the SAFE-LEAD intervention and managers' work processes.

2.1 Organising for Quality

The Organising for Quality (OQ) framework is a research-based framework based on fieldwork in seven hospitals in Europe and the United States. As a result, the researchers found six challenges – structural, political, cultural, educational, emotional, and physical and technological – that organisations need to overcome to achieve and sustain quality and safety (Bate et al., 2008). Figure 1 depicts the OQ framework. The OQ framework has been influenced by organisational studies and organisation theory and seeks to understand the processes of quality improvement and the interaction with human factors and the organisations. In addition, it is concerned with how different levels in the

organisations interact with their inner and outer contexts and how this interaction affects these processes (Bate et al., 2008; Wiig et al., 2014a).

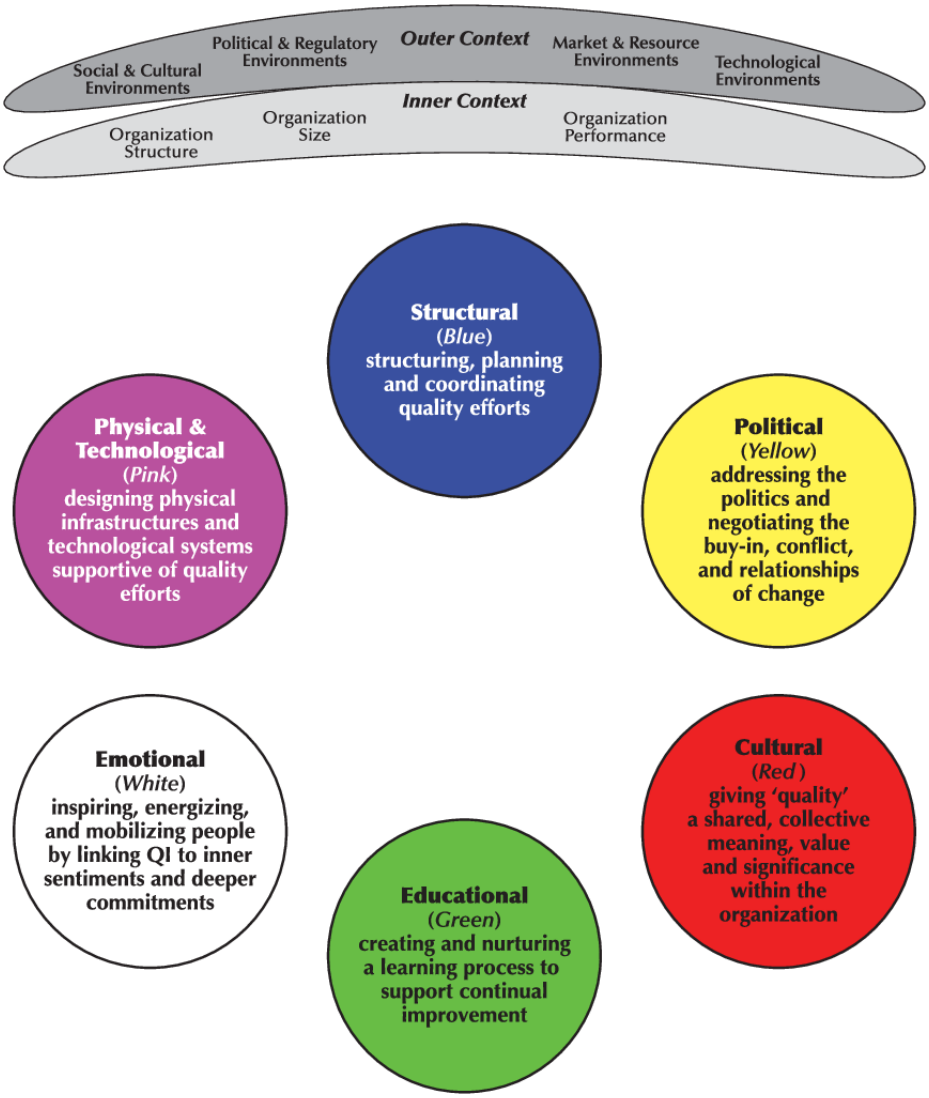

Figure 1. Organising for Quality Framework (Bate et al., 2008, p 254)

The *structural* challenge is the organisation and planning of quality and safety work. This involves a need for a formal quality plan together with strategic leadership that provides direction and focus to the

organisation's quality and safety efforts. The planning can also entail the ability to create organisational slack for quality and safety work such as extra resources that enable employees to step away from their everyday operations to work on improvement efforts (Bate et al., 2008).

The *political* challenge requires addressing changes that affect quality and safety improvement efforts. Political considerations must be integrated into the organisation's quality and safety work, and staff and patients must be empowered to influence their local practice (Bate et al., 2008).

The *cultural* challenge consists of a shared understanding and commitment to the organisation's quality and safety work processes. The cultural challenge requires creating an organisational culture that holds quality and safety as a common value (Bate et al., 2008).

The *educational* challenge is concerned with the creation of learning processes around quality and safety improvement activities. Employees are encouraged to participate in professional development and to share new knowledge, skills and expertise. The educational challenge also emphasises the use evidence-based learning and to evaluate this impact on quality and safety (Bate et al., 2008).

The *emotional* challenge supports employees to motivate their working on quality and safety. The quality efforts of the organisation should reflect employees' sentiments and beliefs. There is a need for organisational champions or a group of committed employees who can drive the organisation's quality and safety improvement effort (Bate et al., 2008).

The *physical and technological* challenge involves building physical and technical infrastructures that support and sustain quality and safety efforts. Examples are the organisation's infrastructure and technology, proximity to other units, functionality of information technology systems

and how implementation of information technology and information systems support service improvement (Bate et al., 2008).

In the OQ framework, contextual factors are either inner or outer. Inner context is the organisation's size and structure: number of patients, public or private, and degree of organisational stability such as continuity in leadership and financial situation. Outer context encompasses political and regulatory environments, market environments, and technological environments such as advances and availability in technology (Bate et al., 2008). Conceptualising inner and outer context is important in understanding how quality and safety processes interact across the healthcare system (Wiig et al., 2014).

The OQ framework considers leadership as an integrated part of quality and safety. The integrated leadership perspective illustrates how leading quality and safety is part of all quality and safety challenges and needs to be handled on a daily basis in theory and practice (Bergerød & Wiig 2016). In Bate et al.'s case study leading to the development of the OQ framework, organisations that achieved and sustained a high quality of care had systematically resolved their quality challenges (Bate et al., 2008). The researchers presented a checklist of these challenges that practitioners could use to identify shortcomings in quality in their organisations and offered ways of resolving them (Bate et al., 2008; Wiig et al., 2014). Bate et al. (2008) argue that organisations have different challenges and that not all challenges have to be overcome. However, Bate et al. (2008) found that structural and cultural processes were central to all sustained quality and safety improvements.

The use of the OQ framework in research

The OQ framework has been used to understand quality and safety processes in hospitals (Bergerød et al., 2018; Bergerød et al., 2020; Jones et al., 2019). The OQ is the theoretical foundation of the QUASER guide (Fulup, 2013; Robert et al., 2011). The QUASER guide was developed in the EU project QUASER (2010-2013) as a guide for senior hospital

managers to develop and implement quality improvement strategies (Fulup, 2013; Robert et al., 2011). The QUASER study expanded the OQ's six quality challenges to eight, with the addition of leadership and external demands (Fulup et al., 2013; Jones et al., 2017 Robert et al., 2011). It also placed greater emphasis on the activities of organisational members. The QUASER guide has been used in England (iQUASER) (Jones et al., 2019). Bergerød and Wiig (2015) explored managers' role in quality and safety in two hospitals and concluded that managers' long-term commitment to quality and safety improvement was vulnerable to their outer context. A cross-case study by Bergerød et al. (2018) found that managers and healthcare professionals recognised next-of-kin as important supports in cancer care, but little was known about next-of-kin involvement. The researchers refined the OQ framework based on empirical results to include next-of-kin. The OQ is also the theoretical backdrop of Bergerød et al.'s (2020) quality and safety involvement guide in cancer care.

Bate et al. (2008) argue that quality is a multilevel phenomenon and social process, not a special method or discipline. The framework focuses on system thinking and how and why things work (or not) (Bate et al., 2008). This is relevant to the thesis in understanding how managers and employees work with quality and safety in their everyday practice and how social processes constructed by managers and employees influence their work in nursing homes and homecare services. The multilevel perspective can reveal how inner and outer context affected managers' quality and safety work. The OQ framework acknowledges the interaction among organisational, cultural and technological factors and is therefore a useful theoretical background to understand quality and safety work and to guide managers. The OQ framework was applied in developing the interview guides and interpreting the thesis' results.

2.2 The Knowledge to Action framework

The KTA framework was developed by Graham and colleagues (2006). It is a theoretical approach to knowledge translation (Fig. 2). The Canadian Institutes for Research defines knowledge translation as 'dynamic and interactive process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products and strengthen the healthcare system' (Straus et al., 2013, p. 4). There are several frameworks for achieving knowledge translation (Rycroft-Malone et al., 2010) with the goal of linking research findings to practice (McDonald, 2013). The KTA framework is grounded in planned action theories. Planned action theories focus implementation efforts and present guiding concepts (Straus et al., 2013).

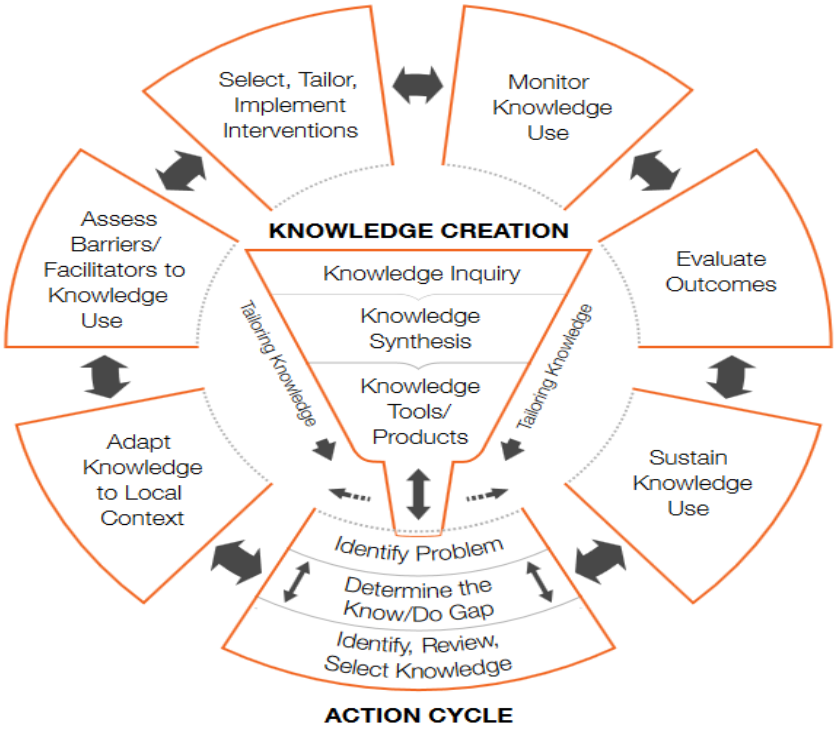

Figure 2 – The knowledge-to-action cycle (Straus et al., 2013, p. 10).

The knowledge to action framework consists of *knowledge creation* and *action cycle*. Figure 2 shows that knowledge to action starts with knowledge creation (centre) which then feeds into the action cycle. The cycle is an iterative and dynamic process (Graham et al., 2006; Straus et al., 2013).

Knowledge creation consists of knowledge inquiry (primary studies such as randomised trials), knowledge synthesis (systematic reviews) and creation of knowledge tools or products (decisions aids, guides, or clinical practical guidelines to present knowledge in implementable format). Knowledge is filtered through each stage of the knowledge creation process and generates knowledge that becomes more useful for end-users (e.g., researchers, healthcare professionals, managers, policy makers). In each phase of the process, the knowledge is tailored to end-users' activities and needs (Straus et al., 2013). In this thesis, the leadership guide was based on reviews of the literature and major fieldwork in the QUASER project and then integrated in the QUASER guide (QUASER, 2013). In addition, the SAFE-LEAD project team collaborated on knowledge translation and adapting the QUASER guide for the nursing home and homecare setting before it was ready for the action cycle.

Knowledge synthesis is used to interpret the results of individual studies to link research with decision making. The synthesis provides the evidence base for knowledge translation tools (Tricco et al., 2013). The development and evaluation of these tools can be an effective integrated knowledge translation strategy because it requires active collaboration between researchers and knowledge users. A completely integrated approach begins with end-users determining the needs for the tool and participatory processes that involve end-users in the development to ensure relevance, usability and implementability. Clinical practical guidelines, for example, are developed to maximise quality and safety and improve care (Tricco et al., 2013).

The action cycle is a structured process for effecting change and translating knowledge into practice. The action cycle consists of seven action phases: identification of the problem and selecting the knowledge to implement; adapting the knowledge to local context; assessing barriers and facilitators; implementing the intervention; monitoring the use of knowledge; evaluating outcomes; and sustaining knowledge (Straus et al., 2013).

The boundaries between knowledge creation and action phases are fluid. The phases of knowledge can influence the action phases at several points in the action cycle (Straus et al., 2013). Bowen and Graham et al. (2013) focus on 'doing' in the translation of knowledge, because doing requires a special understanding of the healthcare context in order to effect change, and the ability to develop relationships with stakeholders in the implementation. In this thesis, this means involving co-researchers from the municipalities, patient and next of kin representatives. The end-users (managers in nursing homes and homecare services) of the knowledge are included to ensure the relevance of knowledge and implementation to their needs. Straus et al. (2013) note that the integration of research with contextual knowledge can be accomplished only with the genuine participation of knowledge users from the beginning of the research process. For this thesis and in the research project, this means involvement from planning to publication. Bowen and Graham (2013) observe that the knowledge to action gap is often interpreted as a knowledge transfer problem, where knowledge is not used because it is difficult to transfer to its intended users. The production of knowledge is an alternate interpretation, one that considers the problem not as research dissemination, but as the failure of the research itself to consider the most urgent problems facing managers, clinicians and decision makers (Bowen & Graham, 2013).

The knowledge to action cycle is a participatory approach to research, one that engages knowledge users and where stakeholders are invited to suggest ways of adapting the intervention to local practice (Straus et al.,

2013). Theoretical frameworks are a way of preparing for the multiple and dynamic factors that influence the implementation of knowledge in practice and it can contribute to a more systematic translation of knowledge (Legare et al., 2009). In this thesis, the KTA framework is applied as a guide to our knowledge translation activities. The KTA framework also ensured the involvement of end-users to adapt the intervention to the nursing home and homecare context. In addition, it guided the identification of barriers to implementation. Figure 3 depicts the logic model of the SAFE-LEAD intervention program and processes (Johannessen et al., 2019a) based on the KTA framework to translate knowledge (leadership guide) into practice.

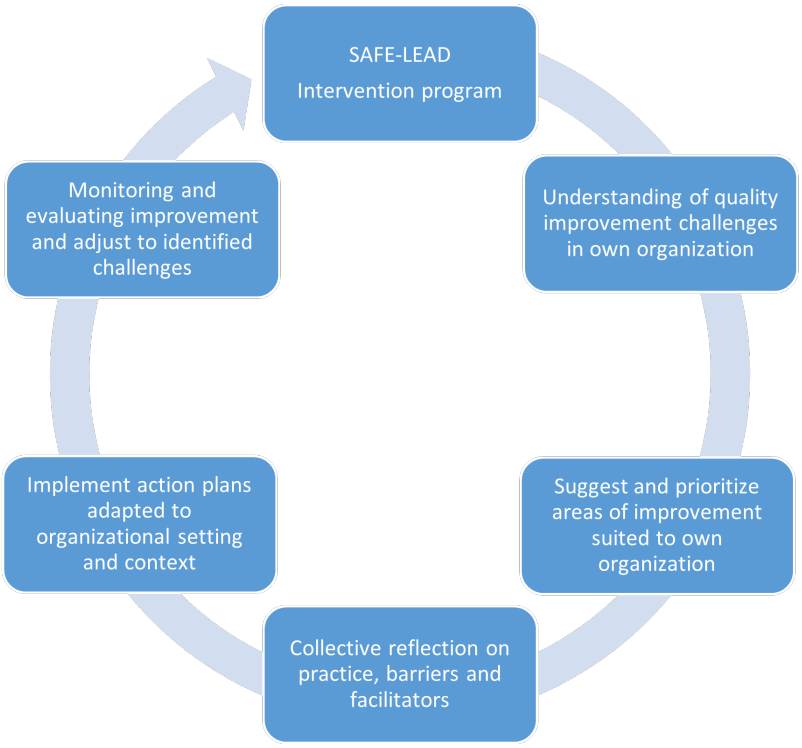

Figure 3. Logic model of the SAFE-LEAD intervention program based on Straus et al., (2013) in (Johannessen et al., 2019a, p. 10).

2.3 Rationale for choice of theory in the thesis

The rationale for the choice of the two theoretical frameworks relates to their emphasis on context. The Organising for Quality framework explores the how and why of an organisation's quality and safety processes; how an organisation handles these challenges; and how inner and outer contexts might influence this work. The Knowledge to Action framework shows how to optimise the translation of knowledge into practice, especially if that knowledge needs to be adapted to local context. The thesis used both theories to understand how managers work with quality and safety and to best design and adapt a leadership guide to support managers' quality and safety work. The theories complement each other in the longitudinal insight from designing a sustainable leadership intervention.

3 Methodology

This chapter presents the methodology, the philosophical underpinnings, research design, data collection, sampling and recruitment, data analysis and lastly, ethical considerations to show that the thesis ensured trustworthiness. Methodological reflections and quality of research are discussed in chapter 5.

3.1 Philosophical underpinnings

The thesis is positioned within the constructivist paradigm (Polit & Beck, 2017). This paradigm emphasises the role of human beings in shaping the social and material world (Scotland, 2012; Polit & Beck, 2017). The thesis assumes that quality and safety are made in the nursing home and homecare practices. It focuses on the work that actors do to create and then maintain quality and safety.

This thesis investigates the social constructs of nursing home and homecare practices and the unspoken and informal rules of everyday work practices (Hacking, 1999). Work practices can be defined as social phenomena because they keep participants in the organisation and the accomplishment depends on managers and employees in nursing homes and homecare organisations working together (Hacking, 1999; Nicolini, 2012). The organisation of a practice can be described by the organisation's actions or tasks and to the extent to which that practice reflects the organisation; practices are structured to give (or deny) people the power to do things and think of themselves in certain ways. But practices are also in a constant dynamic in the sense that they are changed by the actions of individual and collective members and by outside developments (Nicolini, 2012).

The purpose of a work practice is to reveal someone's efforts. We therefore need to understand the relation between practices and their material conditions (structure and process). Approaches to practice in the

literature are concerned with the processes as ongoing, routinised and repeated. Organisations survive through the recurrent performance of social and material activities (Hacking, 1999; Nicolini, 2012).

Moreover, work practice is not just what people do, it is concerned with what is actually done and how those doings make sense of a practice. In this thesis, it was important to understand how managers in nursing homes and homecare services worked with quality and safety, the challenges they perceived and how the leadership guide influenced their quality and safety practice.

A constructivist perspective can help to explain different priorities in organisations (Polit & Beck, 2017). Therefore, the description of work practice requires us to capture the actual work from what people say and do (Nicolini 2009). Nicolini (2009) suggests representing practice by concentrating on words and deeds, the active role of material elements and then zooming out to follow the practice and find patterns. In this connection, the thesis used focus group, observations, workshops, documents to capture how managers worked with quality and safety in formal meetings and strategies, how they prioritised this quality and safety work in everyday work practice and how employees experience these processes.

3.2 Study design

The thesis is a longitudinal multiple case study. Its two phases are design and pilot testing, followed by the implementation and evaluation of the leadership intervention.

A case study is a research design that investigates a contemporary phenomenon within its context and where the boundaries between phenomenon and context may not be evident (Yin, 2018). Each case is unique and can include patients, systems or organisations (Yin, 2018). The study of a phenomenon within its context is one of the main

advantages of case study research (Yin, 2018). Therefore, the case study approach adds to what is known about how managers' work with quality and safety within their organisations and how context influenced this work. The study design can also be described as an intervention study; the cases are not merely descriptive, because the researchers worked with the managers to develop and implement the intervention.

A multiple case study design should follow a replication. Each case must be chosen carefully to investigate similar or contrasting results. In this thesis, a case is a nursing home or a homecare service in a municipality (Johannessen et al., 2019a; Wiig et al., 2018). The cases within a multiple case study can be holistic or embedded (Yin, 2018). This thesis holds a multiple case design with four holistic cases, with each case in a different municipality; the managers and employees in each case are presented together. The purpose of this research was to study quality and safety work in nursing homes and homecare services from the perspectives of managers and employees. The rationale for a multiple case study in this thesis was to investigate different cases in different contexts, locations and sizes (Wiig et al., 2018) and how these differences affected managers' quality and safety work and the implementation of the intervention.

Case studies can help to explain the casual links in real-life interventions, describe the context of an intervention, provide illustrative descriptions of the intervention itself, and explore situations in which the interventions under consideration have no clear, single outcome (Locock et al., 2009; Yin, 2018). Another important element of a case study research is the extent to which a longitudinal perspective is taken. Longitudinal case studies covering months or years produce richer data than snapshot studies (Locock et al., 2009; Yin, 2018). However, the quality of case study research depends on how a researcher meets important standards, such as research relevance, reliability, and construct validity (Yin, 2018).

3.3 The thesis phases

The thesis was conducted in two phases resulting in three papers as shown in Figure 4. Phase 1 presented the design and pilot test of a leadership intervention (Paper I). Phase 2 first explored the challenges facing managers and employees in quality and safety work prior to testing the full-scale leadership intervention program (Paper II). The second phase then continued the implementation and evaluation of this intervention and its influences on managers' quality and safety work practice (Paper III). Table 1 summarises the research questions, methods, participants, data material and analysis.

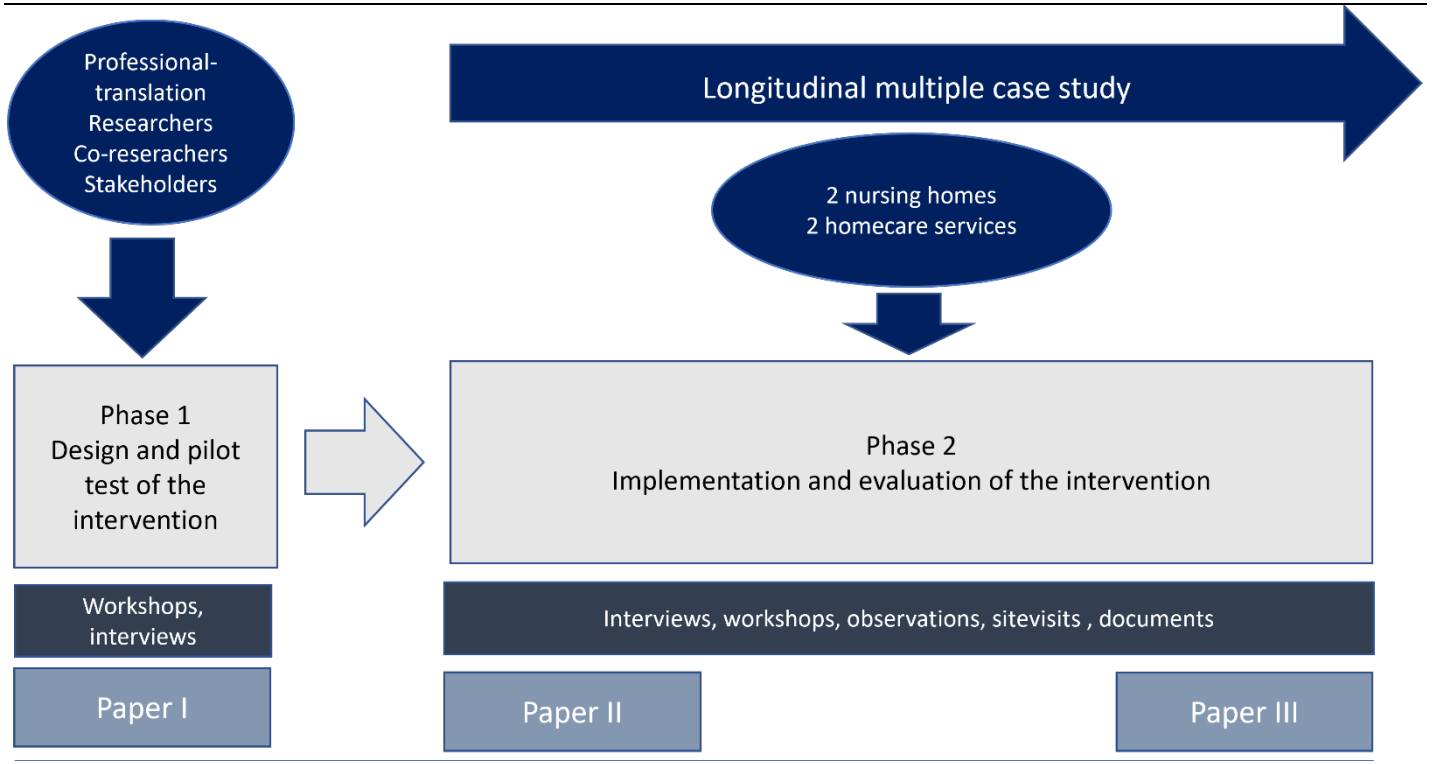

Figure 4. Connection among phases and papers in the thesis.

Table 1. *Summarises Research Questions, Methods, Participants, Data Material and Analysis*

	Research questions	Methods	Participants	Data material	Analysis
Phase 1 (Paper I)	How can a leadership intervention for improving quality and safety be designed for implementation in nursing homes and homecare contexts?	Project meetings Focus group interviews Workshops	Managers (n=16) Co-researchers (n=7) Researchers (n=7) Patient representative (n=1)	Focus group transcript Workshops field notes	Integrative methods Deductive approach
Phase 2 (Paper II)	What are the perceived current challenges in the quality and safety work of managers and employees in nursing homes and homecare services?	Focus group interviews Individual Interviews	Managers (n=17) Employees (n=19)	Focus group transcript Individual interview transcripts Documents	Deductive approach
Phase 2 (Paper III)	How does a leadership intervention influence managers' work practice to improve quality and safety in nursing homes and homecare and what are the necessary requirements for the intervention to be adopted?	Focus group interviews Workshops Documents Observation (108h) Site visits (17h)	Managers (n=16) Employees (n=18)	Focus group transcripts Observation field notes Workshop field notes Organisational document analysis	Integrative methods Inductive content analysis

3.4 The SAFE-LEAD intervention

The SAFE-LEAD intervention is based on a leadership guide to support managers in improving quality and safety work in nursing homes and homecare services. The two-stage intervention includes several workshops and learning activities facilitated by researchers.

Leadership guide

The leadership guide is based on the QUASER guide (Robert et al., 2011) and designed to facilitate quality and safety improvement in practice, by giving managers a systematic way to identify the strengths and weaknesses of their quality and safety work and to reflect upon what is required to develop improvements effort tailored to their needs (Johannessen et al., 2019a). The leadership guide is a research-based tool based on a three-step process (see Fig. 5). The first step (see Fig. 6) is to map out some of the quality challenges (structure, coordination and organisational politics, culture, competence, engagement, physical design/technology, external demands) that organisations often face in their work on quality and safety improvement. The second step identifies and sets the goals. The third step allows managers to develop action plans and evaluate their work process to achieve those goals.

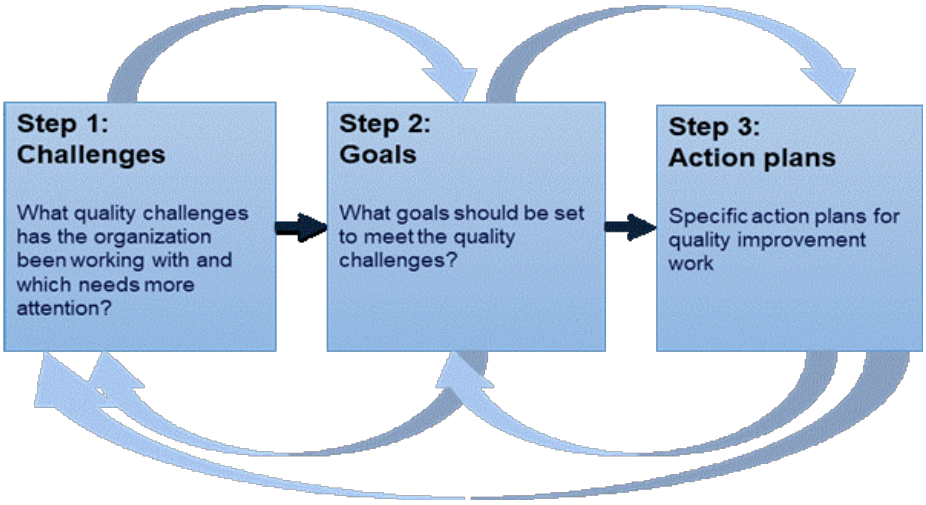

Figure 5. Three-step process in using the leadership guide (Johannessen et al., 2019a, p. 4)

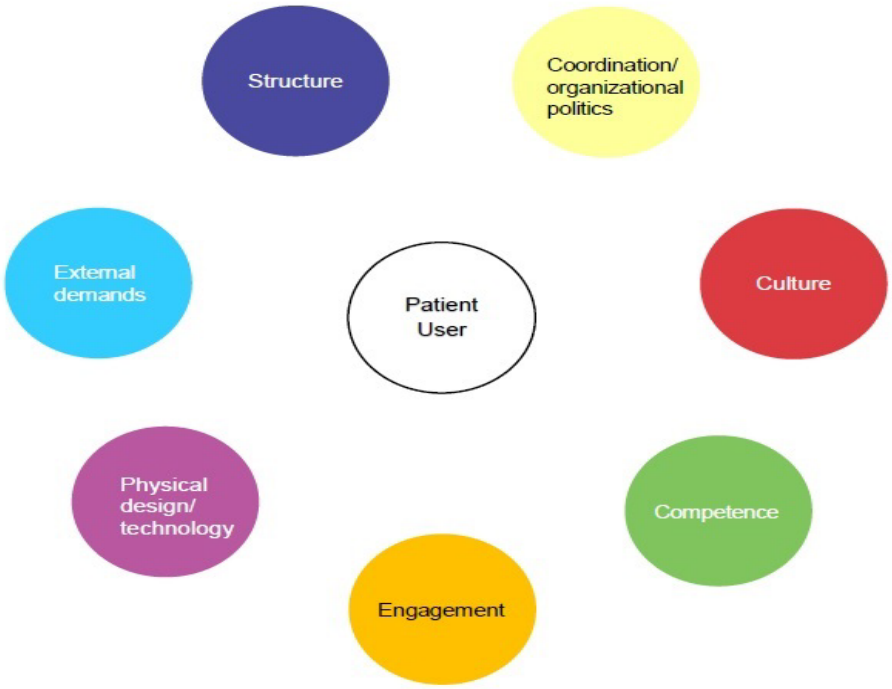

Figure 6. The seven quality challenges (Johannessen et al., 2019a, p. 5).

Intervention stage 1

The SAFE-LEAD intervention lasted for 12 months. Stage 1 lasted six months and entailed the study of four nursing homes and four homecare services. At each site, the researcher facilitated four workshops that were structured around the leadership guide (see Table 2). Managers used the leadership guide to map quality and safety challenges, set goals and develop action plans (Johannessen et al., 2019a).

Intervention stage 2

Two nursing homes and two homecare services participated in stage 2 of the intervention. In stage 2, the managers assumed more individual responsibility for using the leadership guide. Researchers facilitated two additional workshops (see Table 2) and two site visits in each unit. During the site visits, managers invited researchers to observe one of their quality meetings. The site visits included a short follow-up reflection on quality and safety improvement (Johannessen et al., 2019a; Wiig et al., 2018). In stage 2, researchers also observed managers and employees in their daily work practice to understand their quality and safety work.

Table 2. *Intervention Workshop Content*

Workshop	Content
Workshop 1	- Introduced the leadership guide (booklet and web version) - Identified the challenges that the managers experienced in their quality and safety work
Workshop 2	- Established goals and strategies to address the identified quality and safety challenges - Feedback on survey results from phase 1 of the intervention
Workshop 3	- Developed actions plans
Workshop 4	- Sustainability of intervention
Workshop 5	- Discussed the relation between the leadership guide and the management regulation on quality improvement
Workshop 6	- Feedback on survey results from phase 2 of the intervention

3.5 Rationale for data collection methods

This thesis used multiple sources of evidence as recommended when doing case study research (Yin, 2018). The data collection methods consisted of interviews, observations, workshops, site visits, and organisational documents. The use of multiple sources and data triangulation strengthens the construct validity of a case study (Yin, 2018). This gives the researchers a better understanding of the managers'

quality and safety work and how it occurred in everyday practice. This thesis applies a convergence of evidence (multiple sources) to each case (Yin, 2018). The main data sources used in this thesis are focus group interviews and participant observation of intervention workshops.

3.5.1 Focus group

Interviews can help to answer 'how' and 'why' questions and yield insights into a participant's perspective (Malterud, 2018). The main difference between individual and focus group interviews is the potential for interaction among the participants (Malterud, 2018). Focus group interviews can reveal a group's shared experiences of a problem and can therefore offer a good understanding of the members' or employees' thoughts and viewpoints (Yin, 2018). This could produce a broad understanding of the teams of managers and teams of employees, shared experiences and interaction and how they work with quality and safety in everyday practice. Focus group interviews also made it possible to minimise conflicts with work schedules and staffing. However, the management teams and employees were interviewed individually to ensure candid responses (Malterud, 2018). Factors for quality in the focus group interview depend on field knowledge and trust among the participants (Kruger, 2009). The groups that participated in the interviews work together in the nursing homes or homecare services and were perceived by the researchers as confident in each other and accustomed to group dynamic from meetings in several arenas.

3.5.2 Observation

Observation is often combined with the qualitative interview to obtain fuller information (Fangen, 2010; Strøm & Fagermoen, 2012) and can generate additional information about the topic being studied (Yin, 2018). Observation used in case studies can range from formal observation to more open data collection of activities in practice (Yin, 2018). For this thesis, quality meetings, were observed and managers and

employees were shadowed. Observation has the advantage of seeing what happens in the units in real time (Yin, 2018). Observational data can therefore provide useful information. The major drawback to participant observation is the potential for bias (Yin, 2018). The participant role can require too much attention and less time to make notes or ask questions from different perspectives. The observer is likely to follow a familiar phenomenon and to be biased in favour of the organisation being studied (Fangen, 2010; Malterud, 2018).

3.6 Phase 1: design and pilot test of the leadership intervention

Phase 1 designed and pilot tested an intervention program (Paper I). (This intervention program was then implemented in the four cases sites over a 12-month period in Phase 2.)

3.6.1 Sample and recruitment

The design and pilot test of the leadership intervention was conducted in collaboration among researchers, co-researchers, and stakeholders.

The members of the SAFE-LEAD project team have backgrounds in nursing, health psychology, safety science, engineering and health management (Wiig et al., 2018). Two Centres for Development of Institutional and Homecare Services (USHT) (Rogaland County, Sogn and Fjordane County) and the municipality of Songdalen in Vest-Agder County were partners in the SAFE-LEAD. The three partners recruited one nurse-counsellor from their municipality to project serve as co-researcher, in addition to one head of the USHT who was not paid but participated in semi-annual project meetings. The Patient and User Ombudsman had an important role in the stakeholder network and in quality assurance of the intervention design and pilot testing. One patient representative and one next-of-kin representative were also recruited as

co-researchers in the SAFE-LEAD project by the project manager (Johannessen et al., 2019a; Wiig et al., 2018).

The three co-researchers from the municipality's Centres for Development of Institutional and Homecare Services (USHT) recruited two nursing homes and two homecare services for the development and pilot test. One of the nursing homes and homecare services were rural-based and the others were in an urban municipality, to have some diversity in the sites' geographic location and size (Wiig et al., 2018). Table 3 provides an overview of organisations and involvement in phase 1.

Table 3. *Overview of Organisations and Involvement, Phase 1*

	Nursing home A	**Nursing home B**	**Homecare service C**	**Nursing home D**
Municipality population	20-30,000 District municipality	5000-10,000 Rural municipality	130-135,000 Large city, municipality	30-135,000 Large city, municipality
Organisation	4 dementia 1 short-term	1 short-term 2 dementia 1 long-term	Delivers homecare services	1 short-term 1 dementia 4 long-term
Involvement in phase 1	Development	Development	Development Pilot test	Pilot test

The intervention design and development involved three units (two nursing homes and one homecare service) that tested and provided feedback on the leadership guide and suggestions on learning activities.

Unit managers in the study sites selected participants. Managers, professional development nurses and registered nurses were recruited.

The following pilot test was conducted in one nursing home and one homecare service in the same urban municipality and was a convenient sample. The homecare service had participated in the intervention development and it was important to explore if feedback from the development phase had been useful. The pilot test consisted of management team with three managers and one patient representative in the nursing home and six managers in the homecare service. One patient representative from the nursing home was recruited by the unit manager and participated in one workshop in the pilot test.

3.6.2 Data collection

The development of the intervention was carried out from November 2016 to October 2017. The data collection took advantage of multiple methods. First, the leadership guide was translated from English to Norwegian by a professional translation service. Further language adjustments were made in monthly project meetings with the project team. Semi-structured focus group interviews and workshops with co-researchers were applied as a data collection method to get participants' thoughts on clarity, usefulness, and content of the leadership guide. Two workshops with co-researchers were conducted to obtain feedback on language, format and content and the structure of the intervention workshops. Three focus group interviews were held in May 2017 with potential users of the leadership guide (managers in nursing homes and homecare) to receive feedback. The participants read the leadership guide and interview guide before the workshop. The interview guide contained questions about the content, structure and format of the leadership guide and what managers considered important when using the leadership guide in their daily quality and safety work. Some questions were: *What do you think about the challenge? What is the most important thing for you for the leadership guide to be able to function as*

a useful tool in the work with quality and safety? How can the leadership guide be refined to work better for you? (Appendix 2) The thesis author led two of the focus group with different co-researchers in the development phase and contributed to all workshops and project meetings during data collection.

The pilot test lasted from November 2017 to February 2018. The pilot test evaluated the feasibility of the intervention and consisted of three workshops with a management team at their workplace. The workshop agenda was structured around the three-step process in the leadership guide (Fig. 5). One of the researchers facilitated the workshops. In addition, one or two researchers took observational notes according to the workshop agenda such as reflections on quality and safety work, challenges, goals and their quality and safety work process. Two focus group interviews were conducted after the pilot test to evaluate the intervention and receive suggestions for further changes. The interview guide contained questions about the management teams' experiences with the leadership guide, workshop content and experiences with their work process in between workshops. Some questions were: *What do you think about the leadership guide as a tool in the quality work? Are the seven challenges recognisable? How have you experienced the three steps in the guide? How did you experience the material you received in advance?* (Appendix 3) The interviews lasted 60 to 90 minutes. All data collection was conducted in the participants' workplace, because it was most convenient for them. Table 4 shows the data collection activities and the sample involved during phase 1. The thesis author conducted both the pilot test and focus group interviews with researchers and co-researchers.

Table 4. *Overview of Data Collection Phase 1*

Phase 1	Method	Source/informant
Intervention design and development	English – Norwegian translation of guide	Professional translation company Researchers Co-researchers
	Modifications to guide in monthly project meetings	Researchers (n=7)
	Two workshops in the consortium for discussions of guide and workshop content	Researchers (n=7) Co-researchers (n=7)
	Three focus group interviews to test the guide	One homecare services: (focus group 1 n=4) Two nursing homes: (focus group 2: n= 5) (focus group 3: n=2)
Pilot test	Three workshops with observation	One nursing home (n=4) One homecare service (n=6)
	Two focus group interviews for evaluation and need for further changes	One nursing home (n=3) One homecare services (n=6)

3.6.3 Data analysis

The data analysis integrated data from interviews and observation (Patton, 2015; Strøm & Fagermoen, 2012) collected in the course of a year of collaborative development and pilot testing.

The data analysis was inspired by Strøm and Fagermoen (2012), where the key component is the interweaving of observation data and interview

data that derived from sequences of interactive situations, such as the intervention design process into a comprehensive body of material (Johannessen et al., 2019a). This method of systematic data integration separates analysis of the fieldnotes from interview data. The analysis is conducted using a methodological approach and the preliminary results are placed into different documents. The process of data integration incorporated the main themes from field notes analysis and subthemes from the interview analysis. The results of this first process are an integrated text from each pathway. Strøm and Fagermoen (2012) describe that patterns of different interaction processes may emerge and can reflect participants' attitudes. The second interweaving brings together all reconstructed pathways. The research questions guide the continued analysis (Strøm & Fagermoen, 2012).

Focus group interviews with managers from nursing homes and homecare services were tape-recorded and transcribed verbatim before a directed content analysis (Hsieh & Shannon, 2005) according to the predefined categories of the leadership guide (Bate et al., 2008) and according to training needs and user experiences from the pilot test (Johannessen et al., 2019a; Patton, 2015). Directed content analysis (Hsieh & Shannon, 2005) is a more structured approach where researchers use theory as initial coding categories. The strategy is to begin coding immediately with the predetermined codes, and data that cannot be coded are identified and analysed later to determine if the data represents a new category or subcategory of current codes (Hsieh & Shannon, 2005). In directed content analysis, theory can focus the research questions and determine the initial coding scheme or relationships between the codes (deductive analysis).

The field notes after the consortium workshops and intervention workshops were transcribed and analysed in a descriptive manner (Fangen, 2010) with focus on the functionality of the leadership guide content in the development process, and according to intervention content and functionality during the pilot test. All researchers and co-

researchers collaborated. The preliminary research findings were discussed in consortium meetings to ensure trustworthiness and agreement on the final intervention program. The aims of the integrative analysis were to produce a systematic, descriptive overview of discussions and decisions regarding the intervention design and content, the identified training needs and to chronologically describe the results of the pilot test.

3.7 Phase 2: Implementation and evaluation of the leadership intervention

Phase 2 consisted of a longitudinal multiple case study, first exploring and mapping the challenges in quality and safety in the cases (Paper II), then implementing and evaluating the intervention and its influence on the quality and safety work practice of managers (Paper III).

3.7.1 Sample and recruitment

Two nursing homes and two homecare services in four municipalities participated in the two-stage SAFE-LEAD intervention. The sample was based on a contrasting case approach (Yin, 2018) with diversity in size, geography and urban or rural location of cases. The municipalities and units differed in size and location (Wiig et al., 2018). Table 5 provides an overview.

Table 5. *Overview of Cases, Phase 2*

	Homecare 1	**Homecare 2**	**Nursing home 1**	**Nursing home 2**
Municipality population	15-20,000 District, medium-sized municipality	5000-10,000 Rural municipality, border to big municipality	130-135,000 Large city, municipality	70-75,000 City, large municipality in area.
Organisation	Delivers homecare Practical assistance Responsible for community-based activity centre	Delivers homecare Practical assistance	Seven departments: 1 short-term 1 drug care 3 dementia 2 long-term	One department divided into three groups: 1 dementia 2 long-term
Employees	<100	<100	200-300	<100

The three co-researchers from the Centres for Development of Institutional and Homecare Services (USHT) in the municipality recruited the study sites for the SAFE-LEAD intervention. Unit managers appointed a management team to participate in the intervention and selected managers and employees for interviews and observations. The size of the management team was based on unit size and how the managers were organised in the municipality. The managerial levels comprised top managers, unit managers and department managers in both nursing homes and homecare services. In addition, one homecare coordinator and two professional development nurses in the nursing homes participated. Employees consisted of registered nurses and healthcare workers—five males and 31 females. Their years of

experience as managers and employees in their current workplace ranged from less than one year to more than 10.

3.7.2 Data collection

The data collection was intended to explore and map quality and safety challenges in the study sites (Paper II). The intervention continued over 12 months (Paper III).

Explore and map quality and safety challenges before implementation of the intervention (Paper II)

Data collection in Phase 2 first established an understanding of the managers' and employees' quality and safety work prior to the intervention. The study sites did not participate in designing the intervention. Focus group interviews with managers and focus group interviews with employees were chosen to comprehend how managers and employees worked with quality and safety and how this affected quality and safety work in the organisation. The managers in one of the nursing homes did not work in the same organisation, so individual semi-structured interviews were more practical. Prior to the intervention, the project team was divided into intervention teams (one researcher and one co-researcher) that had responsibility for each organisation during the intervention period. The author of the thesis had responsibility for Nursing Home 1 and Homecare 2. To assess the influence of contextual factors the project developed a context mapping tool (Wiig et al., 2019) to track the intervention process and to map the relevant contextual factors for quality and safety work in nursing homes and homecare services (see Appendix 4 for context mapping tool). Among these factors are the type of healthcare service (nursing home or homecare), funding, geographical location, organisation size, workload and any ongoing national or organisational change processes (Wiig et al., 2019). The intervention team used the context mapping tool during the entire intervention and often after workshops to record changes, such as sick

leave and the implementation of a new nutrient screening. In this way, the context mapping tool was a sort of notebook for the intervention teams. The context mapping tool was used in Word format and all documentation was anonymised.

All start-up interviews were conducted in March – April 2018. The focus group interviews lasted 60 – 90 minutes and the individual interviews between 45 and 60. Seven focus group interviews with managers (n=17) and employees (n=19) and two semi-structured interviews (n=2) were conducted. The focus interviews were conducted in the participants' workplace by one researcher (moderator) and one co-researcher (secretary) with responsibility for the organisation. The interviews followed an interview guide based on OQ (Bate et al., 2008). Examples of questions were: *How is the work with quality and safety organised in your workplace? How do you work as managers to create a common understanding of quality and safety work in the unit? What influence does the political and administrative management in the municipality have for your work as managers?* (See Appendix 5 for interview guides.) The questions focused on managers' and employees' work on quality improvement and to meet quality and safety challenges.

Evaluation of the intervention (Paper III)

The rationale for the data collection during the intervention was to evaluate the intervention and its influence on managers' quality and safety work in the nursing home and homecare services. The data collection lasted from March 2018 – April 2019. The data collection consisted of three phases: before, during and after the intervention (Table 6). The data material prior to the intervention was used as the basis in Paper III. In addition, four focus group interviews were conducted six months into the intervention. Examples of questions are*: How can you use the leadership guide further as part of the quality work? What challenges do you think can occur in further work with the leadership guide? How can you meet them?* (See appendix 6). Seven focus group

interviews were conducted after completion of the intervention. Examples of questions are: *How have you used the leadership guide in your workplace? What do you experience as the most important factors that must be in place when implementing tools? Have you learnt anything new in quality and safety work during this year?* (See appendix 7). All interviews were semi-structured and covered themes such as implementation, usefulness of the leadership guide, contextual integration, intervention evaluation, changes occurred in work practice and sustainability of quality and safety improvements. During the intervention, workshops were carried out in each organisation (44 hours). The researchers used a detailed agenda of questions, discussion, reflection, and feedback sessions. The same team of researchers collected data during the intervention.

The researchers observed managers and employees in all units (108 hours), to understand how they worked with quality and safety improvement in daily practice. The observations followed an observation guide that covered topics such as quality meeting, discussion of quality and safety and arenas for quality and safety improvements. (See appendix 8). In addition, we conducted site visits (17 hours). The purpose of the site visits was observation of and feedback on quality and safety meeting chosen by the managers. The site visits also included a short follow-up reflection or feedback session with a focus on quality and safety improvement and how the work could be related to the leadership guide (Wiig et al., 2018). Documents of organisational structure, strategies and plans, quality strategy and risk analysis were collected. The purpose of analysing documents was to see how the documents were used and contributed to the quality and safety work in the organisations. All data was collected at the study sites. The researchers facilitated the managers' quality and safety improvement work through workshops and site visits during the intervention.

Table 6. *Data Collection Methods and Sample in Papers II and III*

Period	Methods/participants
March 2018	• 3 focus group interviews managers (n=15) • 2 individual interview managers (n=2) • 4 focus group interviews employees (n= 22)
April 2018 – March 2019	• Workshops (44 hours) • 4 focus group interviews managers (n=23) • Observation managers (71.5 hours) • Observation employees (36.5 hours) • Site visits (17 hours)
April 2019	• 3 focus group interviews managers (n=16) • 4 focus group interviews employees (n=18) • Document analysis

3.7.3 Data analyses

Paper II: Exploring and mapping of quality and safety challenges before implementation of the intervention

The data material in Phase 2 consisted of interviews with managers and employees from two nursing homes and two homecare services. All tape-recorded interviews were transcribed before deductive content analysis was initiated. The analysis was conducted by directed content analysis (Hsieh & Shannon 2005) according to the OQ framework (Bate et al., 2008) refined in Phase 1 (Johannessen et al., 2020). The directed content analysis (Hsieh & Shannon 2005) was used as described in Phase 1 (Chapter 3.5.3). The purpose of the analysis is to condense a large amount of text into categories that are similar in meaning (Hsieh & Shannon 2005; Patton, 2015). The predefined categories were structure, coordination and organisational politics, culture, competence,

engagement, psychical design and technology and external demands. The data material from each case was analysed by a within-case analysis (Yin, 2018). The transcribed interviews were read through and text was highlighted and coded after the predefined categories. In the analysis process we identified subcategories in the predefined categories, as shown in an example of the predefined category structure in homecare service 1, in Table 7.

Table 7. *Directed Content Analysis of Structure in Homecare Service 1*

Predefined category	**Subcategory**	**Codes**
Structure	Struggle with continuity	What has happened in recent years is that the groups are getting bigger. The management density is not as it was before. There have been larger units, so that each manager has greater personnel responsibilities, and is unable to be so close to the employees. But it is clear that there will always be a lot of work anyway, new shifts and things like that! I always run out of time to adjust. I think that the tasks take an enormous amount of time, and that is precisely why I think that this is so important in a way, to be even more in the group of the employees and where it in a way moves the most. There is a bit of feedback from my employees as well, that they experience that I am not as much present as I have been before, and it is clear that I do not follow up in the same way I would like. Action plan ... so it's nice that they are updated so that you have a safe place to go and check. If I'm not sure what to do, I can go there and read, but that's not really how it works today because we do not have time to update them.

Data that could not fit the initial coding category was identified and analysed later (Hsieh et al., 2005). For example, 'contexting' came up during data analysis. Data (meaning units) of context work that did not fit the initial coding categories were gathered in one additional category. The authors read the transcripts and discussed theme development in several meetings. The within-case analysis was followed by a cross-case analysis to trace similarities and differences among municipalities, between nursing homes and homecare services, and between managers and employees. In the cross-case analysis (Yin, 2018) the data was sorted in a table format. The data on 'contexting' was used to review the data; and we extended and adapted the OQ framework to the nursing home and homecare service. The context work that managers do in quality and safety improvement did not fit the initial coding categories, so 'contexting' was added to show context as an active notion rather than a frame around the organisations. The purpose of a directed approach to content analysis is to validate or extend conceptually a theoretical framework or theory (Hsieh et al., 2005). The initial coding was initially deductive but by the end it was more abductive. The abductive approach rests on the cultivation of anomalous and surprising empirical findings against a background or framework of existing theories and through systematic methodological analysis (Timmermans & Tavory, 2012). Similar research by Stoopendaal and Bal (2013) linked ethnographic findings to theory and found that different kinds of work had to be done by human and non-human actors to displace improvements into specific organisational situations.

Paper III: Evaluation of the intervention

The data analysis in Paper III used transcripts from focus group interviews and observational notes. The data material was subjected to integrative analysis (Strøm & Fagermoen, 2012) to integrate interviews and observation notes collected throughout the 12-month intervention and analysed as a complete dataset from each organisation as described in phase I (Chapter 3.6.3). Co-researchers were not directly involved in

the analysis. However, one researcher from each intervention team was involved in the analysis to ensure sound interpretation of results and that descriptions from the organisations were recognisable and described the process accurately. Within-case analysis was conducted to capture information within each of the four cases over the intervention period (Yin, 2018). An inductive content analysis was conducted on the organisations' implementation, changes during the intervention and mechanisms that contributed to implementation and quality and safety improvement work. All authors read the data and highlighted themes. Meaning units were extracted from the text, sorted and categorised in Microsoft Word. Here, the meaning units were condensed and translated from Norwegian to English. These were developed by integrating data from interviews, workshop notes, and observations describing the organisations' intervention process and changes throughout the intervention period. The analysis was sent to supervisors for review. The third step was a cross-case analysis (Yin, 2018) to compare and contrast the units' and managers' work practice to improve quality and safety, and to identify requirements for the intervention. The entire research team then met to agree on themes and categories. The implementation was depicted in a Microsoft Word table. A narrative of each case was drafted (Langley, 1999) and discussed with the research team. The interweaving produced a large amount of data for analysis and for validation. The analysis enabled the researchers to validate whether and how the observation and reflection corresponded with the managers' and employees' experiences and opinions (Strøm & Fagermoen, 2012). The integrative analysis resulted in a descriptive overview of each organisation and how the managers implemented and worked with the leadership guide.

3.8 Research Ethics

The SAFE-LEAD project is approved by the Norwegian Centre for Research Data (NSD), ID number: phase 1 52324 and phase 2 54855,

15.8.2017 (Appendix 9). Assessment submission was sent to Regional Committees for Medical and Health Research Ethics (REK) which determined that the project did not need approval (Appendix 10). The study followed the Helsinki Declaration and all participants gave their written informed consent (Appendix 11). All participation was voluntary and participants could withdraw at any time. All data were anonymised and securely stored. All researchers signed a declaration of confidentiality in the organisations where they conducted the research. The project developed a procedure in case of information related to malpractice was identified in the organisations. This procedure was thoroughly discussed in the project team. The procedure did not have to be used. The project did not collect any health or patient information and there were no negative consequences for patients or employees. The focus was on quality and safety improvement work and the managers' effort. Some of the interviews were transcribed by a professional company. A data management agreement was established to ensure secure data management and deliverables (Appendix 12).

3.9 Trustworthiness

Trustworthiness is important in qualitative research. Trustworthiness is often described in terms of credibility, transferability, dependability, and confirmability (Elo et al., 2014; Lincoln & Guba, 1985; Shenton, 2004). The following subchapters detail how this thesis preserved trustworthiness and the quality of research.

3.9.1 Credibility

Credibility is the overreaching criterion to ensure trustworthiness in qualitative research (Lincoln & Guba, 1985). Credibility reflects the way in which research is carried out to ensure veracity in the data and interpretations of the topic (Elo et al., 2014). Shenton (2004) describes several ways for researchers to ensure credibility. Our first step was to collect data through focus group interviews, individual interviews, and

observation. We used data triangulation to describe the organisations and its intervention process (Yin, 2018). The phenomenon was viewed from the perspective of managers (unit managers, department managers, professional development nurse) and employees (nurses, healthcare workers) in the nursing homes and homecare services. This enriched the data and strengthened the credibility of findings. The SAFE-LEAD project includes multiple researchers and co-researchers. They brought their own perspectives to the data collection and analysis. The co-researchers had the advantage of being familiar with the nursing home and homecare settings and were liaisons between the academic and practice field and recruited organisations for the project. All participation was voluntary. Debriefing sessions were held in the monthly project meeting and discussions with supervisors and co-authors of the papers to ensure an accurate understanding of the organisations and their quality and safety improvement processes. After each workshop, the intervention team had a debriefing session. The author of the thesis has collaborated closely with thesis supervisors who have read transcripts, collaborated in the analysis and the interpretation of the results to strengthen the research process. Context mapping of each organisation was conducted to provide a detailed description and understanding of the organisations under study (Wiig et al., 2019). With several data sources, we could see, for example, a contextual change in one organisation was mentioned in interviews by the participants, talked about in an observation, noted in the context mapping document, and discussed with by managers in the intervention workshops. This contributed to a thorough and rich understanding of the problem.

3.9.2 Transferability

Transferability means that findings can be transferred to and applied to other settings or contexts (Malterud, 2018). Researchers are responsible for providing detailed and thick descriptions of the phenomenon under study (context, recruitment, participants, data collection and analysis), so

other researchers can decide if the results are transferable to other contexts (Malterud, 2017; Malterud, 2018; Shenton, 2004).

In this thesis, transferability was handled through a detailed contextual information that was described of the organisations and municipalities in Papers II and III and in Chapter 3 of the thesis. The descriptions included size of the municipalities and organisation, managerial level, total number of employees and patients. The Norwegian healthcare context was also described to demonstrate how nursing homes and homecare services provide healthcare services. Information about participants was included in line with ethical considerations. The results included rich descriptions and verbal quotation from the participants.

3.9.3 Dependability

Dependability is the consistency of the research process and the stability of data over time (Shenton, 2004). The dependability issue in qualitative research can be addressed by a detailed report of every step of the study process so future researchers can follow the steps and repeat the work, although not necessarily to gain the same results (Shenton, 2004).

Yin (2018) suggests several ways of reporting case studies. This thesis used a linear-analytic structure that included the problem being studied in light of current literature, description of methods used, data collection, data analysis and findings, and conclusion with implications (Yin, 2018). Sample and recruitment and analysis have been described for each phase and the methodological limitations are presented in the papers and in the discussion section. In this thesis, the study protocol of the SAFE-LEAD project (Wiig et al., 2018) was published in a peer-reviewed journal to ensure transparency of the research phases. All three papers were peer-reviewed by scientific journals before they were published. Furthermore, the author developed a project plan, research questions, and interview guides in close collaboration with thesis supervisors to ensure stability of the research process. The author was active the development,

implementation and evaluation of the intervention, along with researchers from the project.

3.9.4 Confirmability

Confirmability is the objectivity of the relevance and meaning of the data (Shenton, 2004). As the researcher takes an active role in the implementation of the intervention, and the facilitation of the workshops, it is important to be sensitive to potential bias.

Confirmability, in this thesis, was handled by several researchers and co-researchers with different perspectives and affiliations. The workshops, interviews and site visits were conducted by two researchers to ensure quality. The multiple sources and data triangulation supported the findings such as the focus group data combined with observational data (Yin, 2018). The participation of several researchers in the data collection added both nuance and a broad understanding of the topic. The thesis author has worked as a registered nurse in nursing homes and homecare services. However, the implementation was directed at managers, and the data collection was conducted by two researchers at each site. Lastly, awareness of bias is important to discuss and consider through the research process to ensure trust in the data (Malterud, 2017).

3.9.5 The researcher`s role

Reflexivity is about the researcher's pre-conceptions (background, motives, perspectives, and assumptions) and how this is handled through the research process to ensure trustworthiness in qualitative research (Malterud, 2001; Malterud, 2017). In this thesis, this related to my background as a registered nurse with work experience from the nursing home and homecare setting. This could have contributed to me being biased in the meeting with the organisations and based on my own thoughts of how the managers worked with quality and safety. Collaboration with multiple researchers in data collection and monthly

project meetings ensured a reflective process. The intervention activities required an active role as a researcher (workshops, observation, site visits, interviews), however, most were facilitated by two researchers with complementary perspectives. The thesis supervisors have backgrounds in safety science, health psychology, and health management. Continuous discussions in the research team and supervisory team contributed to avoid risk of bias and influencing management teams beyond the intervention content.

4 Results

This chapter summarises the results from the three papers in the thesis and presents the relationship among them.

4.1 Paper I

Design and pilot testing of a leadership intervention to improve quality and safety in nursing homes and homecare (the SAFE LEAD intervention) (Johannessen, Ree, Strømme, Aase, Bal & Wiig, 2019)

The first paper describes the design and pilot test of a leadership intervention to ascertain the feasibility of the intervention design. The final intervention program was found to be ready for implementation.

The design and pilot test of the leadership intervention was a one-year process with researchers, co-researchers, and stakeholders. The original QUASER guide was translated from English into Norwegian and modified for the nursing home and homecare context. There were several suggestions to improve the translation of the leadership guide and refine its structure, language, and content. The managers and co-researchers concurred that the leadership guide should be short, easy to read and tailored to the terminology of the setting. Based on their feedback, we modified the intervention and developed learning resources, such as videos demonstrating the practical use of the guide. In addition, we developed a digital interactive version of the leadership guide. The pilot test of the intervention consisted of three workshops with managers using the leadership guide (web and booklet) and learning tools (video presentation of the guide and sample videos of the guide being used in practice).

In the three-month pilot test, conducted in one large homecare service and one large nursing home, the managers expressed a commitment to use the leadership guide. In both organisations, the managers met

between workshops to work with the leadership guide. Results showed that the managers found the goals too vague and difficult to operationalise. Observational data showed that homecare managers found it important to evaluate their actions. They were eager to implement actions but never followed up with evaluation, thus the leadership guide proved useful. The use of the leadership guide depended on how systematically the organisation was working on quality improvement. This affected the extent of researcher involvement in the organisations. Managers from both organisations insisted that working with the leadership guide increased awareness of their quality and safety work, presented new concepts, gave them an overview of the quality and safety work and helped them evaluate their quality practice. Evaluation of the pilot test study showed that all managers supported the use of the guide and had adapted it to their organisational needs.

4.2 Paper II

Exploring challenges in quality and safety work in nursing homes and homecare: A case study as basis for theory development (Johannessen, Ree, Aase, Bal & Wiig, 2020)

The second paper explored the challenges in quality and safety work as perceived by managers and employees in two nursing homes and two homecare services prior to the intervention.

Challenges in quality and safety work depended on many factors and were similar across settings, despite differences in nursing tasks in homecare and nursing homes and differences in the size and location of these facilities. Managers struggled to maintain continuity of care due to sick leave and continuous externally facilitated changes. Challenges in care continuity were described in different ways across organisations, based on variations in their organisational structure. However, all organisations shared the challenges of filling part-time positions, sick

leave, and maternity leave. Managers described having to balance budgets and that this effort sometimes conflicted with their quality and safety work. The results showed a contrast among managers and employees in relation to finances and room for improved efficiency. Employees struggled with heavier workloads and fewer resources, resulting in less time with patients and inferior quality of patient care. Results showed that time constraints undermined quality and safety work and led to different cultures of error reporting. We also found disparities in access to reliable networks and communication with general practitioners in homecare and nursing homes that could make quality and safety work difficult.

Managers in both nursing homes stated that national and municipal political agendas set expectations they had to meet. The increased external pressure (budget cuts, organisational change processes) limited the possibility to work towards engagement and culture for improvement, and to maintain quality and safety as a collective effort at managerial and employee levels. Our results showed how external demands (outer context) can undermine quality and safety work in the organisation (inner context) and how managers engaged with their context to maintain this work. In times of change, the managers in our study struggled to maximise their available resources for quality and safety work to ensure good practices. In addition, the results showed a lack of management tools to guide managers and to maintain quality and safety.

4.3 Paper III

Exploring managers' response to a quality and safety leadership intervention: findings from a multiple case study in Norwegian nursing homes and homecare services (Johannessen, Ree, Aase, Bal & Wiig, 2021)

The third paper evaluated the intervention and its influence on managers' quality and safety work practice.

Results showed that the influence of the leadership intervention varied among the units. The management teams became more focused on their quality and safety work, and they described the intervention process and time allocated to work on quality and safety as important. The cross-case results found management continuity and arenas and systems for quality and safety improvement as key to understand the managers' response to the leadership intervention.

Management continuity was key for the implementation of the leadership intervention. The implementation depended on stable management teams and on managers' engagement and follow-up. In units that already had stable management teams, the intervention was more rooted in the units and changes in quality and safety work occurred. For example, in one nursing home the management team did not prioritise the leadership guide after Phase 1, so the intervention failed because of manager turnover.

Throughout the intervention, contextual challenges such as externally driven organisational processes and demands from municipalities' checklist, courses, and merger of municipalities competed with the intervention. Observation results showed how managers adapted the leadership guide by condensing the three-step process to shorten meetings on hectic workdays.

A main finding was the lack of systems and arenas to work on quality and safety improvement in daily work practice. The intervention workshops and leadership guide contributed to a common understanding and commitment in the management teams and created an arena in which managers could focus on quality and safety. Managers wanted someone to establish a structure and take responsibility for scheduling and organising quality and safety meetings. The leadership guide provided the managers with a tool for clearer sense of quality and safety in different settings. The workshops created a social and reflexive arena for quality and safety work. Results showed that when managers understood the leadership guide, they felt a greater sense of control, worked more independently, and took advantage of the arena and agenda set by the intervention program.

4.4 Relationship between the papers

The papers in this thesis have contributed to a longitudinal focus on managers' work with quality and safety in nursing homes and homecare services. Together, the three papers describe all activities from development to evaluation of a leadership intervention and its influence on managers' quality and safety improvement work. Moreover, it gives detailed insight into the everyday challenges of managing quality and safety from the managers' and employees' perspective.

Paper I describes the design, development and pilot test of the leadership guide and the workshop content in the intervention. The paper details the involvement of stakeholders and demonstrates how a participatory approach was important for adaptations to nursing home and homecare contexts and to develop an intervention useful for managers in their work practice. The changes made it easier for managers to incorporate the leadership guide into their everyday work practice. Paper I emphasises the role of context and the need to tailor intervention material (web and booklet) to its context. The pedagogical content of the intervention program had to accommodate the managers' needs, time, language, and

interests. This was also mentioned in Paper II, where the contextual and managerial challenges in quality and safety work were mapped.

Paper II explored managers' and employees' perceived quality and safety challenges in nursing homes and homecare services prior to the intervention and examined the organisation's status before implementation of a leadership intervention. The results contributed to an understanding of how several factors were interrelated and affected quality and safety work (budget cuts vs. competency development; fixed vs. flexible work lists; learning from errors vs. work engagement). The researchers used Paper II to gain a deep understanding of status in the organisations prior to investigation of managers' quality and safety work over the 12-month intervention period. Paper III describes the implementation of the intervention and its influence on managers' work on quality and safety improvements.

The three papers show the translation of knowledge into practice and the importance of adapting tools and intervention activities to their context. The development of the guide and intervention used innovative educational solutions (blended learning, web, video) and the pilot testing and adjustment of content were based on user involvement and co-design. Moreover, using this design allowed consideration of the everyday context of nursing home and homecare managers. The three papers illustrate how a leadership intervention can improve managers' work with quality and safety. Results explained the importance of context for quality and safety improvement and how quality and safety is created and negotiated on an ongoing basis in the organisations.

5 Discussion

The aim of this thesis was to explore the role of managers in quality and safety work in nursing homes and homecare services. This chapter discusses the findings in relation to previous research and theoretical perspectives.

5.1 Adapting knowledge to local context

A starting point for this thesis was to design and develop a leadership intervention to support managers in quality and safety work in nursing home and homecare services (Paper I). The translation of knowledge into healthcare practice is complex and not a straightforward process (Barwick et al., 2020; Straus et al., 2013; Wensing & Grol, 2019). For this reason, in the initial phase we identified the contextual challenges (Ree et al., 2019; Wiig et al., 2019), and Paper I illustrates how this was carried out in a longitudinal process with multiple input and involvement from diverse user representatives, pilot testing and further adaptations (language, shortage of text, change of original quality challenge) to make the leadership guide suited to the practical challenges facing managers in Norwegian nursing homes and homecare services. The action phases in the KTA framework guided our process and contributed key insights into the perspectives, barriers, and processes that our knowledge translation action cycle needed to incorporate (Graham et al., 2006). Lessons learnt, for example for regulatory bodies or national campaigns aiming at implementing research into practice (standards, tools, guidelines, checklists), is to take time to understand the context and possible adaptations to make these as relevant as possible. These processes are time consuming.

Assessing barriers and facilitators of knowledge translation

Learning does not occur automatically with the simple dissemination of a tool, such as the leadership guide; it usually requires effort to support

the translation with a targeted intervention program (Davies & Edwards, 2013; Straus et al., 2013). There are several reasons for the barriers between valid recommendations of guidelines and delivery of care based on this evidence. Active involvement of the end-users of the leadership guide led to significant changes in our study (e.g., professional language, learning tools) which echoes other literature in the field (Malterud et al., 2020; O`Hara et al., 2019a; O`Hara et al., 2019b; Vindrola-Padros et al., 2016). Assessing barriers to and facilitators of knowledge use is closely linked to the adaptation and uptake of evidence (Colquhoun et al., 2013; Davies & Edwards, 2013). In the intervention design, this was based on knowledge of barriers and facilitators among the future users of the guide involved in the design and development phase (Paper I). For example, videos with examples were recommended, short 2-hour workshops, homework between workshops, feedback on survey results, and getting access to all intervention materials were based on the intention to facilitate knowledge use among managers in their daily operation where they have limited time (Paper I). All of these intervention components were developed to circumvent barriers and to tailor the intervention.

Monitoring and sustainability of the leadership intervention

Monitoring of interventions is important to determine how and to what extent knowledge has been picked up by the end-users (Straus et al., 2013). The workshop program that we developed for implementation and monitoring of the leadership guide included similar workshop agendas, learning resources and guide content (Paper I). This enabled researchers to observe the implementation of the leadership guide and monitor its influence on quality and safety work practices in nursing homes and homecare services (Paper III). Monitoring systems and feedback mechanism are needed to determine relevant process and factors to access sustainability (Straus et al., 2013), although, sustainability of improvements has been recognised as a challenge for some time (Fleiszer et al., 2015; Shelton et al., 2018), However, there is

agreement that sustainability requires thoughtful planning, attention and should be initiated early in the design and planning of interventions (Davies & Edwards, 2013; Lennox et al., 2020). The KTA framework emphasises sustainability in knowledge translation processes (Davies & Edwards, 2013). We addressed sustainability in the intervention design by timing our intervention workshops, adding a fourth workshop on sustainability six months into the intervention and a check-up call between the third and fourth workshops to follow up with managers on their use of the leadership guide and to answer technical questions about the web version (Paper I). Sustainably, is however, closely linked to the multiple challenges facing managers in nursing home and homecare services. There is pressure to provide healthcare services to more and sicker patients (Gautun & Syse, 2013; Gautun & Syse, 2017; Glette et al., 2018). As argued by Dixon-Woods (2019) the success of improvement depends not just on the interventions, but also on environment: improving processes may take us so far, but stops if the basics of structure and resources are not in place. This is supported by a recent study that concludes that the shift in healthcare culture towards person-centredness requires not only full commitment on the part of managers but also adequate financial and human resources (Asante et al., 2021).

A need to emphasise stakeholder involvement in knowledge translation processes

There is also increased pressure to translate and adapt research-based knowledge to practice (Straus et al., 2013), and healthcare programmes and interventions are increasingly implemented at the front lines of care to increase effectiveness and efficiency (Braitwaite et al., 2020). Several frameworks can guide and structure implementation processes and uptake of knowledge in practice (Rycroft-Malone & Bucknall, 2010). The Consolidated Framework for Implementation Research (CFIR), for example, offers a list of constructs to consider before implementation

(McDonald, 2013). Our use of the KTA framework guided the knowledge translation process with specified action phases to enable implementation and its effect on managers' practice. Researchers have focused more on the importance of interactions between researchers and knowledge users in predicting the uptake of knowledge (Bowen et al., 2013). Embedding implementation science and healthcare service researchers into the healthcare system is a promising strategy to improve the rigour and sustainability of interventions (Aase et al., 2021a; Braitwaite et al., 2020). In this thesis, the co-researchers, affiliated with the SAFE-LEAD project, linked research to practice, contributing professional language in the practice field and knowledge about organisational processes in the nursing homes and homecare settings (Aase et al., 2020). The embedded researcher in the organisation allows for the creation of informal processes and coproduction of knowledge that can lead to greater ownership of research findings and anticipate sources of tension produced by competing views (Garfield et al., 2015; Malterud et al., 2020; Marshall et al. 2014; O`Hara et al., 2019a; O`Hara et al., 2019b; Rowley et al., 2012; Staley, 2015; Tritter, 2009; Vindrola-Padros et al., 2016). The co-researchers contributed in-depth contextual knowledge and expertise in workshops and were able to link managers' quality and safety challenges and reflections to the possible use of the leadership guide and thereby increase the sustainability (Papers I, III). Embedded research can strengthen the knowledge use in practice by increasing the usefulness for the intended users (Garfield et al., 2015; Malterud et al., 2020; Marshall et al. 2014; O`Hara et al., 2019a; O`Hara et al., 2019b; Staley, 2015; Tritter, 2009; Vindrola-Padros et al., 2016). The thesis demonstrates the importance of knowledge about local context when implementing leadership interventions to access facilitators for and remove barriers to implementation. The co-researchers and managers contributed with their contextual adaptation of the leadership guide and adaptation of the intervention program to ensure relevance and usefulness for the managers in their everyday practice (Paper I). Although the use of participatory approach creates

opportunities, researchers need to remember that time constraints for the involved staff could be a possible barrier to their engagement with research (Marjanovic et al., 2019).

The KTA framework and possible further iterations

Diffusion of knowledge is often described as a passive effort that requires active dissemination (Field et al., 2014; Straus et al., 2013). We used the action phases provided by the KTA framework as a guide to the active dissemination and translation of the leadership guide. The thesis shows the comprehensive work needed to translate knowledge into practice and the importance of context adaptation of tools and intervention activities (Papers I, III). However, a systematic review by Field et al. (2014) found the use of KTA to have varying degrees of completeness, often related to the monitoring and sustainability of knowledge use in practice. Considering the longitudinal focus on translating knowledge into practice (Paper III), use of the leadership guide still depended on management continuity in the organisations and was vulnerable to externally driven changes (Paper III). Therefore, based on the thesis' findings on could argue that the KTA framework should focus more on the temporality of implementation and sustainability. It is possible to claim that it lacks a clear description and emphasis on how to involve stakeholders over time to succeed with knowledge translation in practice and that the continuous role of user involvement is not so visible in the KTA framework. This is corroborated by our finding of management continuity to be crucial for implementing the leadership guide regardless of the context adaptations of both the intervention program and the leadership guide. As our research demonstrated how important management continuity was and this is also a possible iteration of the framework. Therefore, the continuity of managers should be pinpointed for future use of the KTA framework and in the operationalisation of tools in healthcare practice when translating knowledge into practice among managers and employees. This demonstrates possible further refinement of theoretical frameworks

guiding knowledge translation to new contexts in healthcare such as nursing homes and homecare. Such frameworks need to reflect the importance with the management continuity element to a stronger degree than today.

5.2 Multiple challenges in quality and safety work

The OQ framework (Bates et al., 2008) contributes a conceptual overview and understanding of the numerous and often interrelated quality and safety challenges that managers face in nursing homes and homecare services. The thesis describes how managers struggle and negotiate multiple trade-offs (e.g., budget cut vs. competence development; learning from errors vs. work engagement) in their daily management role to maintain quality and safety (Paper II). Structural challenges, Bates et al., (2008) in terms of lack of competence, inadequate personnel resources, and sick leave contributed to lack of continuity and inability to commit to long-term planning (Papers II, III). This is consistent with previous research on contextual challenges in quality and safety work in nursing home and homecare settings (Fernholm et al., 2020; Ree et al., 2019). Moreover, a recent review illustrates how organisational factors such as heavy workload, time constraints, understaffing and lack of competence forced trade-offs on both managers and healthcare professionals (Glette & Wiig, 2021). These daily adaptations and resource restrictions affected the way that managers prioritise the ordinary operations of services and integrate quality and safety improvement activities. A recent qualitative study of front-line nurse managers found that both a lack of time for quality improvement work and a lack of time generally when several problems needed to be solved led to hasty solutions and not permanent improvement work in nursing homes and homecare services (Sjølie et al., 2020). Our study co-designed an intervention that was contextually sensitive to the challenges facing managers in their daily work, their risk picture and also in terms of where they were performing well (Paper I).

However, the day-to-day trade-offs are often not articulated and the way in which managers were able to handle these trade-offs was central to how they adopted the intervention. This was linked to the challenge of having structures in place (documentation, clear roles) and continuity in the management team (Paper III). As described in Paper III, one of the units experienced high management turnover and the intervention was terminated. Our results showed that this not only related to the intervention. The staff experienced working in a limbo with no managerial direction. Management turnover or sick leave are often commonplace in everyday homecare and nursing home services (Andersen & Westgard, 2015; Andersen & Westgard, 2013; White et al., 2021), and this needs to be kept in mind when working on quality and safety. A similar intervention study, implemented and evaluated the QUASER guide for hospital boards to support quality improvement (Jones et al., 2017). Like our findings (Paper III), boards that benefitted from the intervention had stable leadership and a shared vision for quality improvement. In addition, the hospital study found that organisations with higher levels of quality improvement maturity prioritised and balanced attention to short-term (external) priorities with a long-term (internal) investment in quality improvement and engaged employees in this work (Jones et al., 2019). This illustrates the importance of managers in quality and safety improvement efforts across hospitals, nursing homes and homecare (Lau et al., 2015; Vaughn et al., 2019).

The culture and emotional challenges (Bate et al., 2008) were evident for employees describing that heavier workload and fewer resources affected engagement and quality and safety as a shared meaning for the organisations. Arenas and time for competence development were described by both managers and employees as difficult due to lack of time and the need to prioritise patient-related tasks. In addition, the homecare setting by its nature has few meeting points with employees (Solbakken et al., 2019; Solbakken et al., 2021). The physical and

technological challenges (Bate et al., 2008) mentioned by managers and employees were the lack of computers and unreliable internet; these presented a potential risk of harm due to insufficient documentation (Paper II). The outer context (Bate et al., 2008) was demanding for managers who had limited influence on decisions made at the higher municipal levels (functionality of computer system and patient documentation) and national decisions (merger of municipalities).

The findings in this thesis (Papers II, III) support the research of Glette and Wiig (2021) arguing that quality and safety would slip off the agenda in the organisation when financial restrictions are pressing. There was a struggle with long-term quality and safety strategies when short-term financial challenges got priority. As described in the theory chapter, Bate et al. (2008) in their original work, found that the two challenges structure and culture were the most central to working on quality and safety. Our results singled out management turnover as a main challenge for quality and safety work. This perspective was found among both managers and staff from the start of the intervention program (Paper II) and until its completion (Paper III). However, there were cultural and emotional aspects (work engagement, common understanding, collegial support) that ensured that the managers and staff adapted to the situation and enabled sound professional practice. The use of the OQ framework with an integrated leadership perspective identified the important role of managers in acting upon and engage in the different challenges in every day work practise in order to maintain and improve quality and safety in the organisation. Seljemo et al. (2020) stress that leaders should facilitate a good work environment with an optimal balance between job demands and job resources and that implementing transformational leadership styles may be important in creating and sustaining sound patient safety culture in these settings. This is also supported by the study of Cappelen et al. (2018) that emphasised the importance of managers facilitating

employees' participation and that managers support employees' responsibility for patient safety initiatives.

Quality and safety challenges and system design

National attention to the role of managers in quality and safety work has been increasing the last decade in Norway (Helsedirektoratet, 2019; Øyri et al., 2020a; Øyri et al., 2020b). However, managers are left with heavy tasks to manage the long-term strategy in nursing homes and homecare services in the consideration of the impact of contextual factors in nursing homes and homecare services (Papers II, III). Other studies have illustrated that the same challenges identified in nursing homes and homecare in our study (e.g., lack of time, competence), can also be seen in Norway's hospital settings (Øyri et al., 2020b). Managers are not necessarily trained to adhere to the responsibility they have under the law and regulations (Øyri et al., 2021). They are expected to establish systems, procedures and practices for risk management, user involvement and continually improve service quality and safety, but in practice they have limited competence or training in doing so and lack the tools. The study of Hovlid et al. (2020) found that external inspections can affect mediators of organisational change such as management involvement, engagement of staff and contribute to creation of new networks for reflection on clinical practise. A recent article of Wiig et al., (2020) argues the need for managers and regulators to create reflexive spaces to support and enable healthcare organisations to perform high care quality and safety under varying conditions in everyday work practises. In our results, the leadership guide contributed perhaps the most important aspect of establishing a reflexive space for the managers and a common conceptualisation of quality and safety. Furthermore, it enabled managers to diagnose what did and did not work well in their organisations (Papers I, III). Having a common understanding of quality and safety challenges, what these concepts mean, and having an arena where quality and safety have full attention

were fundamental for the intervention sites (Papers I, III). Our results highlight the importance of a common conceptualisation of quality and safety in both ordinary work and in relation to quality and safety improvement (Aase et al., 2021b). This is also found in hospital settings (Wiig et al., 2014a) but is often not given attention in interventions (MacKinnon et al., 2019). If managers want to succeed in working on quality and safety, they need to pay attention to how employees experience quality and safety as part of their service provision and design interventions to support and not conflict with this (Aase et al., 2021b). Further research is needed to better understand the role of collegial and professional support, and to reveal how managers balance paperwork and relational work with their staff (Owen et al., 2012).

The results in this thesis indicate that some of the struggles managers face in their quality and safety work are caused by reasons outside their own organisation. They therefore need a long-term municipal and national strategy to support managers in nursing home and homecare services. Such support is not necessarily leadership training, tools, and programmes, as explained in the thesis. It could be worthwhile to look more into system design, funding structures, and cultures for patient and stakeholder involvement (Carayon et al., 2020; WHO, 2018). The thesis suggests further exploration of how the system can be designed to support managers and how it contributes to long-term quality and safety improvement.

5.3 Contextual factors influence on the implementation process

In line with previous studies (e.g., Granja et al., 2018; McDonald, 2013; Øvretveit, 2011; Øvretveit et al., 2011; Pfadenhauer et al., 2005) contextual factors were important to the organisation's implementation process. The study was designed to map contextual factors and changes by using a context mapping tool (Wiig et al., 2018; Wiig et al., 2019;

Holen-Rabbersvik et al., 2020). The implementation gap is often attributed to variations in the contextual conditions that affect improvement interventions (Coles et al., 2017). However, the requirements for quality and safety are the same across all municipalities, although size, resources, competence can range from large cities to small rural areas (NOU, 2018). Although contextual challenges competed with the intervention such as externally driven organisational processes and demands from municipalities (checklists, risk analysis, mergers) the process depended on how managers responded to the contextual factors for their action plans and quality and safety work to improve (Paper III). First, we observed how managers worked *with* their context, for example when a homecare organisation used the leadership guide to get an overview of possible quality and safety challenges due to the merger of the municipalities and how they could react to maintain their quality goals with a fixed work list and responsibility for employees in an uncertain phase. We then identified the role of professional development nurses as part of the management team in facilitating managers' quality and safety work. Our findings showed that conditions for an organisation's success with the leadership guide was the role of professional development nurses, who adapted the implementation to the local context (Paper III). A study of Andersson et al. (2016) found that management's involvement was stressed by the participants as a precondition for successful improvement process and that managers should ease the participating professionals' ordinary workloads as they experienced lack of time to implement the improvement work in everyday practise. In line with Andersson et al. (2016) and the review of Granja et al. (2018) we found staff turnover, workload and deprivation of time to provide care services to be barriers in the implementation process.

The leadership guide as a boundary object for managers in quality and safety work

The leadership guide enabled managers to support a shared sense of quality and safety and to systematise their quality and safety work (Papers I, III). The intervention workshops and the leadership guide created a reflexive space and acted as a boundary object for the managers. Boundary objects can enable effective communication and coordination within and across groups and can be beneficial to a working relationship (Star et al., 1989; Kimble et al. 2010). Boundary objects can also promote knowledge sharing and transfer within groups and facilitate learning (Kanwal et al. 2019). In healthcare settings, boundary objects are often used to improve interprofessional collaboration (Engstrøm et al., 2005; Keshet et al., 2013; Sjølie et al., 2020; Wiig et al., 2014b). Improving quality and safety in healthcare is predicated on collaboration and interactions across system levels between healthcare professionals and managers, and across actors at different system levels (Aase & Wiig, 2010; Bate et al., 2008). The leadership guide is founded on a system perspective and a multilevel understanding of quality and safety (Bate et al., 2008) and on the challenges that need to be met. In our results, the leadership guide acted as a boundary object that stimulated to reflection in the management teams around their quality and safety challenges and contributed to collective solutions and actions in the organisations quality and safety work. The leadership guide also brought new concept and ideas into this work (Papers I, III).

5.4 Main contributions

This thesis contributes to explorations of quality and safety challenges in managing nursing home and homecare practices through an in-depth longitudinal study of the development and implementation of a complex intervention. This thesis makes three contributions: methodological, theoretical, and practical (see figure 7).

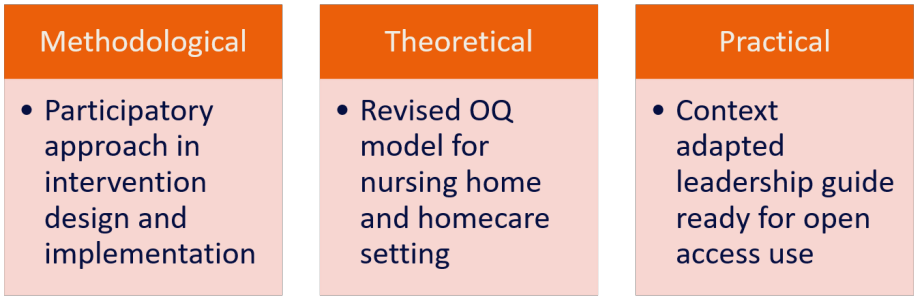

Figure 7. Thesis' main contributions.

The *methodological contribution* is the use of a participatory approach through 12 months of designing an intervention adapted to managers in nursing home and homecare settings. This was crucial in designing an intervention useful for managers and that fitted managers' language, learnings needs and capacity in everyday work practice. Results from the design and development process of the leadership guide and intervention process are described in Paper I, and the collaboration with co-researchers throughout the SAFE-LEAD project has been recently published in an article illustrating the multiple strategies used and how different strategies are important to cover diverse perspectives (patient, next of kin, manager, professional) at different stages of a study (planning, design, data collection, analysis, dissemination) (Aase et al., 2021a). The experiences and reflections with participatory approaches have been important for the knowledge translation process and is important to increase the use of research in practise. This can inspire further implementation research in healthcare services. This methodological approach also has the potential to enhance the KTA framework, in terms of a stronger emphasis on stakeholder involvement in knowledge translation processes in line with the literature on user involvement in practice and research (Malterud et al., 2020; O`Hara et al., 2019a; O`Hara et al., 2019b; Vindrola-Padros et al., 2016).

The second contribution relates to *theory development* of the Organising for Quality framework (OQ) (Bate et al., 2008) by refining the quality challenges and adaptation to the nursing home and homecare settings. The thesis added 'contexting' to the OQ framework. It describes context as an active action, rather than as a fixed frame to describe the organisations as depicted in Figure 8. 'Contexting' is managers' work *with* context to improve quality and safety. Managers worked hard to negotiate context, by maintaining structure for quality and safety work without sacrificing a shared meaning of the concepts in the organisation. Therefore, in line with Bergerød's study (2018), we refined the OQ framework for the nursing home and homecare contexts. Future research should explore the ways in which the revised model fits nursing homes and homecare service provision in other countries. Comparative studies between these settings and hospitals are also recommended to investigate relevance and explanatory power.

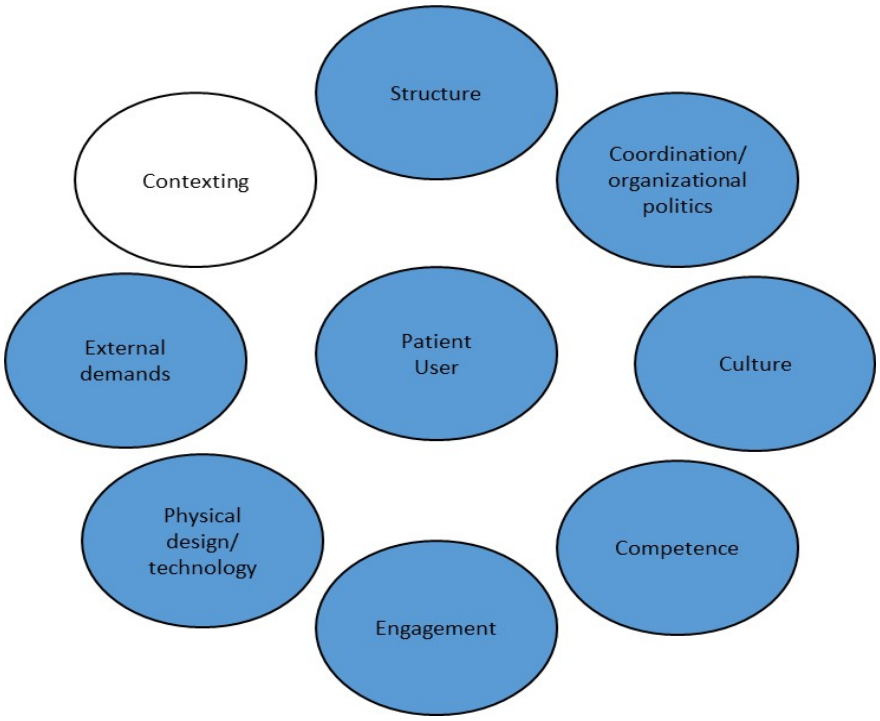

Figure 8. The revised Organising for Quality model (Johannessen et al., 2020, p. 10).

The third contribution is *practice improvement* and sustainability beyond the thesis time frame. The context-adapted leadership guide and intervention program is a key contribution to current and future managers in nursing home and homecare practice. The leadership guide will be launched on an open access platform and available as a PDF and in the web version after completion of the SAFE-LEAD project (Wiig et al., 2018). The results from the thesis (Paper III) strongly indicate that the leadership guide has the potential to support managers in their quality and safety work. However, the leadership guide needs additional larger-scale research to find even more compelling evidence for the functionality and influence on quality and safety processes and outcomes. The dissemination of the leadership guide is ongoing in a SAFE-LEAD 'light version', to explore how uptake and implementation

of the leadership guide can be conducted with limited researcher involvement in practice.

5.5 Methodological considerations

This section presents methodological considerations of the strengths and weaknesses of the thesis.

Several researchers have participated during the entire research process (Aase et al., 2020) ensuring different perspectives in the design, planning, data collection, analysis, and dissemination. The researchers spent the first year in close collaboration in consortium workshops to design the leadership intervention. Monthly project meetings were organised with discussions and reflections about the intervention process and consistency of the intervention activities (such as experiences from workshops and activities and advice to ensure usefulness for the managers). This contributed to awareness and understanding of the research quality and organisational processes in all sites involved in the intervention program. It can be considered a major strength to have researchers, co-researchers and stakeholders involved, but it could also lead to information being lost in the shuffle. However, a strict meeting structure, continuous supervision meetings and close collaboration among researchers reduced this risk (Aase et al., 2020; Johannessen et al., 2021).

The data collection has the advantage of data from multiple sources to investigate a phenomenon. The use of several methods of data collection strengthens the interpretations and understanding of a phenomenon (Yin, 2018). The longitudinal insight into the nursing home and homecare services participating in the intervention for more than a year combined with the data collection from multiple sources was a strength of the thesis.

The thesis explored managers' and employees' perspectives and perceived challenges and how the leadership intervention influenced the quality and safety work processes. A detailed description and mapping of contextual settings enable others to assess the relevance of the study and to consider the transferability of the results. However, it is a small-scale study and intervention with only four sites, so future researchers should use larger samples and other contextual settings to establish stronger evidence for the leadership guide.

The changing nature of qualitative inquiry can make it difficult to replicate the findings (Yin, 2018). Implementation of context-sensitive intervention and healthcare improvement can be a challenge because what works in one setting does not need to be relevant in or easy to transfer to another setting (Coles et al., 2020). The municipalities and organisations differed in size and location and these differences can be considered a strength in the presentation of the results. However, it can be argued that some of the organisations had small management teams (n=3). This could limit the information perspectives and the transferability of the results (Malterud, 2018). At the same time, the Norwegian municipal context includes large, small, city and rural sites (NOU; 2018). Small management teams often work together on service provision. Hence, we argue that our sample reflects the context.

The observational data can be biased by researchers (Fangen, 2010). The thesis author's background as a registered nurse and work in homecare could bias the interpretation of data collection and analysis of the data. However, having several researchers involved in observation and data collection reduced the risk of bias and brought a range of perspectives to the notes. Moreover, all observations were conducted according to an agreed-upon observation guide (Appendix 8), that contributed to sound mapping and consistency among the researchers.

As described in the methods chapter, the study established intervention teams at the research sites. Data were analysed at sites where the thesis

author was not part of the intervention team (homecare service 1, nursing home 2). To ensure sound interpretation of results, Papers II and III included co-authors who assisted with the data collection in these sites, as a quality assurance to ensure that the managers' quality challenges and implementation process were accurately described. All results were discussed among the author team and in project meetings.

Documents that were collected could have been used and interpreted more in the data analysis process in Paper III. There were variations in types and amount of collected documents from the organisations. Therefore, collected documents received less attention in the analysis. The documents complemented the other data (for example in the narrative of each case) but was not used in a systematic analysis in Paper III.

Directed content analysis can make the researcher more likely to find data that support theory (Hsieh & Shannon, 2005). Participants can also be guided to give specific answers when using a theoretical framework as basis for developing the interview guide. However, the thesis has not produced an exhaustive list of quality and safety challenges; the emphasis has been on understanding and describing the phenomenon. Therefore, the OQ framework produced an overview of the quality and safety challenges and how they were connected for managers and employees in nursing homes and homecare services. We could then identify how context work was more prominent.

The thesis could have used other theories and methods that might have led to different results and perspectives. This thesis could have benefitted from the use of human factors theory that focuses on human beings and their capabilities in the work system (Carayon et al., 2006; Carayon et al., 2005). The Systems Engineering Initiative for Patient Safety (SEIPS) model builds on human factors and is concerned with complex processes in the work system (Carayon et al., 2006; Carayon et al., 2005). Holden et al. (2013) have included patient and next of kin in a revised version of

the SEIPS model. This could have been relevant for the thesis as patient and user are highlighted in the leadership guide and are the end-users of nursing homes and homecare services. The SEIPS model has been used in research on primary care (Johannessen, 2016; Odberg et al., 2020) to describe interaction and work processes in different organisations and their effect on patient outcomes. Moreover, Normalisation Process Theory (NPT) could also have been relevant for the thesis because it is concerned with social processes related to implementation and the implementation of the leadership guide and other tools in everyday work practice (May, 2013). NPT could have drawn increased attention to the workability of the leadership guide in its intended setting to evaluate the effects of the new practice (May 2013; Foss et al., 2016). Although other theories could have been useful, I believe the combination of the KTA and OQ frameworks in this thesis from start to completion is a major strength. This contributed to a consistent guidance and use of theory, reflection on theory, and further iteration and suggestions for theory development of both theories. This is important knowledge for further implementations and knowledge translation in practice.

The use of other methods in the data collection that could have supplemented or given other results. The SAFE-LEAD project collected quantitative data that could have been included in the thesis to complement the qualitative data. That could have contributed with data and analysis to support understanding of improvement in user-involvement or employee involvement and perception of patient safety culture (Ree, 2020; Ree & Wiig, 2019a; Ree & Wiig, 2019b). However, this thesis adopted a qualitative case study to explore the role of managers in improving quality and safety in nursing homes and homecare services as we were interested in the mechanisms that lead to successful quality and safety work. The purpose of this thesis was not to measure outcomes of quality and safety in the different organisations before or after the intervention, but rather to explore and understand how and why managers work on quality and safety and what happens in these

organisations before an intervention (Paper II) and when implementing a leadership guide (Paper III). The longitudinal data collection of interviews, observation and workshop was suitable to answer the research questions.

Quality and safety were explored from the viewpoints of managers and employees. What patients and their next of kin experience as good care and safety is beyond the scope of this thesis. It is therefore strongly recommended that further research investigate these perspectives.

6 Conclusion

The thesis explored the role of managers in quality and safety work in nursing homes and homecare services. It then designed and implemented a leadership intervention for improving quality and safety in those facilities.

The thesis demonstrated the importance of a participatory approach and stakeholders' involvement when designing a leadership intervention to support managers in quality and safety improvement work. This approach made the leadership guide and learning resources more relevant for the managers and easier to incorporate into their work routine.

Managers and employees perceived the interrelated quality and safety challenges that depended on several factors and implied trade-offs for both managers and employees. Managers struggled with external change processes, budget cuts and to stay visible in the organisations. Employees contended with heavier workloads and less time with patients. The leadership intervention influenced managers' work practice in different ways depending on capacity and needs in the organisations. The leadership intervention served as a reflexive space for managers and contributed with a more structured process and commitment towards the organisations' quality and safety work. However, management continuity and the establishment of structures were crucial for the intervention to be adopted and for actions to be implemented. The implementation depended on stable management teams and on managers' engagement and follow-up in workshops for the intervention to be rooted in the organisations and for changes to occur in quality and safety practice.

The longitudinal insight broadens the understanding of contextual impact on quality and safety work in nursing homes and homecare services and increases the focus on context work and the role of managers to act upon contextual factors in quality and safety work. The thesis has contributed to theory development in this setting with an expansion of the OQ framework and adaptation to the nursing home and homecare setting. The thesis emphasises the importance of context mapping before and during implementation of a leadership intervention to target the intervention to the nursing home and homecare setting. The thesis found context to be acted upon in negotiations and interactions and how managers and employees engaged with their context to support and maintain their quality and safety work. There is a need for increased focus on how context work affects long-term quality and safety strategy in these settings.

Finally, the thesis has produced a context-adapted leadership guide and intervention with the potential to support future nursing home and homecare services' managers in their quality and safety work.

6.1 Implications for practice and further research

The results of this thesis shed important light onto managers' and employees' quality and safety work in nursing home and homecare services and demonstrated the impact of context in this work. This needs to be considered by policymakers, managers in municipalities and researchers. There is a need to support the role of managers in everyday operations to increase access to competence, tools, structure, and cultural surroundings to provide sound professional practice.

Implications for practice

- Create arenas (reflexive spaces) for managers and employees to discuss and reflect on current quality and safety work.

- Set quality and safety work on the agenda by naming a person responsible and set of time in the calendars for quality and safety meetings for all involved.
- Take advantage of research-based tools, such as the leadership guide, to structure and guide the improvement work.
- Increase knowledge and awareness and mapping of the organisational context and its impact on organisations' quality and safety work at all levels in the healthcare system.
- Create common understanding and engagement for quality and safety work in the organisation by using formal meetings, lunches and, shift handover to inform about the organisation's work on this.
- Establish a joint plan on knowledge sharing between departments in nursing homes and homecare.
- Allocate time to involve employees in organisational change processes and monitor the effect on the organisation and provision of care quality and safety (which employees describe as time with patients)
- Establishment of a joint plan on active patient and next of kin involvement in healthcare service and overall quality and safety of the organisation.
- Improve communication with upper management in the municipality on the effect of constantly externally driven changes.
- Involve employees, patients or next of kin to broaden the perspective on strategies in quality and safety work and to make it sustainable over time
- Larger national reforms need to be given resources and competence at management level for follow-up.

Implications for further research and theory development

- Further studies should explore the participatory approach and involve stakeholders in planning, designing, testing, implementation and monitoring of interventions, and especially the involvement of patients in this work.
- Further studies with larger samples to test the leadership guide in different contexts are recommended.
- Further studies should investigate how different levels of healthcare interact and work with local context to improve quality and safety in healthcare services.
- Further theory development on 'contexting' in primary care settings is recommended.
- Qualitative cross-county studies on how contextual factors can explain and affect implementation of quality and safety improvements initiatives should be initiated.
- There is a need for longitudinal studies on the impact of quality and safety improvements interventions and the sustainability, especially in areas such as nursing home and homecare service which are characterised by disruption.
- Studies on the effect of research-based tools for managers to structure and organise their quality and safety work and how to design and support them without extensive researcher involvement could support development of sustainable management-oriented support. This should be investigated.
- Future studies should use leadership theory, such as transformational leadership, to understand the role of managers in quality and safety work and to understand the relationship between leadership characteristics and approaches that managers adopt in their work on implementing a leadership guide
- Additional testing and refinement of the leadership guide and the 'contexting' challenge should be conducted.

- Future studies should further develop the web version of leadership guide to improve its functionality.
- Future research should focus on both quantitative and qualitative investigation into the nursing homes and homecare services on what goes well, and why.
- More studies on how managers and employees conceptualise quality and safety are needed to customise interventions and establish conditions in which interventions are relevant.
- Responsibility for safety at home falls on the shoulders of the patient, family members and informal carers (Vincent & Amalberti, 2016). Research should also focus on the relations between healthcare personnel and informal caregivers, and how they contribute to quality and safety improvement in nursing homes and homecare services and to explore how quality is conceptualised for them and how they contribute to quality of life and safety for patients receiving homecare services.

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Part II

List of papers

Paper I

Johannessen, T., Ree, E., Strømme, T., Aase, I., Bal, R., Wiig, S. (2019). Designing and pilot testing of a leadership intervention to improve quality and safety in nursing homes and homecare (the SAFE LEAD intervention). *BMJ Open*, 9:e027790.

Paper II

Johannessen, T., Ree, E., Aase, I., Bal, R., Wiig, S. (2020). Exploring challenges in quality and safety work in nursing homes and homecare– a case study as basis for theory development. *BMC Health Services Research*, 20, 277.

Paper III

Johannessen, T., Ree, E., Aase, I., Bal, R., Wiig, S. (2021). Exploring managers' response to a quality and safety leadership intervention: findings from a multiple case study in Norwegian nursing homes and homecare services. *BMJ Open Quality*,10:e001494

Paper I

BMJ Open

Designing and pilot testing of a leadership intervention to improve quality and safety in nursing homes and home care (the SAFE-LEAD intervention)

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ABSTRACT

Objective To describe the design of a leadership intervention for nursing home and home care, including a leadership guide for managers to use in their quality and safety improvement work. The paper reports results from the pilot test of the intervention and describes the final intervention programme.

Design Qualitative design, using the participation of stakeholders.

Methods The leadership guide and intervention were designed in collaboration with researchers, coresearchers and managers in nursing homes and home care organisations, through workshops and focus group interviews. The pilot test consisted of three workshops with managers working on the leadership guide, facilitated and observed by researchers, and evaluated by means of observation and focus group interviews with the participants. The analysis combined the integration of data from interviews and observations with directed content analysis.

Setting Norwegian nursing homes and home care services.

Participants Managers at different levels in three nursing homes and two home care services, coresearchers, and patient and next-of-kin representatives.

Results The managers and coresearchers suggested some revisions to the leadership guide, such as making it shorter, and tailoring the terminology to their setting. Based on their suggestions, we modified the intervention and developed learning resources, such as videos demonstrating the practical use of the guide. Evaluation of the pilot test study showed that all managers supported the use of the guide. They adapted the guide to their organisational needs, but found it difficult to involve patients in the intervention.

Conclusions A participatory approach with stakeholders is useful in designing a leadership intervention to improve quality and safety in nursing homes and home care, although patient participation in its implementation remains difficult. The participatory approach made it easier for managers to adapt the intervention to their context and to everyday quality and safety work practice.

Strengths and limitations of this study

- The main strength of this study is that the intervention design drew on input from researchers, coresearchers, future users of the Improving Quality and Safety in Primary Care—Implementing a Leadership Intervention in Nursing Homes and Home care intervention and patient and next-of-kin representatives, and several data sources.
- The sample of managers and units in the pilot test is limited. However, the feedback received during interviews and pilot testing of the intervention was consistent across the sample, and supported by the feedback received from the coresearchers.
- The intervention design needs to be made sustainable over time without researcher involvement, and patients should be more actively involved in its implementation.

BACKGROUND

Translating research-based findings into practice in healthcare is difficult.[1–4] Improvement interventions too often fail, and management teams have to know how to implement evidence-based knowledge to facilitate quality improvement at the local service level.[5 6] Quality improvement interventions may have multiple components designed to enable knowledge translation to foster change in the behaviour of people and organisational systems, and can target any or all of the quality domains (safety, effectiveness, efficiency, timeliness, equity and patient-centredness) where performance is unsatisfactory.[7]

The recent literature on intervention design emphasises the importance of using theory, acknowledging interventions as both social and technical, and the role of context.[6] Perhaps the most important need highlighted in the literature is for a more

active and collaborative design of the intervention, involving stakeholders such as service users, practitioners and researchers aiming to solve practical problems in a way that emphasises shared reflection and collective inquiry.[3 6 8] More effort is needed to design an intervention that incorporates all of those elements.[6]

Leadership is central to a healthcare organisation's effort to improve quality and safety.[9–14] A recent systematic review shows how disengaged leadership, leadership turnover, poor organisational culture and dysfunctional external relations are characteristic of healthcare organisations that are struggling with quality and safety.[15] However, our knowledge of how best to design interventions to support healthcare managers with new tools and competence to diagnose and improve their organisational quality and safety challenges needs to be strengthened.[12 16] In the Norwegian context, policy-makers have called for the development of stronger competence among managers in relation to quality and safety improvement, in addition to the leadership skills and tools to translate research-based knowledge into practice. Policy-makers and research funding bodies have paid special attention to the primary care setting in terms of nursing home and home care managers who need the tools and competence to achieve the goals of sound professional practice, reduced patient harm and improved service quality.[17 18] Our study contributes to fill this knowledge and tool gap by designing a leadership intervention for nursing home and home care managers.

The Improving Quality and Safety in Primary Care—Implementing a Leadership Intervention in Nursing Homes and Home care study

The intervention described and pilot tested in this paper is part of a larger study titled 'Improving Quality and Safety in Primary Care—Implementing a Leadership Intervention in Nursing Homes and Home care' (SAFE-LEAD).[16] The SAFE-LEAD study builds on the European Union seventh Framework Program funded project 'Quality and Safety in Europe by Research' (QUASER) conducted in hospitals, by applying research findings to Norwegian nursing homes and home care settings. The QUASER guide defines quality care as care that is clinically effective, safe and patient centred. Care coordination is central in the understanding of quality in the Norwegian primary care context and is incorporated into the SAFE-LEAD study's conceptualisation of quality. The original QUASER guide[19] is theoretically anchored in the Organising for Quality framework[20] and structured around eight common quality challenges: structure, politics, culture, education, emotions, technical and physical conditions, leadership, and external demands.[19] It consists of a series of questions to stimulate reflection and an accompanying decision-aid menu of potential options, including empirical examples of possible quality and safety improvement solutions across macro, meso and micro system levels. The guide is designed to facilitate patient safety and quality improvement in clinical practice and service delivery, by giving managers a systematic way to identify the strengths and weaknesses of their improvement approach and reflect on what is required to develop quality improvement and patient safety efforts tailored to their needs.[12 13 19 20]

Based on the original QUASER-guide, the SAFE-LEAD study will develop, implement and evaluate a research-based leadership guide for the nursing home and home care context in Norway. This paper focuses on the design and modification of the leadership guide, and the form and content of a pilot intervention programme.[16]

Aim and research question

The aims of this paper were (1) to describe the design of the leadership intervention; (2) to conduct a pilot test of the intervention to ascertain the feasibility of the intervention design and receive input for modifications and (3) to describe the final intervention programme prior to implementation. The objectives of the pilot test were to receive information on the functionality of the leadership guide, the pedagogical approaches, and the structure and content of the intervention. Testing outcome measures was not an objective.[16]

The following research question was addressed: How can a leadership intervention for improving quality and safety be designed for implementation in nursing homes and home care contexts?

METHODS

This SAFE-LEAD study has a mixed-methods design; this paper uses a combination of qualitative methods. To guide the design of the SAFE-LEAD intervention, we used the Medical Research Council's (MRC) guidance framework for the development and evaluation of complex interventions.[21] The MRC's guidance views healthcare interventions as flexible, non-linear processes, giving equal attention to all phases (development, testing, evaluation and wider application). Also noteworthy is that while advocating the systematic development of interventions, it stresses the importance of context in implementation and allows for adaptation of an intervention to the local setting to ensure its success in practice.[21]

The Knowledge to Action framework[2] guided the development process. According to this framework, translating the leadership guide into practice requires an organisation to identify the problems it needs to solve; tailor the guide to its own settings and contexts; assess and address barriers to its use; implement the intervention; monitor the implementation and evaluate the outcomes.[22] One part of the development process was the identification of contextual factors in the Norwegian nursing home and home care setting that can affect outcomes. These results will be published in a separate paper.

Data collection

In the following, we describe the data collection methods in the different phases of the development and pilot testing, the data sources (table 1), and the data analysis.

Table 1 Overview of data collection activities and data sources

Phase	Method	Source/informant	Time/duration
Intervention development (leadership guide, workshop content)	► English–Norwegian translation of leadership guide ► Modifications to guide	► Professional translation company, researchers, coresearchers ► Monthly project meetings with researchers	► November 2016 to October 2017. 12 months ► November 2016 to October 2017/ 1.5 hours x 12. Total:17 hours
	► Two workshops in consortium for discussions of guide and workshop content	► Seven coresearchers ► Seven researchers	► April and September 2017 / 3 days x 7 hours: Total: 21 hours
	► Three focus group interviews with managers to test the leadership guide	► One home care services: (focus group: 1 n=4) ► Two nursing homes (focus group 2: n=5, focus group 3: n=2)	► May to June 2017 / 1–1.5 hours. Total: 4.5 hours
Pilot test	► Workshops with managers (n=3) with observations	► One nursing home: 6 hours (n=3 managers+1 patient representative) ► One home care service: 6 hours (n=6 managers).	► November 2017 to February 2018. Total: 12 hours
	► Two focus group interviews with participants for evaluation and feedback on need for further changes	► One nursing home (n=3 managers) ► One home care services (n=6 managers)	► February 2018 / 1–1.5 hours. Total: 3 hours

Intervention development

The design of the intervention planned to include a 6-month intervention consisting of 3–4 workshops with manager teams working with the leadership guide. The workshops were scheduled in advance,[16] but their content and structure, as well as the leadership guide, were developed in a participatory process.[3 23] First, the QUASER Hospital Guide was translated from English to Norwegian by a professional translation service. Further language adjustments were conducted in collaboration with the project team (researchers with backgrounds in nursing, health psychology, safety science, engineering and health management), coresearchers in the project (nurse counsellors from different municipalities, patient and next-of-kin representatives) and future users (managers from nursing homes and home care). An important part of the development process was to adapt the leadership guide to the Norwegian nursing home and home care setting. The original QUASER guide is based on empirical findings from European hospitals. The SAFE-LEAD project developed a version that was adapted to Norwegian nursing homes and home care settings. The development process lasted from November 2016 to November 2017. There were several iterations before agreement was reached on the final version. This process comprised meetings with the project team and two workshops with coresearchers to obtain feedback on language, format and content. These arenas were also used to discuss the structure and content of the intervention workshops.

The leadership guide was refined based on coresearchers' feedback, and in May 2017, we conducted three focus group interviews with potential users of the guide. The participants were managers, development nurses and nurses from two nursing homes (n=7) and one home care service (n=4), to test and receive feedback on the leadership guide. The focus group lasted for 60–90 min (table 1). The participants were given time to read the leadership guide and the interview guide beforehand. The interview guide contained questions about the content, structure and format of the leadership guide, in addition to what the managers considered important when using the guide in their daily quality and safety work (eg, amount and type of researcher involvement and facilitation, and training needs). The purpose of the focus group interviews was to elicit the participants' thoughts about the clarity, usefulness and content of the leadership guide, and to identify learning support needs so that the guide could be used for quality improvement work. Based on the theory, literature, input from coresearchers and potential users, we designed the SAFE-LEAD intervention.

Pilot test

The pilot test evaluated the feasibility of the intervention. We conducted a process evaluation of the pilot test according to the study protocol[16] focusing on guide functionality, pedagogical approach and intervention content, in order to asses needs for modifications.[24]

The SAFE-LEAD intervention was pilot tested for feasibility in two organisations located in the same urban Norwegian municipality. The pilot test lasted 2–3 months (table 1). One coresearcher from the Centre

for Development of Institutional and Home Care services (USHT) in the municipality recruited the study sites. All invited participants consented to participate. No one who had been invited declined. The organisations were one large nursing home and one large home care service. The same home care service site also participated in the focus group interviews in the development phase of the leadership guide, to assess if its suggested changes had improved the guide. One management team in each organisation participated in the workshops, which were conducted at their own workplace. The management team of the nursing home consisted of three managers and one patient representative. The management team from the home care services consisted of six managers. Each organisation held three workshops. During the workshops, one researcher facilitated discussion and one or two researchers observed and took notes. In addition to taking observational notes during the workshops, we conducted semistructured focus group interviews with the participants in both facilities after the final workshop to evaluate their experiences with the leadership guide, and with the intervention workshops during the pilot test period. The interview guide contained questions about (1) experiences with the leadership guide (eg, content, language, usefulness), (2) the workshop (eg, content, structure, usefulness, challenges, material received in advanced, web tool) and (3) experiences with their work processes in between workshops. We structured the workshop agendas around the three-step process in the leadership guide (figure 1). During all workshops, the researchers observed and took notes according to a guide based on the workshop agendas (eg, reflections concerning quality and safety work, challenges and goals, as well as work processes and progress).

Data analysis

The data analysis was inspired by Strøm and Fagermoen's[25] approach to integrating data from interviews and observation collected during a year-long process of collaborative development. The key component of this strategy is the interweaving of observation and interview data derived from sequences of interactive situations, such as the intervention design process, and analysing them as a complete body of material. The data material was analysed before integration. In our study, all focus group interviews were tape-recorded and transcribed verbatim. The focus group data were all subjected to directed content analysis[26] according to the predefined categories of the leadership guide,[20] and according to training needs, and user experiences from the pilot test to enable evaluation of the intervention feasibility.[27] The field notes were transcribed and analysed in a more descriptive manner[28] that focused on sorting the contents of the field notes recorded during and after the consortium workshops and intervention workshops. The field notes were also analysed according to the functionality of the guide content in the development process, and according to intervention content and functionality during the pilot test. The aim of our integrative analysis was to produce a systematic, descriptive overview of discussions and decisions regarding the intervention development and content, the identified training needs and chronologically describe the results from the pilot test. In this way, we integrated the data sources collected over a 1-year period and described the process underlying the final intervention programme ready for implementation. All researchers and coresearchers collaborated in the process and during the data analysis, the preliminary

Figure 1 Three-step process.

research findings were discussed in consortium meetings to ensure trustworthiness.

Patient and public involvement statement

The user, patient and next-of-kin perspectives are key throughout the SAFE-LEAD project from project development, design, data collection, analysis, through the dissemination of results.[16] The development process has consisted of workshops with the co-researchers in the SAFE-LEAD consortium ensuring sound user involvement with perspectives from patient representatives, next-of-kin representatives and Patient and User Ombudsman and perspectives from future users of the guide (managers in nursing home and home care services). Three nurse-counsellors from the USHT were recruited by their municipality which is a partner in the project. These three nurse-counsellors are employed as coresearchers, in addition to one head of a USHT who was not paid, but who participated in semiannual project meetings. In addition, one patient representative and one next-of-kin representative were recruited as coresearchers in the SAFE-LEAD project after startup, by the project manager. The Patient and User Ombudsman was recruited as partner in the project and was involved in the project development and application for funding. The Patient and User Ombudsman has an important role in the stakeholder network and in quality assurance of the intervention design and pilot testing. The recruitment of participants and study sites was conducted in collaboration with the three USHT coresearchers. Managers from nursing home and home care participated in the development of the leadership guide, intervention workshop content and pilot test. One patient from the nursing home study site participated in the pilot test.

RESULTS

We now describe the intervention design process and the participatory approach. The results from the guide and workshops development process are presented, followed by results from the pilot test and the final adjusted intervention programme ready for full implementation in the SAFE-LEAD study.[16]

Phase 1: development of leadership guide and workshop content

Development of leadership guide

The leadership guide is built around a three-step process (figure 1) in which the organisations assess themselves on seven common quality challenges (figure 2). As illustrated in figure 2, both 'patient' (for nursing homes) and 'user' (for home care) are represented in the leadership guide.

The participants in the focus groups had several suggestions for the development of the leadership guide, which were in line with the input received from coresearchers

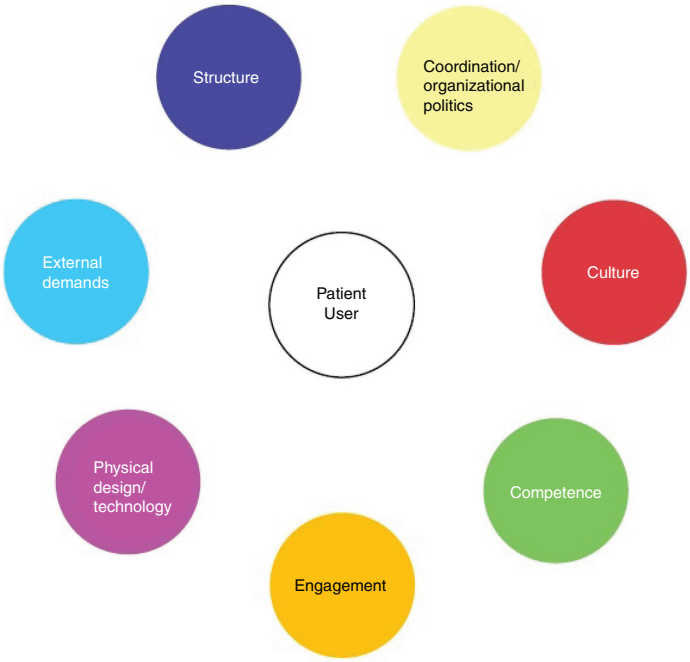

Figure 2 The seven challenges of quality improvement based on Bate *et al*.[20]

Table 2 Guide elements changed in the development process

Guide element from the QUASER guide	Changes made in the SAFE-LEAD guide
Structure	• The guide was shortened from 152 to 70 pages. • Repetitions were deleted. • A table of contents was added. • Definitions of the quality challenges and a clear description of how the guide can be used were presented at the beginning of the guide. • Incorporated opportunity and space for adding self-selected goals in addition to the predefined ones.
Content	• Clearer definitions of the quality challenges, as well as some new labels (eg, 'emotional challenge' was changed to 'engagement'). • In Norwegian, it was not appropriate to use 'strategy,' so it was changed to 'goals.' • Removal of the leadership challenge (as this is inherent in all challenges). • Inclusion of patient /user at the centre of the seven challenges figure 2.

SAFE-LEAD, Improving Quality and Safety in Primary Care – Implementing a Leadership Intervention in Nursing Homes and Home care; QUASER, Quality and Safety in Europe by Research.

in the project. Their suggested revisions were related to the structure, language and content of the guide. Table 2 summarises the feedback. The translation of the guide was an iterative working process. Coresearchers and users of the guide reported having difficulties with some of the language after translation because it did not fit the vocabulary used in everyday practice. Thus, language revisions were made as a part of the development process and modification of the guide to fit the nursing home and home care settings.

The managers and coresearchers concurred that the leadership guide should be shorter, more detailed and easier to read. Several changes were made to condense the guide. The original version included approximately 80 pages of examples of quality improvement work in European hospitals. These examples were not considered especially relevant for the nursing home and home care settings and were therefore removed. Removing duplications and condensing several paragraphs and definitions also shortened the guide.

Some of the original eight quality challenges did not fit the Norwegian context and vocabulary when translated from English, resulting in a rewording of some of the challenges and expansion or restriction of some of the definitions. For example, the participants in the focus group and the coresearchers argued that since care coordination is a key domain of the Norwegian quality and safety work and reforms on policy level, it merited inclusion as a quality challenge. The 'political challenge' was, therefore, changed to 'care coordination and organisational politics.' Furthermore, the 'educational challenge' was reworded to 'competence,' and the 'emotional challenge' to 'engagement.' The 'leadership challenge,' one of the eight challenges in the original QUASER-guide, was removed, because the managers and coresearchers viewed leadership as inseparable from the other challenges. An important issue in the feedback on the guide content was that the patient/user was lacking in the guide and in figures used for visualisation. Consequently, the patient/user received more attention in the leadership guide, in definitions and goals, and in the visual presentation of the seven challenges by being placed in the centre, symbolising that quality work improves service quality for the patients/users (figure 2).

The participants supported our idea of developing a web version of the guide in addition to the paper version. The participants believed that a web version could provide simple, digital and visual presentation of the work in the leadership guide. They added that a web version would be easier to use and could be readily updated without losing earlier versions. Based on the feedback, we developed a digital interactive version of the leadership guide with the same content as the paper version. The digital web version allows for data storage and visualisation of the guide and evaluation over time.

Development of workshop content

The coresearchers and managers who participated in the focus groups offered the following suggestions about the content of the intervention workshops:

- Introduction of the leadership guide by a researcher in the first workshop.
- Specific homework and preparation between workshops.
- Learning tools to ease the managers' workload with the leadership guide (presentation of the guide and sample videos of the guide being used in practice).

It was suggested that the first workshop should start with one of the researchers introducing the leadership guide, to improve participants' understanding of its purpose, and to encourage its use in quality work. They also wanted short videos demonstrating practical examples of the guide in use. Based on the training needs identified in the focus group interviews, we developed four videos as learning resources. The first is a 10 min studio lecture presentation of the leadership guide. One of the researchers introduces the guide. The three other videos, each lasting about 6 min, use actors to demonstrate the

practical use of the guide. In each video, three actors portray managers from the home care service setting as they follow the three steps of the guide (figure 1). The videos cover the topics that were discussed in each of the first three workshops (assessment of quality challenges, setting goals, make action plans). All learning resources were emailed to the managers 1 week before the workshops and were available on the internet. The design of the video manuscripts was based on data and input from coresearchers' experiences with the home care services, and on focus group interviews with managers who responded to the draft version of the leadership guide.

Based on the input from the coresearchers and the focus group interviews, we developed the content of the three workshops for pilot testing, including preparation of workshop agendas and homework between workshops. All workshops focused on managers' self-evaluation of their quality and safety work. A team of researchers and coresearchers should facilitate reflexive group discussions among the teams in the workshops. This programme was designed to take place in three workshop sessions (2 hours each). The content of the three pilot tested workshops was as follows:

- Workshop 1: Introduced the leadership guide and web version, identified the quality challenges that the managers experienced in their quality work, and the challenges they believed needed the most attention.
- Workshop 2: Established goals and strategies to address the identified quality challenge(s), and to involve patients/users.
- Workshop 3: Developed action plans.

Before each workshop, participants were expected to have done some preparatory reading and watched the video for that workshop (1–3). The rationale was that managers are under time constraints, and by coming prepared to the workshops, the sessions could be more time-effective and productive. For each 2-hour workshop, the research team used the detailed agenda consisting of questions, discussions, reflections and feedback sessions. The research team met between workshops to discuss the implementation and to ensure consistent approaches and reflections about findings in the two organisations in the pilot test.

Phase 2: intervention pilot testing

In the following, we present the findings from the pilot test of the intervention and how it was evaluated.

The managers' use of the leadership guide

Results from workshop observations and interviews from the pilot test showed that all managers in the nursing home and home care services were committed to and positive about using the guide and to start working with the quality challenges they identified as most relevant for their organisations.

> I believe that a key part of our challenge, especially in the health service and for the nurses, is that we are so trained in suggesting specific actions and action should be implemented really fast… we are so action-oriented that we sometimes act before we have actually realized what the problem really is. So to take a step back and think about what our challenges really are is key, and then sometimes ask the 'why, why, why' questions… (Unit manager, nursing home).

In both organisations, the managers met between the workshops to collaborate on the guide, and to prepare for the next workshop. Managers in the nursing home included their employees in the quality improvement process between the workshops, as stipulated in the intervention programme. The home care organisation was undergoing reorganisation and found it more difficult to involve their employees. They needed the leadership guide to give them a sense of what quality work entails.

Moreover, results from the pilot test showed that managers in both organisations found the goals suggested in the guide too vague and difficult to operationalise. Observational data from workshops showed that managers from the home care services wanted to focus on next-of-kin involvement and a training programme for new employees, and struggled to meet one of the predefined goals. However, they appreciated the ability to use the guide to define their own goals, and consulted the predefined goals as needed. Furthermore, observation data showed that the home care managers found it important to evaluate their actions. One of their reflections during the workshop was that they were very eager to implement actions for different kinds of challenges but never followed up by evaluating them. Here, the leadership guide proved a useful evaluation tool. One of the home care managers described how the leadership guide helped them systematise their quality work:

> I think it was very good at Step 1 [identification of quality challenges], that is where we haven't had any system. It clarifies. Step 3 [defining action plans] is really how we already work, we do have interventions, action plans and goals—but I see the need for the systematization in the beginning. We too often jump right into actions, and we are not so good at sorting things out and see where it belongs (…). So I think we have not applied Step 1 that much before. (Home care manager).

Quality improvement tool for structure and system is important

Results from the observations and the focus group interviews showed that the use of the guide depended on how systematically the organisations were already working on quality improvement. This also affected the extent of researcher involvement in the organisations. In the nursing home, the managers already had a well-functioning system and an established plan for their quality work, and therefore considered it a 'waste of time' to make new action plans to fit the leadership guide. Managers from both organisations insisted that working with the guide increased their awareness of their quality

work by presenting them with new concepts and opportunities for creating new ideas, giving them a good overview of their quality work, and helping them to evaluate their actions and current practice.

> (…) it has raised awareness in a way. I think. You`ve got some new concept on things that you would not otherwise have had. (Unit manager, nursing home)

The results from both focus group interviews and observation showed that the managers found the seven quality challenges in the guide recognisable and informative. Managers were enthusiastic about the way in which the quality challenges gave them an overview of their organisation and quality work.

According to the managers in the pilot, the guide provided new systematics in their quality work, and they welcomed the explicit focus on patient and user-involvement. Results showed that the guide served as a checklist, and as a supplement to the quality improvement tools they already applied in their practice. In both organisations, the managers used only the web version of the guide. However, the managers stressed the need for a tutorial demonstrating its more technical capacities, such as data storage, exporting and importing of data.

Manager's input on adjustments for final intervention design

In the focus group interviews, the managers suggested that additional development of the guide and intervention should clarify that the challenges overlapped with the goals. This means that working with one challenge or goal might have a spillover effect in the guide and vice versa. Furthermore, the managers struggled to make the goals more relevant and applicable to their own organisation. Unlike the action plans, the goals are overarching and therefore not measurable, and it was important for the managers that the researchers clarify this in the final intervention programme, to prevent managers from becoming frustrated when working with the goals. In addition, the managers found that the work on goals and action plans in the guide overlapped, and experienced this as an iterative rather than a linear process. Thus, they suggested that further development of the workshops should merge the themes in workshop 2 (goals) with workshop 3 (action plans) to allow them to work with both at the same time. The nursing home managers noted that involving a user representative (a resident) in the workshops was difficult, due to the patient's reduced sight and hearing capabilities. They preferred to ask patients/users for their advice and involve them between rather than in workshops. The patients/users could then discuss their perceived challenges in the organisation and share their thoughts and experiences on more developed organisational goals and actions, as illustrated in this quote:

> Yes, we should involve the patients between the workshops and get their feedback then. Then we could also approach several patients, instead of involving only one in the workshops. We could ask patients on every floor or several patients about one topic that we are concerned about. (Manager, nursing home).

Phase 3: final intervention design

Based on the results from the pilot test and discussions among project researchers and coresearchers, a final intervention programme consisting of four workshops was designed. The final intervention programme is illustrated in table 3. The following changes and adjustments from the pilot version of the intervention were made:

- Merging of the themes in workshops 2 (goals) and 3 (action plans).
- Presentation of survey results (conducted in the study prior to the intervention) to give information on quality challenges as described by the employees.
- Adding a fourth workshop on sustainability.
- Check-up call between workshops 3 and 4.
- Development of a tutorial demonstrating the use of the web version of the leadership guide.
- Timing of intervention workshops, where workshops 1, 2 and 3 should be conducted in the first 3 months of the intervention, and workshop 4 should be conducted in the sixth and final month. The rationale was to be intensively involved in the beginning so that managers would be comfortable using the guide. The fourth and last workshop could then focus on sustainability.
- The intervention programme will be implemented in the SAFE-LEAD study and evaluated by survey measurement before and after the intervention period, and process evaluation over a 1-year period as described in the study protocol.[16]

DISCUSSION

It is challenging to translate research-based findings into practice in healthcare settings.[1–4 21 29] In this paper, we have described the design of the SAFE-LEAD intervention. Our study demonstrates the importance of stakeholder involvement in the design and development of a leadership intervention in nursing homes and home care. Our approach was influenced by participatory design[3 23] and involved coresearchers (nurse counsellors from different municipalities, patient ombudsman, patient and next-of-kin representatives), and future users (managers from nursing homes and home care). The participatory design played a key role in translating and adapting English language QUASER hospital Guide to the Norwegian nursing home and home care setting. Moreover, using this design allowed consideration of the everyday context of nursing home and home care managers, thereby tailoring the intervention content to managers' learning needs, time and challenges. In close collaboration with coresearchers and managers, the intervention was modified to fit the intended field of practice. This is consistent with previous research suggesting a more active intervention co-design involving stakeholders.[3 6 8 30 31]

Our study supports the findings of previous research, indicating that patient and user participation in

Table 3 Final intervention programme

	Workshop 1 (Mnt1—2 hours)	Workshop 2 (Mnt2—2 hours)	Workshop 3 (Mnt3—2 hours)	Workshop 4 (Mnt6—2 hours)
Preparation	Videos and guide, **tutorial on web tool**	Video	Video	**Check-up call before work shop 4**
Introduction	Intro of the guide and web tool+**identify quality challenges**	Status of challenges and goals and reflection on action plan **Presenting survey results**	Status of challenges, goals, action plans	Status
Topic	Seven challenges, **goals, user involvement, action plans**	Goals and action plan and user involvement	Action plan	**Sustainability**
Approach	Self-diagnosis facilitated by researchers	Self-diagnosis facilitated by researchers	Self-diagnosis facilitated by researchers	Self-diagnosis facilitated by researchers
Discussion	► What challenges have the organisation worked on? ► What challenges need more attention? ► Why did you choose this?	► Discuss goals related to the challenges ► Focus on user involvement ► **Consider possible actions**	► Discuss action plan and local adaptations ► Adjustment	► Discuss promoting and inhibiting factors in local QI processes ► Adjustment ► **Sustainability—what is needed in the organisation**
Homework	Agreement on homework	Agreement on homework	Agreement on goals for ensuring sustainability	Close involvement from researchers in four units

The bold text specifies changes added after the pilot test.

interventions is difficult.[30 32] In our results, we attribute this to the nature of the nursing home and home care context, such as reorganisation processes, lack of managerial capabilities and the difficulty of finding patients who are physically capable of participation in projects and interventions. However, the patient and user engagement has the potential to uncover unmet needs,[30 32] and hence received stronger emphasis in our adapted guide than in the original QUASER guide.

Involving coresearchers and managers in the design process generated several suggestions on how to develop a leadership intervention that would be useful and feasible in their everyday practice. They requested short meetings and suggested instructional videos and examples of when and how the guide was used by other managers, as inspiration. Therefore, we designed the intervention programme with use of blended learning activities as suggested by Harris *et al*.[22] Blended learning is a systematic combination of copresent (face to face) and technologically mediated interactions among students, teachers and learning resources.[22] We found that blended learning activities offered managers a more flexible way of understanding and making the best use of the leadership guide. Furthermore, the managers appreciated the fact that they saved time by watching the learning videos while preparing for a workshop and performing other tasks.

The results from the intervention design process were consistent between the managers in the nursing home and home care contexts, regarding how the leadership guide and workshops should be best designed. However, there were differences in how the two management teams used the leadership guide and adapted it to their organisation's needs and capabilities. Our study, therefore, supports earlier implementation research[33 34] on the need for local adaptions in complex organisations. In line with our findings, previous research has shown that managers must be engaged in and capable of involving their management team and employees for optimal function of interventions designs.[35–38] We have, therefore, designed an intervention that has a clear description of the process and that accommodates the nursing home and home care contexts and the manager's capabilities. However, despite this flexibility and adaptability, a detailed description of the intervention's elements still allows for comparison between organisations. Therefore, workshop agendas, learning resources, guide content, workshop structure are similar, but still offer choices among the seven quality challenges and goals and actions plans for their specific context.

Strengths and limitations

The main strength of this study is the thorough intervention development process that involved researchers, coresearchers, future users of the SAFE-LEAD intervention (managers in nursing homes and home care services), and patient and next-of-kin representatives, and several

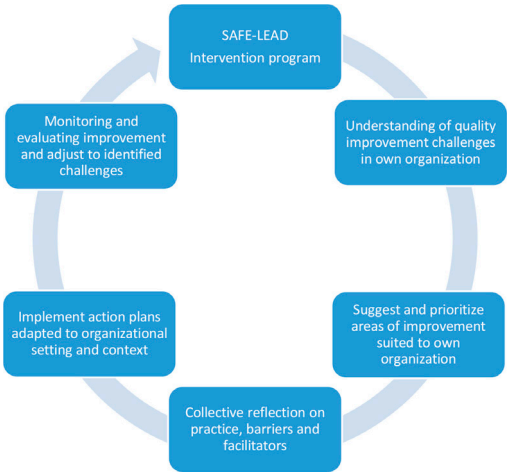

Figure 3 Logic model of the SAFE-LEAD intervention programme translating knowledge into practice based on knowledge to action framework of Straus *et al*.[2] SAFE-LEAD, Improving Quality and Safety in Primary Care – Implementing a Leadership Intervention in Nursing Homes and Home care.

data sources (ie, focus group interviews, observations, workshops). The data material is collected from many researchers and coresearchers who contributed to the development of the intervention. Observational data are, therefore, based on subjective interpretation from many researchers.

The study has several limitations. The data material is analysed consecutively in the intervention development process, resulting in a less systematic analysis. One nursing home located in a small, rural area had only two employees participating in the focus group in the development phase, due to sick leave and understaffing. The sample of managers and units in the pilot test is limited. However, the feedback received during focus group interviews and pilot testing of the intervention was consistent across the sample, and supported by the feedback we received from the coresearchers.

There is a challenge in the intervention design on how to make it sustainable over time without researcher involvement. Quality improvement tools can be beneficial for managers in nursing homes and home care, but the heavy workload in these organisations can make implementation of improvement tools difficult without additional support in the implementation.[39] Previous research shows greater chance of success with implementation if there is a stable working environment, enough personnel resources and a nursing home management that is positive to the intervention.[40]

In the 'Knowledge to Action' framework, Straus *et al*[2] suggest several factors that should be considered when developing sustainability-oriented action plans, such as ensuring the presence of systems to monitor progress, map the availability of financial and human resources, and managers responsible for monitoring progress and ensuring sustainability. Managers can use the leadership guide to monitor progress, and no financial resources are required for using the guide. The issue of sustainability will be discussed with the participating managers during implementation of the final intervention, and a sustainability-oriented plan will be made in collaboration with researchers and managers.[16] In figure 3, we illustrate the logic model of the intervention programme and processes based on the Knowledge to Action framework.[2]

CONCLUSION

The findings of this study support the importance of involving stakeholders in the design of a leadership intervention. A leadership intervention for the improvement of quality and safety in nursing homes and home care contexts can be designed in a participatory approach involving stakeholders, although patient and user participation during the implementation remains a challenge. There is a need for further exploration of how patients and users can be involved in a leadership intervention and how managers can make the best use of patient and user experiences in managing quality and safety. The use of blended learning activities can be considered as a data-driven and bottom-up approach to tailor an intervention to the suggestions and educational needs identified by potential users in the development and pilot test phase. Our evaluation demonstrated that the intervention design made it easier for managers and their teams to incorporate the leadership guide into their everyday quality and safety work practice.

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Competing interests None declared.

Patient consent for publication The patient participating in the pilot test gave written informed consent.

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Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement Anonymised data of the study will be stored at the Norwegian Social Science Data Services subsequent to completion of the project, and will then be available to others on request.

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RESEARCH ARTICLE Open Access

Exploring challenges in quality and safety work in nursing homes and home care – a case study as basis for theory development

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Abstract

Background: Management, culture and systems for better quality and patient safety in hospitals have been widely studied in Norway. Nursing homes and home care, however have received much less attention. An increasing number of people need health services in nursing homes and at home, and the services are struggling with fragmentation of care, discontinuity and restricted resource availability. The aim of the study was to explore the current challenges in quality and safety work as perceived by managers and employees in nursing homes and home care services.

Method: The study is a multiple explorative case study of two nursing homes and two home care services in Norway. Managers and employees participated in focus groups and individual interviews. The data material was analyzed using directed content analysis guided by the theoretical framework 'Organizing for Quality', focusing on the work needed to meet quality and safety challenges.

Results: Challenges in quality and safety work were interrelated and depended on many factors. In addition, they often implied trade-offs for both managers and employees. Managers struggled to maintain continuity of care due to sick leave and continuous external-facilitated change processes. Employees struggled with heavier workloads and fewer resources, resulting in less time with patients and poorer quality of patient care. The increased external pressure affected the possibility to work towards engagement and culture for improvement, and to maintain quality and safety as a collective effort at managerial and employee levels.

Conclusion: Despite contextual differences due to the structure, size, nature and location of the nursing homes and home care services, the challenges were similar across settings. Our study indicates a dualistic contextual dimension. Understanding contextual factors is central for targeting improvement interventions to specific settings. Context is, however, not independent from the work that managers do; it can be and is acted upon in negotiations and interactions to better support managers' and employees' work on quality and safety in nursing homes and home care.

Keywords: Nursing home, Home care, Quality challenges, Safety, Leadership, Employees, Context, Theory development

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Background

Management, culture and systems for better quality and safety have been the main topics in Norwegian national healthcare policy [1–3]. These key challenges have also been highlighted internationally [4–7]. There is a clear need to ensure leadership, a culture of openness and learning, and a system for developing, embedding and sustaining quality and safety improvements. The delivery of healthcare is becoming more complex as a result of demography, patient preferences and limited resources [4, 6]. A pressure for immediate change may create a cultural bias to jump to implementation without a thorough planning of interventions [4, 6]. These factors can undermine performance and explain some variations in quality and safety [4, 8].

Both Norwegian health policy [1–3] and a recently updated regulation for the entire healthcare services focus on the role of management in quality and safety improvement [9]. The regulation states that management is responsible for the organization to provide professionally sound services and to work systematically with quality improvement and patient and user safety [9]. The regulation also elaborates on the requirements and responsibility for managers to having the overview of quality and safety challenges and risks and to ensure systematic improvement work. Moreover, the regulation specifies the governmental expectations towards healthcare managers for having a quality-oriented management and sound quality management systems in place. Yet, the challenges remain with managers in how to plan, manage and improve healthcare services. Understanding contextual barriers and challenges in quality and safety work in healthcare is crucial to implement effective improvement [7]. The Norwegian healthcare system has increasing knowledge about hospital settings but knows little about how nursing home and home care managers experience quality and safety challenges [2]. Norwegian research by Glette et al. [10] shows that managers and employees experience patients as sicker and more complex in nursing homes and that patient care is also becoming more time-consuming. Specific challenges in home care are the unregulated environment, fragmentation of care, discontinuity and multiple care givers that lack overview of patient status [6, 11]. There are fewer quality indicators in both homecare and nursing home settings in Norway, compared to specialized healthcare services (e.g. hospitals). However, we have seen a development in this area focusing on indicator development such as hospital readmission rates, waiting time for a nursing home placement, waiting time for homecare services, nutrition, competence level (proportion of employees with healthcare education in municipal health care services), dental services last 12 months, hours of doctor per resident in nursing homes, and activities for residents with dementia or disability. Despite these examples of measurable challenges in these settings, we have limited knowledge about healthcare professionals' own experiences of key challenges. In this paper, we therefore focus on nursing homes and home care as there is a need to map the challenges in quality and safety work, as perceived by managers and employees in Norwegian nursing homes and home care services.

The SAFE-LEAD project

This paper is part of a larger project titled 'Improving Quality and Safety in Primary Care – Implementing a Leadership Intervention in Nursing Homes and Home care' (SAFE-LEAD) [12], based on an intervention implementing a leadership guide for managers over a period of 12 months in 2018–2019 [12]. The leadership guide comprises seven common quality challenges (structure, coordination/organizational politics, culture, competence, engagement, physical design/technology, external demands) in which the organizations work with and diagnose themselves [13, 14]. In this paper, we map the status of the organizations in relation to the seven challenges before the intervention. The aim of this intervention is to build leadership competence and guide managers in improving quality strategies and practice and in tailoring them to their needs [14].

Aim and research question

The aim of the study was to explore the current challenges in quality and safety work as perceived by managers and employees in nursing homes and home care services before the intervention started. In addition, we were interested in their experience on factors that could facilitate or hinder their quality and safety work.

The following research question guided the study: What are the perceived current challenges in the quality and safety work of managers and employees in nursing homes and home care services?

Methods

Study design

The research was conducted as a multiple explorative case study of two nursing homes and two home care services in four municipalities in Norway. The cases allowed for exploration of the differences between nursing homes and home care services and the similarities and differences among municipalities and between managers and employees.

Case selection and recruitment

The cases were selected based on criteria such as size, geography and variation between city- and rural-based services [12, 14, 15]. Recruitment of the study sites (nursing homes and home care services) was conducted

by three nurse-counselors from the Centre for Development of Institutional Care and Home Care Services (USHT). They are employed as co-researchers in the SAFE-LEAD project.

Context

In Norway, municipalities are responsible for the provision of primary health care services such as nursing homes and home care services, general practitioners (GP) and emergency rooms. Nursing homes provide patients with 24-h stay, treatment and care that requires more health-related work than is practicable and justifiable in the patient's own home. Nursing homes have different departments such as long-term care, sheltered stay for dementia, and short-term stay. The nursing homes must have access to a nursing home doctor and other relevant professional groups, such as priest and physiotherapists. Home care services coordinate and provide health care services in the patient's home. The home care assists with tasks such as administration of medicine, personal hygiene, wound and palliative care [16]. Norwegian municipalities have great freedom in the organization and funding of their nursing homes and home care services. This freedom can ensure that municipalities design the services to fit local needs [3], but it results in differences in the delivery of healthcare services. Included in this study were four municipalities and four units; two home care services and two nursing homes. Geographical location was important in selection of units, as well as the different contextual nature between nursing homes and home care services, to explore different challenges they might experience in quality and safety work. The municipalities and units differed in size. Table 1 gives and overview of the study context and a description of the cases.

Sample

The participants were recruited as a part of a first phase in the SAFE-LEAD project [12] to explore the perceived quality and safety challenges before implementing intervention and as a basis for process evaluation in the project. Each unit selected participants (managers and employees) to participate in the interviews. The total included participants consisted of five males and 31 females. Participants varied in their years of experience as managers and employees. The managerial levels spanned from top managers and unit managers of the nursing homes and home care services, department managers with personnel responsibility for one or several departments within the nursing homes and home care service, one home care coordinator, and two professional development nurses in the nursing homes. Employees ranged from registered nurses to healthcare workers.

Data collection

Data collection consisted of seven focus group interviews with managers ($n = 17$) and employees ($n = 19$) and two semi-structured interviews with managers in one nursing home (Table 2). The managers in this nursing home were not located in the same unit so individual semi-structured interviews were more convenient. All invited participants consented to participate. No participants declined. The interviews were conducted in March/April 2018. All interviews were based on an interview guide based on the Organizing for Quality framework (OQ) [17] with questions pertaining to *structure, politics, culture, education, emotions, physical and technological*

Table 1 Overview of context

Case	Municipality population (approximate N of inhabitants)	Organization	Approximate number of employees	Approximate number of patients	Managerial levels
Home care A	15–20,000 District, medium-sized municipality.	• Delivers home care services • Practical assistance • Responsible for a community based activity center	< 100 Registered nurses Healthcare workers Assistants	280	2
Home care B	5000–10,000 Rural municipality, border to big municipality. Future merging with neighbor municipality.	• Delivers home care services • Practical assistance	< 100 Registered nurses Healthcare workers Assistants	100	2
Nursing home A	130–135,000 Large city, municipality.	Seven departments: • 1 short-term department • 1 drug care department (residence for patients with substance abuse) • 3 dementia departments • 2 long-term departments	200–300 Registered nurses Healthcare workers Assistants	130	2
Nursing home B	70–75,000 City, large municipality in area. Merger with another municipality planned.	One department divided into three groups: • 1 dementia group • 2 long-term groups	< 100 Registered nurses Healthcare workers Assistants	30	2

Table 2 Data collection and methods

Case	Method	Informant	Time/duration
Home care A	Focus group interview with managers (1) Focus group with employees (1)	Managers ($n = 4$) Employees ($n = 4$)	April 2018/60–90 min
Home care B	Focus group interview with managers (1) Focus group with employees (1)	Managers ($n = 3$) Employees (n = 4).	April 2018/60–90 min
Nursing home A	Focus group interview with managers (1) Focus group with employees (1)	Managers ($n = 8$) Employees ($n = 6$)	April 2018/60–90 min
Nursing home B	Semi structured interviews with managers (2) Focus group with employees (1)	Managers ($n = 2$) Employees ($n = 5$)	March 2018/45–90 min
Total	7 focus group interviews 2 semi structured interviews	17 managers 19 employees	

factors. Examples of questions were: What are the key challenges in your quality and safety work? How are you working to create enthusiasm among employees in the quality and safety improvement work (time for it, meeting points, responsibility, opportunity to attend conference, networking, monitoring of results)? How do you as a manager facilitate competence-development among employees? How are decisions on implementation/changes regarding quality and safety efforts made in this nursing home/home care (needs, motivations, top down, experienced problems in practice)? What is your experience on how data- and information systems support quality and safety improvement? How do you as a manager work with local adaptions on national policies? How do you adjust them to the local unit? Moreover, we asked follow-up questions focusing on challenges, obstacles and facilitators related to each theme.

Researchers and co-researchers in the SAFE-LEAD project conducted the interviews in the nursing homes and home care services in which the participants worked. Each interview lasted 60–90 min. All interviews were audio recorded and transcribed verbatim by a professional transcription service. Table 2 gives an overview of data collection and methods.

Data analysis

The data material was analyzed using directed content analysis approach according to predefined categories [18]. The predefined categories derived from theory, the OQ framework [17] and a further refinement by Johannessen [14]. The categories were structure *(plan and structure for the organizations' quality work),* coordination and organizational politics *(interaction within the organization and between service levels),* culture *(create an organizational culture where quality is a common value),* competence *(continuous competence development in the organization)*,engagement *(support and mobilize employees to create motivation in the quality improvement work),* physical design and technology *(implies premises, outdoor areas and the importance of home environment for quality improvement work),* and external demands *(awareness and decision related to social, political and economic factors such as regulatory requirements, national professional guidelines).*

Direct content analysis is a deductive approach to interpret meaning from the content of text data. Analysis starts with a theory or relevant research findings as guidance for initial codes. Data were collected followed by questions about the predefined categories. The next step in analysis was to highlight passages using the predetermined codes. Codes were defined before and during data analysis. Text that could not be categorized with the initial coding was identified and analyzed later to determine if they presented a new category or a sub category of an existing code [18]. The OQ framework and a further refinement by Johannessen [14] guided the discussions of findings (17). The main strength of a directed approach to content analysis is that existing theory can be supported and extended. The first author TJ was responsible for the analysis with input from ER and SW who read the transcripts and discussed theme development throughout the analysis period. IA and RB took part in discussion on theme development and refinement. Within-case analysis in each municipality was conducted first, followed by a cross-case analysis to map similarities and differences among municipalities, between nursing homes and home care and between managers and employees.

Results

The analysis of the data material is presented in two main categories with their associated subcategories. The first category, *structure, coordination, organizational politics, and external demands* describes challenges in continuity, change processes, coordination and how quality systems do not always interact. The second category, *culture, competence and engagement,* describes the challenges related to cultures of errors, maintaining competence among employees and knowledge transfer.

Structure, coordination, organizational politics, and external demands

Keeping continuity is a major challenge affecting service quality and safety

Managers and employees in all units experienced challenges with care continuity. However, these challenges were described in different ways across units, based on variations in the units' organizational structures. In both home care services, worklists (each employees' individual list of patients and duties for their specific work shift) were an important part of the quality and safety work. Fixed worklists, where employees attend to the same patients over time, contributed more to care continuity, quality in follow-up, good relationship between patients and personnel, and that decisions were more easily made with patients in their home, than did rotating lists. One of the unit managers expressed the advantages of fixed lists:

> The side effect [of the fixed list] is that it is much more fun to work. That everyone should try everything and experience variety in work tasks.… (..) It is when there is case continuity, then you as a nurse or healthcare worker are able to see the changes in the user conditions (Unit manager, home care B).

Employees in the home care services noted that the disadvantages of fixed worklists were less time and opportunity for discussions about ethics. Furthermore, patients were placed on the worklist based on geographical area rather than on employees' knowledge about the patients. All units shared some challenges in maintaining continuity, such as part-time positions, sick leave, requirements for larger positions, evening adaptation and maternity leaves among the employees. The nursing homes did not have fixed worklists but focused on primary nursing and the 'primary contact role', meaning that one employee bore the main responsibility for a group of patients. This ensured more continuity of care and follow-up. The largest nursing home experienced a challenge with many employees working in small positions of 11–12%. Although these part-time employees were expected to follow the same systems as full-time employees, the unit managers found this difficult, as these employees were often not present when the manager was. For example, the managers at nursing home B wanted the 'primary contact' to update the care plan regularly in order to have an awareness of the plan and to maintain service quality. Employees working full time had the overview, but the managers worried about keeping the overview during summer vacations and other seasonal changes in staffing and emphasized the importance of preparing for them. Depending on the unit that the managers represented, their perspectives of nursing coverage differed. For example, in home care A, the managers found it important to have enough nurses present. The manager argued that this was less of a problem in nursing homes because one nurse was always present. However, our results showed that even in the large nursing home with several departments, the managers faced similar difficulties with nursing coverage. Sometimes department managers performed nursing duties during the day shift, or one nurse assumed responsibility for approximately 130 patients across seven departments. The following quote illustrates the challenge with nursing coverage:

> And if there are several patients who need a nurse then they have to wait. Whether it is just an extra pill they need or if it is a wound to be cleaned. That is noticeable for our patients. (Employee, nursing home A)

Managers often have to carry out change processes, adding to the employees' workload

In several units, the managers described having to balance budget and that this effort sometimes was in conflict with quality and safety work in the organization. Retrenchment in the budgets should not come at the expense of services. The manager in home care A described operational tasks as time consuming, and as taking time away from employees:

> Our leeway is reduced. Looking at our efficiency in the home care service, it is incredibly high! We have measured and really made sure that people are so effective that we are at the limit. But, at the same time we have to cut the budget. Therefore, our major challenge is to do things differently, to create room for maneuver. (Unit manager, home care A).

The results showed a contrast among managers and employees in relation to finances and room for improved efficiency. The managers described the need to stick to their budgets and thus relied on trying to establish routines and change processes that met the constant demands for efficiency. For their part, employees reported having to do extra tasks in addition to their regular work. Having to make lunches, order food, and take blood samples without an accompanying increase in resources meant that they had less time to spend with patients and a reduction in the quality of health services.

The municipality's influence on the quality and safety work and the use of quality systems

Managers in the nursing homes reported that one system after another was being imposed upon them. They explained that the municipality bought IT systems, for

example a documentation program that was not suited to their needs. The managers found that there were too many systems and too much parallel documentation. Managers in both nursing homes stated that national and municipal political agendas set expectations they had to meet. The manager in home care B, used national plans and guidelines in meetings with the municipal manager to justify their service's resource needs, by noting the challenges in dementia care and the governmental expectations for service provision to this patient group. In this home care service, resources were reallocated to create a new position for a dementia coordinator, as prescribed in a new national guideline that will be implemented in 2020 ('dementia 2020'). This manager also talked about major reforms such as the change of care district and a future merger with another municipality. Such decisions were taken at the municipal level without input from the managers in our study. According to the managers in home care B and nursing home B, employees were not interested in the major organizational changes. Employees seemed to be more occupied with their daily tasks and did not mention any concerns about how organizational changes could affect their future work practice. However, employees argued that because of changes introduced at the municipal level, the managers were less visible in the department, causing increased workload and less patient follow-up from management. One unit manager described the effect of change processes on their work:

> Is it very much that, a lot of projects and changes, setting up a new group, this is at the expense of how you manage to be available in the workgroup, and how you can try to stay in the forefront yourself (Unit manager, home care A) .

Quality systems not interacting and lack of management tools challenges quality and safety work

Employees stated that their municipal quality systems did not communicate with the hospital systems. For example, because of different patient record systems in the municipalities and hospitals, they were not receiving sufficient data about their patients during care transitions. Furthermore, the different systems complicated the training of new employees, especially during the summer vacations. In home care B, employees had online access to the patient record system via tablets. Results showed that they had easy access to patient data as important for quality of care. However, the information from the hospital and GP did not connect with the tablet, so they had to connect from computers in the offices. The shortage of computers was another problem. Managers and employees across all units would have preferred having a laptop or tablet so that they could sit with the patients in their living room when documenting. However, an unreliable wireless network, and poor communication systems between the nursing home and the GP made this impossible. When the quality systems worked as intended, employees and managers found them both helpful and necessary. Both the top manager and the department manager in nursing home B reported that the quality system was efficient and gave them an overview of tasks. In terms of targets, the managers explained that they reported twice a year to the municipal management level about practical tasks such as contract of employment and if patients had been offered individual plans. The reporting seemed to be a safety check. There were variations in the use and need for checklists in the different departments, but what was evident across units and departments was the lack of management tools to guide managers in their quality and safety work. According to one manager:

> We are doing a lot of innovation and change processes at the moment, for example running a project now on tightening really, or cutting [resources] in home care. To get some management tools in this [would help]: "How can I be a good manager then?" (Unit manager, home care A).

Culture, competence and engagement

Lack of time affects quality and safety work and leads to different cultures of error reporting

In all units, the most often-reported errors pertained to medication administration and lack of documentation when prescribing medications. Medication errors increased in summertime when more employees were on vacation. Employees talked about the challenges they often faced and that differences in employees' work culture and work pressure led to poor documentation. The managers acknowledged that this stress easily led to deviations and medication error. At the same time, managers heard complaints directly from patients and relatives who said that employees were not spending enough time with patients and just ran in and out. However, the managers experienced that they had limited capacity to change the situation. One employee described the challenge with lack of documentation when prescribing medications:

> We actually had a case here on Tuesday, I think it was, then there was a patient, who had received his medication in the evening, but it had not been signed, and then he believed that he did not get it, and then it was the night shift: but the medicine was not in the medicine trolley. We did not want to give him double dosage. There was no one who knew. So most likely, he got it, but it was not signed

and the medicine was gone. (Employee, nursing home A)

Employees in home care B said that they had an inadequate incident reporting practice due to lack of time. One employee said that when all workdays were busy, she was not eager to take the time after her shift to complete the reporting. Other reasons were fear of reporting colleagues, and that the manager would ask why mistakes had been made. The manager in home care B described that it was important to have feedback about errors in order to avoid repeating them. The managers in general wanted to improve service quality and safety and encouraged employees to report adverse events, near misses, and areas they considered as possible improvements. Managers in two small units (home care B and nursing home A) said that when they were away from the units, new cultures quickly formed and that the reporting rate was reduced. At the same time, some managers expressed that employees' threshold to report was too low. According to one manager, employees were more eager to report different kinds of deviations to explain how busy their morning had been instead of reallocating their resources and getting work done:

> You can report deviations on everything. Now I had one example last week ... The one day I was gone, of course when I had given a nurse a leave for half an hour in the morning to accompany her son to a doctor (..) Then they [employees] typically reported, and entered six reports on that day. The patient did not get up at the right time etc. So ... and then we reconsider how much we can anticipate of this? And what is a deviation from good practice? The patient spent half an hour extra in the bed, but it does not necessarily mean that it should be reported. (Department manager, nursing home B)

The top manager in nursing home B said that they had no special routines for processing reports, although they discussed them in the management meetings for learning purposes. Afterwards, the managers addressed them in staff meetings. However, the department manager at the same nursing home stated that there was not enough time during staff meetings to discuss the reports in detail. For their part, employees said that they were tired of hearing about the medications errors and wanted the managers to pay more attention to what they were doing well. They found that, except for medication errors, nothing happened when they reported. The employees also stated a need for more positive feedback and discussion on what went well, as illustrated by the statement from an employee with 18-years experience at the same nursing home:

> I have attended those meeting for like 17 to 18 years, and the focus is only on what we can do better! Thus, it is so depressing attending them. They [the managers] are not good at telling us what we do well. Our former manager gave us many compliments, telling us how much we had grown and so on. That means a lot. For so many years, I have thought that I cannot stand more of those meetings, as all they talk about are that we give wrong medicines, this should be better, this is the economy, which is disappointing. The economy has been bad for 20 years. There is no change! (Employee, nursing home B).

Managers and employees did not always know what and where to report. Many systems made reporting difficult. Therefore, managers had trouble disseminating information to all employees in different work positions. The units also differed on how the reports were handled, although managers in all the units found it appropriate to discuss reports frequently. The learning potential was considered the best immediately after an incident was reported, even if the person who had reported was not at work. The latter was also described as a dilemma with shift workers. Other challenges were related to organizing meetings due to sick leave and management being unavailable to follow up.

The struggle to maintain competence among employees

Development of competence among the employees was difficult in all four units. Results showed lack of overview of professional specialty among the employees (resource persons). The managers explained how they had tried to map different specialties among employees but struggled to maintain this overview because of constant organizational changes. Common subjects assigned to resource persons were palliative care, hygiene, medicine ordering, and nutrition. Although employees were assigned a subject, there were no results on how they used or maintained this competence. The manager at home care B saw the municipal innovation department as an important support for developing projects and attracting external funding. Moreover, this was explained as an advantage for a small municipality, with very short distances. Managers at all units in our study encouraged employees to take initiative themselves and then offered courses and facilitated development based on this. It was experienced as a strength if employees themselves found an area of interest to elaborate. This was confirmed by the employees. They were eager to take courses that interested them, not just courses that were required for

environmental and safety reasons, like the fire course. Several of the managers observed that nurses were more likely to take these courses than other healthcare workers, arguing that the nurses shouldered more of the responsibility for procedures. Employees explained that it was important for assistants to take these courses as well, especially since they often worked full-time positions that affected the overall service quality and competence level in the units. There was also some lack of managerial competence. The top manager at nursing home A acknowledged that many managers in healthcare had been trained as healthcare professionals with limited knowledge of management and leadership. The management role requires different competences than those acquired in nursing education and managers would benefit from more knowledge on management, it was argued.

Challenges with knowledge transfer at a formal level due to the healthcare structure

There was a consensus among employees and managers in all units that it was difficult to maintain knowledge transfer at a formal level, especially when employees had been away on courses. Managers thought that employees found it intimidating to stand in front of everyone and share information, so the units rather arranged education and courses themselves. However, employees were kept busy with patient-related tasks and were therefore not able to attend. In addition, employees resented having to come to work on their days off. In one home care, employees believed that a new room with large screen could make 10 min of information sharing easier. The manager in nursing home B ate lunch with employees and employees liked these opportunities for informal discussion. One of the employee described the importance of these informal conversations:

> I think we are good at talking together! It is not the same as being taught, but all these conversations are ongoing ... Everything is discussed in the corridors! But the conversations are very informative and they are important for things to go around. (Employee, nursing home B).

Discussion

Results of this multiple explorative case study showed that the challenges in quality and safety work experienced by nursing home and home care managers and employees had several contributing factors, such as sick leave, work lists, budget cuts, and lack of competence oversight. There were contextual differences in the structure of nursing homes and home care services, although the main challenges in the quality and safety work were common in all units. All managers struggled to maintain continuity of care due to sick leave and constant organizational change processes. This affected the organizational culture and error reporting, especially when the manager was absent.

The contextual impact on quality and safety work

The context varied in our sample with for example different nursing tasks in home care and nursing homes, differences in size, location, and distance to hospitals. We also found variation in access to reliable networks and communication with GPs in home care and nursing homes that sometimes challenged the staffs and managers work, in line with previous research [19]. However, our results are consistent with previous research showing that one of the greatest leadership challenge is to prepare and facilitate processes for organizational change [20, 21]. During change processes, the managers in our study struggled with the imbalance between available resources and quality and safety work, constantly prioritizing and maneuvering to ensure good practices. In doing so, they adapted their internal contexts (conflicting challenges such as flexible vs. fixed worklist) to fit the external demands. Similar results were reported in a previous study of Norwegian nursing homes and home care services [22]. Furthermore, these findings are in line with research of van de Bovenkamp et al. [23] that uses institutional work when describing how managers both shape and are shaped by their organizational contexts. The increased external pressure reported by participants in our study made it harder for them to strengthen engagement and culture for working on quality and safety, and to maintain this collective effort involving both managers and employees. This also resulted in a lack of oversight of the amount of quality work in the organizations and could have a cumulative negative effect over time [24], due to managers' struggle to maintain high-quality work. Differences in leadership strategy and in the handling of errors and error reporting were also important in our study, as in other studies [25–28] where employees were demoralized by the constant focus on what was going wrong [29, 30]. Our results indicate that managers and employees should work together more on developing strategies for understanding work practice, challenges and risk and emphasize learning from positive deviance and what goes well [29]. These measures could improve both the organizational learning and work engagement.

The need to make change happened fast in the organizations and the constant struggle to relocate resources and maintain sound services was prominent in our study. This is in line with the research by Katteouw [31] showing that constant external-facilitated reorganization gives professionals less time to do their job. This prioritizes day-to-day operations over the patients' need for

continuity of care. Although managers and employees were constantly trying to improve quality and safety and adapt to external changes, management seemed to lack the tools to create an overview of and plan for quality and safety work. Our results thus support the need of appropriate management tools, despite the increased attention to this at the Norwegian policy level [3]. Our results indicate that a leadership intervention, focusing on giving managers a tool to aid reflection and dialogue to diagnose and take targeted action in their organizations' quality and safety work, could benefit these participating units. Contextual factors influence quality and safety efforts and their success [32–34]. This study support the importance of the context in these setting. In line with Wiig [35], we suggest targeted contextual factor mapping in nursing homes and home care before and during intervention studies to both tailor the intervention and map the possible influence of contextual factors on the intervention in these settings. Other contextual mapping tools such as the 'Alberta Context Tool' are developed to measure context in nursing homes. Our findings fit with several of the factors listed in the tool, such as the challenges related to culture, leadership, social capital, organizational slack, and informal and formal interactions [36–40]. However, our study and research of Ree and colleagues [22] adds to the factors listed in the 'Alberta Context Tool' by providing in-depth qualitative descriptions of how the different contextual factors challenges managers and employees' quality and safety work in these healthcare settings. For example, our study shows how the outer setting, such as external demands from national guidelines, policies and reforms, affects healthcare professionals' quality and safety work and how they continuously act upon and negotiate the external context to fit local needs. That is, we do not treat context as an independent variable, but something that can at least partly be negotiated by healthcare organizations. A thorough mapping of both inner and outer context is included in the contextual mapping framework by Wiig [35]. The different tools [35–40] can supplement each other when mapping and measuring contextual factors in nursing homes and home care.

Adaptation of theoretical framework to Norwegian nursing home and home care context

The OQ model by Bate [17] helps to understand important factors and processes to achieve and maintain high-quality care. Our results demonstrate how external factors such as political decisions, economic pressure, and change processes can undermine quality and safety work, and how they affect internal factors such as collective engagement, competence development and culture. Therefore, our results can be interpreted using the OQ framework to understand which challenges hinder quality and safety work, and how. Furthermore, our results showed a struggle with facilitating and negotiating context. This proved time-consuming for managers and employees alike. The original OQ model defines context as inner and outer context, but context is not conceptualized as a quality challenge. In our studies we have seen the need for adapting the OQ framework into a Norwegian context by using other concepts and revise (Fig. 1) and improve the framework to fit the nursing home and home care setting [14]. Kislov [41] argues for the need to focus on a few key concepts and explore the complex relationships among them, rather than provide exhaustive lists of contextual factors. In our study, we used the concepts of OQ framework while exploring the complex relationships among them. Capturing this complexity in a constantly changing environment requires theory to be constantly refined, and researchers should not rely only on theory to guide research. Focused effort is needed to transparently apply and test existing frameworks [42]. A cross-case study by Bergerød [43] refined the OQ framework based on empirical results to include next-of-kin involvement. It is important to see how the empirical results can be used to refine theory [41]. Hsieh [18] also argues that the strength of a directed approach to content analysis is that theory can be supported and extended. Managers and employees in nursing homes and home care need to incorporate context more actively into their quality and safety work [35] and we argue that our results show a need to refine the OQ theoretical framework applied in our study, by expanding the challenges and adding context as a quality challenge in itself, thereby focusing on 'context work'. Our study shows the importance of mapping the context in addition to the quality and safety challenges before implementing an intervention to target and direct the intervention to that setting. The additional "contexting" challenge (Fig. 1), indicates that using the OQ framework as a basis for quality and safety improvement work and interventions, implies that context is a challenge that managers, employees and stakeholders need to take into account on a continuous basis and act upon to improve quality and safety. The importance of managers acting upon and negotiating their context as also emphasized in a previous Norwegian study of managers in nursing homes and home care [22].

Strengths and limitations of the study

The strength of this study is that it contributes with new knowledge to the challenges in quality work in the municipality health care service, and how managers and employees in nursing homes and home care maneuver to continuously change the context in which they work. Given the qualitative nature of this study, the challenges explored were not exhaustive, however they provide

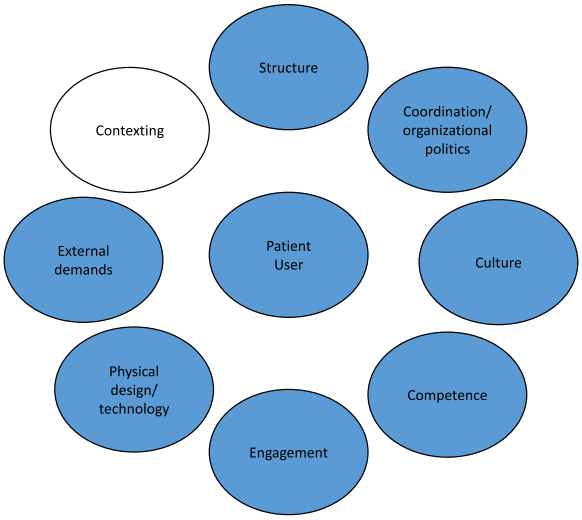

Fig. 1 The quality challenges model included the "contexting challenge". Based on the OQ framework [17] and a further refinement of Johannessen [14]. Generated in power point software. The figure is not under copyright

insight that could be similar to other nursing homes and home care services [44]. The study has some limitations. First, when using directed content analysis the researcher is more likely to find evidence that supports the theory used. Second, participants could be guided or prompted to answer in certain ways [18]. However, we emphasized that we were interested in all experiences, and that there were no right or wrong answers. Other limitations relate to recruitment of employees, as they were selected by their managers. This could have increased the pressure to participate, although this was necessary to combine interview time with their work schedule and staffing levels. However, all participants were informed about their right to withdraw from the study at any time.

Conclusion

In this paper, we explored the challenges that managers and employees in Norwegian nursing homes and home care perceived in their work on quality and safety. By using the OQ framework, we identified numerous and sometimes conflicting challenges related to formal and structural elements of the concepts structure, coordination and organizational politics, and external demands, and the softer dimensions of culture, competence and engagement. The interrelated challenges depended on many factors and often implied a trade-off for both managers and employees (budget cut vs. competence development; fixed vs. flexible work lists; learning from errors vs. work engagement; course attendance vs. fear of presenting lessons learnt to others).

There were contextual differences in the structure, size, nature, and location of the nursing homes and home care services, but the challenges were similar across settings. Managers struggled with the upper management in the municipalities that imposed changes that affected their quality and safety work and limited their leeway. Managers struggled to stay visible, available and present in their workgroup; employees struggled with heavier workload and fewer resources that reduced the time spent on and the quality of patient care. The increased external pressure made it harder to work towards engagement and culture for improvement, and to maintain quality and safety as a collective effort at the managerial and employee levels. The findings indicate a lack of tools and limited resources to support managers in balancing the continuous demands for organizational change and establishing a rationale for their priorities during change processes.

The need to understand and act upon contextual factors stood out as crucial. Based on our findings, we have suggested theoretical refinement of the OQ framework by adding "contexting" as a quality challenge (Fig. 1). Our study indicates a dualistic aspect in relation to context. First, understanding contextual factors is central for targeting improvement interventions to specific settings. Second, context can be purposely acted upon in negotiations and interactions to

support managers and employees' work on quality and safety in nursing homes and home care. Further studies should look into the duality of context and how people working in different healthcare settings actively engage with context as part of their effort to improve service provision.

Abbreviations

GP: General practitioner; OQ: Organizing for quality

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Authors' contributions

All authors contributed to the research, design and writing of the manuscript. ER, SW, IA and TJ collected data material. TJ was responsible for within-case and cross-case analysis and interpretations of data with input from ER and SW who read transcripts and discussed theme development throughout the analysis period. IA and RB took part in discussion regarding theme development and refinement. TJ wrote the first draft of the manuscript, while ER, SW, IA and RB critically reviewed and revised the subsequent drafts. All authors have read and approved the final manuscript.

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Availability of data and materials

Original de-identified data of the study will be stored at the Norwegian Centre for Research Data subsequent to completion of the project. Original de-identified data can be requested from the corresponding author upon reasonable request. No database was used in the study.

Ethics approval and consent to participate

The Regional Committees for Research Ethics in Norway found that the study was not regulated by the Health Research Act. The Norwegian Centre for Research Data approved the study in two phases (Phase 1: NSD, ID 52324; Phase 2: NSD, ID 54855). The study followed the Helsinki Declaration, and all participants gave their written informed consent.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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Publisher's Note

Paper III

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Exploring managers' response to a quality and safety leadership intervention: findings from a multiple case study in Norwegian nursing homes and homecare services

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ABSTRACT

Background Improvement interventions would be easier to treat if they were stable and uninfluenced by their environment, but in practice, contextual factors may create difficulties in implementing and sustaining changes. Managers of healthcare organisations play an important role in quality and safety improvement. We need more research in the nursing home and homecare settings to support managers in their quality and safety improvement work. The aim of this study was to explore managers' response to a leadership intervention on quality and safety improvement.

Methods This study reports findings from the SAFE-LEAD intervention undertaken from April 2018 to March 2019. The research design was a multiple case study of two nursing homes and two homecare services in four municipalities in Norway. We used a combination of qualitative methods including interviews, workshops, observations, site visits and document analysis in our data collection that took place over a 1-year period.

Results Management continuity was key for the implementation process of the quality and safety leadership intervention. In the units where stable management teams were in place, the intervention was more rooted in the units, and changes in quality and safety practice occurred. The intervention served as an arena for managers to work with quality and safety improvement. We found that the workshops and use of the leadership guide contributed to a common understanding and commitment to quality and safety improvement among the managers.

Conclusions This is a longitudinal study of managers' response to a leadership intervention targeted to improve quality and safety work in nursing home and homecare settings. Our research demonstrates how the mechanisms of stable management and established structures are crucial for quality and safety improvement activities. Management continuity is key for participating in interventions and for using the leadership guide in quality and safety work.

INTRODUCTION

Quality and safety improvement is a continuous process for identifying challenges and areas for improvement. It covers activities such as making minor improvements like changing mealtimes in nursing homes based on patients' wishes,[1] to testing more innovative ideas and services like new documentation systems and e-health solutions in healthcare organisations.[2 3] According to Marshall *et al*,[4] it would be easy to implement improvement interventions if they were stable and uninfluenced by their environment. But research has shown that contextual factors may complicate implementing and sustaining changes in practice.[5–9]

In Norway, the municipalities are largely responsible for providing sound and safe healthcare services. The municipalities are responsible for providing nursing home and homecare services and are legally bound to improve quality and safety. While quality and safety improvement should be considered a central task across municipalities, this work is often poorly rooted in management.[10] Results from Johannessen *et al*[11] and Ree *et al*[1] show that managers in nursing homes and homecare struggle to balance demands and resources in their quality and safety work, and constantly need to set priorities to ensure sound practice. Managers struggle to maintain continuity of care due to sick leave and constant organisational changes.[11] High turnover can stall organisational and service development, and quality and safety improvement efforts can be challenged by organisational demands.[5] Increased external pressures such as national regulations and financing also affect an organisation's engagement and culture for improvement.[1 11 12]

Leadership is important to quality and safety in healthcare organisations.[5 13–16] Several studies show that managers have an important role in the patient safety culture.[14 17–19] Previous research has shown that managers actively negotiate and

influence their organisation to support their improvement work.[11] However, managers seem to lack tools and support in their efforts to improve quality and safety.[11 20 21] This is especially a challenge in the nursing home and homecare settings, and there have been calls for more research to develop, test, and evaluate interventions to support managers in their quality and safety work in these settings. Therefore, we developed and implemented a quality and safety leadership intervention in Norwegian nursing home and homecare settings (the SAFE-LEAD intervention).[20 21] In this article, the aim was to evaluate this intervention and its influence on managers' quality and safety work practice. The managers' response to the intervention was explored from the managers' and the employees' perspective. The following research questions guided our study: (1) How does a leadership intervention influence managers' work on quality and safety in nursing homes and homecare; (2) What are the requirements for the intervention to be adopted?

Table 1 Intervention workshop content

Workshop 1	► Introduced the leadership guide (booklet and web version) ► Identified the challenges that the managers experienced in their quality and safety work
Workshop 2	► Established goals and strategies to address the identified quality and safety challenges ► Feedback on survey results from phase 1 of the intervention
Workshop 3	► Developed actions plans
Workshop 4	► Sustainability of intervention
Workshop 5	► Discussed the relation between the leadership guide and quality improvement regulation
Workshop 6	► Feedback on survey results from phase 2 of the intervention

SAFE-LEAD INTERVENTION

This article reports from the project 'Improving Quality and Safety in Primary Care–Implementing a Leadership Intervention in Nursing Homes and Home Care' (SAFE-LEAD).[20] The intervention facilitated the use of a research-based leadership guide for managers for 12 months in 2018–2019. The leadership guide comprises seven quality challenges (structure, coordination/organisational politics, culture, competence, engagement, physical design/technology, external demands) that healthcare managers face in their quality and safety work. By using the guide, the managers diagnose and rate their organisation and performance in terms of these challenges.[20 21] The leadership guide is based on three steps. The first step is to map out the challenges the organisation faces in quality and safety improvement. Step two lists the goals related to the seven challenges. Step three presents action plans.

During the intervention, the researchers supported the managers' quality and safety improvement work through workshops and site visits. Eight units (four nursing homes and four homecare services) participated in the project for 6 months (phase 1). Four of the units (two nursing homes and two homecare services) participated in phases 1 and 2 (12 months). In phase 1, four workshops (2 hours each) were facilitated by researchers in which the managers worked with the leadership guide. In these workshops (table 1), the researchers used a detailed agenda of questions, discussion, reflection and feedback sessions (full description of intervention program in Johannessen *et al*).[21] In phase 2, the managers had more individual responsibility for using the leadership guide in their daily quality improvement work. We conducted observations and interviews with managers and employees and collected data from all workshops and site visits. In phase 2, two additional workshops were conducted (table 1). Two site visits in each unit were conducted where the researchers observed a quality meeting chosen by the managers. The site visits also included a short follow-up reflection or feedback session with a focus on quality and safety improvement.[20 21] We also conducted a survey in all participating units before the intervention and after 6 months. Results from the survey data were not used in this qualitative part of the process evaluation but are reported in other studies.[22 23]

METHODS

The research was designed as a multiple case study[24] of the SAFE-LEAD intervention with a longitudinal in-depth study of four cases,[25] two nursing homes and two homecare services in four municipalities in Norway (April 2018 and March 2019).

Context

Norwegian municipalities have responsibility for general practitioners, nursing homes, emergency room and homecare services.[26] Norwegian municipalities are financed by public funds and the state oversees the municipalities through regulatory and financial frameworks. Apart from earmarked funding, the municipalities have room to prioritise and adjust services to local needs.[27] The Norwegian municipalities vary in size and surroundings, for example, distance to hospital, and this can create variations in delivery of healthcare services. However, they are all responsible for providing healthcare services based on sound professional practice.[27 28]

Case selection and sample

A case is defined as a nursing home or a homecare service in a municipality. The municipalities and units differed in size and location (table 2) according to the selection criteria of variation in size and location.[20] Two nursing homes and two homecare services participated in the two-phased SAFE-LEAD intervention. Co-researchers from the Centre for Development of Institutional and Homecare

Table 2 Overview of context

Case	Homecare 1	Homecare 2	Nursing home 1	Nursing home 2
Municipality population (approximate N of inhabitants)	5000–10 000 Rural municipality, border to big municipality	15–20 000 District, medium-sized municipality	130–135 000 Large city, municipality	70–75 000 City, large municipality in area
Organisation	Delivers homecare services Practical assistance	Delivers homecare services Practical assistance Responsible for a community-based activity centre	Seven departments: 1 short-term department 1 drug care department 3 dementia departments 2 long-term departments	One department divided into three groups: 1 dementia group 2 long-term groups
Size of management team	4	4	8	1

Services in the municipalities recruited the study sites. Unit managers selected participants for observations and interviews and appointed a management team to participate in the intervention program. The size of the management teams depended on the size of the unit and how they were organised in the municipality (table 2). The samples consist of management teams (unit managers, department managers, professional development nurses, coordinator, system responsible) and employees (registered nurses, healthcare professional and assistants).

Data collection

Data were collected across three phases in all four units: before, during and after the intervention (table 3). We combined qualitative methods (individual interviews, focus group interviews, workshops, observations, context mapping and document analysis) to triangulate and provide in-depth contextualised understanding of the intervention and managers' practice to improve quality and safety during the intervention. We collected data from the management teams and employees. All data collection was conducted at the study sites. In total, seven focus groups and two individual interviews were conducted before the start, four focus group interviews after 6 months into the intervention and seven focus group interviews after completion of the intervention. Interviews were semistructured and covered topics such as implementation, usefulness of the SAFE-LEAD guide, contextual integration, intervention evaluation, changes in work practice and sustainability of quality improvements (online supplemental appendices 1–5). All interviews were audio recorded and transcribed verbatim. During the intervention, we observed managers and employees in all units (108 hours) to understand how they worked with quality and safety improvement in their daily activities. The researchers used an observation guide that included themes such as quality meeting, discussion of quality and safety, and arena for quality and safety improvement (online supplemental appendix 6). We conducted 17 hours of site visits. In addition, we collected documentation on organisational structure, quality strategy, risk analysis, and organisational strategies and plans. All units were also mapped according to the SAFE-LEAD context mapping tool[29] to gather information from the different settings and their development during the intervention period.

Table 3 Summary of data collection

Period	Methods
March 2018	► 3 focus group interviews, managers (n=15) ► 2 individual interview, managers (n=2) ► 4 focus group interviews, employees (n=19)
April 2018–March 2019	► Workshops (44 hours) ► 4 focus group interviews, managers (n=23) ► Observation, managers (71.5 hours) ► Observation, employees (36.5 hours) ► Site visits (17 hours)
April 2019	► 3 focus group interviews, managers (n=16) ► 4 focus group interviews, employees (n=18) ► Document analysis

The data collection was conducted by researchers from the university with backgrounds in nursing, health psychology, safety science, engineering and health management. Two Centres for Development of Institutional and Homecare Services and a municipality were central partners in the SAFE-LEAD Project and representatives from these partners participated during the data collection as co-researchers. The project team was divided into intervention teams (one researcher and one co-researcher). Each intervention team had the overall responsibility for each study site during the intervention period. Co-researchers contributed with professional language and contextual knowledge in workshops and supported and facilitated managers' use of the leadership guide in their local practice (see[30] for further details). The project team had different backgrounds and affiliations that ensured quality and trustworthiness in interpretations of data, in workshops, observations and interviews. The project team from each study site had monthly project meetings with discussions and reflections about the intervention process and consistency of the intervention

activities (such as experiences from conducted workshops and activities and advice to ensure usefulness for the managers). These activities were key to reflection and quality of the research process.[30]

Patient and public involvement

The user, patient and next of kin perspectives are important in the SAFE-LEAD Project and were used in the design and implementation of the leadership intervention (the SAFE-LEAD intervention). Several co-researchers representing different stakeholders participated during the entire research process from planning to publication.[20 21] Patients were not directly involved in the implementation of the leadership intervention. In addition to peer-reviewed publications from the project, the results are disseminated through summaries, podcasts and social media.

Analysis

The data material was analysed as an integrative analysis.[31] We used Strøm and Fagermoen's approach[31] to integrate interviews and observation notes collected throughout the 12-month intervention and analysed it as a complete dataset. Within-case analysis in each unit was conducted to capture information within each unit. First author, with support from two coauthors, conducted an inductive content analysis of information on the units' implementation process, changes during the intervention, and mechanisms that contributed to implementation and quality and safety improvement work. First author read through the data and highlighted themes. This was discussed with the coauthors. Meaning units were extracted from the text to be sorted and categorised. First author then drafted a narrative of each case, as recommended when analysing organisational processes.[32] These were developed by integrating data from interviews, workshop notes and observations describing the units' intervention process and changes throughout the intervention period. The third analysis step was a cross-case analysis to map similarities and differences between the units' and managers' work practice to improve quality and safety, and to identify requirements for the intervention. These were discussed by the entire research team to agree on themes and categories. The purpose of our integrative analysis was to produce a systematic, descriptive overview of the essence of each unit and how the managers implemented and worked with the leadership guide and extracted mechanisms that influenced the implementation process.

RESULTS

The influence of the leadership intervention on quality and safety work practice varied among the units in our study. The management teams became more focused on their quality and safety work and they described the process and time allocated to work with quality and safety as important. Three units implemented quality and safety improvement actions. Table 4 presents an overview of the implementation process in each unit. Two categories emerged from the analysis: (1) management continuity as the main contributor to the implementation process; and (2) the importance of arenas and systems for quality and safety improvement. The results are first presented with a narrative from each case (box 1). The results from the categories are then synthesised.

What contributes to quality improvement work? Cross-case results

Management continuity

In our study, management continuity was key for the implementation process of the quality and safety leadership intervention. The implementation depended on stable management teams and on managers' engagement and follow-up. In units that already had stable management teams in place, the intervention was more rooted in the units, and there were changes in quality and safety practice. In nursing home 1, where the same management team participated throughout the intervention, and consisted of managers and professional development nurses, they implemented actions and offered employees courses on person-centred care. In homecare 2, they met with resource persons to implement whiteboards. The employee involvement in the implementation of whiteboards increased their engagement. In all units where managers were engaged with the intervention (consistency of manager participation in workshops and engaged in discussions), the intervention went as intended, whereas the reverse was also true. For example, nursing home 2 did not prioritise the use of the leadership guide after phase 1 and the intervention failed as a result of manager turnover. The new manager who was overwhelmed with new responsibilities did not see the benefit from the intervention and did not make it a priority. As an employee in the unit with high manager turnover stated:

> It is a lot of stress that I'm carrying. Everything from practical things like holidays and how new routines will be in the department. (healthcare worker, nursing home 1)

Throughout the intervention, contextual challenges competed with the intervention; among these challenges were externally driven organisational processes and demands from municipalities (checklist, courses, risk analysis). In workshops and during site visits, the management teams integrated external demands with their units' strategy and goals. For example, during a site visit, the researchers observed that homecare 1 used the leadership guide to get an overview of demanding processes in the planning phase of the merger of municipalities. The management team found it important to share information with employees as this was a phase that entailed a high degree of uncertainty for the organisation. According to the managers, the employees would be better prepared to answer questions from patients and next of kin. The management team in homecare 1 wanted the new managers in the merger to get an understanding of their

Table 4 Implementation process in the four units

Aspect of the intervention process and status in the organisation	Homecare service 1	Homecare service 2	Nursing home 1	Nursing home 2
Characteristics of the organisational context	Small municipality. New management team. Structure as their main quality challenge. Professional development nurse plays a key role. Fixed worklist was central organising mean to ensure quality.	Established management team. Wanted to continue with integrating the use of whiteboards in daily practice for employees. Professional development nurse was central in quality work and for getting quality on the agenda.	Strong and established management team. Large nursing home. Seven departments with different needs. Wanted to make person-centred care a main goal before participating in the intervention.	Small nursing home within a large municipality. Decided to establish a common understanding for quality improvement. Internal change processes within departments of the nursing home and in the municipality. Started the intervention process as a joint process together with homecare services in the municipality.
Ethnography	Strengthened management structure and responsibility during intervention. Established commitment and common understanding in the management team. Intervention led to better oversight and building of relations within management team.	Stable management before intervention start-up with quality plans. Implemented Whiteboards. Created quality meetings. Used professional development nurse in this work. Intervention created a conceptual framework for structuring talking about quality and safety.	Intervention contributed to commitment and common understanding in the management group. Actions implemented in daily practice.	Intervention was suspended due to management turnover. No implemented actions. General frustration within the organisation due to lack of management stability.
Managers identified quality and safety challenges as part of the intervention start-up phase	Structure	Structure Culture	Culture Engagement	Culture Engagement
Goals to overcome the challenge	Develop a common understanding of quality in the unit.	Build capacity and resources for quality improvement in the unit. Integrate quality improvement in daily routine for employees.	Incorporate person-centred care into all activities.	Develop a common quality goal among managers.
Actions implemented to reach their set goal	Lunch to inform employees. Established task responsibility in the management team. Weekly quality meeting. Updated the primary care role.	Established quality meeting. Practical use of whiteboard. Prepared further use of the leadership guide in meetings.	Internal courses. Kickoff for person- centred care. Established common goal in the management team.	None
Main contextual challenges during intervention period	Municipality merger process. Newly established management team.	Structural changes in organisation.	Distance in municipality/lack of support.	Manager turnover in the nursing home and at the municipal level.

fixed work lists and how this contributed to high care quality in their homecare service. We also observed how the managers adapted the use of the leadership guide to their context, for example, by condensing the three-step process to a 1-hour meeting on hectic workdays, in which they mapped, set goals and developed action plans. Several managers claimed that they needed to shorten the process to sustain the use of the leadership guide. A unit manager in homecare 2 expressed conditions for the implementation to go well:

> Skilled department managers who always show up for work and who cheer on employees. Managers who are clear on the goals and act as a role model themselves. The department managers need perseverance, then, they learn from each other, set aside time, write it in the book, and talk across departments.

A common element across units was the key role of professional development nurses as part of the management team in facilitating managers' quality and safety work. Our findings showed that conditions for organisations'

Box 1 What happened? Descriptive narratives from the intervention process

The merger of municipalities

In homecare service 1, located in a rural district, the same management team participated throughout the intervention period with a professional development nurse. The municipality experienced a planning phase of a merger with the neighbour municipality during the implementation. In workshop 1, the managers identified structure as their main quality challenge. The managers also set the goal to establish a common understanding of quality in the unit. They developed actions such as a weekly Tuesday lunch to inform employees about quality and safety improvement activities and as an arena for employees to share competence. Other actions were to establish task responsibility in the management team, as well as weekly quality meetings within the management team to follow up on quality work and update the primary care nursing role. Workshops during the intervention gave the management team a shared understanding of quality as the members comprised a newly established management team. The management team had a positive attitude towards the leadership guide and met to discuss quality issues after the workshops finished. In the planning phase of the merger, they used the leadership guide to get an overview of demanding processes they were facing and what to concentrate on in an uncertain phase of their quality work.

The integration of quality and safety improvement in daily routines

Homecare service 2 was located in a rural district. In this unit, the same management team of managers and a professional development nurse participated throughout the intervention period. They identified culture and structure as their main quality challenges in workshop 1. In workshop 2, the managers chose the goals to build capacity and resources for quality improvement in the unit and to integrate quality improvement in daily routines for the employees. Action plans consisted of establishing quality meetings as an arena for discussing quality challenges in the services and to hold whiteboard meetings as a work routine for quality improvement among the employees. The unit manager arranged meetings with resource persons to discuss successes and challenges with the implementation of whiteboards and for sustainability purposes. Managers considered the leadership guide as a strength in terms of being research based and containing a high-quality standard. This was a source of pride and motivation for the management team. Throughout the intervention period, the management team found 'physical design and technology' as a new challenge, because they needed to implement health technology in the services in near future.

The person-centred care unit

Nursing home 1 was located in a large city. In this unit, the same management team of managers and professional development nurses participated during the intervention. The managers identified culture and engagement as their units' main quality challenges in the first workshop and agreed to focus on these. The management team had decided to make person-centred care a main goal before participating in the leadership intervention. In their action plans, they set a kickoff date for putting person-centred care on the agenda in all activities. All employees were informed of the goal for the nursing home and the upcoming planned in-house courses for employees to educate them on person-centred care. Throughout the intervention period, the management team described their struggles with external demands from the municipality; for example, they needed to implement a nutritional assessment tool for each patient. During the intervention, they were able to connect this to their action plan in the intervention, thus integrating external demands with internal goals. The workshops contributed with a common understanding of the management team.

Continued

Box 1 Continued

The struggle with management turnover

Nursing home 2 was located in a medium-sized city. In this unit, the management team collaborated across nursing home and homecare in the first phase of the intervention. This unit was characterised with management turnover. Two managers (one unit manager and one department manager) left during the intervention period. They cited culture and engagement as their quality challenges in the first workshop. In workshop 2, they were trying to establish a common understanding of quality improvement. The management team claimed to have a common understanding, but it was difficult to involve the employees. In their action plan, they wanted to develop an education plan for newly hired assistants. The intervention failed in phase 2 because of a change of management. Employees explained that the change in leadership had brought activities to a halt and that they felt insecure in their situation, for example, with taking holidays off. The new manager had not attended previous intervention workshops and using the leadership guide was not prioritised, as the intervention was considered an additional burden. The manager was temporary for two departments at the same time as being manager at the intervention nursing home. The intervention ended, and data collection consisted of observing daily work and interviewing employees about their work situation.

success with the leadership guide were the role of professional development nurses, who adapted the implementation to local conditions. For example, we observed how professional development nurses offered internal courses on person-centred care to employees. Nursing home 1 had a full-time professional development nurse who implemented actions from the intervention and engaged employees. Both interviews and researchers' workshop notes showed that professional development nurses brought good insights to the workshop and facilitated quality meetings.

Arenas and systems for quality improvement

A main finding was the lack of systems and arenas to work on quality and safety improvement in daily work practice. In our study, the intervention workshops and leadership guide contributed to a common understanding and commitment in the management teams and created an arena in which managers could focus on quality and safety. During the intervention, managers expressed that they realised that someone needed to establish a structure and take responsibility for scheduling and organising quality meetings. Our findings demonstrated a lack of systems for quality improvement in all study units. The units used systems for reporting deviations (eg, medication errors, near misses, fall injuries), but had few systems for creating an overview

and systematising the quality and safety work. The leadership guide provided the managers with a tool for a clearer sense of quality and safety in the units. Managers claimed to have worked with quality in different settings, but there was no documentation and there was no system for managers to connect all quality work-related activities, as illustrated by the following quote:

> This tool is very useful [leadership guide] and puts a concept on the daily work that we are doing and integrates it into a system. This is a very good thing to adhere to. What we are doing now, you [researcher] have observed us in the department, we don't document that on an ordinary basis. (manager, nursing home 1)

The workshops (working with the leadership guide) also created a social and reflexive arena for quality and safety work. In homecare 1, they developed a positive attitude towards the leadership guide through the workshops and perceived it as a useful arena to discuss quality and safety. The contributions with researchers in workshops stimulated reflection and discussions in the quality and safety improvement work. Nursing home 1 consisted of five department managers, and they also used the intervention workshops as arena for interdepartmental competence development. Observation otherwise showed little time for direct daily reflection on quality and safety work in management teams. Managers claimed to have plans for quality and safety work but failed to complete all quality-related tasks on busy workdays:

> The challenge that remains is to follow up what is already in the structure and system. There is much that we talk about and want to do, but we need concrete plans for implementation and changes in practice. (manager, homecare service 2)

We found that the workshops and use of the leadership guide contributed with sustained focus and a more structured process that eased implementation of actions in practice. Results showed that when managers understood the leadership guide, they felt a greater sense of control, worked more independently, and took advantage of the quality arena and an agenda set by the intervention programme. According to the unit manager in nursing home 1:

> For us it has been more committing to be part of this [leadership intervention], it has more to do with the actions around the tool and the structure itself. I think we have seen good results from working this way, that we have had our own meetings only dealing with this [quality and safety improvement], and separate it from the rest of the work tasks that we have to do.

DISCUSSION

In this study, we found that managers' response to the leadership intervention depended primarily on management continuity. Units with a stable management team had more capacity for quality and safety improvement and implemented actions as planned. In contrast, comprehensive management turnover in one of the units led to withdrawal from the intervention due to lack of capacity for quality and safety improvement at the management level, and thus lack of prioritising the leadership guide. The results from Vaughn *et al*'s systematic review[33] found disconnected leadership and leadership turnover as two of several factors that characterise organisations that strive to succeed with quality and safety improvement. In addition, our findings showed limited capacity to work with quality and safety in daily work practice. Managers expressed lack of time and no systems for quality and safety improvement. Our results are consistent with a review by Lau *et al*[34] showing how organisational turbulence and the exigencies of everyday work impede implementation. This illustrates the importance of understanding the contextual settings (competence, capacity, leadership situation) in nursing homes and homecare services prior to implementation efforts. It also explains the everyday challenges in nursing homes and homecare settings where these factors are constantly changing.

Parand *et al*'s systematic review[14] found that hospital managers do not spend sufficient time on quality and safety. Our study found similar results in the nursing home and homecare settings. However, throughout the intervention, we found that management continuity together with arenas and systems for quality and safety improvement gave the managers an opportunity to reflect on their quality and safety challenges and improvement areas. This adds important sustainability in focus and implementation of actions. The managers, however, needed to perceive the leadership guide as useful. Our deviant case with high management turnover demonstrated how the unit was not ready for a leadership intervention. In such a situation, the leadership guide and the intervention programme were incompatible with the manager's need for an overview of the organisation. This illustrates the need for context-sensitive improvement measures to support managers, and a need for genuine interest from the managers to participate in intervention activities.

An intervention described by Jones *et al*[5] is founded on similar theoretical backdrop and guide structure as the SAFE-LEAD intervention. This illustrates that the guide has a potential in hospital settings as well as the nursing home and homecare settings when it is context sensitive. However, major effort is required before the implementation to adapt the tool to the local context where it is being implemented.[21] In line with previous studies,[35–39] contextual factors were important in the units' implementation process. In our study, different organisational contexts affected the focus and use of the leadership guide. Managers used the workshops as arenas for quality improvement discussions and steer quality and safety work according to their jointly established priorities. However, they needed to come across

the barrier with different patient needs in departments. The management team's discussions in workshops contributed to collective solutions and actions. This is in line with the work of Engeström *et al*[40] who describe an intervention which facilitated managers and stakeholders to learn in multiple workshops and take the learning and reflections back to their units as a new, negotiated way of working. We know conceptualisation of quality may differ between managers and employees,[41 42] and further investigation into the negotiations with the employees as an ongoing part of the management activities is recommended for future research.

Understanding contextual barriers and challenges in quality and safety work is crucial to effective interventions.[7 9 38 39] Flexibility in the use of the leadership guide made it possible for managers to adapt it to their setting, thus contributing to quality and safety improvement work. Cappelen *et al*[43] indicate that organisational initiatives in nursing homes tailored to local needs improve the patient safety culture. The authors emphasised the importance of managers facilitating employees' participation and supporting employees' responsibility for patient safety initiatives.[43] This was evident in our study; in one of the homecare services the managers were determined to involve employees to sustain the work with whiteboards. We found that requirements for the intervention to be adopted were stable management and establishment of structures. Managers' engagement and follow-up in workshops were important for the intervention to be rooted in the units and for actions to be implemented. Also, the role of managers to structure quality work and delegate responsibility to the team managers and involve professional development nurses was fundamental for adopting this intervention. This is in line with research on interventions in other settings.[5] It is also clear that the role of the researchers in driving the intervention process was important in our study. The researchers also established a structure and set out a detailed process for the management teams as part of following the intervention programme. Future studies of how interventions with a content related to organisational development and competence development, like the SAFE-LEAD intervention, can be executed with limited researcher involvement are recommended.[44]

Norwegian national healthcare policy has highlighted management, culture, and systems as important topics for improving quality and safety.[45 46] The regulations for management and quality improvement[47] in the healthcare service are meant to lay the foundation for quality-oriented management and systems. However, our study explains how managers in nursing home and homecare services struggle to have an overview and complete all quality and safety-related tasks. Kattouw and Wiig[48] found that for some municipalities, quality and safety had less priority and that finances dominate the management of homecare services. Managers' constant need to negotiate their context against externally driven factors is time-consuming[1 11] and affects their goals and plans for quality and safety improvement. Based on our results, using the guide actually helped managers to incorporate external demands and 'context' into their quality strategies.

Units with high management turnover and constant organisational change processes lack the opportunity and capacity to work with quality and safety improvement and set up structures to enable this work. Our results indicate that units in need of quality improvement (eg, lack of structures, turnover, lack of manager commitment, low user involvement) are the most unlikely to benefit from them. Thus, national healthcare regulators and policymakers need to acknowledge this in a risk-based perspective, give priority to such contexts, and support and follow up managers in nursing homes and homecare services to enable sound organising and working with quality and safety improvement.[49 50] Results from this study contribute with longitudinal insight into managers' quality and safety work in nursing home and homecare services. It shows how several factors affect this work, and how it is possible for this group to set long-term quality goals and participate in leadership interventions as part of their ongoing activities. This should be considered by managers in municipalities and researchers in further research on how to support managers in everyday quality work practice. Despite organisational changes, the results strongly indicated that managers benefited from the reflexive arenas that the intervention and the guide created. Low-hanging fruits for management teams in nursing homes and homecare could be to create similar arenas with management colleagues and with their employees to reflect and discuss on current quality and safety work and ongoing experienced challenges. Furthermore, management teams could also take advantage of research-based tools to support the structure and improve engagement and commitment in quality and safety work.

Limitations

It is difficult to separate the leadership guide from the intervention activities. The managers needed the introduction and facilitated workshops in the start of the intervention to understand how they could use the leadership guide in their daily quality and safety work. The intervention activities (workshop) were also a mechanism that contributed to managers' quality and safety improvement work. In addition, the observations and data analysis could be biased by strong researcher involvement in intervention activities. Multiple researchers can be considered a strength, but also a potential limitation as information could get lost between researchers. However, a strict meeting structure, monthly project meeting, continuous reflection and close collaboration between researchers were measures taken to reduce this risk. We have collected data from several sources (interviews, observations, workshop notes) that give credibility to the findings.[51 52] In addition, the year-long involvement and data collection in the field gave the researchers a deeper

understanding of local context and how the intervention worked.[53]

CONCLUSION

In this study, we explored managers' response to a quality and safety leadership intervention in nursing homes and homecare. To our knowledge, this is the first longitudinal study of managers' response to leadership interventions targeted to improve quality and safety work in nursing home and homecare settings. The investigation from the mangers' and employees' perspective in our research demonstrates how the mechanisms of stable management and established structures are crucial for quality improvement activities to take place. Management continuity is a dominant mechanism for participating in the intervention activities and for using the leadership guide in quality and safety work. Also prominent was that the SAFE-LEAD intervention served as an arena and a system for managers to work with quality and safety improvement. There is a need for further studies with larger samples and cross-country designs to find even stronger evidence for the leadership guide and how it might work in different contexts.

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Appendices

Appendix 1 – Survey nursing homes and homecare services

Spørreskjemaundersøkelse om kvalitetsarbeid i helse- og omsorgstjenesten

Tusen takk for at du har sagt deg villig til å delta i forskningsprosjektet "Ledelse av kvalitet og sikkerhet i helse- og omsorgstjenesten (SAFE-LEAD)". Prosjektet er finansiert av Norges Forskningsråd og Universitetet i Stavanger. Hensikten med forskningsprosjektet er å få kunnskap om hvordan et forskningsbasert ledelsesverktøy kan bidra til å bedre kvalitet og sikkerhet i sykehjem og hjemmetjeneste.

For å undersøke om verktøyet virker og få kunnskap om hvordan du opplever arbeidet med kvalitet og sikkerhet på din arbeidsplass gjennomfører vi to spørreskjemaundersøkelser, henholdsvis i mars 2018 og i september 2018.

Vi håper du kan sette av ca. 25 minutter til å fylle ut spørreskjemaet, og at du av hensyn til kvaliteten på undersøkelsen svarer på alle spørsmålene. Det er ingen riktige eller gale svar. Les spørsmålene nøye og svar det som passer best for deg.

Alle opplysninger som samles inn vil bli behandlet konfidensielt og din anonymitet vil bli ivaretatt. Resultater fra undersøkelsen vil ikke bli publisert på en slik måte at du som enkeltperson kan identifiseres.

I tillegg til å bidra til forskning, vil resultatene fra undersøkelsen også være verdifulle for kvalitetsarbeidet på din arbeidsplass. Vi håper du har mulighet til å fylle ut spørreskjemaet innen 16.03.18.

Hvis du er usikker på noe i forbindelse med utfyllingen av spørreskjemaet eller prosjektet er du velkommen til å ta kontakt med oss.

På forhånd tusen takk for hjelpen!

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Del A: Sikkerhetskultur i SYKEHJEM

Om å arbeide på vårt sykehjem

Hvor enig eller uenig er du i følgende påstander?

	Helt uenig	Uenig	Både/og	Enig	Helt enig
1. I vårt sykehjem behandler vi hverandre med respekt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. I vårt sykehjem støtter vi hverandre	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Både/og	Enig	Helt enig
3. Vi er tilstrekkelig personell til å håndtere arbeidsmengden	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Ansatte følger gjeldende prosedyrer når de yter pleie og omsorg til pasientene	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. Ansatte opplever at de er en del av et team	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Ansatte tar snarveier for å få arbeidet raskere gjort	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. Ved dette sykehjemmet får ansatte den opplæring de har behov for	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
8. Ansatte må skynde seg fordi de har for mye å gjøre	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
9. Når noen har det virkelig travelt ved dette sykehjemmet hjelper andre ansatte til	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
10. Ansatte får skylden når en pasient blir skadet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Både/og	Enig	Helt enig
11. Ansatte får nødvendig opplæring i hvordan de skal håndtere utfordrende pasienter	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
12. Ansatte er redde for å rapportere når de har gjort en feil	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
13. Ansatte skjønner den opplæringen de får ved dette sykehjemmet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
14. Ansatte ignorerer ofte prosedyrene for å gjøre arbeidet lettere	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
15. Ansatte blir rettferdig behandlet når de gjør feil	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
16. Pasientenes behov blir også ivaretatt i forbindelse med vaktskifte	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
17. Det er vanskelig å ivareta pasientenes sikkerhet fordi så mange slutter i jobben sin	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
18. Ansatte føler de trygt kan rapportere sine feil	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Kommunikasjon

Hvor ofte skjer følgende ved ditt sykehjem?

	Aldri	Sjelden	Av og til	Ofte	Alltid
1. Ansatte får nødvendig informasjon når de skal ta seg av pasienter for første gang	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
2. Ansatte blir tidlig informert når det er endring i en pasients tiltaksplan/pleieplan	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
3. Vi har all den informasjonen vi trenger når pasienter overføres fra sykehus	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
4. Når ansatte rapporterer om noe som kan skade en pasient blir dette fulgt opp	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
5. Ved dette sykehjemmet diskuterer vi hvordan vi kan forhindre at	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑

	Aldri	Sjelden	Av og til	Ofte	Alltid
uønskede hendelser kan skje igjen					
6. Ansatte sier fra dersom de ser noe som kan skade en pasient (fysisk eller psykisk)	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
7. Ansattes ideer og forslag blir verdsatt	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
8. Ved dette sykehjemmet diskuterer vi ulike måter å sikre at pasienter ikke kommer til skade (fysisk eller psykisk)	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
9. Ansattes meninger blir ignorert ved dette sykehjemmet	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
10. Ansatte får den informasjon de trenger for å gi omsorg til pasientene	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
11. Det er lett for ansatte å ta opp problemer ved dette sykehjemmet	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑

Din nærmeste leder

Hvor enig eller uenig er du i følgende påstander?

	Helt uenig	Uenig	Både/og	Enig	Helt enig
1. Min nærmeste leder lytter til ansattes ideer og forslag vedrørende pasientenes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Min nærmeste leder uttrykker seg positivt når han/hun ser at arbeidet blir utført i overensstemmelse med våre prosedyrer	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Min nærmeste leder er opptatt av pasientsikkerhet ved sykehjemmet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Ditt sykehjem

Hvor enig eller uenig er du i følgende påstander? (Tenk sykehjemmet som helhet)

	Helt uenig	Uenig	Både/og	Enig	Helt enig

	Helt uenig	Uenig	Både/og	Enig	Helt enig
1. Pasientene blir godt ivaretatt ved dette sykehjemmet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Ansvarlig ledelse spør om personalets mening om hvordan sykehjemmet kan forbedre pasientsikkerheten	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. I dette sykehjemmet skjer de samme feilene om og om igjen	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Det er lett å iverksette endringer for å forbedre pasientenes sikkerhet i dette sykehjemmet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. Ved dette sykehjemmet gjøres alltid noe for å forbedre pasientenes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Ved dette sykehjemmet gjøres en god jobb i forhold til å vedlikeholde pasientenes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Både/og	Enig	Helt enig
7. Ansvarlig ledelse ved sykehjemmet lytter til personalets ideer og forslag om hvordan pasientenes sikkerhet kan forbedres	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
8. Dette sykehjemmet er et trygt sted for pasientene	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
9. Ansvarlig ledelse går ofte rundt i sykehjemmet for å vurdere omsorgen for pasientene	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
10. Endringer med sikte på å forbedre pasientsikkerheten evalueres	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Rapportering av uønskede hendelser

Hvor ofte rapporteres følgende hendelser?

	Aldri	Sjelden	Av og til	Ofte	Alltid
1. Hvor ofte blir nærhendelser rapportert - det	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑

	Aldri	Sjelden	Av og til	Ofte	Alltid
vil si hendelser som blir oppdaget og avverget så brukeren ikke rekker å bli skadet?					
2. Hvor ofte blir hendelser som på ingen måte kan skade brukeren rapportert?	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
3. Hvor ofte blir potensielt skadevoldende hendelser rapportert - det vil si hendelser som kunne skadet brukeren, men som ikke gjorde det?	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑

Antall uønskede hendelser som blir rapportert

(1) ❑ Ingen rapporter

(2) ❑ 1-2 rapporter

(3) ❑ 3-5 rapporter

(4) ❑ 6-10 rapporter

(5) ❑ 11-20 rapporter

(6) ❑ 21 rapporter eller flere

Samlet vurdering

1. Jeg kan fortelle til venner at dette er et trygt sykehjem for deres familiemedlem

Ja	Kanskje	Nei
(1) ❑	(2) ❑	(3) ❑

2. Alt i alt, hvordan vurderer du pasientenes sikkerhet i dette sykehjemmet?

Svært dårlig	Dårlig	Tilfredsstillende	God	Svært god
(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Del B: Personsentrert omsorg og brukermedvirkning

Hensikten med spørsmålene under er å måle i hvilken grad personalet på arbeidsstedet opplever omsorgen som personsentrert.

PERSONSENTRERT OMSORG

	Helt uenig	Uenig	Hverken enig eller uenig	Enig	Helt enig
1. Vi diskuterer ofte hvordan vi kan yte personsentrert omsorg	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Vi har regelmessige	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Hverken enig eller uenig	Enig	Helt enig
teammøter der vi diskuterer hvordan vi skal gi beboerne omsorg					
3. Beboernes livshistorie brukes rutinemessig i planleggingen av omsorgen	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Kvaliteten på samhandlingen mellom personalet og beboerne er viktigere enn å få oppgavene unnagjort	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. Vi har anledning til å endre arbeidsrutiner etter beboernes ønsker	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Beboerne gis mulighet til deltakelse i dagligdagse aktiviteter på individuell basis	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. Jeg har faktisk ikke tid til å yte personsentrert omsorg	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
8. Miljøet oppleves kaotisk	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
9. Vi må få arbeidsoppgavene unnagjort	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Hverken enig eller uenig	Enig	Helt enig
før vi kan tenke på skape et hjemmekoselig miljø					
10. Denne arbeidsplassen hindrer meg i å yte personsentrert omsorg	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
11. Beboernes behov vurderes daglig	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
12. Det er vanskelig for beboerne å finne frem i avdelingen	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Nedenfor følger noen spørsmål om brukermedvirkning gjennom brukerundersøkelser og brukerrepresentanter.

Brukermedvirkning i kvalitetsarbeid

	Aldri	Nokså sjelden	Av og til	Nokså ofte	Svært ofte
1. Gjennomføres brukerundersøkelser med brukere i din enhet?	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
2. Benyttes resultater fra brukerundersøkelser i systematisk forbedringsarbeid	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑

	Aldri	Nokså sjelden	Av og til	Nokså ofte	Svært ofte
blant helsepersonell i din enhet?					
3. Benyttes brukerrepresentanter i din enhet?	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
4. Blir brukerrepresentanter benyttet i undervisning og opplæring av helsepersonell i din enhet?	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
5. Involveres brukerrepresentanter i beslutninger om ansettelse av helsepersonell i din enhet?	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑
6. Involveres brukerrepresentanter i beslutninger om organisering og planlegging av tjenesten?	(1) ❑	(2) ❑	(6) ❑	(4) ❑	(5) ❑

Del C: Psykososiale arbeidsbelastninger

Mennesker kan oppleve sine arbeidsoppgaver og sin arbeidssituasjon forskjellig. Vi ber

deg i det følgende om å ta stilling til en del spørsmål om hvordan du opplever ditt daglige arbeid.

Krav i arbeidet

	Aldri	Noen ganger	Ofte	Alltid
1. Må du arbeide svært raskt?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
2. Må du arbeide ekstra hardt for å bli ferdig med dine oppgaver?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
3. Arbeider du under tidspress?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
4. Må du skynde deg når du arbeider?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Mental belastning

	Aldri	Noen ganger	Ofte	Alltid
5. Må du konsentrere oppmerksomheten din om flere ting samtidig?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
6. Må du vedvarende være konsentrert og	(1) ❑	(2) ❑	(4) ❑	(5) ❑

	Aldri	Noen ganger	Ofte	Alltid
påpasselig i arbeidet ditt?				
7. Er det mange ting å huske på i jobben din?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Emosjonell belastning

	Aldri	Noen ganger	Ofte	Alltid
8. Er arbeidet ditt belastende ut fra et følelsesmessig synspunkt?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
9. Stilles du i arbeidet ditt overfor forhold som påvirker deg personlig?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
10. Fører arbeidet ditt til følelsesladde situasjoner?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
11. Føler du deg personlig angrepet eller truet i arbeidet?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
12. Har du kontakt med vanskelige personer i arbeidet?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Monotont arbeid, bruke egne ferdigheter, lære noe nytt

	Aldri	Noen ganger	Ofte	Alltid
13. Er arbeidet ditt variert?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
14. Lærer du nye ting i arbeidet ditt?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
15. Gir jobben din mulighet for personlig vekst og utvikling?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
16. Har du en følelse av at du oppnår noe av betydning i jobben din?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Autonomi

	Aldri	Noen ganger	Ofte	Alltid
17. Står du fritt i utførelsen av arbeidsoppgavene dine?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
18. Har du innflytelse på arbeidstempoet?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
19. Kan du avbryte arbeidet ditt om du finner det nødvendig?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
20. Har du innflytelse på	(1) ❑	(2) ❑	(4) ❑	(5) ❑

	Aldri	Noen ganger	Ofte	Alltid
hvordan arbeidsoppgavene prioriteres?				

Deltakelse

	Aldri	Noen ganger	Ofte	Alltid
21. Har du innflytelse på hva som foregår på ditt arbeidsområde?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
22. Kan du delta i beslutninger som får innvirkning på områder som berører ditt arbeid?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
23. Kan du rådføre deg i tilfredsstillende grad om arbeidet ditt med din nærmeste overordnede?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
24. Kan du være med å bestemme hva som inngår i dine arbeidsoppgaver?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Har du hatt medarbeidersamtale i løpet av de siste 12 månedene?

Ja	Nei

Ja	Nei
(1) ❑	(2) ❑

Del D: Ledelse, engasjement, og kompetanse

Under finner du noen påstander som beskriver lederstilen til din nærmeste leder. Marker i svaralternativene hvor ofte han eller hun:

LEDELSE

	Aldri	En sjelden gang	Av og til	Ganske ofte	Ofte om ikke alltid
1. Formidler en klar og optimistisk visjon for fremtiden	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Forholder seg til de ansatte som enkeltindivid, støtter og oppmuntrer deres utvikling	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Oppmuntrer og anerkjenner de ansatte	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Fremmer tillit, engasjement og samarbeidsånd blant de ansatte	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Aldri	En sjelden gang	Av og til	Ganske ofte	Ofte om ikke alltid
5. Er tydelig på sine verdier og praktiserer i tråd med disse	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Frembringer stolthet og respekt i andre og inspirerer gjennom å fremstå som svært kompetent	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. Oppfordrer til å tenke problemstillinger på nye måter og utfordrer eksisterende antagelser	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

I det følgende presenteres ni utsagn om hvordan du kan ha det i forhold til jobben din. For hvert utsagn skal du ta stilling til hvor ofte du føler det på denne måten. Marker det svaralternativet som best beskriver hvordan du har det på jobb.

ENGASJEMENT

	Aldri det siste året	Noen ganger det siste året	Månedlig	Noen ganger i måneden	Ukentlig	Noen ganger i uken	Daglig
1. Jeg er full av energi i arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑

	Aldri det siste året	Noen ganger det siste året	Månedlig	Noen ganger i måneden	Ukentlig	Noen ganger i uken	Daglig
2. Jeg føler meg sterk og energisk på jobben	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
3. Jeg er entusiastisk i jobben min	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
4. Jeg blir inspirert av jobben min	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
5. Når jeg står opp om morgenen ser jeg frem til å gå på jobben	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
6. Jeg føler meg glad når jeg er fordypet i arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
7. Jeg er stolt av det arbeidet jeg gjør	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
8. Jeg er oppslukt av arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
9. Jeg blir fullstendig revet med av arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑

Spørsmålene under handler om i hvilken grad du opplever å få benyttet kompetansen du besitter på jobb. Marker i hvilken grad du opplever følgende:

KOMPETANSE

	Aldri	Sjelden	Av og til	Ganske ofte	Svært ofte
1. At du får benyttet din kompetanse på jobb?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. At din nærmeste leder verdsetter den kompetansen du besitter?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. At din kompetanse kommer pasienter/brukere til gode?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Del E: Bakgrunnsinformasjon

Kjønn

Kvinne	Mann
(1) ❑	(2) ❑

Alder

20 - 29 år	30 - 39 år	40 - 49 år	50 - 59 år	60+ år
(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

I hvilken kommune har du din arbeidsplass?

_____

Hva er din stilling/utdanningsbakgrunn? (Marker det svaralternativet som passer best)

(1) ❑ Lederstilling m/personalansvar

(2) ❑ Helsepersonell med min. treårig utdanning fra høgskole eller universitet

(4) ❑ Helsepersonell med utdanning fra videregående skole eller tilsvarende

(6) ❑ Pleieassistent (ufaglært)

(7) ❑ Administrativt personell (merkantil/økonomi/personal)

(9) ❑ Annet

Hvor lenge har du arbeidet ved dette sykehjemmet?

(1) ❑ Mindre enn 1 år

(2) ❑ 1 - 5 år

(3) ❑ 6 - 10 år

(4) ❑ 11 - 15 år

(5) ❑ 16 - 20 år

(6) ❑ 21 år eller lengre

Hvor mange timer i uken arbeider du vanligvis?

(1) ❑ Mindre enn 15 t/uke

(2) ❑ 16 - 24 t/uke

(3) ❑ 25 - 35,5 t/uke

(4) ❑ Mer enn 35,5 t/uke

Når arbeider du oftest?

(1) ❑ Bare dag

(2) ❑ Todelt turnus

(3) ❑ Tredelt turnus

(4) ❑ Fast kveldsskift

(5) ❑ Fast nattskift

(6) ❑ Annen ordning

Arbeider du direkte med pasienter det meste av tiden?

Ja	Nei
(1) ❑	(2) ❑

Ved hvilken avdeling på dette sykehjemmet bruker du det meste av din arbeidstid?

(1) ❑ Langtidsavdeling

(3) ❑ Korttidsavdeling

(5) ❑ Rehabilitering

(7) ❑ Øyeblikkelig hjelp

Egne kommentarer

(Skriv gjerne en kort kommentar om brukernes sikkerhet ved din enhet)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Takk for du tok deg tid til å fylle ut skjemaet. **Trykk "Avslutt"** for å sende inn ditt svar.

Spørreskjemaundersøkelse om kvalitetsarbeid i helse- og omsorgstjenesten

Tusen takk for at du har sagt deg villig til å delta i forskningsprosjektet "Ledelse av kvalitet og sikkerhet i helse- og omsorgstjenesten (SAFE-LEAD)". Prosjektet er finansiert av Norges Forskningsråd og Universitetet i Stavanger. Hensikten med forskningsprosjektet er å få kunnskap om hvordan et forskningsbasert ledelsesverktøy kan bidra til å bedre kvalitet og sikkerhet i sykehjem og hjemmetjeneste.

For å undersøke om verktøyet virker og få kunnskap om hvordan du opplever arbeidet med kvalitet og sikkerhet på din arbeidsplass gjennomfører vi to spørreskjemaundersøkelser, henholdsvis i mars 2018 og i september 2018.

Vi håper du kan sette av ca. 25 minutter til å fylle ut spørreskjemaet, og at du av hensyn til kvaliteten på undersøkelsen svarer på alle spørsmålene. Det er ingen riktige eller gale svar. Les spørsmålene nøye og svar det som passer best for deg.

Alle opplysninger som samles inn vil bli behandlet konfidensielt og din anonymitet vil bli ivaretatt. Resultater fra undersøkelsen vil ikke bli publisert på en slik måte at du som enkeltperson kan identifiseres.

I tillegg til å bidra til forskning, vil resultatene fra undersøkelsen også være verdifulle for kvalitetsarbeidet på din arbeidsplass. Vi håper du har mulighet til å fylle ut spørreskjemaet innen 16.03.18.

Hvis du er usikker på noe i forbindelse med utfyllingen av spørreskjemaet eller prosjektet er du velkommen til å ta kontakt med oss.

På forhånd tusen takk for hjelpen!

Prosjektleder:

Siri Wiig, professor

E-post: siri.wiig@uis.no

Mobil: 905 11 290

Medarbeider:

Eline Ree PhD, postdoktor

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Del A: Sikkerhetskultur i HJEMMETJENESTEN

Om å arbeide i din enhet

Hvor enig eller uenig er du i følgende påstander?

	Helt uenig	Uenig	Både/og	Enig	Helt enig
1. I vår enhet behandler vi hverandre med respekt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. I vår enhet støtter vi hverandre	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Vi er tilstrekkelig	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Både/og	Enig	Helt enig
personell til å håndtere arbeidsmengden					
4. Ansatte følger gjeldende prosedyrer når de yter pleie og omsorg til brukerne	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. Ansatte opplever at de er en del av et team	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Ansatte tar snarveier for å få arbeidet raskere gjort	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. I vår enhet får ansatte den opplæring de har behov for	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
8. Ansatte må skynde seg fordi de har for mye å gjøre	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
9. Når noen har det virkelig travelt hjelper andre ansatte til	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
10. Ansatte får skylden når en bruker blir skadet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
11. Ansatte får nødvendig opplæring i hvordan de skal	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Både/og	Enig	Helt enig
håndtere utfordrende brukere					
12. Ansatte er redde for å rapportere når de har gjort en feil	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
13. Ansatte skjønner den opplæringen de får	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
14. Ansatte ignorerer ofte prosedyrene for å gjøre arbeidet lettere	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
15. Ansatte blir rettferdig behandlet når de gjør feil	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
16. Brukernes behov blir også ivaretatt i forbindelse med vaktskifte	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
17. Det er vanskelig å ivareta brukernes sikkerhet fordi så mange slutter i jobben sin	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
18. Ansatte føler de trygt kan rapportere sine feil	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Kommunikasjon

Hvor ofte skjer følgende i din enhet?

	Aldri	Sjelden	Av og til	Ofte	Alltid
1. Ansatte får nødvendig informasjon når de skal ta seg av brukere for første gang	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Ansatte blir tidlig informert når det er endring i en brukers tiltaksplan/pleieplan	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Vi har all den informasjonen vi trenger når brukere overføres fra sykehus	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Når ansatte rapporterer om noe som kan skade en bruker blir dette fulgt opp	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. I vår enhet diskuterer vi hvordan vi kan forhindre at uønskede hendelser kan skje igjen	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Ansatte sier fra dersom de ser noe som kan skade en bruker (fysisk eller psykisk)	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. Ansattes ideer og	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Aldri	Sjelden	Av og til	Ofte	Alltid
forslag blir verdsatt					
8. I vår enhet diskuterer vi ulike måter å sikre at brukerne ikke kommer til skade (fysisk eller psykisk)	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
9. Ansattes meninger blir ignorert	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
10. Ansatte får den informasjon de trenger for å gi omsorg til brukerne	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
11. Det er lett for ansatte å ta opp problemer	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Din nærmeste leder

Hvor enig eller uenig er du i følgende påstander?

	Helt uenig	Uenig	Både/og	Enig	Helt enig
1. Min nærmeste leder lytter til ansattes ideer og forslag vedrørende brukernes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Både/og	Enig	Helt enig
2. Min nærmeste leder uttrykker seg positivt når han/hun ser at arbeidet blir utført i overensstemmelse med våre prosedyrer	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Min nærmeste leder er opptatt av brukernes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Din enhet

Hvor enig eller uenig er du i følgende påstander?

	Helt uenig	Uenig	Både/og	Enig	Helt enig
1. Brukerne blir godt ivaretatt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Ansvarlig ledelse spør om personalets mening om hvordan tjenestene kan forbedre sikkerheten	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Det er lett å iverksette endringer for å forbedre brukernes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Både/og	Enig	Helt enig
4. Det gjøres alltid noe for å forbedre brukernes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. Det gjøres en god jobb i forhold til å vedlikeholde brukernes sikkerhet	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Ansvarlig ledelse lytter til personalets ideer og forslag om hvordan sikkerheten kan forbedres	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. Hjemmetjenestene er trygge for brukerne	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
8. Ansvarlig ledelse har jevnlig kontakt med brukerne for å vurdere omsorgen	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
9. Endringer med sikte på å forbedre brukernes sikkerhet evalueres	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Rapportering av uønskede hendelser

Hvor ofte rapporteres følgende hendelser?

	Aldri	Sjelden	Av og til	Ofte	Alltid
1. Hvor ofte blir nærhendelser rapportert - det vil si hendelser som blir oppdaget og avverget så brukeren ikke rekker å bli skadet?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Hvor ofte blir hendelser som på ingen måte kan skade brukeren rapportert?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Hvor ofte blir potensielt skadevoldende hendelser rapportert - det vil si hendelser som kunne skadet brukeren, men som ikke gjorde det?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Antall uønskede hendelser som blir rapportert

(1) ❑ Ingen rapporter

(2) ❑ 1-2 rapporter

(3) ❑ 3-5 rapporter

(4) ❑ 6-10 rapporter

(5) ❑ 11-20 rapporter

(6) ❑ 21 rapporter eller flere

Samlet vurdering

1. Jeg kan fortelle til venner at dette er trygge hjemmetjenester

Ja	Kanskje	Nei
(1) ❑	(2) ❑	(3) ❑

2. Alt i alt, hvordan vurderer du brukernes sikkerhet i disse hjemmetjenestene?

Svært dårlig	Dårlig	Tilfredsstillende	God	Svært god
(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Del B: Personsentrert omsorg og brukermedvirkning

Hensikten med spørsmålene under er å måle i hvilken grad personalet på arbeidsstedet opplever omsorgen som personsentrert.

PERSONSENTRERT OMSORG

	Helt uenig	Uenig	Hverken enig eller uenig	Enig	Helt enig
1. Vi diskuterer ofte hvordan vi kan yte	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Hverken enig eller uenig	Enig	Helt enig
personsentrert omsorg					
2. Vi har regelmessige teammøter der vi diskuterer hvordan vi skal gi brukerne omsorg	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Brukernes livshistorie brukes rutinemessig i planleggingen av omsorgen	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Kvaliteten på samhandlingen mellom personalet og brukerne er viktigere enn å få oppgavene unnagjort	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. Vi har anledning til å endre arbeidsrutiner etter brukernes ønsker	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Brukerne gis mulighet til deltakelse i dagligdagse aktiviteter på individuell basis	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. Jeg har faktisk ikke tid til å yte personsentrert omsorg	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
8. Miljøet oppleves kaotisk	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Helt uenig	Uenig	Hverken enig eller uenig	Enig	Helt enig
9. Vi må få arbeidsoppgavene unnagjort før vi kan tenke på å gjøre det hjemmekoselig	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
10. Denne arbeidsplassen hindrer meg i å yte personsentrert omsorg	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
11. Brukernes behov vurderes daglig	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
12. Det er vanskelig for brukerne å få kontakt med helsepersonell	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Nedenfor følger noen spørsmål om brukermedvirkning gjennom brukerundersøkelser og brukerrepresentanter.

Brukermedvirkning i kvalitetsarbeid

	Aldri	Nokså sjelden	Av og til	Nokså ofte	Svært ofte
1. Gjennomføres brukerundersøkelser med brukere i din enhet?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Benyttes resultater fra	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Aldri	Nokså sjelden	Av og til	Nokså ofte	Svært ofte
brukerundersøkelser i systematisk forbedringsarbeid blant helsepersonell i din enhet?					
3. Benyttes brukerrepresentanter i din enhet?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Blir brukerrepresentanter benyttet i undervisning og opplæring av helsepersonell i din enhet?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
5. Involveres brukerrepresentanter i beslutninger om ansettelse av helsepersonell i din enhet?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Involveres brukerrepresentanter i beslutninger om organisering og planlegging av tjenesten?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Del C: Psykososiale arbeidsbelastninger

Mennesker kan oppleve sine arbeidsoppgaver og sin arbeidssituasjon forskjellig. Vi ber deg i det følgende om å ta stilling til en del spørsmål om hvordan du opplever ditt daglige arbeid.

Krav i arbeidet

	Aldri	Noen ganger	Ofte	Alltid
1. Må du arbeide svært raskt?	(1) ❑	(2) ❑	(3) ❑	(4) ❑
2. Må du arbeide ekstra hardt for å bli ferdig med dine oppgaver?	(1) ❑	(2) ❑	(3) ❑	(4) ❑
3. Arbeider du under tidspress?	(1) ❑	(2) ❑	(3) ❑	(4) ❑
4. Må du skynde deg når du arbeider?	(1) ❑	(2) ❑	(3) ❑	(4) ❑

Mental belastning

	Aldri	Noen ganger	Ofte	Alltid
5. Må du konsentrere oppmerksomheten din om flere ting samtidig?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

	Aldri	Noen ganger	Ofte	Alltid
6. Må du vedvarende være konsentrert og påpasselig i arbeidet ditt?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
7. Er det mange ting å huske på i jobben din?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Emosjonell belastning

	Aldri	Noen ganger	Ofte	Alltid
8. Er arbeidet ditt belastende ut fra et følelsesmessig synspunkt?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
9. Stilles du i arbeidet ditt overfor forhold som påvirker deg personlig?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
10. Fører arbeidet ditt til følelsesladde situasjoner?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
11. Føler du deg personlig angrepet eller truet i arbeidet?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
12. Har du kontakt med vanskelige personer i arbeidet?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Monotont arbeid, bruke egne ferdigheter, lære noe nytt

	Aldri	Noen ganger	Ofte	Alltid
13. Er arbeidet ditt variert?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
14. Lærer du nye ting i arbeidet ditt?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
15. Gir jobben din mulighet for personlig vekst og utvikling?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
16. Har du en følelse av at du oppnår noe av betydning i jobben din?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Autonomi

	Aldri	Noen ganger	Ofte	Alltid
17. Står du fritt i utførelsen av arbeidsoppgavene dine?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
18. Har du innflytelse på arbeidstempoet?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
19. Kan du avbryte arbeidet ditt om du finner det	(1) ❑	(2) ❑	(4) ❑	(5) ❑

	Aldri	Noen ganger	Ofte	Alltid
nødvendig?				
20. Har du innflytelse på hvordan arbeidsoppgavene prioriteres?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Deltakelse

	Aldri	Noen ganger	Ofte	Alltid
21. Har du innflytelse på hva som foregår på ditt arbeidsområde?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
22. Kan du delta i beslutninger som får innvirkning på områder som berører ditt arbeid?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
23. Kan du rådføre deg i tilfredsstillende grad om arbeidet ditt med din nærmeste overordnede?	(1) ❑	(2) ❑	(4) ❑	(5) ❑
24. Kan du være med å bestemme hva som inngår i dine arbeidsoppgaver?	(1) ❑	(2) ❑	(4) ❑	(5) ❑

Har du hatt medarbeidersamtale i løpet av de siste 12 månedene?

Ja	Nei
(1) ❑	(2) ❑

Del D: Ledelse, engasjement, og kompetanse

Under finner du noen påstander som beskriver lederstilen til din nærmeste leder. Marker i svaralternativene hvor ofte han eller hun:

LEDELSE

	Aldri	En sjelden gang	Av og til	Ganske ofte	Ofte om ikke alltid
1. Formidler en klar og optimistisk visjon for fremtiden	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. Forholder seg til de ansatte som enkeltindivid, støtter og oppmuntrer deres utvikling	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. Oppmuntrer og anerkjenner de ansatte	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
4. Fremmer tillit, engasjement og samarbeidsånd blant de ansatte	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

	Aldri	En sjelden gang	Av og til	Ganske ofte	Ofte om ikke alltid
5. Er tydelig på sine verdier og praktiserer i tråd med disse	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
6. Frembringer stolthet og respekt i andre og inspirerer gjennom å fremstå som svært kompetent	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
7. Oppfordrer til å tenke problemstillinger på nye måter og utfordrer eksisterende antagelser	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

I det følgende presenteres ni utsagn om hvordan du kan ha det i forhold til jobben din. For hvert utsagn skal du ta stilling til hvor ofte du føler det på denne måten. Marker det svaralternativet som best beskriver hvordan du har det på jobb.

ENGASJEMENT

	Aldri det siste året	Noen ganger det siste året	Månedlig	Noen ganger i måneden	Ukentlig	Noen ganger i uken	Daglig
1. Jeg er full av energi i arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑

	Aldri det siste året	Noen ganger det siste året	Månedlig	Noen ganger i måneden	Ukentlig	Noen ganger i uken	Daglig
2. Jeg føler meg sterk og energisk på jobben	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
3. Jeg er entusiastisk i jobben min	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
4. Jeg blir inspirert av jobben min	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
5. Når jeg står opp om morgenen ser jeg frem til å gå på jobben	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
6. Jeg føler meg glad når jeg er fordypet i arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
7. Jeg er stolt av det arbeidet jeg gjør	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
8. Jeg er oppslukt av arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑
9. Jeg blir fullstendig revet med av arbeidet mitt	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑	(6) ❑	(7) ❑

Spørsmålene under handler om i hvilken grad du opplever å få benyttet kompetansen du besitter på jobb. Marker i hvilken grad du opplever følgende:

KOMPETANSE

	Aldri	Sjelden	Av og til	Ganske ofte	Svært ofte
1. At du får benyttet din kompetanse på jobb?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
2. At din nærmeste leder verdsetter den kompetansen du besitter?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑
3. At din kompetanse kommer pasienter/brukere til gode?	(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

Del E: Bakgrunnsinformasjon

Kjønn

Kvinne	Mann
(1) ❑	(2) ❑

Alder

20 - 29 år	30 - 39 år	40 - 49 år	50 - 59 år	60+ år
(1) ❑	(2) ❑	(3) ❑	(4) ❑	(5) ❑

I hvilken kommune har du din arbeidsplass?

_____

Hva er din stilling/utdanningsbakgrunn? (Marker det svaralternativet som passer best)

(1) ❑ Lederstilling m/personalansvar

(2) ❑ Helsepersonell med min. treårig utdanning fra høgskole eller universitet

(4) ❑ Helsepersonell med utdanning fra videregående skole eller tilsvarende

(6) ❑ Pleieassistent (ufaglært)

(7) ❑ Administrativt personell (merkantil/økonomi/personal)

(9) ❑ Annet

Hvor lenge har du arbeidet i denne hjemmetjenesten?

(1) ❑ Mindre enn 1 år

(2) ❑ 1 - 5 år

(3) ❑ 6 - 10 år

(4) ❑ 11 - 15 år

(5) ❑ 16 - 20 år

(6) ❑ 21 år eller lengre

Hvor mange timer i uken arbeider du vanligvis?

(1) ❑ Mindre enn 15 t/uke

(2) ❑ 16 - 24 t/uke

(3) ❑ 25 - 35,5 t/uke

(4) ❑ Mer enn 35,5 t/uke

Når arbeider du oftest?

(1) ❑ Bare dag

(2) ❑ Todelt turnus

(3) ❑ Tredelt turnus

(4) ❑ Fast kveldsskift

(5) ❑ Fast nattskift

(6) ❑ Annen ordning

Arbeider du direkte med brukere det meste av tiden?

Ja	Nei
(1) ❑	(2) ❑

Hvor bruker du det meste av din arbeidstid?

(1) ❑ Heldøgns bolig

(3) ❑ Bemannet bolig

(5) ❑ Pleie i hjemmet

Egne kommentarer

(Skriv gjerne en kort kommentar om brukernes sikkerhet ved din enhet)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Takk for du tok deg tid til å fylle ut skjemaet. **Trykk "Avslutt"** for å sende inn ditt svar.

Appendix 2 – Focus group interview development of the leadership guide

Intervjuguide – lederguiden

Åpningsspørsmål:

- Fortell litt om dere selv
    - Alder, stilling, erfaring, hvor lenge har du vært i stillingen/arbeidet som leder?

Introduksjon/overgang:

- Hva er deres generelle inntrykk av lederguiden for arbeid med kvalitet og sikkerhet?

Nøkkelspørsmål:

- Hva tenker dere om de 8 utfordringene? I hvilken grad de forståelige og relevante for deres arbeid med kvalitet og sikkerhet?
    - Hva kunne eller burde vært annerledes/forbedret/tydeligere forklart?
- Hva er det viktigste for dere for at lederguiden skal kunne fungere som et nyttig verktøy i arbeidet med kvalitet og sikkerhet?
- Er det noe dere tenker vil være spesielt relevant og nyttig i arbeidet med kvalitet og sikkerhet?
    - Hva og hvorfor?
- Er det noe dere ikke syns fungerer (både når det gjelder formuleringer/struktur, men også i forhold til anvendbarheten/nytteverdien i arbeidet med kvalitet og sikkerhet)?
    - Hva og hvorfor?
- Hvordan kan guiden videreutvikles til å fungere bedre for dere i arbeidet med kvalitet og sikkerhet?
- Hva tenker dere om å ta inn konkrete eksempler på hvordan andre helseorganisasjoner har arbeidet med kvalitet og sikkerhet?
- Hvis du får dette verktøyet, hvordan ser du for deg at det kan benyttes på din arbeidsplass?
    - Hva vil være spesielt utfordrende?
    - Hva tror du vil fungere bra?
    - Er det noe du tenker kunne/burde vært annerledes? (i så fall, hva og på hvilken måte?)
- Hvilken type opplæring trenger dere for å ta verktøyet i bruk? Hvor omfattende bør opplæringen være?

Avslutning:

- Hvis dere nå blir presset til å nevnte ett stikkord på hva dere synes fungerer best, og ett på det som fungerer dårligst med lederguiden, hva sier dere da?
- Hva er det absolutt viktigst at vi endrer på for at dere skal få god nytte av guiden?
- Kan dere nå avslutningsvis si litt om hvordan det har vært for dere å være med i fokusgruppen? Hva har vært bra og mindre bra, hva kan forbedres?

- Er det noe dere mener vi burde spurt om som dere ønsker å formidle helt avslutningsvis?

Appendix 3 – Focus group interview pilot test

Fokusgruppeintervju – evaluering

Introduksjon

- Hvordan har dere har arbeidet med guiden?
    - Hvem har vært med?
    - Hva har dere gjort?
    - Hvordan har prosessen deres vært?
- Hvilke erfaringer har dere gjort etter å ha deltatt på workshopene med guiden?

Nøkkelspørsmål

- Hva tenker dere om guiden som verktøy i kvalitetsarbeidet?
    - Er de syv utfordringene gjenkjennbare?
    - Hvordan har dere opplevd de tre stegene i guiden? Har et av stegene vært vanskeligere å arbeide med? Hvorfor?
    - Er det noen av de tre stegene i guiden som fungerer bedre enn andre?
- Hvordan har dere opplevd materialet som dere mottok på forhånd?
    - Skriftlig informasjonsbrev
    - Video – studioforelesning og videoer tilknyttet hver workshop
    - Web verktøy og teknisk beskrivelse
    - Guiden og eventuelle endringsbehov
- Hvordan har web versjonen fungert?
    - Brukervennlig
    - Behov for mer opplæring
    - Kontakt ved web utfordringer
- Hvordan har selve workshopene og opplegget i dem vært?
    - Innhold – (Workshop 1 utfordringer, 2 målsettinger og 3 tiltak)
    - Varighet
    - Arbeidet mellom workshops
    - Har dere brukt papirversjon /web versjon/ kombinert begge?
- Har arbeidet i de tre workshopene vært nyttig for kvalitetsarbeidet på avdelingen/enheten? På hvilken måte?
- Hvordan har dere opplevd å integrere flere ansatte og eventuelt bruker/pårørende representanter i arbeidet?
- Hvordan ser dere for dere videre bruk av guiden på deres avdeling/enhet?
- Hva må til for at dere skal kunne ha et eierforhold til guiden?

Avslutning

- Hva er viktigst at vi gjør videre/endrer på for at workshopene skal være nyttige?
- Er det noen dere mener vi burde spurt om som dere ønsker å formidle helt avslutningsvis?

Appendix 4 – Context mapping tool

Kontekst domene	Beskrivelse av domene	Vurdering/ beskrivelse	Grad 1-5 (1=liten/lav 5=høy/stor)				
			1	2	3	4	5
YTRE OMGIVELSER	**Utenfor kommunen – nasjonalt nivå**						
Ekstern politikk og insentiver							
	Nasjonalt program for pasientforløp						
	Grad av nasjonal støtte for forbedringsarbeid						
	Grad av tilgjengelige nasjonale kvalitetsindikatorer for sykehjem og hjemmesykepleie						
	Grad av nasjonale digitale verktøy for kvalitetsforbedring						
Regelverk	Type regulering i tjenesten, internkontroll/ kontroll/godkjenning/ forsikring						
	Grad av forskrifter som fremmer lederes fokus på kvalitetsforbedring						
	Tilsynsmyndigheters fokus på tjenestekvalitet						
Statens rolle i organisering av sykehjem og hjemmetjenester	Delegert til kommuner ved lov/ statsstyrt/annet						
Finansiering	Grad av egenandel ved bruk av tjenester						
YTRE OMGIVELSER	**Innen kommunen – lokalt nivå**						
Pasientbehov og ressurser	Hvilken grad pasienters behov er kjent og prioritert Pårørendeundersøkelse						
Innbyggerinvolvering	Grad av innbyggerinvolvering i kommunen						
Globalisering/ kosmopolitisme	Grad av nettverk med eksterne organisasjoner						
	Grad av samarbeid om kvalitetsarbeid med andre kommuner						

	Gjennom læringsnettverk og prosjekt i regi av USHT						
	Grad av lokal støtte og kompetanse i kvalitetsforbedringsarbeid						
Ekstern politikk og insentiver	Eksterne strategier for å spre intervensjoner						
Kommunestørrelse, lokalisering,	Antall innbyggere Lokalisering i by/distriktskommune						
Avstand til sykehus	Antall timer til sykehus fra sykehjem/hjemmetjeneste						
Finansiering av tjenester	Privat/offentlig						
Digital infrastruktur	Grad av utbredelse av digital infrastruktur, inkludert elektronisk feilrapporteringssystemer.						
Samarbeidsklima	Grad av samarbeid mellom politikere, administrasjon og ansatte						
Økonomisk status	Grad av økonomisk press på kostnadssparing						
INDRE OMGIVELSER	**Innen enheten – organisatorisk nivå**						
Type tjenester	Hjemmetjeneste/sykehjem/ behandlingsnivå av tjenester (beskriv)						
Strukturelle karakteristika	I hvilken grad er store personalgrupper delt opp i mindre grupper						
	Antall pasienter per pleier						
	Antall ledernivå i enheten						
	Vurdering av ledertetthet						
	Enhetsstørrelse						
	Grad av kvalitet/sikkerhetsinfrastruktur						
Eksterne krav	Grad av konsistens mellom eksterne krav og klinisk praksis						
Pasient og brukerinvolvering i kvalitetsforbedringsarbeid	Grad av mulighet for involvering av bruker/pasient/pårørende (arenaer,						

	styrer, komiteer, spørreundersøkelser, samskaping)						
	Grad av faktisk involvering av bruker/pasient/pårørende (arenaer, styrer, komiteer, spørreundersøkelser, samskaping)						
Personsentrert omsorg	Grad av personsentrert omsorg i tjenesteytelse						
Arbeidstid/plan	Grad av organisering av arbeidstid basert på pasientbehov.						
Arbeidsstyrke	Bemanningens alderssammensetning og modenhet						
	Grad av deltidsarbeid						
	Grad av legedekning						
	Grad av sykepleierdekning						
	Grad av ufaglærte						
	Grad av tilgang til og bruk av tverrfaglig kompetanse slik som psykolog, ergoterapeut, fysioterapeut						
Kompetanse	Grad av kompetanse blant de ansatte (off. godkj. sykepleiere, ressursgrupper, forbedringsteam, fagutviklingssykepleiere)						
	Grad av ansvarsdelegering relatert til tilegning av spesifikk kompetanse i spesifikke tema (for eksempel forbedringsarbeid, medikamenthåndtering, trykksår), og kompetanseoverføring mellom ansatte						
Engasjement	Grad av lederstøtte og oppmuntring for at ansatte skal engasjere seg i kvalitetsforbedringsarbeid						
Nettverk og kommunikasjon	Tilgang til og kvalitet på sosiale nettverk, formell og uformell kommunikasjon						

	Grad av arenaer og struktur for tverrfaglig samarbeid						
	Grad av fokus på overganger som risikoområde						
Kultur	Normer, verdier og grunnleggende antagelser i organisasjonen						
	Grad av interesse for kvalitetsforbedringsarbeid innen organisasjonen						
Implementeringsklima	Kapasitet for endring/ mottakelighet for kvalitetsforbedringstiltak/ i hvilken grad kvalitetsforbedringsarbeid blir belønnet, støttet og forventet i organisasjonen						
Modenhet for implementering	Organisatorisk forpliktelse til kvalitetsforbedringsintervensjoner (Håndfaste indikatorer?)						
Tilgjengelige ressurser	Grad av tilgjengelig tid til kvalitetsforbedringsarbeid						
	Grad av tilgjengelig finansiering for kvalitetsforbedringsarbeid						
Autonomi	Grad av autonomi i hvordan tilgjengelige ressurser benyttes						

Appendix 5 – Focus group interviews before the intervention

Intervjuguiden er strukturert med hovedpunkter og underpunkter. Underpunktene er ment som hjelpespørsmål som moderator kan benytte dersom hun ikke får nok informasjon eller deltakerne står fast/ikke forstår spørsmålene.

Intervjuguide ansatte (fokusgruppe)

Introduksjon

- Kan dere fortelle litt om dere selv; alder, utdannelse, arbeidserfaring og arbeidstittel?
- Kan dere helt kort fortelle litt om hva dere tenker at kvalitet og pasientsikkerhet innebærer på deres arbeidsplass?

Struktur

- Hvordan organiseres arbeidet med kvalitet og sikkerhet på din arbeidsplass?
    - Hvordan er ansvaret for dette arbeidet fordelt? Kjenner dere til strategier og planer for dette arbeidet?
    - Hvordan håndteres avvik? Hvordan lærer dere av uønskede hendelser?
    - Er dere ansatte med i kvalitetsforbedringsprosjekter i dag? Hvordan? Hvilke type prosjekter er det?
    - I hvilken grad bruker dere verktøy (veiledere / guide/retningslinjer/sjekklister) i arbeidet med kvalitet og sikkerhet? Kan dere gi eksempler på dette? Hvordan fungerer det?
- Hvordan jobber dere for å få til pasient/brukerinvolvering?
    - Hvordan samler dere inn og bruker erfaringer som pasienter og pårørende har med tjenesten?

Kultur og engasjement

- Opplever dere at det er en felles forståelse om hva som er viktigst å fokusere på i arbeidet med kvalitet og sikkerhet? Hvordan?
- Hvilke utfordringer opplever dere i arbeidet med kvalitet og sikkerhet på deres arbeidsplass?
    - Hvordan har dette blitt håndtert?
- Hvordan jobber dere for å skape engasjement hos ansatte om forbedringsarbeid? Gi eksempler.
- Hvordan jobber dere for å få til pasientsentrert omsorg og positive pasienterfaringer? Gi eksempler. (eks: se pasient/bruker, sette av tid til «kaffe», omsorg, kvalitet i pleie)

Kompetanse

- Hvordan tilrettelegges det i avdelingen for kompetanseutvikling? (eks: hvordan tilrettelegges det for tid til å jobbe med forbedringsarbeid? Er det en del av arbeidsplanen? Etablerte møteplasser, fagutviklere, ressurspersoner kurs osv?
    - Opplever dere at dere får nok tid til å oppdatere dere faglig?
- Hvem tar initiativ til kvalitetsforbedringsarbeid i avdelingen? (eks: top-down – ledelse, bottom-up – ansatte, fagutvikler etc.)
- Hvordan opplever dere at ledelsen tilrettelegger for at kvalitetsforbedringsarbeid innføres i avdelingen?

Politikk – samhandling og koordinering

- Hvilke nettverk er tilgjengelige for dere i arbeid med kvalitet og sikkerhet og faglig utvikling? (eks: læringsnettverk, USHT)
- Hvordan opplever dere at samhandlingen med andre fagprofesjoner fungerer? (eks: sykepleiere, fysioterapi). Utfordringer?
- I hvilken grad opplever dere at dere jobber tverrfaglig på din arbeidsplass?
- Hvordan tilrettelegges det for samhandling mellom sykehus-sykehjem innad i kommunen? Eventuelt andre enheter. Utfordringer?

Fysisk utforming og teknologi

- Hvordan opplever dere at data- og informasjonssystemene som er i avdelingen i dag støtter opp om kvalitet- og sikkerhetsforbedring? (For eksempel avvikssystem, tilgang på data om kvalitet og ytelse, trykksår, ernæringsstatus, info fra sykehus, samarbeid med fastlege)
- Hvordan er den fysiske utformingen av lokaler/uteområder/private hjem i forhold til kvalitet og sikkerhet for pasienter/brukere og ansatte? (Plassering av arbeids pc-er, rapportoverføring, farlige gjenstander, private hjem, arbeidsbiler)

Ytre kontekst/eksterne forhold

- På hvilken måte har dere opplevd at nasjonale retningslinjer/ veiledere/krav blir benyttet i kvalitets- og sikkerhetsarbeidet på din arbeidsplass?
- På hvilken måte har dere opplevd at ytre krav, som f.eks. tilsyn, forskrifter, eller veiledere hindrer eller fremmer arbeidet ditt med kvalitet og sikkerhet?

Avslutning

- Er det noe dere ønsker å tilføye om teamet som ikke kom fram i spørsmålene?

Intervjuguiden er strukturert med hovedpunkter og underpunkter. Underpunktene er ment som hjelpespørsmål som moderator kan benytte dersom hun ikke får nok informasjon eller deltakerne står fast/ikke forstår spørsmålene.

Intervjuguide ledere - (fokusgrupper)

Introduksjon

- Kan dere fortelle litt om dere selv; alder, utdannelse, arbeidserfaring og stillingstittel?
- Kan dere helt kort fortelle litt om hva tenker dere generelt at kvalitet og pasientsikkerhet i sykehjem innebærer?

Struktur

- Hvordan organiseres arbeidet med kvalitet og sikkerhet på din arbeidsplass?
    - Hvordan er ansvaret fordelt? Hvilke forum eller utvalg finnes?
- Er det utviklet mål, strategi og plan for kvalitetsarbeidet? Hvordan fungerer det?
- I hvilken grad har dere adgang til verktøy, veiledere/guide, intervensjoner, metoder for å arbeide med kvalitet og sikkerhet?
    - Hvordan opplever dere at disse er til støtte for dere i deres daglige arbeid med kvalitet og sikkerhet? Er det noen typer verktøy dere savner?
- Hvordan involveres pasienter og pårørende i kvalitet og sikkerhets forbedringsarbeid?
    - Finnes det spesielle metoder eller forum for dette?
- Hvordan håndteres alvorlige hendelser som oppstår i hjemmesykepleien? (Internt, tilsyn, analyse av hendelser? Læring i etterkant?)
    - Avvik/rapportering
    - Informasjon til pårørende
    - Håndtering av personell involvert
    - Har dere egne prosedyrer eller metoder for dette?
    - Hvilken kompetanse har dere i forhold til å håndtere og analysere alvorlige hendelser?

Kultur og engasjement

- Hvordan jobber dere som ledere for å skape det en felles forståelse for kvalitet og sikkerhetsarbeid i enheten? (Felles mål)
- Hvilke utfordringer opplever dere i arbeidet med kvalitet og sikkerhet på deres arbeidsplass?
    - Hvordan har dette blitt håndtert?
- Hvordan fremmer dere initiativ fra de ansatte i kvalitet og sikkerhetsarbeidet?
- Hvordan jobber dere for å skape og utnytte engasjement hos ansatte om forbedringsarbeid? Og eksempler
- Hvordan jobber dere for å få til pasientsentrert omsorg og positive pasienterfaringer?

Kompetanse

- Hvordan tilrettelegger dere som ledere for kompetanseutvikling hos ansatte?
    - Hvilke områder er i fokus for faglig utvikling hos ansatte? Hvordan blir områdene valgt?

- Hvordan kartlegger dere kompetanse og kompetansebehov hos de ansatte? Gjøres noe spesielt i forhold til kompetanseutvikling i forbedringsarbeidet?
- Hvordan jobber dere med erfaringsoverføring mellom ansatte og eventuelt andre enheter i kvalitets og sikkerhetsarbeidet? (Også i forhold til uønskede hendelser)

Politikk - Samhandling og koordinering

- Hvilken innflytelse har den politiske og administrative ledelsen i kommunen for arbeidet ditt som leder?
- Hvordan opplever dere at størrelsen på kommunen/enheten påvirker arbeidet deres med kvalitet og sikkerhet? (positivt og negativt)
- På hvilken måte påvirker den økonomiske situasjonen arbeidet deres som leder?
- Hvordan tilrettelegges det for samhandling mellom sykehus-korttidsavdeling-hjemmesykepleien innad i kommunen? (Og mellom avdelinger og andre enheter i kommunen)

Fysisk utforming og teknologi

- Hvordan opplever dere at tilgjengelige data- og informasjons system støtter opp om kvalitet- og sikkerhetsforbedring? (For eksempel avvikssystem, tilgang på data om kvalitet og ytelse, trykksår, ernæringsstatus, info fra sykehus, samarbeid med fastlege)
- Hvordan er den fysiske utformingen av lokaler/uteområder/private hjem i forhold til kvalitet og sikkerhet for pasienter/brukere og ansatte? (Plassering av arbeids pc-er, rapportoverføring, farlige gjenstander, plass, private hjem, arbeidsbiler)

Ytre kontekst/eksterne krav

- Hvilke nettverk eksisterer i kommunen som kan være til hjelp for deg i arbeidet med kvalitet og sikkerhet?
- På hvilken måte har dere opplevd at ytre krav som f.eks. tilsyn, retningslinjer, forskrifter eller veiledere hindrer eller fremmer arbeidet med kvalitet og sikkerhet?
- Har dere brukt offentlige rapporter eller regelverk for eksempel tilsynsrapporter, lederforskriften i ditt arbeid med kvalitet og sikkerhet? Hvordan opplever du nytten av det?

Avslutning

- Er det noe du ønsker å tilføye om teamet som ikke kom fram i spørsmålene?

Appendix 6 – Focus group interview during intervention

SAFE-LEAD intervensjon Steg 2 – Workshop 4: Evaluering og sustainability

Samling/ workshop 4	**Tid 2 timer**
Kort introduksjon • Introduksjon av deltakerne • Kort muntlig informasjon om SAFE-LEAD prosjektet og gjennomgang av infoskriv og signering av samtykkeskjema dersom noen nye deltar Status på tiltak: • Hvordan har dere arbeidet med guiden siden sist? • Hvilke tiltak har dere fokusert på siden sist workshop? (under hvilke utfordringer og målsettinger?) • Hva er status på arbeidet så langt? Hvor langt har dere kommet ift arbeidet med tiltak?	Maks 15 min
Evaluering av arbeidet med guiden og måloppnåelse Fra forrige samlinger skal deltakerne ha jobbet med mål og tiltak, og ha involvert brukere i dette arbeidet. Start med å presentere målene de satte seg for arbeidet til denne workshopen på forrige samling. ***Evaluering av kvalitetsarbeidet*** 1. Har dere oppnådd målene dere satte på forrige samling? Hvordan? 2. Har dere jobbet videre med de samme tiltakene eller formulert nye/flere? Under hvilke utfordringer og målsettinger? 3. Hvordan har dere arbeidet med handlingsplaner og tiltak siden sist? Har dette gått etter planen? På hvilken måte? 4. Har tiltakene fungert slik dere hadde tenkt? (hvorfor/hvorfor ikke?) 5. Har dere hatt noen utfordringer i implementeringen av tiltak? Hva kan dere eventuelt gjøre med det? 6. Spesielle tiltak for involvering av pasient og pårørende? 7. Har dere involvert ansatte i arbeidet med tiltakene? På hvilken måte? 8. Har dere involvert brukere i arbeidet med tiltakene? På hvilken måte? Be dem fylle ut tabell på side 9. i guiden som de også fylte ut på første samling: • Er det noen endring? Hvordan? • Hva har de gjort/ikke gjort som har eller ikke har ført til endringer?	40 min
Evaluering av guiden 1. Har dere brukt web-versjonen, papirversjonen eller begge deler? 2. Hvordan har guiden fungert i deres arbeid med kvalitet og sikkerhet? 3. Hvordan har dere jobbet med guiden? 4. Hva har vært spesielt nyttig og relevant? På hvilken måte? 5. Hva har vært utfordrende/vanskelig eller som ikke har fungert? På hvilken måte? 6. Hvordan kan guiden eventuelt videreutvikles til å fungere enda bedre for dere i arbeidet med kvalitet og sikkerhet?	20 min

Evaluering av workshops og egenarbeid 1. Hvordan har det vært å delta på workshopene? 2. Har det vært i tråd med forventningene dere hadde på forhånd? (hvis ja/nei: på hvilken måte?) 3. Hvilket utbytte har dere fått av å være med på workshopene? Hva kunne/burde eventuelt vært annerledes på for at det skulle fungert enda bedre? 4. Hvordan har det vært å få hjemmelekse mellom hver workshop? Har dette blitt gjort? Hvilke utfordringer har dere eventuelt møtt? Hva har gått spesielt bra? 5. Hvordan har det vært å arbeide med guiden mellom workshopene? 6. Hvis vi skal lage et nytt opplegg på et senere tidspunkt, hvilke forslag ville dere da gitt oss forskere utforming intervensjonsopplegget? Hva har vært bra/dårlig, og hva kunne/burde vært endret på?	
Sustainability: Hvordan få arbeidet med guiden og fokuset på kvalitetsarbeid til å vedvare? 1. Hvordan tenker dere at dere kan bruke lederguiden videre som en integrert del av kvalitetsarbeidet? 2. Hvilke utfordringer tenker dere kan bli gjeldende i videre arbeid med guiden? Hvordan kan dere møte disse? 3. Hvilke utfordringer har dere – hvor bør fokuset være i det videre arbeidet? 4. Hvilke faktorer bør være til stede for at dere skal klare å opprettholde arbeidet med guiden i kvalitetsarbeidet? Hva må/bør dere gjøre for å få dette til på best mulig måte? 5. Hvordan kan dere involvere ansatte i det videre kvalitetsarbeidet og arbeidet med guiden fremover? 6. Hvordan kan dere involvere brukere/pasienter i det videre kvalitetsarbeidet og arbeidet med guiden fremover? 7. Hvem skal ha ansvaret for å følge opp? 8. Hvordan ønsker dere at vi forskere skal involvere oss i det videre arbeidet? Hva trenger dere? 9. Ønsker dere flere workshops? At vi er med på ledermøter og/eller fagmøter? Hva vil dere i så fall at vi skal fokusere på?	45 min
Bli enige om videre arbeid, tidspunkt for intervju og observasjon, og eventuelle workshop og deltakelse på ledermøter/fagmøter.	

Appendix 7 – Focus group interview after the intervention

Intervjuguide ansatte – etter intervensjon (fokusgruppe)

Guiden tilpasses den enkelte enhet og de tiltak/begreper som er benyttet i enheten gjennom året vi har fulgt dem. Dette er bare en veiledning, fokusgruppeintervjuet er fleksibelt. Noter ned hvilke tiltak organisasjonen har gjennomført og spør de ansatte spesifikt om dette – har de hørt om det og opplevd endringer i sin enhet? Hvordan? Har de blitt involvert i større grad? Begynn åpent: har dere opplevd endringer i enheten eller nye tiltak? Hvilke? Hvordan har dette fungert? (alle bør notere ned tiltakene som har vært gjennomført på sin enhet og komme inn på disse dersom de ansatte ikke gjør dette spontant).

Åpningsspørsmål

- Fortell litt om dere selv
    - Alder, stilling, erfaring, hvor lenge dere har vært i nåværende stilling?

Introduksjon/overgang:

- Hvordan opplever dere arbeidet med kvalitet og sikkerhet på deres arbeidsplass?
- Arbeidsplassen deres har det siste året vært med i et prosjekt som heter SAFE-LEAD, har dere fått med dere det?
    - Hvordan? (eksempler: survey, lederne har snakket om det, tiltak osv.)

Nøkkelspørsmål

- Har dere opplevd at det har blitt iverksatt nye tiltak eller prosedyrer på deres arbeidsplass det siste året?
    - Hvilke? Kan dere fortelle om det?
    - Hvordan opplever dere at dette har fungert? (positivt og/eller negativt)
    - Har dere som ansatte blitt involvert i arbeidet med noen av tiltakene? På hvilken måte?
- Har det skjedd noen endringer i rutiner med tanke på kvalitet og sikkerhet? (Endringer i ledelsen/fysiske endringer i avdeling/omrokkering av ansatte/nye strategier/økt engasjement etc.)
    - Har det vært spesielle områder/tema i fokus? Har dere kjennskap til hvorfor akkurat disse områdene har vært i fokus?
    - Har det blitt etablert nye arenaer hvor dere snakker om kvalitet og sikkerhet, i så fall hvilke? (F.eks. Morgenmøte, teammøter)
    - Hvordan opplever dere at dette har fungert?
- Er det noen konkrete områder i arbeidet med kvalitet og sikkerhet dere tenker at dere selv som ansatt har ansvar for? Hva og på hvilken måte?
    - Har dere opplevd nye/endrede krav til ansatte eller arbeidsmåter ila siste året?
- Opplever dere at dere som ansatte har blitt involvert i større grad eller på en annen måte enn tidligere?
    - Har dere hatt oppfølging det siste året på områder innen kvalitet og sikkerhet?
    - Har dere deltatt på noe som bidrar til økt kompetanse/kunnskap om kvalitet og sikkerhet?
    - Hva/hvem opplever dere bidrar til motivasjon og engasjement for arbeid med kvalitet og sikkerhet?

    - Er det noe dere savner som kunne vært til hjelp for dere i arbeidet med kvalitet og sikkerhet?
- Har dere fått nye systemer eller annen teknologi i arbeidet med kvalitet og sikkerhet det siste året? (Datasystemer, sjekklister)
    - Hvordan fungerer det?
- Kan dere si noe om hva dere selv gjør for å involvere brukere og pårørende i deres daglige arbeid? (spør etter eksempler)
    - Opplever dere at ledelsen har fokus på brukerinvolvering? (i så fall, på hvilken måte? Eksempler).
    - Har det skjedd noen endringer i hvordan dere jobber med brukerinvolvering det siste året? Hvordan?
- Er det noen dere opplever kunne blitt gjort annerledes som hadde bedret arbeidet med kvalitet og sikkerhet på deres arbeidsplass?
- Har dere opplevd endringer i organisasjonen det siste året (for eksempel omorganisering, ny leder, nye oppgaver)?
    - Hvordan har dette påvirket arbeidet deres?
    - Opplever dere at det har påvirket mulighetene for å gi god kvalitet på tjenestene? Hvordan?

Avslutning

- Er det noe dere ønsker å tilføye om teamet som ikke kom fram i spørsmålene?

Intervjuguide – lederguiden

Guiden tilpasses den enkelte enhet og de tiltak/begreper som er benyttet i enheten gjennom året vi har fulgt dem. Dette er bare en veiledning, fokusgruppeintervjuet er fleksibelt.

Introduksjon/overgang:

- Hvilke forventninger hadde dere på forhånd til å være med i SAFE-LEAD og bruke lederguiden i deres daglige arbeid?

Nøkkelspørsmål:

- Hvordan opplevdes det å delta i SAFE-LEAD prosjektet?
    - Hva likte dere best?
    - I ettertid, er det noe som kunne vært gjort annerledes? Kan dere fortelle?
- Hvordan syns dere generelt det har vært å bruke lederguiden?
- Hvordan har dere benyttet guiden på deres arbeidsplass? (F.eks. alene, i lederteam, sammen med ansatte på møter etc.)
    - Hva har vært spesielt utfordrende?
    - Er det noe dere tenker kunne/burde vært annerledes? (i så fall, hva og på hvilken måte?)
- Hvorfor har dere lykkes/ikke lykkes med implementering av lederguiden i denne enheten?
    - Hva opplever dere som de viktigste faktorer som må være på plass ved implementering av verktøy/guider i denne enheten? (Ledelse, opplæring, nytteverdi etc.)
- Har dere lært noe nytt innen kvalitet og sikkerhetsarbeidet gjennom dette året?
    - På hvilken måte?
    - Hva har dere konkret fått økt kompetanse eller kunnskap om?
    - Føler dere at SAFE-LEAD har bidratt til dette? Hvordan?
- Hva har vært det viktigste bidraget fra guiden i deres arbeid med kvalitet og sikkerhet?
    - På hvilken måte?
    - Hva har eventuelt vært utfordrende?
- Har dere holdt dere til de utfordringene dere valgte i starten av prosjektet eller har dere endret underveis/begynt på nye?
    - Hvordan har dere jobbet for å oppnå forbedring i de valgte utfordringene?
    - Hva har fungert bra? Hva er betingelsene for at det fungerte så bra?
    - Hva har vært utfordrende, og hvorfor?
- Nå som dere har brukt lederguiden i ett år:
    - Hva er det med selve guiden som har fungert bra?
    - Hva burde vi eventuelt justert på?
    - Hvordan opplever dere at SAFE-LEAD har passet inn i det arbeidet dere allerede driver med av kvalitetsarbeid? (for eksempel prosessen med de tre stegene – utfordringer, mål, handlingsplaner)
    - Opplever dere at guiden er i tråd med lederforskriften som vi snakket om i workshop 5 – har dere reflektert noe mer over dette?

    - Hvordan har det vært å fortsette arbeidet med guiden etter det første halve året hvor vi i mindre grad har vært involvert?
    - Har dere tilpasset den til deres behov? På hvilken måte?
- Har skjedd noen viktige organisatoriske endringer i enheten det siste året som dere opplever at det har hatt innvirkning på muligheten for å gi gode tjenester?
    - Opplever dere at dette har påvirket arbeidet med SAFE-LEAD? På hvilken måte?
- Kan dere si noe om hva dere gjør for å involvere brukere og pårørende på deres arbeidsplass? (spør etter eksempler)
    - Har det skjedd endringer i hvordan dere jobber med brukerinvolvering det siste året? Hvordan?
-

Avslutning:

- Hvilke anbefalinger ville dere gitt til andre som skulle gå i gang med då bruke guiden for første gang?
- (Oppsummer kort hva vi ar snakket om). Er det noe dere mener jeg burde spurt om som dere ønsker å formidle helt avslutningsvis?

Appendix 8 – Observation guide

OBSERVASJONS GUIDE

- Hvordan ledere bruker sjekklister/lederguide i daglig arbeid
- Hvordan blir lederguiden brukt til selv-evaluering av eget arbeid
- Bruker de andre sjekklister i kommunen utenom lederguide til selv-evaluering
- Hvilke verktøy/guider/sjekklister blir brukt på ulike nivåer
- Har ledere egne verktøy - hvor ofte brukes de og i hvilke sammenhenger
- Hvordan kvalitetsarbeid er synlig i strategier og handlingsplaner
- Har lederne faglig påfyll/kurs til selvutvikling og læring i lederrollen
- Hvordan planlegger ledere dagens gjøremål – fokus på kvalitet
- Fokus på kvalitet og sikkerhetsarbeid i tverrfaglige møter
- Hvordan ledere formidler kvalitetsarbeid til mellomledere / ansatte
- Informasjonsflyt mellom nivåene i kvalitetsarbeid (Kommunalsjef – enhetsleder – avdelingsleder (fagleder / soneleder) - sykepleiere – helsefagarbeidere – vikarer)
- Strukturer/planer ledere jobber med
- Maktforhold/relasjoner som viser seg i samhandling i kvalitetsforbedringsarbeidet
- Delt(e) forståelse/verdier/atferd i kvalitetsforbedringsarbeidet
- Samhandling mellom profesjoner, ledelse knyttet til kvalitetsforbedringsarbeidet
- Kursing/opplæring som relaterer seg til kvalitetsforbedring
- Entusiasme/motivasjon i det daglige kvalitetsforbedringsarbeidet
- Barrierer og forbedringsmuligheter i kvalitetsforbedringsarbeidet
- IT – tilgjengelighet og bruk i kvalitetsforbedringsarbeidet
- Læringsaktiviteter – arenaer og aktiviteter der det jobbes med kvalitetsforbedring
- Bærekraftighet av kvalitetsforbedringsarbeidet
- Organisasjonsnivåer og samhandling og kommunikasjon på tvers av nivåer
- Hvilke kanaler bruker ledere til formidlinger ut mot ansatte
- Tidsfaktorer og stresselementer i organisasjonen knyttet til kvalitetsforbedring
- Oppleves det tidspunkter i løpet av dagen med høyt «tempo», hvem er synlige i disse tidspunktene
- Hvordan er brukerperspektivet (kontakt med pasienter/pårørende/innhenting av informasjon) synlig i kvalitetsarbeid
- Når er leder tilgjengelig/synlig for ansatte – (for eksempel uformell samtale med ansatte, stikke innom kontoret)

Rapportering

I etterkant av observasjonen skrives det en oppsummering på ca 0,5 -2 sider. Oppsummeringen oversendes til (…), som samler alle disse feltnotatene til bruk i videre analyser.

Appendix 9 – NSD Approval

Siri Wiig
Institutt for helsefag Universitetet i Stavanger
Ullandhaug
4036 STAVANGER

Vår dato: 03.03.2017 Vår ref: 52324 / 3 / IJJ Deres dato: Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 19.01.2017. Meldingen gjelder prosjektet:

52324	*Ledelse av kvalitet og sikkerhet i primærhelsetjenesten – SAFE-LEAD Primary Care (Fase 1)*
Behandlingsansvarlig	*Universitetet i Stavanger, ved institusjonens øverste leder*
Daglig ansvarlig	*Siri Wiig*

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/meldeplikt/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 31.12.2021, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Katrine Utaaker Segadal

Ida Jansen Jondahl

Kontaktperson: Ida Jansen Jondahl tlf: 55 58 30 19
Vedlegg: Prosjektvurdering

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Personvernombudet for forskning

Prosjektvurdering - Kommentar

Prosjektnr: 52324

NASJONAL SAMARBEIDSSTUDIE
Prosjektet er en nasjonal samarbeidsstudie. Universitetet i Stavanger er behandlingsansvarlig institusjon. Personvernombudet forutsetter at ansvaret for behandlingen av personopplysninger er avklart mellom institusjonene. Vi anbefaler at det inngås en avtale som omfatter ansvarsfordeling, ansvarsstruktur, hvem som initierer prosjektet, bruk av data og eventuelt eierskap.

DATAMATERIALETS INNHOLD
Vurderingen gjelder individuelle intervjuer og gruppeintervjuer med ledere ved sykehjem og i hjemmesykepleien. Dersom det i senere faser av prosjektet skal samles inn ytterligere nye personopplysninger, må dette meldes som en endringsmelding i god tid før datainnsamlingen skal starte.
http://www.nsd.uib.no/personvern/meldeplikt/skjema.html

INFORMASJON OG SAMTYKKE
Utvalget informeres skriftlig og muntlig om prosjektet og samtykker til deltakelse. De reviderte informasjonsskrivene, mottatt 03.03.2017, er godt utformet.

INFORMASJONSSIKKERHET
Personvernombudet legger til grunn at forsker følger Universitetet i Stavanger sine rutiner for datasikkerhet. Dersom personopplysninger skal sendes elektronisk, bør opplysningene krypteres tilstrekkelig.

PROSJEKTSLUTT OG ANONYMISERING
Forventet prosjektslutt er 31.12.2021. Ifølge prosjektmeldingen skal innsamlede opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å:
- slette direkte personopplysninger (som navn/koblingsnøkkel)
- slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsopplysninger som f.eks. bosted/arbeidssted, alder og kjønn)
- slette digitale lydopptak

Siri Wiig
Serviceboks 604
4809 ARENDAL

Vår dato: 15.08.2017 Vår ref: 54855 / 3 / STM Deres dato: Deres ref:

Tilbakemelding på melding om behandling av personopplysninger

Vi viser til melding om behandling av personopplysninger, mottatt 23.06.2017.
Meldingen gjelder prosjektet:

54855	*Ledelse av kvalitet og sikkerhet i primærhelsetjenesten - SAFE-LEAD Primary Care (Fase 2)*
Behandlingsansvarlig	*Universitetet i Stavanger, ved institusjonens øverste leder*
Daglig ansvarlig	*Siri Wiig*

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database.

Personvernombudet vil ved prosjektets avslutning, 31.07.2023, rette en henvendelse angående status for behandlingen av personopplysninger.

Dersom noe er uklart ta gjerne kontakt over telefon.

Vennlig hilsen

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Marianne Høgetveit Myhren

Siri Tenden Myklebust

Kontaktperson: Siri Tenden Myklebust tlf: 55 58 22 68 / Siri.Myklebust@nsd.no
Vedlegg: Prosjektvurdering

Personvernombudet for forskning

Prosjektvurdering - Kommentar

Prosjektnr: 54855

Dette er fase to av prosjektet Ledelse av kvalitet og sikkerhet i primærhelsetjenesten – SAFE-LEAD Primary Care. Fase 1 er meldt med prosjektnummer 52324.

Prosjektet er en internasjonal samarbeidsstudie. Universitetet i Stavanger er behandlingsansvarlig institusjon for den norske delen. Personvernombudet forutsetter at ansvaret for behandlingen av personopplysninger er avklart mellom institusjonene. Vi anbefaler at det inngås en avtale som omfatter ansvarsfordeling, ansvarsstruktur, hvem som initierer prosjektet, bruk av data og eventuelt eierskap.

UTVALG OG DATA
Utvalget består av helsepersonell og ledere på ulike nivå i sykehjem og hjemmetjenesten i et utvalg norske kommuner samt helsepersonell og ledere i et sykehjem i Nederland.

Data samles inn ved hjelp av intervjuer og observasjon. Dersom det i senere faser av prosjektet skal samles inn personopplysninger ved hjelp av andre metoder, må dette meldes som en endringsmelding i god tid før datainnsamlingen skal starte: http://www.nsd.uib.no/personvernombud/meld_prosjekt/meld_endringer.html

DISPENSASJON FRA TAUSHETSPLIKTEN
Det vil inngå observasjon av arbeidspraksis. Vi forstår det slik at pasienter vil være til stede under observasjonene. Ettersom forskerne vil få innsyn i taushetsbelagt informasjon er det vår vurdering at det må foreligge en dispensasjon fra taushetsplikten fra REK. Vi forutsetter at dere avklarer dette med REK.

Personvernombudet forutsetter at studien gjennomføres etter alle forutsetninger og vilkår REK eventuelt setter, og vi ber om at tillatelsen ettersendes til personvernombudet@nsd.no.

INFORMASJON OG SAMTYKKE
Utvalget informeres skriftlig og muntlig om prosjektet og samtykker til deltakelse. Informasjonsskrivet er i all hovedsak godt utformet, men informasjonen i avsnittet som omhandler tilgang må presiseres. Det må fremgå klart av skrivet hvem som skal ha tilgang til data med personopplysninger. Videre må det opplyses om at innsamlet data vil brukt i to masteroppgaver. Navn på masterstudenter bør også påføres skrivet.

Revidert informasjonsskriv skal sendes til personvernombudet@nsd.no før utvalget kontaktes.

TILGANG
Eline Ree, Universitetet i Stavanger
Terese Johannessen, Universitetet i Stavanger
Marianne Storm, Universitetet i Stavanger

Karina Aase, Universitetet i Stavanger
Torunn Strømme, Universitetet i Stavanger
Lene Schibevaag, Universitetet i Stavanger
Line Hurup Thomsen, USHT Rogaland, Stavanger kommune
Elisabeth Holen-Rabbersvik, Universitetet i Stavanger
Berit Ullebust, USHT Sogn og Fjordane, Førde kommune
Espen Kolstø (masterstudent, Universitetet i Stavanger)
Eleni Calameti (masterstudent, Universitetet i Stavanger)

DATASIKKERHET
Personvernombudet legger til grunn at forskerne etterfølger Universitetet i Stavanger sine interne rutiner for datasikkerhet.

DATABEHANDLERAVTALE
Det kan bli aktuelt å benytte databehandler i prosjektet. Universitetet i Stavanger skal inngå skriftlig avtale med eventuell databehandler om hvordan om hvordan personopplysninger skal behandles, jf. personopplysningsloven § 15. For råd om hva databehandleravtalen bør inneholde, se Datatilsynets veileder: http://www.datatilsynet.no/Sikkerhet-internkontroll/Databehandleravtale/.

PROSJEKTSLUTT OG ANONYMISERING
Forventet prosjektslutt er 31.07.2023. Ifølge prosjektmeldingen skal innsamlede opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å:
- slette direkte personopplysninger (som navn/koblingsnøkkel)
- slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsopplysninger som f.eks. bosted/arbeidssted, alder og kjønn)
- slette digitale lydopptak

Vi gjør oppmerksom på at også databehandler må slette personopplysninger tilknyttet prosjektet i sine systemer.

Fra:	Siri Tenden Myklebust
Til:	Siri Wiig
Emne:	Prosjektnr: 54855. Ledelse av kvalitet og sikkerhet i primærhelsetjenesten - SAFE-LEAD Primary Care (Fase 2)
Dato:	mandag 4. desember 2017 13:17:34

BEKREFTELSE PÅ ENDRING

Vi viser til endringsmelding registrert hos personvernombudet 23.11.2017, samt telefonsamtale med prosjektleder, den 27.11.2017.

Vi har nå registrert at dere vil gjennomføre en spørreundersøkelse. Undersøkelsen gjennomføres elektronisk og på papir.

Personvernombudet forutsetter at prosjektopplegget for øvrig gjennomføres i tråd med det som tidligere er innmeldt, og personvernombudets tilbakemeldinger. Vi vil ta ny kontakt ved prosjektslutt.

Med vennlig hilsen,
Siri Tenden Myklebust
seniorrådgiver | Senior Adviser
Seksjon for personverntjenester | Data Protection Services
T: (+47) 55 58 22 68

NSD – Norsk senter for forskningsdata AS | NSD – Norwegian Centre for Research Data
Harald Hårfagres gate 29, NO-5007 Bergen
T: (+47) 55 58 21 17
postmottak@nsd.no www.nsd.no

Appendix 10 – REK assessment

From: post@helseforskning.etikkom.no
To: Siri Wiig
Subject: Ikke fremleggingspliktig
Date: 31. august 2017 14:46:40

Vår ref. nr.: 2017/1669
Prosjekttittel: "Ledelse av kvalitet og sikkerhet i primærhelsetjenesten "
Prosjektleder: Siri Wiig

Til Siri Wiig.

Jeg viser til framleggingsvurdering innsendt 21.08.2017. REK vest ved sekretariatet vurderte saken.

Vår forståelse av prosjektet
Hovedformålet er å bygge ledelseskompetanse innen kvalitet og sikkerhet blant ledere i primærhelsetjenesten. I Fase 2 som denne søknaden omhandler vil en ledelsesintervensjon testes i norske sykehjem og hjemmetjenesten og prosjektet vil måle effekten av intervensjonen på kvalitet og sikkerhet ved å se på forbedring i kunnskap, holdninger og praksis i sykehjem og hjemmesykepleie. Observasjon av helsepersonell sin arbeidspraksis kan gjøre at prosjektgruppen får tilgang til taushetsbelagt informasjon om pasienter.

Det er helseforskningsloven som regulerer hvorvidt det er krav om søknad til REK eller ikke. Helseforskningsloven gjelder for medisinsk og helsefaglig forskning på mennesker,humant biologisk materiale eller helseopplysninger, jf. hfl § 2. Medisinsk og helsefaglig forskning defineres som virksomhet som utføres med vitenskapelig metodikk for å skaffe til veie ny kunnskap om helse og sykdom, jf. hfl § 4. Etter min vurder vil ikke formålet i denne studien være "ny kunnskap om helse og sykdom" som sådan, og det er dermed ikke krav til forhåndsgodkjenning av REK. Prosjektet må selvsagt forankres av ledelsen på den/de institusjoner som skal besøkes, og prosjektgruppen bør signere taushetserklæring. Dette er i tråd med rådgivning fra REK når det gjelder prosjekter av forskjellig art som av forskjellige grunner er fysisk innom en helseinstitusjon.

Jeg gjør oppmerksom på at konklusjonen er å anse som veiledende jfr. forvaltningsloven § 11. Dersom dere likevel ønsker å søke REK vil søknaden bli behandlet i komitémøte, og det vil bli fattet et enkeltvedtak etter forvaltningsloven.

Vær også oppmerksom på at dersom dere skal samle inn personopplysninger, så må prosjektet klareres med Datatilsynet/Personvernombudet for forskning.

Med vennlig hilsen
Øyvind Straume
rådgiver
post@helseforskning.etikkom.no
T: 55978497

Regional komité for medisinsk og helsefaglig
forskningsetikk REK vest-Norge (REK vest)
http://helseforskning.etikkom.no

Appendix 11 – Request for participation in the SAFE-LEAD project

Forespørsel om deltakelse i forskningsprosjektet

" Utvikling av en lederguide for arbeidet med kvalitet og sikkerhet i primærhelsetjenesten"

Bakgrunn og formål
Dette er et spørsmål til deg om å delta i et forskningsprosjekt om utviklingen av en lederguide for arbeidet med kvalitet og sikkerhet i primærhelsetjenesten. Dette er en del av prosjektet *«Ledelse av kvalitet og sikkerhet i primærhelsetjenesten (SAFE-LEAD Primary Care)»,* finansiert av Norges Forskningsråd (prosjektnr: 256681) og Universitetet i Stavanger. Formålet er å utvikle, implementere og teste et forskningsbasert kvalitets- og sikkerhetsverktøy (lederguide) i norsk primærhelsetjeneste. Hovedmålet med studien er å bygge ledelseskompetanse innen kvalitet og sikkerhet blant ledere i primærhelsetjenesten og derigjennom støtte deres arbeid med forbedring av tjenesten. Guiden er basert på omfattende forskning utført i sykehus i fem europeiske land. Nå ønsker vi å videreutvikle og tilpasse guiden til bruk for ledere i den norske primærhelsetjenesten. I den forbindelse trenger vi tilbakemeldinger fra ledere i primærhelsetjenesten på hvordan guiden fungerer og hva vi eventuelt må gjøre for å forbedre og tilpasse den til deres kontekst. Du er forespurt om å delta i dette forskningsprosjektet fordi du som leder i primærhelsetjenesten inngår i den tiltenkte brukergruppen for guiden. Dine innspill på guidens funksjonalitet, brukervennlighet og nytteverdi er viktig for vårt arbeid med den videre utviklingen av lederguiden.

Universitetet i Stavanger er faglig ansvarlig for forskningsprosjektet. Stavanger-, Førde- og Songdalen kommune, Helsedirektoratet v/Pasient og brukerombudet i Vestfold, samt ERASMUS University, Nederland er samarbeidspartnere i prosjektet.

Hva innebærer deltakelse i studien?
Prosjektet innebærer at du deltar i et gruppeintervju med ledere i primærhelsetjenesten som varer ca. 90 minutter. Intervjuet omfatter diskusjoner i gruppen om brukervennligheten og nytteverdien av lederguiden, med spesielt fokus på hvilke forbedringer og tilpasninger som bør gjøres for at den på best mulig måte blir et nyttig verktøy for ledere i primærhelsetjenesten i deres arbeid med kvalitet og sikkerhet. Prosjektet vil også innebære at du 2-3 uker før intervjuet får tilsendt guiden, og bes lese gjennom denne i forkant av intervjuet. Vi gjør lydopptak av gruppeintervjuet.

Hva skjer med informasjonen om deg?
Alle personopplysninger vil bli behandlet konfidensielt. Informasjonen som registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Alle opplysningene vil bli behandlet uten navn eller andre direkte gjenkjennbare opplysninger. En kode knytter deg til dine opplysninger gjennom en navneliste. Det betyr at opplysningene er avidentifisert. Det er kun prosjektleder som har adgang til navnelisten og som kan finne tilbake til deg. Lydbåndopptakene vil bli overført til en datamaskin og slettes like etter intervjuet er transkribert. Medforskere fra USHT Rogaland, Songdalen kommune og USHT Sogn og Fjordane vil ha tilgang til transkriberte data uten navngitte personer. Alt materiale som inngår i studien, inkludert personopplysninger, vil oppbevares nedlåst og utilgjengelig for utenforstående. Alle deltakerne vil få pseudonym, og det vil ikke være mulig å identifisere deg i resultatene av studien når disse publiseres. Prosjektleder har ansvar for den daglige driften av forskningsprosjektet og at opplysninger om deg blir behandlet på en sikker måte.

Frivillig deltakelse
Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Dersom du senere har spørsmål til prosjektet, kan du kontakte prosjektleder Siri Wiig på tlf: 51834288 eller e-post: siri.wiig@uis.no.

Studien er meldt til Personvernombudet for forskning, NSD - Norsk senter for forskningsdata AS. Ref nr: 52324.

Samtykke til deltakelse i studien

Jeg har mottatt informasjon om studien, og er villig til å delta

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(Signert av prosjektdeltaker, dato)

Jeg bekrefter å ha gitt informasjon om prosjektet

(Signert av forsker, dato)

Forespørsel om deltakelse i forskningsprosjektet SAFE-LEAD

«Ledelse av kvalitet og sikkerhet i helse- og omsorgstjenesten»

Bakgrunn og formål
Dette er et spørsmål til deg om å delta i forskningsprosjektet *«Ledelse av kvalitet og sikkerhet i helse- og omsorgstjenesten» (SAFE-LEAD)»*, finansiert av Norges Forskningsråd (prosjektnr: 256681). Formålet er å utvikle, implementere og teste et forskningsbasert kvalitets- og sikkerhetsverktøy for økt ledelseskompetanse og støtte til forbedringsarbeid. Vi ønsker å få kunnskap om hvordan ledere og ansatte arbeider med kvalitet og sikkerhet i sykehjem og hjemmetjenesten og hvilke utfordringer de opplever i forbedringsarbeid. I prosjektet vil et ledelsesverktøy testes i utvalgte sykehjem og hjemmetjenester og prosjektet vil måle effekten av verktøyet ved å se på forbedring i kunnskap, holdninger og praksis knyttet til kvalitet og sikkerhet. Vi vil videre kartlegge og evaluere hvordan et konkret kvalitetsforbedringsprosjekt gjennomføres av tjenestene selv («I trygge hender ved akutt funksjonssvikt hos sårbare eldre i kommunehelsetjenesten», USHT Rogaland). Du er forespurt om å delta i dette forskningsprosjektet fordi du er leder eller ansatt i et sykehjem eller en hjemmetjeneste som inngår i studien og derfor har viktige erfaringer og kunnskap om det å arbeide med kvalitet og sikkerhet.

Universitetet i Stavanger er faglig ansvarlig for forskningsprosjektet. Stavanger, Førde og Songdalen kommune, Helsedirektoratet v/Pasient og brukerombudet i Vestfold, samt ERASMUS University, Nederland er samarbeidspartnere i prosjektet.

Hva innebærer deltakelse i studien?
I prosjektet vil vi samle data på ulike måter. Du, som leder eller ansatt, kan bli forespurt om å delta i individuelle intervju, gruppeintervju, besvare spørreskjema eller at forskere observerer arbeidet som skjer i din enhet:

- Individuelle intervjuer (med lydopptak) varer i ca. 45 minutter og omfatter hvilke utfordringer du opplever i arbeidet med kvalitet og sikkerhet, hvordan det arbeides med dette i din enhet, om det har skjedd endringer over tid og eventuelt hvorfor endringer har skjedd.
- Gruppeintervjuer (med lydopptak) varer i ca. 90 min og omfatter diskusjoner om forståelse av kvalitet og sikkerhet, hvordan det arbeides med dette i organisasjonen, om det har skjedd endringer over tid og hvorfor.
- Observasjon innebærer at en forsker er tilstede i det daglige arbeidet på din arbeidsplass og deltar på møter, observerer samarbeid, hvordan man jobber med kvalitets- og sikkerhetsarbeid eller følger deg på jobb i løpet av arbeidsdagen.
- Spørreskjema innebærer å besvare et spørreskjema (ca 25-30 minutter) om kunnskap, holdninger og praksis knyttet til kvalitet og sikkerhet.
- Kartlegging av forbedringsprosjekt innebærer individuelle intervjuer, gruppeintervjuer og observasjon før, under og etter aktiviteter som inngår i prosjektet «I trygge hender ved akutt funksjonssvikt hos sårbare eldre i kommunehelsetjenesten».

Hva skjer med informasjonen om deg?
Alle personopplysninger vil bli behandlet konfidensielt. Informasjonen som registreres om deg skal kun brukes som beskrevet i formålet over. Alle opplysningene vil bli behandlet uten navn eller andre direkte gjenkjennbare opplysninger. En kode knytter deg til dine opplysninger gjennom en navneliste. Det betyr at opplysningene er avidentifisert. Det er kun prosjektteamet ved Universitetet i Stavanger som har adgang til navnelisten og som kan finne tilbake til deg. Lydbåndopptakene vil bli overført til en datamaskin og slettes like etter at intervjuet er transkribert. Medforskere fra Utviklingssenter for sykehjem og hjemmetjenester (USHT) Rogaland, v/Stavanger kommune, USHT Sogn og Fjordane, v/ Førde kommune og Songdalen kommune, samt masterstudenter som er tilknyttet prosjektet vil være med på ulike deler av datainnsamlingen og ha tilgang til transkriberte data uten navngitte personer. I de tilfeller hvor medforskere og/eller masterstudenter er med på innsamling av data vil disse også ha

tilgang til datamateriale med personopplysninger. Alt materiale som inngår i studien, inkludert personopplysninger, vil oppbevares nedlåst og utilgjengelig for utenforstående. Det vil ikke være mulig å identifisere deg når resultatene fra studien publiseres. I spørreskjemaundersøkelsen kartlegges det ikke personopplysninger. Prosjektleder har ansvar for den daglige driften av forskningsprosjektet og at opplysninger om deg blir behandlet på en sikker måte. Dato for prosjektslutt og anonymisering av alt datamaterialet er 31.7.2023.

Frivillig deltakelse
Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert. Dersom du ønsker å delta, undertegner du samtykkeerklæringen under. Dersom du senere har spørsmål til prosjektet, kan du kontakte prosjektleder Siri Wiig, Universitet i Stavanger, på tlf: 51834288 eller e-post: siri.wiig@uis.no. Studien er meldt til og tilrådd av Personvernombudet for forskning, NSD - Norsk senter for forskningsdata [Ref: 54855 (15.8.2017)].

Samtykke til deltakelse i studien

Jeg har mottatt informasjon om studien, og er villig til å delta

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(Signert av prosjektdeltaker, dato)

Jeg bekrefter å ha gitt informasjon om prosjektet

(Signert av forsker, dato)

Universitetet i Stavanger

SAFE-LEAD

Appendix 12 – Data agreement Ordfuglen

Avtaleskisse – databehandleravtale etter personopplysningsloven

NB: Les veilederen på www.datatilsynet.no/databehandler

Databehandleravtale

I henhold til personopplysningslovens § 13, jf. § 15 og personopplysningsforskriftens kapittel 2.

mellom

Behandlingsansvarlig: Universitetet i Stavanger (UiS)

og

Databehandler: Ordfuglen (991601953)

1. Avtalens hensikt

Avtalens hensikt er å regulere rettigheter og plikter etter Lov av 14. april 2000 nr. 31om behandling av personopplysninger (personopplysningsloven) og forskrift av 15. desember 2000 nr. 1265 (personopplysningsforskriften). Avtalen skal sikre at personopplysninger om de registrerte ikke brukes urettmessig eller kommer uberettigede i hende.

Avtalen regulerer databehandlers bruk av personopplysninger på vegne av den behandlingsansvarlige, herunder innsamling, registrering, sammenstilling, lagring, utlevering eller kombinasjoner av disse.

2. Formål

Databehandler tar på seg oppdraget med å transkribere lydfiler for behandlingsansvarlig i prosjektet SAFE-LEAD. Lydfilene kan være fra både individuelle intervju og fokusgruppeintervju av ledere og ansatte i sykehjem og hjemmetjenesten fra flere kommuner i Norge. Navn på personer og enheter kan fremkomme i intervjuene.

Pris for oppdraget avtales til kr 400 per arbeidstime, eks MVA. Fakturering gjøres kvartalsvis med betalingsfrist 14 dager. For oppdraget er det avtalt følgende antall timer: omtrent 7 arbeidstimer per 60 min lydfil for fokusgrupper og 6 arbeidstimer per 60 min lydfil for individuelle intervju, avhengig av lydkvalitet.

3. Databehandlers plikter

Databehandler skal følge de rutiner og instrukser for behandlingen som behandlingsansvarlig til enhver tid har bestemt skal gjelde.

Databehandler har taushetsplikt om all informasjon som måtte fremkomme i arbeidet med transkribering av lydfiler. Denne bestemmelsen gjelder også etter avtalens opphør.

4. Bruk av underleverandør

Dersom databehandler benytter seg av underleverandør eller andre som ikke normalt er ansatt hos databehandler skal dette avtales skriftlig med behandlingsansvarlige før behandlingen av personopplysninger starter.

Samtlige som på vegne av databehandler utfører oppdrag der bruk av de aktuelle personopplysningene inngår, skal være kjent med databehandlers avtalemessige og lovmessige forpliktelser og oppfylle vilkårene etter disse.

5. Sikkerhet

Databehandler skal oppfylle de krav til sikkerhetstiltak som stilles etter personopplysningsloven og personopplysningsforskriften, herunder særlig personopplysningslovens §§ 13 – 15 med forskrifter. Databehandler skal dokumentere rutiner og andre tiltak for å oppfylle disse kravene. Dokumentasjonen skal være tilgjengelig på behandlingsansvarliges forespørsel.

Lydfiler og transkripsjoner utveksles mellom forskere hos behandlingsansvarlig og databehandler via en mappe i Dropbox. Det er kun forskere i SAFE-LEAD prosjektet og databehandler som vil ha tilgang til denne mappen.

Når lydfilene transkriberes skal navn på personer og enheter eller andre personidentifiserbare opplysninger som fremkommer i lydfilene gis pseudonym. Det skal ikke være mulig å identifisere personer eller enheter i transkripsjonene. Transkripsjonene lagres med samme kode sendte lydfiler er lagret med. Lydfiler slettes etter transkribering.

Avviksmelding etter personopplysningsforskriftens § 2-6 skal skje ved at databehandler melder avviket til behandlingsansvarlig. Behandlingsansvarlig har ansvaret for at avviksmelding sendes Datatilsynet.

6. Sikkerhetsrevisjoner

Behandlingsansvarlig kan avtale med databehandler at det gjennomføres sikkerhetsrevisjoner jevnlig for systemer og lignende som omfattes av denne avtalen.

7. Avtalens varighet

Databehandler tar på seg oppdraget med å transkribere lydfiler for behandlingsansvarlig i prosjektet SAFE-LEAD med estimert varighet på ett år.

Oppdraget skal være avsluttet 30 dager etter mottatt materiale.

Ved brudd på denne avtale eller personopplysningsloven kan behandlingsansvarlig pålegge databehandler å stoppe den videre behandlingen av opplysningene med øyeblikkelig virkning.

Avtalen kan sies opp av begge parter med en gjensidig frist på 1 måned, jf. punkt 8 i denne avtalen.

8. Ved opphør

Ved opphør av denne avtalen plikter databehandler å tilbakelevere alle personopplysninger som er mottatt på vegne av den behandlingsansvarlige og som omfattes av denne avtalen.

Etter endt oppdrag slettes lyd- og tekstfiler fra alle enheter og områder, inkludert mail med eventuelle vedlegg eller annen konfidensiell informasjon. Dette gjelder også for eventuelle sikkerhetskopier. Eventuelle utskrifter skal makuleres.

Databehandler skal skriftlig dokumentere at sletting og eller destruksjon er foretatt i henhold til avtalen innen rimelig tid etter avtalens opphør.

9. Lovvalg og verneting

Avtalen er underlagt norsk rett og partene vedtar Stavanger tingrett som verneting. Dette gjelder også etter opphør av avtalen.

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Denne avtale er i 2 – to eksemplarer, hvorav partene har hvert sitt.

Sted og dato	
Stavanger 23.4.2018	Oslo, 16 april 2018
Behandlingsansvarlig	Databehandler
Siri Wiig	
(underskrift)	(underskrift)

Prosjektleder SAFELEAD
UiS

Avtaleskisse – databehandleravtale etter personopplysningsloven

NB: Les veilederen på www.datatilsynet.no/databehandler

Databehandleravtale

I henhold til personopplysningslovens § 13, jf. § 15 og personopplysningsforskriftens kapittel 2.

mellom

Behandlingsansvarlig: Universitetet i Stavanger (UiS)

og

Databehandlers underleverandør:

Ordfuglens (991601953) underleverandør: Slettum konsulenttjenester (820 123 832)

1. Avtalens hensikt

Avtalens hensikt er å regulere rettigheter og plikter etter Lov av 14. april 2000 nr. 31om behandling av personopplysninger (personopplysningsloven) og forskrift av 15. desember 2000 nr. 1265 (personopplysningsforskriften). Avtalen skal sikre at personopplysninger om de registrerte ikke brukes urettmessig eller kommer uberettigede i hende.

Avtalen regulerer databehandlers bruk av personopplysninger på vegne av den behandlingsansvarlige, herunder innsamling, registrering, sammenstilling, lagring, utlevering eller kombinasjoner av disse.

2. Formål

Databehandler tar på seg oppdraget med å transkribere lydfiler for behandlingsansvarlig i prosjektet SAFE-LEAD. Lydfilene kan være fra både individuelle intervju og fokusgruppeintervju av ledere og ansatte i sykehjem og hjemmetjenesten fra flere kommuner i Norge. Navn på personer og enheter kan fremkomme i intervjuene.

Slettum konsulenttjenester fakturerer Ordfuglen for utført arbeid i henhold til separat arbeidsavtale mellom Slettum konsulenttjenester og Ordfuglen.

For oppdraget er det avtalt følgende antall timer: omtrent 7 arbeidstimer per 60 min lydfil for fokusgrupper og 6 arbeidstimer per 60 min lydfil for individuelle intervju, avhengig av lydkvalitet.

3. Databehandlers plikter

Databehandler skal følge de rutiner og instrukser for behandlingen som behandlingsansvarlig til enhver tid har bestemt skal gjelde.

Databehandler har taushetsplikt om all informasjon som måtte fremkomme i arbeidet med transkribering av lydfiler. Denne bestemmelsen gjelder også etter avtalens opphør.

4. Bruk av underleverandør

Dersom databehandler benytter seg av underleverandør eller andre som ikke normalt er ansatt hos databehandler skal dette avtales skriftlig med behandlingsansvarlige før behandlingen av personopplysninger starter.

Ordfuglens (991601953) underleverandør: Elisabeth Slettum i Slettum konsulenttjenester (820 123 832).

Samtlige som på vegne av databehandler utfører oppdrag der bruk av de aktuelle personopplysningene inngår, skal være kjent med databehandlers avtalemessige og lovmessige forpliktelser og oppfylle vilkårene etter disse.

5. Sikkerhet

Databehandler skal oppfylle de krav til sikkerhetstiltak som stilles etter personopplysningsloven og personopplysningsforskriften, herunder særlig personopplysningslovens §§ 13 – 15 med forskrifter. Databehandler skal dokumentere rutiner

og andre tiltak for å oppfylle disse kravene. Dokumentasjonen skal være tilgjengelig på behandlingsansvarliges forespørsel.

Lydfiler og transkripsjoner utveksles mellom forskere hos behandlingsansvarlig og databehandler via en mappe i Dropbox. Det er kun forskere i SAFE-LEAD prosjektet og databehandler som vil ha tilgang til denne mappen.

Når lydfilene transkriberes skal navn på personer og enheter eller andre personidentifiserbare opplysninger som fremkommer i lydfilene gis pseudonym. Det skal ikke være mulig å identifisere personer eller enheter i transkripsjonene. Transkripsjonene lagres med samme kode sendte lydfiler er lagret med. Lydfiler slettes etter transkribering.

Avviksmelding etter personopplysningsforskriftens § 2-6 skal skje ved at databehandler melder avviket til behandlingsansvarlig. Behandlingsansvarlig har ansvaret for at avviksmelding sendes Datatilsynet.

6. Sikkerhetsrevisjoner

Behandlingsansvarlig kan avtale med databehandler at det gjennomføres sikkerhetsrevisjoner jevnlig for systemer og lignende som omfattes av denne avtalen.

7. Avtalens varighet

Databehandler tar på seg oppdraget med å transkribere lydfiler for behandlingsansvarlig i prosjektet SAFE-LEAD med estimert varighet på ett år.

Oppdraget skal være avsluttet 30 dager etter mottatt materiale.

Ved brudd på denne avtale eller personopplysningsloven kan behandlingsansvarlig pålegge databehandler å stoppe den videre behandlingen av opplysningene med øyeblikkelig virkning.

Avtalen kan sies opp av begge parter med en gjensidig frist på 1 måned, jf. punkt 8 i denne avtalen.

8. Ved opphør

Ved opphør av denne avtalen plikter databehandler å tilbakelevere alle personopplysninger som er mottatt på vegne av den behandlingsansvarlige og som omfattes av denne avtalen.

Etter endt oppdrag slettes lyd- og tekstfiler fra alle enheter og områder, inkludert mail med eventuelle vedlegg eller annen konfidensiell informasjon. Dette gjelder også for eventuelle sikkerhetskopier. Eventuelle utskrifter skal makuleres.

Databehandler skal skriftlig dokumentere at sletting og eller destruksjon er foretatt i henhold til avtalen innen rimelig tid etter avtalens opphør.

9. Lovvalg og verneting

Avtalen er underlagt norsk rett og partene vedtar Stavanger tingrett som verneting. Dette gjelder også etter opphør av avtalen.

***

Denne avtale er i 2 – to eksemplarer, hvorav partene har hvert sitt.

Sted og dato

Stavanger 23.4. 2018

Oslo 17/4-18

Behandlingsansvarlig

Siri Wiig

.....

(underskrift)

Prosjektleder SAFE-LEAD

UiS

Databehandlers underleverandør

Elisabeth Slettum

.....

(underskrift)