How to deal with context? Evaluation of the SAFE-LEAD Context Tool for quality and safety in nursing home and homecare services

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Abstract

Background: The SAFE-LEAD Context Tool was developed for identifying contextual factors to help guide the implementation of healthcare quality and safety interventions. The SAFE-LEAD Context Tool has been tested during a 6 to 12-month intervention study in nursing homes and homecare services. The objective of this paper is to evaluate the SAFE-LEAD Context Tool, and to further develop the tool based on evaluation results.

Methods: Mapped context data from an intervention study in nursing homes and homecare services in Norway were collected and analysed using an initial two-step qualitative content analysis. A semi-structured focus group was conducted with researchers focusing on their overall experience with using the SAFE-LEAD Context Tool, followed by a workshop where the research group reached consensus on how to revise the tool.

Results: Major changes were made to the introductory and final sections of the tool to allow process documentation based on predefined categories. Minor revisions were also made, relating mainly to the consolidation and clarification of terms to better reflect our intended meaning.
Conclusion: The revised SAFE-LEAD Context 2.0 is a theoretically based, and empirically tested tool adapted for context mapping in quality and safety research interventions in nursing home and homecare services.

What do we already know about this topic?
- Contextual factors often serve as significant mechanisms for change in interventions
- Research involving the application of context tools has predominately been conducted in specialised healthcare settings

What does this study add to existing knowledge?
- The revised SAFE-LEAD Context 2.0 is a theoretically based, and empirically tested tool adapted for context mapping in quality and safety research interventions in nursing homes and homecare settings

Introduction

Understanding the importance of context in quality and safety improvement is fundamental for research and practice efforts. Contextual factors often serve as significant mechanisms for change in interventions, and should therefore be taken into account in all research projects in health care services (Batalden & Davidoff, 2007; Coles et al., 2017; Dixon-Woods, 2014; Kaplan et al., 2012). What works in one setting, does not necessarily transfer to other settings, as changes and findings may be dependent upon the context in which the research was conducted (Coles et al., 2017; Shekelle et al., 2010). Mapping contextual factors can provide a better understanding of which contextual factors may be important for research findings, implementation and evaluations of quality and safety interventions both at local, national and international levels (Damschroder et al., 2009; Øvretveit, 2011). However, how to map, cover and choose among different inner and outer contextual factors is challenging (Bate, Mendel & Robert, 2008), and there are significant gaps in research providing evidence on how different contextual factors influence quality interventions (Øvretveit, 2011). Therefore, a number of tools have been developed to assist with this process, such as the Alberta context tool, the PARiHS framework, and the Consolidated framework for implementations research (Damschorder et al., 2009, Estabrooks et al., 2015; Harvey & Kitson, 2015; Pfadenhauer, 2015). To date, research involving the application of these tools has predominately been conducted in specialised healthcare settings (Ree, Johannessen &Wiig, 2019), with little work done to understand the contextual components of aged care settings such as nursing homes and homecare. Due to this knowledge and research gap, we developed the SAFE-LEAD Context Tool (Wiig et al., 2019; also see Appendix 1) to support the identification of contextual factors in our implementation research targeting quality and safety in nursing home and homecare settings (Wiig et al., 2018). The SAFE-LEAD Context Tool is founded on a theoretical implementation research framework in combination with data collection in the SAFE-LEAD project "Improving Quality and Safety in Primary Care—Implementing a Leadership Intervention in Nursing Homes and Homecare" (Wiig et al., 2018; 2019).

Following the development stage (described in detail in Wiig et al., 2019), the SAFE-LEAD Context Tool has been tested in nursing home and homecare settings during the 6 to 12 months SAFE-LEAD intervention study in 2018-2019 (see study protocol Wiig et al., 2018). The researchers used the tool to map contextual factors and changes over the intervention period. The four nursing home and four homecare services included in the SAFE-LEAD study were situated in both rural and urban municipalities in Norway. Based on our researchers' experiences with applying the SAFE-LEAD Context Tool, the aim of this paper was to evaluate the tool and make suggestions for further improvements to optimise future context mapping in nursing homes and homecare.

The following research questions guided our evaluation:

1. What are the researchers' experiences with using the SAFE-LEAD Context Tool in nursing home and homecare settings?
2. How can the SAFE-LEAD Context Tool be further improved?

By evaluating the researchers' experiences with using a context tool, we are able to contribute new knowledge about the functional use of a tool and to fine tune it to fit the nursing home and homecare context.

Methods

The evaluation was conducted based on triangulation of four successively methodological approaches (Patton, 2002): (1) qualitative content analysis of mapped contextual factors, (2) qualitative content analysis of focus group interview, (3) workshop, and (4) consensus process amongst involved researchers.

Participants

Eight researchers involved in developing and/or using the SAFE-LEAD Context Tool during a period of 6 to 12 months participated in the study. Five researchers (SW, ER, IA, LS, TS) were university employed. Three researchers (BU, LHT, EHR) were employed in municipalities and had the role as co-researchers. In addition, two university-employed researchers (KA, LAE) not part of the SAFE-LEAD data collection provided an outside glance on the emergent findings, contributing to new insight. Pseudonyms for intervention sites have been used throughout this paper to protect the identities and confidentiality.

Mapped contextual factors

During the intervention period, researchers in each intervention site used the SAFE-LEAD Context Tool and mapped the contextual factors (MS Word templates). As an initial step of our evaluation, the mapped data from the researchers was collected and analysed by two of the co-researchers (EHR and BU) using an initial qualitative content analysis inspired by Krippendorf (2004). The content analysis was twofold. First, the analysis was conducted to identify commonalities and contrasts in how the tool had been applied in the eight different contextual settings. This was examined with regards to both the amount and content of free text in the "assessment/description" column, as well as identification of how the grading was used in the various domains (See Appendix 1). We also conducted an inductive content analysis of documented information related to contextual changes during the intervention, hereafter called "process information". The process information was intended to be documented as free text in the end of the document. However, the lack of predefined categories

resulted in process documentation characterised by great variation in terms of what and how it was documented. As a second step of the analysis, we compared across nursing home and homecare services according to whether they had participated in a six or 12-month intervention period. The two researchers (EHR and BU) undertook their analysis separately first, and then compared their findings. This final step ensured an overall coherent understanding of the findings.

Based on the results of the two-step analysis, we developed a semi-structured focus group interview guide for researchers' overall experience with using the SAFE-LEAD Context Tool, including the accuracy and relevance of the contents of the tool, and compliance in conception and use of the tool. The interview guide was used in the following focus group interview with the involved researchers.

Focus group interview

The focus group interview included seven researchers and one research assistant, who acted as an independent observer and supplementary note-taker. The interview was performed by two of the co-researchers (EHR – moderator; BU – co-moderator and note-taker) and lasted for two hours.

The interview guide was semi-structured and included predefined questions, dealing with issues such as experiences with using the SAFE-LEAD Context Tool, the collection of data using the tool, how it accommodated needs in the six-month intervention period (Step 1) and in the 12-month intervention period (Step 2) and specifically addressing areas with incongruence identified in the initial content analysis of the mapped contextual factors.

Before the interview, all researchers had the opportunity to read the semi-structured interview guide. They were also encouraged to bring their completed SAFE-LEAD Context Tool to the interview. One researcher could not participate in the interview and provided input via e-mail.

All researchers were provided with the opportunity to express their views and experiences of using the SAFE-LEAD Context Tool. To ensure trustworthiness, the research assistant took supplementary notes and observed the process as an outsider, as she is not part of the project team. In addition, the interview was audio-taped and transcribed verbatim. The transcription served as supplementary data in the content analysis and to ensure verbatim citations.

The research notes from the focus group interview, made by the research assistant and the co-moderator (BU) formed the basis for a content analysis. Based on the presentation of the overall findings in the content analysis of the focus group interview, the research team agreed upon three important areas for further improvement of the SAFE-LEAD Context Tool; "Lack of central domains related to context", "different interpretations of contents" and "unclear purpose". These areas formed the basis for the following workshop.

Workshop

In the workshop, the same seven researchers, and research assistant as in the focus group interview participated. The workshop lasted for two hours. Two co-researchers, BU and EHR guided the workshop. The three challenges identified in the focus group interview; "Lack of central domains related to context", "different interpretations of contents" and "unclear purpose" were presented on large paper sheets on a board and addressed one by one. All participants were provided with Post-It Notes and noted improvement suggestions related to each challenge. The suggestions and the reason for each suggestion were shared one by one. Eventually, the group decided on what improvements to prioritise.

Consensus rounds

Based on the suggestions for improvement prioritised in the workshop, the two co-researchers (BU and EHR) revised the SAFE-LEAD Context Tool. The revised tool was exchanged in several rounds by e-mail amongst the involved researchers. In addition, three Skype meetings were held. This process resulted in consensus amongst the research group regarding the contents and layout of a revised version – SAFE-LEAD Context 2.0 (see Appendix 1).

Ethics

The study was approved by the Norwegian Centre for Research Data (NSD, ID: 54855). Participants gave both written and verbal voluntary, informed consent to participate. To maintain confidentiality, all data was stored in password-protected computers.

Results

The evaluation of the tool revealed insight resulting in a revision including two major changes, in addition to a number of minor revisions to the context tool. The major changes were related to (1) the integration of an introductory part; and (2) the integration of a final section allowing process documentation based on predefined categories. The minor revisions were mainly related to consolidation, clarification and additions of terms to better address the original meaning. In addition, findings suggest variability in use across the six- and 12-month intervention period.

Integration of an introductory part

Based on the data collection sessions, it became evident that the main aim, target group and specifications for use of the context tool were not fully understood by all the researchers. The SAFE-LEAD Context Tool was used in different ways and researchers expressed lack of understanding about how they should have used the tool. This resulted in unclear understanding of the intention of the various parts of the tool. One participant in the focus group interview stated:

What are we asking here, what is the intention with this whole section [Context domain: outer setting]?

This was elaborated on by another participant, stating that the intention would have been clearer if it was more clearly expressed in the introduction:

And this also relates to the thing I and B talked about; that if you have an introductory text, to say something about the intention…

This resulted in the need for integration of an introductory part. The introduction now consists of two parts; "Purpose and intended users" and "Applying the context mapping tool". The "Purpose and intended users" provides information related to who the context mapping tool is developed for: the researcher in nursing home and homecare settings, and how it can be used; e.g. to obtain a more comprehensive understanding of contextual factors and how these can influence research and development processes regarding quality and safety issues. This knowledge can be used both to describe the context in a scientific paper and to assess differences and commonalities across contexts. More important is the emphasis on the flexibility inherent in the tool. The introductory part therefore describes that the tool is designed to be a support for the researcher and that domains can be more or less applicable, based on aim and context.

The "Applying the context mapping tool" part of the introduction explains how the information needed for the context mapping process can be obtained such as through web pages,

interviews and observations, and how the various columns can be used. Finally, it specifies that there is a final section applicable for process information.

Integration of a process documentation part

When comparing how various researchers used the initial SAFE-LEAD Context Tool, it was obvious that process documentation, such as change processes, mergers, or change in leadership team, was not uniform. In the initial context tool, the research team decided to document relevant process information at the end of the context tool. No predefined categories were originally developed for this purpose. This resulted in process information characterised by great variation in terms of what and how information was documented. Some researchers had documented process information within the original context tool, indicating a need for predefined categories regarding relevant process information. This was elaborated on by a participant in the focus group interview:

One sees some kind of development, right, and you do that several times: But what I miss is some kind of dating. When did you do that? And when did you do that the next time? That way you would get insight into the development.

Some of the participants had documented process information at the end of the tool, yet the content of the information varied. Based on our analysis, we recognised that the majority of the information documented matched the quality challenges (coordination/organisational politics, culture, competence, engagement, physical design/technology, external demands and structure, in addition to patients/users which are placed in the centre of the quality challenges) developed in the Safe-Lead guide that was implemented in the SAFE-LEAD intervention (Johannessen, Ree, Strømme, Aase, Bal and Wiig, 2019: p. 5). Based on the insight of this study, we decided to integrate a final process documentation part, inspired by the quality challenges in the Safe-Lead guide. "Patients/users" is not a quality challenge in the Safe-Lead guide, but described as a central part of quality and safety work. In the process documentation, we have identified the importance of the patients/users, and therefore integrated it in the documentation part. To ensure flexibility, we also included a final row, "Other". In the vertical columns, we included "Description of challenge", "Date" and "Description of change".

Consolidation, clarification and addition of terms

Based on information from the initial analysis and the focus group interviews, we found that not all terms and descriptions were similarly understood. During the workshop, we focused on identifying terms and descriptions that could better reflect the intended meaning of the domains. Based on discussions in the workshop, e-mail exchanges and the Skype meeting, the research group obtained consensus on what terms and descriptions to use, to best reflect the intended meaning. This was also tested by an international researcher (LAE) to ensure sound translation to the English language and international settings.

Table 1 Examples of revisions

Action	Previous version	Revised version	Rationale for revision
Consolidation (Context domain: "inner setting")	"Engagement" and "Culture"	"Culture and management"	The domain description related "engagement" to a manager-responsibility. The domain descriptions of "culture" related to how the organisation facilitated improvement. The manager represents the organisation, and therefore it was more suitable to consolidate and rename the context domains
Clarification ("domain description")	"Outside municipality – national level"	"National guidelines and strategies"	Based on discussion in the research group, the original term did not fully address the description in the column. All columns did relate to the national guidelines and strategies. The heading was therefore changed to obtain a heading more targeted to the content
Addition of term	"Digital infrastructure" was included in "Outer setting, within municipality – local level"	"Digital infrastructure" are also included in "Outer setting, Outside municipality – national level"	During the data analysis, it became evident that national guidelines and strategies regarding digital infrastructure had a major impact on quality and safety issues on the local level.

Differences across 6- and 12-months intervention settings

The initial analysis suggested differences in the researchers' use of the SAFE-LEAD Context Tool. We found differences in the quantitative content across Step 1 and Step 2, as shown in Table 2.

Table 2 Differences in quantitative content

Step 1	Columns with no text	Columns with some text	Columns with large amount of text
Unit B-nursing home	0	47	6
Unit A- nursing home	34	19	0
Unit A-homecare service	11	39	3
Unit D- homecare service	27	17	10
Total	72	122	19
Step 2			
Unit E- homecare service	2	34	17
Unit D- nursing home	9	22	22
Unit C- nursing home	31	21	1
Unit B- homecare service	0	44	8
Total	42	121	48

As the table shows, there are 30 more columns with no text in in Step 1 compared to Step 2. There are more than twice as many columns with a large amount of text in Step 2, compared to Step 1. There was no clear distinction in qualitative content across Step 1 and Step 2. However, there were indications that types of services were described in greater depth in Step 2 compared to Step 1. The types of services were described in detail by Unit B-homecare services, C-nursing home and E-homecare services compared to the other units. Access to resources was described in detail by C-nursing home, D-homecare services and E-homecare services.

Discussion

Quality and safety efforts in healthcare services are highly related to contextual factors (Krein et al., 2010; Bergstrøm et al., 2015). In nursing homes and homecare, there has been a lack of tools to assess contextual factors. Founded on theory and data collection from stakeholders, the SAFE-LEAD Context Tool was developed for nursing homes and homecare services. Based on experiences from researchers performing the SAFE-LEAD intervention study in this context, the tool has now been revised. Findings suggested a need for a more uniform way of understanding how and why to use the SAFE-LEAD Context Tool.

The study revealed a need for a pre-structured part for process documentation, since intervention studies are usually conducted over a period. Health services are characterised by rapid structural changes and reorganisations in order to optimise resources, reduce costs and improve quality (Jensen &Sørensen, 2017). This is related to both policy changes, use of technology, and demographic changes resulting in an increase in patients with multimorbid diseases, in combination with health care personnel's high risk of long periods of sick leave (Nisbet, 2018; Michie, Yardley, West, Patrick and Greaves, 2017; Andersen et al., 2016). This can result in continuous changes during an intervention period, which are relevant to document. This is also consistent with previous findings suggesting that contextual elements and changing environment are of importance, and addressed by managers in quality and safety interventions (Johannesen et al., 2019). To address the need for a continuous and systematic documentation of contextual factors, the SAFE-LEAD Context 2.0 now includes this process element.

One of the SAFE-LEAD Context mapping tool's aims is to compare contextual factors across and within national settings. This presupposes a common understanding, as well as relevance of the terms used. Findings suggested a different understanding and interpretation among researchers regarding some of the terms used in the tool and its content. The revised version provides content and terms that met consensus amongst a group of researchers doing intervention studies in different sites in Norway. However, we recognise the challenge of comparison across the variable healthcare systems across countries (Wolfe et al., 2013). To be able to compare across countries, we recognised the need for a flexible tool that could be adapted to various settings. This resulted in a revised tool which is flexible in regard to grading (introducing a Not Applicable (N/A) – column) and has fewer predefined domain descriptions in the outer setting.

Eventually the evaluation revealed a few differences in use across Step 1 and Step 2. In Step 2, researchers documented more text and details. The finding might indicate a need for more documentation of contextual factors in long-term interventions compared to short-term interventions. The flexibility inherent in the revised tool will support various needs for documentation practices in long-term and short-term intervention studies.

This study also demonstrates how researchers can contribute further development based

on critical assessment of own experiences and practice. Such evaluation and improvement elements are often missing in the literature. Here we were able to complete the development, testing and evaluation of the tool within the same project and research team. We thereby also show how such a process might be completed in a systematic approach to inspire other researchers and practitioners.

Strength and limitations

The SAFE-LEAD Context 2.0 has been evaluated based on research in nursing homes and homecare services in a Norwegian setting. There is a need for further evaluations to other healthcare contexts, such as the general practitioner and preventive services. There is need for further testing and refinement of the tool in a Norwegian and an international context. Currently it is being tested for fit in the Australian nursing home context and will then be further evaluated to assess usefulness for researchers outside the Norwegian context. The methodological triangulation in this study is applied to reduce the potential weakness or biases of single method approach. Hence, it strengthens the results and contributes to completeness of data.

Conclusion

The revised SAFE-LEAD Context 2.0 is a theoretically based, and empirically tested tool adapted for context mapping in quality and safety research interventions in nursing homes and homecare settings. This study highlights the importance of addressing contextual factors in quality and safety interventions, and how the rapid and continuous change characterising healthcare services requires systematic process documentation. Further, it addresses the importance of evaluating and revising contextual tools, and how researchers can contribute to such processes.

Medforfatter Siri Wiig er en av gjesteredaktørene for dette temanummeret. Derfor har den redaksjonelle behandlingen og beslutningen om publisering av artikkelen blitt håndtert av de andre gjesteredaktørene i samarbeid med ansvarlig redaktør, og Siri Wiig har ikke hatt innsikt i vurderingsprosessen.

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Appendix 1

SAFE-LEAD Context 2.0

Purpose and intended users
The purpose of this tool is to map contextual factors that might have an influence when researching quality and safety in nursing homes and homecare. The tool is designed to be flexible and to support the researcher. The various domains of the tool will appear more or less significant depending on the overall research design, purpose and context in which the research takes place. The mapped data can help the researcher gain a wider understanding of the contextual factors that might be of significance for research and implementation of quality and patient safety interventions. The tool can for example be used to describe the context in scientific publications or when discussing and analysing research results. When conducting research in various settings the tool can assist with identifying similarities and differences between contexts, both on a local, national and international level. The mapping qualities of the tool can also act as contextual background information prior to, or during, the empirical data collection.

Applying the context mapping tool
The tool is divided into external and internal contextual factors. Information on external contextual factors can be identified on national websites and with relevant authorities. Internal factors can be identified on the community services' (municipality in Norway) website and intranet, as well as through interviews and dialogues, observations and surveys with relevant informants. Each context domain in the tool can be described in the assessment/description column and rated in the right column. In cases where rating is not meaningful, tick n/a (not applicable).
For research involving implementation of an intervention over time, it may be relevant to describe changes that are taking place or have recently occurred, in the organisation where the research is being conducted. At the end of the document, predefined topics are described that may be relevant when recording changes. Here you can also use the open note field for registration of other changes.

Context domain	Domain description	Assessment/ description	Grade 1-5 (1=low/small 5=high/large)					
			1	2	3	4	5	n/a
OUTER SETTING – NATIONAL LEVEL	National Guidelines and strategies							
Governmental guidelines and incentives	Degree of national/governmental strategies, programs and action plans for quality and safety							
	Degree of national/governmental support and resources for quality improvement work							
	Degree of national quality indicators							
Rules and regulation	Regulation of the service: self-regulation, control, accreditation/authorisation, insurance							
	Protocols that enhance managers' focus on quality improvement							
	Supervisory authorities' emphasis on service quality							
The governmental role in service organisation	Assigned to municipalities by law, state-controlled or otherwise							
Funding	Degree of deductions when accessing services							
Digital infrastructure	Degree of national strategies and action plans to digitalise the healthcare services sector							
	Degree of digitalisation of the healthcare services sector							
	Degree of national digital tools in quality improvement work							

Context domain	Domain description	Assessment/ description	Grade 1-5 (1=low/small 5=high/large)					
			1	2	3	4	5	n/a
OUTER SETTING – MUNICIPAL AND REGIONAL LEVEL.	Within the municipality							
Collaboration/ Co-operation	Degree of collaboration between politicians, the administration and staff.							
	Degree of citizen engagement in the municipality							
	Degree of networks with external organisations							
	Degree of collaboration on quality improvement efforts with other municipalities.							
	Degree of local support and competence in quality improvement efforts							
Municipality size, location	Number of inhabitants. City or rural							
Distance to hospital	Number of hours to reach hospital							
Funding of services	Private or Public							
Digital infrastructure (technical/digital systems)	Degree of tele and communications net/infrastructure, including error reporting systems							
Financial status	Degree of financial pressure to cut costs							

Context domain	Domain description	Assessment/ description	Grade 1-5 (1=low/small 5=high/large)					
			1	2	3	4	5	n/a
INNER SETTING	Within the unit							
Type of services	For example, homecare or nursing home. Treatment level within service							
Structural characteristics	Degree of how many employees are clustered into smaller groups							
	Nurse-patient ratio							
	Number of managerial levels within unit							
	Assessment of manager-employee ratio							
	Unit size							
	Degree of quality and safety infrastructure (reporting systems, quality systems and manuals, procedures etc.)							
External demands	Degree of consistency between external demands and clinical practice							

Context domain	Domain description	Assessment/ description	Grade 1-5 (1=low/small 5=high/large)					
			1	2	3	4	5	n/a
Patient and user involvement in quality and safety improvement	Degree of possibilities for involvement of user, patient or next of kin (arenas, boards, committees, surveys, co-design)							
	Degree of actual involvement of user, patient or next of (arenas, boards, committees, surveys, co-design)							
	Degree in which patients' needs are known and prioritised							
Person centredness	Degree of person centredness in service provision							
Work schedule	Degree of organising of work schedule according to patient needs							
Change processes	Degree of change/reorganisation in the unit during the last year							
	Degree of openness for change processes							
Workforce	Degree of age and experience among staff							
	Degree of part-time employment							
	Degree of doctor availability							
	Degree of nurses' availability							
	Degree of health workers							
	Degree of unskilled employees							
	Degree of access to, and use of, inter-professional competence such as psychologist, social educators, occupational therapist and physical therapist							
Competence	Degree of specialist competence among staff (training, courses, resource group, improvement teams, professional development nurses)							
	Degree of delegating responsibility related to specific competence (improvement work, drug administration, ulcers, etc.)	.						
	Degree of competence transfer among staff							
Culture and leadership	The degree managers support and engage staff in quality and safety improvement work							
	Degree of interest in quality improvement work among staff							
Coordination	Degree of available networks for formal and informal communication							
	Degree of arenas and structure for inter-professional collaboration							
	Degree of attention to handover as a risk area							

Context domain	Domain description	Assessment/ description	Grade 1-5 (1=low/small 5=high/large)					
			1	2	3	4	5	n/a
Digitalisation and communication	Degree of opportunities for documenting relevant information in Electronic Patient Journals (EPJ)							
	Degree of access to EPJ when needed							
	Degree of utilising eHealth and distance monitoring							
	Degree of ICT resources to assist the unit							
	Degree of integration between relevant ICT systems							
	Degree in which digital solutions support work processes							
Implementation climate	Degree of openness for change and support for quality improvement interventions							
Readiness for implementation	Degree of organisational commitment to improvement interventions (e.g., management support, competence, interest, plan and political anchoring, indicator follow-up)							
Available resources	Degree of available time for improvement work							
	Degree of available funding for improvement work							
Autonomy	Degree of autonomy in how to utilise available resources							
Other	Please specify							

Notes about changes that might have an impact on implementation			
Challenge	Description of challenge	Date	Description of change
Coordination/organisational politics	Involves coordination in the organisation and between service levels, as well as establishing shared meeting arenas. There is a need for support from key professionals, patients/users/ next-of-kin and local interest groups serving different purposes.		
Culture	Involves creating an organisational culture in which quality is a shared value that is central to clinical work and in all activities. This is particularly important in sustaining quality improvement efforts over time.		

Notes about changes that might have an impact on implementation			
Challenge	**Description of challenge**	**Date**	**Description of change**
Competence	Involves continuous competence development in the organisation for successful quality improvement. It is necessary to identify staff's knowledge and competence, as well as developing processes for training and learning at an individual and organisational level.		
Engagement	Involves supporting and mobilising employees in the organisation to create motivation in the quality improvement work. This enables the organisation to effectively mobilise ideas and resources for quality improvement.		
Physical design/technology	Involves for example facilities, outdoor areas, and the importance of the home for the quality improvement work, as well as support functions such as effective infrastructure and technology (e.g., monitoring, mapping, and benchmarking).		
External demands	Involves being aware of and making decisions regarding broader social, political, and economic factors such as regulatory demands and national and professional guidelines.		
Patients/users	Involves number of patients, composition of patients with different diagnoses, and expectancies from patients/users.		
Structure	Involves a strategic leadership with clear goals for the quality improvement work in the organisation. Structuring and planning quality improvement involves deciding on how to organise the work. Examples of organisational structures are roles and responsibilities, committees, reporting systems, strategies and systematic use of patient and user experiences.		
Other			