Healthcare middle managers’ capacity and capability to quality improvement

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Abstract

Purpose - The purpose of this study was to identify and critically discuss how healthcare middle managers’ (HMMs) development of the capacity and capability for leadership are experienced to influence quality improvement (QI) in nursing homes.

Design/methodology/approach - This study had a critical hermeneutic perspective with data gathered using focus groups, one individual interview and participative observations. Analysis was guided by a qualitative interpretive approach.

Findings - The results show how HMMs’ development of the capacity and capability for leadership are experienced to influence QI in nursing homes through grasping complexity in a conflicting practice. This involves continuous knowledge development and compensating contrasted by resource shortages, role conflicts, and the lack of trust and cooperation.

Originality/value - HMMs have a key role in implementing QIs in healthcare. There are few studies on how HMMs develop the capacity and capability for leadership and it is unclear how clinical contexts are influenced by HMMs’ development. This study provides new knowledge supporting a change facilitating HMMs’ developmental processes targeting practical influence; it emphasizes continuity, coherence, presence, and trust.

Keywords Healthcare middle manager, Leadership, Development, Capacity, Capability, Quality improvement, Nursing homes, Qualitative

Paper type Research paper
Introduction

The healthcare middle managers (HMMs) in this study are identified as the leadership level closest to patients and health personnel in clinical practice (Birken et al., 2018). HMMs are shown to have a unique position facilitating change, implementing healthcare innovation (Birken et al., 2013), quality improvement (QI) (Zjadewicz et al., 2016) and evidence-based practice (Birken et al., 2018). Their central position between health personnel and top management involves working to limit knowledge and information gaps (Zjadewicz et al., 2016) and translating top-level policies, strategies and means, with the purpose of QI and reducing harm (Birken et al., 2013). Leading relationships is shown to be the most important factor in a caring nursing leadership (Solbakken et al., 2018).

This study appraises HMMs’ development of capacity and capability for leadership, and how this process is experienced to influence QI in nursing homes. “Capacity” includes individual features such as technical expertise, creative thinking, social skills, and organizational understanding. “Capability” includes what HMMs are able to implement, such as the ability to identify and define problems, handle complex contexts (Mumford et al., 2007), adapt to change, generate new knowledge, and continuously improve (Fraser and Greenhalgh, 2001). HMMs’ development of capacity and capability for leadership have been identified as part of a bottom-up development process that involves building self-confidence, knowledge, skills and tools. This process was facilitated by interaction in networks and an empowering approach from upper management (Hartviksen et al., 2019).

Each nursing home described in this study is understood to be a place of residence providing long-term care to an older population with significant co-morbidities (Woo et al., 2017). The prevalence rates for dementia and care dependability in nursing homes are increasing. A nursing home involve a dual function, both as an institution and a home, including care and assistance from health personnel (Rijnaard et al., 2016). This dual function
has been shown to be challenging, whereas the institutional aspect tends to overshadow the needs comprised by a home (Vaismoradi et al., 2016). People who have lived in nursing homes have described experiences of loneliness, depression and limited support with their spiritual needs, as well as a need for QI to avoid care-related symptoms (Greenwood et al., 2018).

Abuse against the elderly is a relevant problem in nursing homes and are linked to stress because of health personnel shortages and low competence (Yon et al., 2019).

Education of health personnel that includes multi-faceted components in conjunction with didactic teaching has shown limited impact on residents’ agitation, anxiety, mood and quality of life, and consistent improvement of activities of daily living (Bauer et al., 2018).

Participation in individualized activities is suggested to support a resident’s sense of self and to reduce the feeling of loneliness connected to living in nursing homes (Kitzmüller et al., 2018).

QI in nursing homes should be targeted toward multidisciplinary areas with high complexity (Agarwal et al., 2013). QI efforts are to be understood as changing processes within complex social systems that evolve over time in both predictable and unpredictable ways (Taylor et al., 2014). There are several methods available to assist QI processes, exemplified by PDSA (Plan-Do-Study-Act) and Lean (refers to slim). PDSA is a four-stage cyclic learning approach to improvement (Taylor et al., 2014). Lean focuses on mapping out and adapting process pathways to preserve what works, and to eliminate waste (Mason et al., 2015). QI is shown challenging when healthcare organizations are hierarchical structured and less collaborative, has resource scarcity, unclear aims, or new systems or special events detracts the attention (Vaughn et al., 2019).

Learning networks organizes competence development across professional and organizational borders and are known to stimulate organizational learning (Ferlie et al., 2012).
Quality Improvement Collaboratives (QICs), are central to current international strategies to improve healthcare (Schouten et al., 2008). QICs are shown to improve targeted clinical processes and patient outcomes (Wells et al., 2017). It is unclear if participation in learning networks (Hartviksen et al., 2019; Cunningham et al., 2012) or other means for developing HMMs’ capacity and capability for leadership (Hartviksen et al., 2019) influences the quality of patient care in the participants clinical contexts (Hartviksen et al., 2019; Cunningham et al., 2012). This is thus an area in need of additional research. The authors of this study aimed to identify and critically discuss how HMMs’ development of capacity and capability for leadership are experienced to influence QI in nursing homes.

**Method**

This study had a critical hermeneutic perspective based on Gadamer’s descriptions of placing the preunderstanding at stake in seeking new horizons (Gadamer, 1989) and Habermas’ additional societal dimensions including the understanding of a lifeworld as a cultural horizon, whereas participants interpret and understand through specific experiences. The participants’ lifeworld was pre-understood as colonized by the system, a process that could be balanced by reflection and critical questioning. The research team (authors) searched for contrasts and accentuated theoretical statements that represented changeable dependent relationships (Habermas, 1985).

**Design**

This study was initiated and designed in collaboration with the research team and a member of top management in a rural northern Norway municipality. This municipality had implemented QI based on PDSA (Taylor et al., 2014) and Lean (Mason et al., 2015) with a QI strategy aiming for user value, process work and a culture for QI. The implementation included three workshops whereas HMMs were introduced for improvement boards and risk boards, as well as board meetings with improvement suggestions, aims and measurements.
Six process counsellors were designated to assist HMMs with QI training and process work.

The HMMs had additionally participated for six years in a QIC.

The Norwegian National Patient Safety Campaign (The Norwegian Directorate of Health, 2019) had included one of the nursing homes in this municipality as a national pilot for the prevention of falls. Other improvement areas, such as malnutrition, were also introduced in the same campaign. The municipality was part of the Norwegian National Project “Patient-safe Municipality” (The Norwegian Directorate of Health, 2019), aiming to ensure systematic and sustained work on patient safety. These affiliations included coursing and practice in QI for HMMs.

The setting included two publicly-financed nursing homes in this municipality.

Nursing home 1 employed four HMMs: two registered nurses, one healthcare assistant and one social educator. Nursing home 2 included three HMMs: all registered nurses. Data were gathered in April and May of 2019 by a multimethod approach were focus groups was the main method, supported by one individual interview and participative observations. The methods were considered complementary (Morgan, 1996). The analysis was guided by critical hermeneutic principles according to Kvale and Brinkmann (2015) and Alvesson and Sköldberg (2008).

Participants and Recruitment

The participants included all 7 HMMs and a total of 18 relatives from the two nursing homes. 7 invitations were sent to HMMs, and 30 were sent to nursing home residents and relatives. Residents were not recruited, as they rejected to participate, or were considered not capable by their relatives or healthcare personnel. The recruitment of relatives also posed challenges, resulting in adoptions of the number and size of groups to enable participation.

7 participating HMMs represents a 100% participation rate among HMMs. 18 relatives represented 16 of 95 total residents (one resident was represented by his two daughters, and
one resident was represented by his wife and son). This resulted in a 15% participation rate among residents. The total number of participants was 25. Table 1 describes participants characteristics. The parentheses indicate the same participants as presented in the previous focus groups and individual interview.

Table 1

Participants’ Characteristics

Data gathering

Data were gathered by the first author in a three-part process as illustrated in Figure 1.

Figure 1

Data gathering process

(Participants in focus group 2 and the individual interview are the same as in participative observations and focus group 7. Focus groups 1 and 4 were merged to focus group 5. Focus group 3 have participants from focus group 6).

In part 1, four successive qualitative, semi-structured focus groups and one individual interview were performed, addressing participants’ experiences of how HMMs’ development of capacity and capability for leadership influenced QI in the nursing homes. The questions were open-ended, framed to stimulate dialogue and reasoning from critical and reflective perspectives (Alvesson and Sköldberg, 2008). Assistant moderators had the responsibility of audio recording and taking notes describing visual cues as well as group dynamics (Morgan, 1996). This included drawing communication lines among the participants. The focus groups were conducted in shielded meeting rooms at the nursing homes. Each focus group lasted 1.5 hours. The individual interview was conducted with the same principles as the focus groups.

Part 2 consisted of 40 hours of participative observations with all 7 HMMs over the course of one month. The first author followed the different HMMs through normal workdays and observed naturally occurring events and interactions. The participative observations were
documented by field notes. Part 3 included three focus groups with an interview guide designed as elaborative and explanatory of the data already gathered. The amount of focus groups, participative observations and participants were adapted to the data saturation (Alvesson and Sköldberg, 2008).

The recordings from the focus groups with notes were transcribed into verbatim text, comprising a total amount of 159 pages. Transcripts from the individual interview recording amounted to 11 pages. Transcripts from the field notes amounted to 13 pages. The transcripts were generated systematically and consistently, ensuring that all verbal and nonverbal statements were documented (Kvale and Brinkmann, 2015). The transcripts from the field notes were written in cue form, whereas transcripts from the focus groups and the individual interview were written in oral language.

Data analysis

The critical interpretation of this study focused on the construction of reality and asymmetrical relations of power, ideology, autonomy, and communicative distortions. The interpretation included both understanding and explanation, altering between proximality and distance, related to a broader social, historical, and economic contexts, and the problematization of what seemed natural and self-evident (Alvesson and Sköldberg, 2008).

Considering how the participants’ and the participating first author’s lifeworld and preunderstanding affected their understanding of their complex context was a central part of the analysis. The first author had a preunderstanding of HMMs’ development as challenging, taking place in a demanding clinical context, and in need of a change. The preunderstanding was based on experiences of previously being an HMM participating in the same QIC as the HMM participants.

The transcribed text from the focus groups, individual interview, and participative observations were the points of focus for interpretation. First, the transcripts were read several
times to get a sense of the whole. Second, the transcribed text was condensed into units of meaning in a shortening process designed to preserve the core meaning (see Table 2). Third, the condensed units of meaning were abstracted and sorted into themes and subthemes, based on this study’s purpose (Kvale and Brinkmann, 2015).

This analytical process had seven main characteristics: (1) the transcribed text was interpreted in a back-and-forth movement according to the hermeneutical circle; (2) the interpretation was ended when a good gestalt was reached without logical contradictions; (3) partial explanations were tested related to the global meaning; (4) the autonomy of the text was respected; (5) the researchers had knowledge about the theme; (6) the researchers were aware of how preunderstandings influenced the analysis; and 7. the interpretations involved renewal and creativity beyond what was immediately given (Kvale and Brinkmann, 2015).

Ethical considerations

Ethics approval was obtained by the Norwegian Centre for Research Data (reg. no. xxx).

Participants were informed orally and in writing about the study, including their rights to withdraw at any phase of the research and protection of their confidentiality. The participants gave written informed consent to participate (Norwegian National Committees for Research Ethics, 2014).

Results

Participants characteristics are described in Table 1. Most participants were women (100% among HMMs and 68% among relatives). The 18 relatives included 7 men. These are representative numbers according to the gender ratios in Norwegian healthcare, where 83.6% of health personnel are women (Statistics Norway, 2018). The recent time use survey by Statistics Norway (2010) showed that women spent 26% more time on care work than men. The results are presented in two overarching themes consistent with participants’ quotations
as illustrated in Table 2. The themes were related to (1) grasping complexity and limited resources and (2) conflicting practice.

Table 2
Illustration of the analysis process

Grasping Complexity and Limited resources
The first main theme, grasping complexity and limited resources, illustrated HMMs’ continuous work to develop knowledge and attitudes among health personnel. The results showed how HMMs were aware of existing improvement areas in the nursing homes. Some were worked on, whereas others were described as needing improvement. The continuous development focus was accentuated and contrasted by the participants’ experiences of nursing homes as complex contexts in states of continual change. It was accentuated when contexts were described as requiring a high knowledge level among health personnel to ensure quality services to vulnerable residents. It was contrasted when contexts were described as staffed by limited resources, staff shortages, and mainly health personnel with high school education or without healthcare education. HMM participants described that this complexity and resource scarcity enforced continual QI processes. This main theme had two subthemes: (1) supervising a complex context and (2) continuously developing and compensating.

Supervising a Complex Context
The sub-theme supervising a complex context included participants’ experiences of how HMMs supervised QI in a complex context with vulnerable and sick elderly residents. These residents were explained to have both domestic needs (the nursing home was their place of residence) and institutional needs (such as medicine or nursing). The domestic and institutional needs were explained as overlapping when relative participants expressed how the residents and their environment should be clean, tidy, and well kept; this was interpreted as a sign of dignity and professionalism in the nursing home and it was described as observed...
quality. The needs contrasted when the participants experienced the nursing homes as institutions that never could be a home. One example was given in one focus group (relative 15, daughter):

“[. . .] it is very rare to see someone sitting with them [. . .] rare to see someone sitting in the living room. All the while, it’s that they are so busy.”

Another contrast was described by how different groups were involved in the nursing homes, such as residents, relatives, health personnel, HMMs, volunteers, and others. The results revealed several challenges in the interaction and collaboration among these groups. The observations showed varying interactions between health personnel and residents. Several relative participants had experienced feeling unwelcome. Relatives expressed how they wanted to be a resource for the nursing homes but only in varying degrees were allowed to.

Both the focus groups and the participative observations showed how volunteers arranged activities whereas health personnel did not contribute to residents’ participation. One example was given in one focus group (relative 3, daughter):

“Then there was worship service, but the priest who was there, she complained that there was almost nobody there. Only herself and a couple of residents.”

Contrasts were also evident through the exercise of formal and informal rules in the institution, exemplified by relatives’ access to the kitchen. Participative observations revealed how there were several written notices posted on walls and doors about what was not allowed, but in the focus groups the rules were described as being followed differently. Some relatives described this as a sign of flexibility, but mostly it was described as confusing and discriminatory. The need for QI was forwarded by the relative participants’ experiences of the residents’ dependency on their relatives’ abilities to observe and act if they did not receive quality services. Initially, they explained these shortcomings as related to the lack of
resources, and there was noted acceptance, but during the focus groups there were questions
as to whether this should be accepted.

**Continuously Developing and Compensating**

The sub-theme *continuously developing and compensating* involved experiences of how
HMMs influenced QI in the nursing homes by continuous guidance, repeating instructions
and compensating for resource scarcity. Focus group participants described a lack of adequate
staffing, both in numbers and knowledge. Most of the health personnel had lower degrees of,
or lacked, care education. Nurses were mainly organized in serving teams because of a
nursing shortage. Several quality deviations related to lack of knowledge and resources
became evident through the focus groups. The relative participants described examples of
how residents became increasingly more and more in need of care; and related it to a lack of
adequate training and activity. Time shortages were described as relative and related to how
health personnel prioritized time. A participant (relative 14, son) stated:

> 
> “... here the health personnel were enough! Yes, they shielded themselves from the
> residents, they closed the doors and sat down in the waiting room or the kitchen. I
> argued with them several times. Because I saw, after all, I was there.”

The HMMs in the focus groups described how they continuously worked to develop
knowledge and attitudes among health personnel with a guiding and empowering approach.
This was supported by the participative observations. The approach included showing health
personnel trust in their knowledge and expecting that they made use of it when needed. The
introduction of improvement boards and risk boards were examples of QI measures that were
introduced and successfully put into practice by the HMMs. However, the results from the
focus groups and the individual interview showed that what was not put into a routine fell
away if no HMM was present to continuously raise it. The need for continuous follow-up was
described by one participant (relative 5, daughter):
“Me and my sister when we have been in relative meetings . . . what we record, as she (HMM) grabs on to it, it might work for a week or two . . . then it is the same again.”

Varying levels of knowledge and resource scarcity were explained in the focus groups and supported by the participative observations as involving a high dependency on HMMs’ levels of professional nursing competence. The participants described how HMMs compensated for the lack of nurses by replacing them themselves, and the participant observations showed how HMMs constantly performed small and large tasks that were left undone by health personnel. These compensations were observed as providing positive feedback from health personnel.

Conflicting Practice

The second main theme, conflicting practice, illustrated how HMMs’ development was experienced and observed as a three-fold enterprise related to their profession, personnel, and economics. These three parts were not emphasized equally by the HMMs but left to individual competence and prioritizing. Participants in the focus groups explained that some HMMs had a strong professional focus whereas others prioritized their time for tasks regarding health personnel follow-up and economic reporting. The different points of focus were described as conflicting with each other. These experiences were supported by the participative observations. Participants in the focus groups described how top management mainly had an economic focus, whereas HMMs needed professional and relational points of focus. The relative participants referred to being “a good person” as the most important feature for HMMs. This main theme had two sub-themes: (1) lacking supported development and (2) striving to meet unclear frameworks.

Lacking Supported Development

The sub-theme lacking supported development included HMMs experiences of developing capacity and capability for leadership as an unsystematic process they needed to take individual responsibility for. Several HMMs explained in the focus groups how they had
chosen to approach further education. Nursing competence was more frequently accentuated than leadership competence in the focus groups, along with expertise in relationships, communication, and guidance. This was supported by the results from data gathered in the participative observations. One participant (relative 7, husband) said:

“You must have interpersonal traits and be able to see the individual, whether it is the employee [. . .] I think if you have interpersonal traits, then you see everyone, then you also see the relatives.”

The development of capacity and capability for leadership was experienced as diverse and fragmented by the HMM participants. They all explained how they were recruited by being encouraged to apply and how they started in the position with feelings of uncertainty, having no leadership competence. They did not get to experience the training and follow-up needed for entering the position. The follow-up they did receive was related to administrative computer programs. One participant (HMM 7) shared her experiences:

“Now I am more conscious, because when I started, I had zero knowledge as a leader, and I had zero experience and I didn’t get the training I needed to become a leader. I got training in how to register time sheets, but being an HMM, it is not about how many time sheets you register. It’s about something more, something different.”

HMMs’ development process, as described in the focus groups, was based on experience, learning by mistakes. One HMM participant described how QI was challenging because of her lack of capacity and capability, exemplified by national and local improvement initiatives where she, because of insecurity, chose to observe from behind instead of leading the team. A change was experienced to involve somewhat more follow-up when the municipality decided to work continuously on QI. Participation in the QIC and the patient safety campaign were also described as developing. In this regard, the HMM participants described an increased understanding of the complexity in healthcare and continual improvement work. However, the
participants’ experiences gave a picture of a high start-up focus, that eventually became random and deficient.

Striving to meet Unclear Frameworks

The sub-theme striving to meet unclear frameworks included how the HMM participants experienced unclear signals from top management who introduced QI strategies based on user values, cyclic improvement processes, and a culture for QI, when the results of these strategies were never requested. Several HMMs expressed in the focus groups that they assumed their top management would like them to prioritize budget and economic expertise higher than QI. They described how the communication mainly went top to bottom, and how this presented several challenges to QI. Numbers were changed beyond their control and they were given tasks they did not understand the meaning of.

HMM participants explained that instead of working on improvement processes related to their own challenges in their units, they were busy responding to economic reports and cut demands. The exercise of leadership was left to each individual HMM, influenced by HMMs’ personal competence and characteristics. In this way, QI tasks became under-prioritized in favor of tasks that were perceived as more acute. Participative observations revealed how computer systems affected this, by giving alerts on tasks that had to be terminated, for example, related to sick absence.

The results clarified two major role conflicts among HMMs. The first conflict was between being concerned with communication and relationships whereas top management asked for budget control; the second conflict was between being an HMM and being a nurse. The second conflict was reinforced by HMMs having shared positions, partly as HMMs, partly in the rotation as ordinary nurses. The shared management positions were explained as reducing HMMs’ availability to be present. The results showed presence and attendance from HMMs in the clinical context as central to influencing QI. This was described as presence as a
professional HMM rather than a nurse. Both HMM and relative participants expressed that HMMs needed to know the individual resident, relative and health personnel, and in this way support everyone to make use of their individual strengths. One participant (HMM 7) explained:

“It is very important to be able to communicate and find the right words and approach. I cannot speak in the same way to one and the other; I am in a different role to one and the other.”

As a contrast to how important HMMs’ presence was perceived, the participants in the focus groups described absence, and how the top management removed HMMs from the units with frequent mandatory meetings outside the nursing homes. One participant (relative 7, husband) additionally described absent top management in the nursing homes, and questioned how HMMs were supported:

“But how much support do HMMs get from their leaders [. . .] to exercise leadership, it is almost impossible if you don’t have the top with you.”

**Discussion**

The purpose of this study was to identify and critically discuss how HMMs’ development of capacity and capability for leadership were experienced to influence QI in nursing homes. Seven focus groups, one individual interview, and participative observations were conducted and analyzed with a critical hermeneutic perspective. In total, there were 25 participants; 18 were relatives and 7 were HMMs from two nursing homes in a rural municipality in northern Norway. Two main themes were identified: (1) grasping complexity and limited resources and (2) conflicting practice.

The first theme, *grasping complexity and limited resources*, added new knowledge to challenges related to nursing homes’ dual functions as both institutions and as homes (Rijnaard *et al.*, 2016). This includes focus group’ participants descriptions of nursing homes
as complex contexts with overlapping and contrasting domestic and institutional needs. The complex context necessitates stable and sufficient health personnel who are provided with high knowledge and who exhibit good attitudes to ensure quality services. This was contrasted by the focus group participants’ experiences with lack of resources. The limited recourses were explained as reducing HMMs’ capabilities for implementation of QI (Mumford et al., 2007). These results support previous research on how resources influence QI processes (Kaplan et al., 2010). This study indicated quality deviations in the nursing homes based on the lack of communication, knowledge, and skills among health personnel, which thus underlines the need for HMMs’ capacities and capabilities for QI to avoid care-related symptoms (Greenwood et al., 2018).

The results showed the system’s colonization of the relatives’ life-worlds (Habermas, 1985) when the relative participants initially argued that they accepted deviations in nursing homes because of the lack of money in the municipality. The rationalization of the life-world (Habermas, 1985) seemed to be developing during the focus groups, where in particular the relative participants in the last focus groups became clearly more critical, interrupted themselves, and questioned how and why deviations were accepted. These results support previous research indicating that QI in complex nursing home contexts should be accomplished in multidisciplinary areas (Agarwal et al., 2013). The results accentuated nursing home cultures based on presence, trust and involvement. This was in contrast to the experiences of how both relatives and voluntary organizations were not welcomed, and the descriptions of a lack of collaboration.

In the second theme, conflicting practice, the HMM participants experienced that they had developed a capacity for influencing QI by an increased understanding of complexity and continuous improvement work as a result of the municipality’s focus on QI. Central parts of HMMs’ experiences of capacity development were recognized local and national
development areas. However, this was contrasted by how HMMs experienced their general
development of capacity and capability for leadership as an unsystematic process for which
they had taken individual responsibility and by which their capabilities for QI were reduced.

The participants described how HMMs’ everyday expectations were experienced as
three-fold, regarding the need to meet professional, personnel-related, and economic
demands. Both HMMs and relatives experienced that prioritizing among these areas was left
to individual HMMs, and that this practice caused multiple role conflicts. Although the top
management had introduced Lean as consistent for leadership throughout the organization,
with principles based on adapting process pathways (Mason et al., 2015), it was explained by
both HMMs and relatives in the focus groups that traditional command and control leadership
styles dominated from the top management level. The municipality’s investment in the
development of HMMs’ competence and implementation of QI was thus a clear contrast to
how these role conflicts unfolded.

Although both relatives and HMMs expressed in the focus groups that leadership
presence among residents and health personnel was important, the participative observations
revealed that health personnel highly valued when HMMs compensated for a lack of nursing.
The members of top management were experienced to value economic reporting and
budgetary control. Previous research shows how HMMs’ development of capacity and
capability for leadership should be supported by bottom-up processes, interactions within
networks, and an empowering upper management (Hartviksen et al., 2019).

This study shows how HMMs experience a reality with opposite principles, lacking
coherence between leadership development programs and everyday life. HMMs experienced
expectations from the top management to prioritize the economic part of leadership, and much
time was spent on meetings in this regard. HMMs expressed that they did not experience
communicative rationality, and provided several examples of systematically distorted
communication (Habermas, 1985) where their reality and budgetary estimates were changed without their knowing and without the possibility of influencing this process.

The results show how both relatives and HMMs experienced the need for HMMs to exercise leadership and adapt to individual residents, relatives, and health personnel so as to make the most out of inter personal relationships. Both relatives and HMMs agreed to this perspective; HMMs agreed from a professional view while relatives agreed from a relational view. This correspondence between professional and relational experiences strengthens this knowledge and expands the present understanding on how to handle QI processes within changing complex social systems (Taylor et al., 2014). This study shows how HMMs developed the capacity to influence QI in nursing homes, but how the possibility of QI was reduced because of how nursing homes are structured and managed.

Strengths and Limitations

The authors of this study aimed to explore how HMMs’ development of capacity and capability for leadership were experienced to influence QI in nursing homes. This design implies that aspects other than HMMs’ development of capacity and capability could affect HMMs’ approaches to QI, including their personal characteristics, knowledge, and experience. However, the results show parallels from the development programs HMMs had participated in relative to the participants’ experiences and data from participative observations. One of the HMMs did not have the ability to participate in the initial focus group, and thus participated in an individual interview. This interview did not benefit from the participants’ interactions and the participant had more time to share her experiences. These differences could have influenced the data, as people tend to act differently in a group than in private (Morgan, 1996). The benefits of gaining her perspectives were considered more important than the limitations.
Participative observations were added as a method to observe HMMs in their clinical environment, although influenced by the researchers’ presence (Alvesson and Sköldberg, 2008). The participative observations altered the asymmetric power relationship created by focus groups (Kvale and Brinkmann, 2015), as HMMs took the leader position and the researcher became a follower. These three different methods strengthened the study and gave coherent results.

The participants in this study were relatives and HMMs. Attempts were made to recruit residents. Another important group of participants could have been health personnel. However, this study aimed to keep the focus on HMMs and their influence on quality improvement. This study’s first author participated in the same learning network as the HMM participants. This dual role involved the risk of influencing the participants’ answers. However, by building on existing trust, it also simplified access to the field. The relative participants included two sisters, and a mother, and son. The communication lines showed that the relationship between the two sisters influenced the communication by more closely following each-others’ input. This was not visible between mother and son. In a rural context, it could be expected that the participants, in some degree, are known to each other.

Conclusions

The results of this study provide new knowledge about how HMMs’ development of capacity for leadership may influence QI in nursing homes, and how this is contrasted by organizational and structural challenges that reduce HMMs’ capability for QI. HMMs in these nursing homes had developed capacity for leadership through knowledge and understanding of the complexity and continual processes involved in their work. This development was contrasted by how resource shortages, role conflicts, and the lack of trust and cooperation reduced the possibility for succeeding with QI. The first theme provides new knowledge about how important the presence of leadership among HMMs is with a continuous
perspective on the development of knowledge and attitudes among health personnel closest to residents. The second theme provides new knowledge about how role conflicts and conflicting demands reduce HMMs’ capabilities for QI.

**Implications**

For HMMs, the results of this study implicates knowledge that may provide a source for critical reflection about own leadership and the connection between their development, choices and priorities, and the opportunities and constraints that are given on the basis of healthcare as a complex context, and how it is organized and managed. For top managers and policy makers, the knowledge provided by this study implicates a need for a change in how HMMs’ development are facilitated and supported, suggesting HMMs’ involvement in continuous and systematic competence programs in coherence with HMMs’ everyday life in their clinical context. Such competence programs should be based on the principles of clear frameworks, overall trust, and a facilitating, present leadership. These changes are understood as necessary to meet the demands of complexity in healthcare and to secure HMMs’ development of capacity and capability for leadership to influence QI in clinical contexts.
References


Table 1

Participants’ Characteristics

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</tr>
<tr>
<td>Nursing home</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Nursing home 2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Experience in nursing homes</td>
<td>2-4 years</td>
<td>2-8 years</td>
</tr>
</tbody>
</table>
Table 2

Illustration of the analysis process

Experiences of how HMMs’ development of capacity and capability for leadership influence quality improvement in nursing homes

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Units of meaning (Quotations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grasping complexity and limited resources</td>
<td>Supervising a complex context</td>
<td>“The biggest challenge is this daily, that is, one thing is what you can measure, but what happens every day, and can all the substitutes, and also permanent employees, do they know what the individual prefers, and how we are doing it here” (HMM 5)</td>
</tr>
<tr>
<td></td>
<td>Continuously developing and compensating</td>
<td>“Things fluctuate all the time: it is easy for someone to disagree about how something should be done or become uncertain [...] they need guidance, a person who asks the right questions [...] it’s continuous work.” (HMM 3)</td>
</tr>
<tr>
<td>Conflicting practice</td>
<td>Lacking supported development</td>
<td>“It must be a proper program or follow-up [...] not just the title HMM, but to become a leader [...] because there are different techniques to involve people, to lead, it is an art, and of course there are tools [...] when I started I had to find out for myself.” (HMM 7)</td>
</tr>
<tr>
<td></td>
<td>Striving to meet unclear frameworks</td>
<td>“ [...] they think we should be economic oriented [...] we are guided by professional expertise, than what they want of us. They probably think [...] that everything is square, but healthcare is not square, there is no black-and-white answer, eh, even if they want it.” (HMM 6)</td>
</tr>
</tbody>
</table>
Figure 1

Data gathering process