

Factors Enabling Innovation Readiness of Long-Term Care Organizations: Stakeholder Opinions

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ABSTRACT

Background

Increasing innovation readiness of long-term care organizations for older adults is vital to ensure future provision and affordability of care delivery.

Purpose

This study sought to gain insight into factors that contribute to innovation readiness and addresses the following research question: What factors contribute to the innovation readiness of long-term care organizations for older adults?

Methodology/Approach

Semi-structured interviews were conducted with 16 stakeholders connected to long-term care in the Netherlands: academics, (top) management, innovation managers, and consultants. A thematic content analysis was used to analyze the data.

Results

Four main factors were identified that contribute to the innovation readiness: 1) a clear strategic course for innovation, 2) a tailored innovation journey, 3) inspirational leading for innovation, and 4) hands-on-learning for innovation. Stakeholders highlighted that innovation readiness should not be developed as an ad-hoc initiative but should be embedded into corporate strategies and decision-making processes. All stakeholders mentioned the importance of ‘preparing’ the organization for innovation readiness and professional ‘learning for innovation’.

Conclusion

This study provides a step toward evidence-based factors, presented in a general framework, that contribute to the innovation readiness of long-term care organizations for older adults. Future research could verify the findings of this study and develop a scan, based on this study’s innovation readiness factors, indicating the maturity of long-term organizations for older adults.

Practice Implications

To become more innovation ready long-term care organizations are encouraged to embed innovation readiness into their corporate strategies and decision-making processes, to integrate learning into daily activities, and to collaborate with stakeholders.

Keywords: Qualitative research, learning climate, innovation readiness, framework, long-term care

INTRODUCTION

As societies age, pressure grows to ensure the future provision and affordability of long-term care (1, 2). Long-term care organizations for older adults provide a range of services, including medical and nursing care, housing, personal care, assistance, and social services to older adults who are unable to live independently (3). Challenges such as technological change and labor resource scarcity demand alternative ways of organizing and delivering long-term care (1).

To better deal with these challenges, long-term care organizations for older adults are investing time and budget in innovation (4). Greenhalgh et al. (5) describe innovation as “a novel set of behaviors, routines, and ways of working that are discontinuous with previous practice, are directed at improving health outcomes, administrative efficiency, cost-effectiveness, or user experience, and that are implemented by planned and coordinated actions.” This definition shows that innovation means changing the way an organization works as a whole, not just adding one new idea or project.

Although long-term care organizations show great potential for innovation (6), many struggle to do this in a professional way (1, 4). Organizations that are innovation ready are more capable of implementing innovations (7). ‘Innovation readiness’ indicates the level of maturity of an organization to succeed in any type of innovation (2), and long-term care organizations for older adults might benefit from more knowledge about how to become innovation ready (8). The importance of being ‘innovative’ for a long-term care organization has become broadly recognized in practice and in the literature, although there is limited evidence of what it takes to become innovation ready (5, 9). Recently, a scoping review (2) on studies into innovation readiness of health care organizations, summarized 4 main factors that may lead to innovation readiness of health care organizations: 1) strategic course for innovation, 2) climate for innovation, 3) leadership for innovation, and 4) commitment to innovation. These main factors emerged primarily from studies in hospital and primary care settings. It remains unclear whether they fully capture what is needed in the long-term care sector to become better at innovating, where different dynamics may apply. The transferability of these factors to long-term care might thus be limited. Additionally, it is anticipated that there might be additional factors enabling innovation readiness in day-to-day practice, such as innovation infrastructure and the capacity to monitor and evaluate (10). In particular, recent studies suggest that elements such as innovation infrastructure (e.g., dedicated teams, structured routines, IT support) and the ability to monitor and learn from innovation efforts (e.g., feedback loops) may be essential in long-term care but are underrepresented in existing models (11). Against this background, there is a need to obtain more insight into the factors that might lead to innovation readiness of long-term care organizations for older adults (10). Innovating in long-term care is complex, multi-dimensional, and involves many parties, each having their viewpoints (10, 12). Additional research is needed to explore stakeholder perspectives on the factors that enable organizations to improve their innovation readiness, as such insight is still lacking in the context of long-term care (13).

Theory

Situating innovation readiness

Research into the innovation readiness of health care organizations is a rather new field (2). The literature describes several concepts that relate to what makes organizations successful at innovation, for example: (organizational) readiness for innovation, innovation capability, and innovation capacity (14-16). Innovation readiness differs from these concepts by its focus on the degree to which an organization has organized and prepared key factors to be successful in the entire innovation cycle. In contrast, these concepts target specific

innovation stages: innovation capability focuses on development (15), while organizational readiness for innovation and innovation capacity focus on implementation (14, 16).

Our scoping review, aiming to clarify the concept of innovation readiness and to identify available research on the factors contributing to innovation readiness in health care organizations, (2) revealed that there is not a generally accepted definition of innovation readiness. The concept of innovation readiness remains conceptually underdeveloped and lacks operationalization in the context of healthcare management research. Based on literature in business and health care, we defined innovation readiness as the maturity level of an organization to succeed in any type of innovation and encompasses the entire innovation cycle (2). By the entire innovation cycle, we refer to all phases: idea generation, idea selection, solution development, implementation, scale-up, and diffusion (17). While innovation types vary, they generally fall into three main categories: social, technological, and process innovations.

In our view, innovation readiness represents a proactive orientation: not just readiness to adopt a specific innovation, but the maturity to continuously engage in and sustain innovation over time (2). This places innovation readiness within a broader view of how organizations build the ability to adapt and grow by developing processes and structures that help them adjust when needed (18).

Innovation readiness framework

The number of included studies found in the scoping review was limited (n=44), with most studies conducted in hospitals and focused on becoming ready for implementation. In searching for factors contributing to innovation readiness, we found no conceptual framework for health care (2). To enable long-term care organizations to improve their innovation readiness, an overview of key factors enabling innovation readiness in their context is needed (10). Furthermore, a framework could support researchers in understanding how innovation readiness relates to the success of health care organizations in responding to societal challenges. Such an insight is still lacking (13). The scoping review did reveal a preliminary set of main factors contributing to innovation readiness in health care organizations: 1) strategic course for innovation, 2) climate for innovation, 3) leadership for innovation, and 4) commitment to innovation. This research aims to complement this set of factors by empirically exploring how a diverse group of long-term care stakeholders interpret and operationalize factors that enable innovation readiness. The factors identified in the scoping review will inform the development of our interview guide and serve as an initial coding frame for thematic analysis.

By collecting and analyzing stakeholders' perspectives via interviews, we intend to identify an overview of factors that can inform a conceptual framework, offering a structured and practice-oriented approach that enables managers and their organizations in long-term care to act upon key factors contributing to innovation readiness. This expanded innovation readiness framework might serve both as a diagnostic lens to assess an organization's current maturity level for innovation (5, 11) and as a developmental framework that guides future innovation structures and processes over time (2, 7). By providing a shared terminology and structured guidance, this framework advances both theoretical understanding and practical approaches to organize for innovation readiness in long-term care.

METHOD

This is a qualitative study into the opinions of Dutch stakeholders on factors enabling long-term care organizations for older adults to become innovation ready. Semi-structured interviews were conducted as an approach to access in-depth information and encourage the respondent to tell 'the story' in their own words.

Eligibility and Recruitment of Respondents

Interview respondents were identified through a purposive sampling approach. They were recruited through the network of the research team and via snowball sampling of initial contacts. Over 50 persons were initially identified and finally, 16 were recruited through direct invitation. Respondents were not selected if, for example, geographical locations overlapped or because of job changes. Respondents were included if they 1)

were researchers or professionals with academic or practical knowledge in the field of innovation and 2) were able to articulate viewpoints on factors important for innovation readiness of long-term care organizations for older adults in the Netherlands.

To ensure representation of the diverse views held by the respondents, we recruited for diversity in two aspects. We sought to include 4 groups of roles in long-term care organizations for older adults 1) academics, 2) (top) management, 3) innovation managers, and 4) individuals guiding organizations in making them ‘innovation ready’ (eg, consultants in government and commercial organizations). We expected that the different stakeholders would, depending on their position (e.g., strategic, tactical, or operational) and role (academic, management, innovation manager, or consultant) express different viewpoints. Further, we sought access to respondents in organizations spread over the Netherlands. The sex and gender of the respondents were not taken into account in the design of the study, as no potential implications of sex and gender on the study results and analyses were expected (19). Respondents were invited by personal contact, by email (if an email address was publicly available), or by social media (LinkedIn). All contacted respondents were asked if they regarded themselves as knowledgeable to articulate their viewpoint and all responded positively to the interview invitation.

Data Collection

The 16 semi-structured interviews were held in Dutch from June 1 to September 30, 2022. The interviews took place with the written consent of each respondent, were audio recorded, and transcribed verbatim. The interview guide consisted of open-ended questions on the description of innovation readiness, factors enabling innovation readiness, and the impact of the setting of long-term care organizations providing care for older adults on innovation readiness (Table 1). The topic list was based on a comprehensive scoping review, providing a broad overview of factors contributing to innovation readiness in healthcare organizations, including long-term care organizations (2). The interview guide was piloted in two trial interviews and adjusted according to the feedback. Each interview started with an explanation of the interview’s purpose and process, followed by open-ended questions. The first question was aided by the selection of photocards (20) to uncover respondents’ descriptions of innovation readiness of long-term care organizations for older adults. Previous research on factors enabling innovation readiness of health care organizations (2) aided the interviewer at the end of the interview to refer to specific factors if they were not mentioned by the respondent. All interviews were conducted by the first author (MWH).

Table 1. Interview guide (semi-structured) for stakeholders in long-term care for older adults

1. Can you choose 1, 2, or more photocards that, in your eyes, display innovation readiness best? How would you describe innovation readiness in your own words?
2. Some long-term care organizations are good at innovating; what are the factors that contribute to this in your opinion?
3. How does this (these) factor(s) support, enable, or contribute to innovation readiness?
4. Does the setting of long-term care have an impact on innovation readiness of long-term care organizations?
5. Is there any other factor, feature, element, or point of attention around innovation readiness that we have not discussed, but that in your opinion is important?

Data analysis

The method of analysis chosen was thematic content analysis. Four interview transcripts (one from each respondent group) were coded independently (by MWH, AB) and a set of preliminary codes based on previous research on innovation readiness (2) functioned as an initial coding frame. Comparison and discussion, until consensus was reached, resulted in a modified coding frame (in Maxqda software). Descriptions of the main and sub-codes and excerpts typified the content for that code. The modified coding frame allowed for new codes to emerge and was adjusted as a result of coding the 12 remaining interviews. In the next step, clusters of codes were grouped into themes, and connections between the themes were explored. Discussion in the research team led to finetuning of the coding frame.

Demonstrating Rigor

For the trustworthiness of this qualitative study, we paid attention to credibility, transferability, dependability, and confirmability (21). Credibility and transferability were promoted by selecting 4 respondent groups (active in diverse roles) from organizations (different in location) in the Netherlands with knowledge and experience of innovation readiness in long-term care settings for older adults. Stakeholders were selected through well-defined inclusion criteria via recruiting through the network of the research team and snowball sampling. To present a variety of perspectives on factors enabling innovation readiness 4 groups of roles in long-term care organizations were selected: academic, management, professional and consultant (Table 2). Furthermore, these stakeholders were sourced from different levels within the organization e.g. top management and innovation managers (staff and middle management). Besides that, stakeholders both from within organizations (management and professional) and stakeholders active in the broader context of long-term care (e.g. academics and consultants) were selected to represent the broad variety of perspectives. To capture the diversity of the factors enabling innovation readiness (content validity), the 10-step methodological protocol (22) (Appendix 1) was followed to achieve and assess saturation. The description of the research method is extensive (dependability), and during the analysis process, memos with interpretations of the data were recorded in a logbook to facilitate other researchers in repeating the work (confirmability).

To enhance the quality of the data collection, the interviewer used an interview guide (Table 1) and listened intensively during the interviews (which were audio-recorded and transcribed verbatim). To promote analytic integrity, the collection of the data and the analysis were done simultaneously. To enhance coding reliability and coding consistency, two authors (MWH, AB) performed the coding, and 4 interviews (one interview per respondent group) were coded independently by these two authors. The other 12 interviews were read, coded, and discussed. To enhance the quality of the analyses, the interpretation and analysis of the data were discussed within the research team.

Ethical issues

The study received ethical approval from the Medical Ethics Board in the Netherlands. Permission to conduct the interview for this study was granted by each respondent personally. Respondents were made aware of the study objectives and written informed consent was obtained from respondents before the beginning of the interviews.

RESULTS

Characteristics of the respondents

The 16 interviews took place either face-to-face at the workplace of the respondents (n=13) or online (n=3) and lasted between 60 and 90 minutes. An overview of respondent characteristics is shown in Table 2.

Table 2 Characteristics of Participating Respondents

| No. | Group | Type of Organization | Main role of respondent |
|-----|--------------------|---|----------------------------|
| 1. | academics | University | Academic |
| 2. | academics | University of Applied Sciences | Academic |
| 3. | academics | National Centre of Expertise for Long-term Care | Academic |
| 4. | academics | Dutch Healthcare Authority | Academic |
| 5. | (top) management | Long-term care ^a (€102 M, 2900 employees) ^b | Director |
| 6. | (top) management | Long-term care ^a (€75 M, 1800 employees) ^b | Director |
| 7. | (top) management | Long-term care ^a (€47 M, 1560 employees) ^b | CEO |
| 8. | (top) management | Long-term care ^a (€244 M, 5500 employees) ^b | CEO |
| 9. | innovation manager | Long-term care ^a (€152 M, 4000 employees) ^b | Innovation manager |
| 10. | innovation manager | Long-term care ^a (€176 M, 2900 employees) ^b | Program manager innovation |

| | | | |
|-----|--------------------|---|----------------------------|
| 11. | innovation manager | Long-term care ^a (€189 M, 2300 employees) ^b | Program manager innovation |
| 12. | innovation manager | Long-term care ^a (€305 M, 5600 employees) ^b | Innovation manager |
| 13. | consultants | Independent | Innovation coach |
| 14. | consultants | Independent | Consultant |
| 15. | consultants | Care administration office | Manager |
| 16. | consultants | Client organization | CEO |

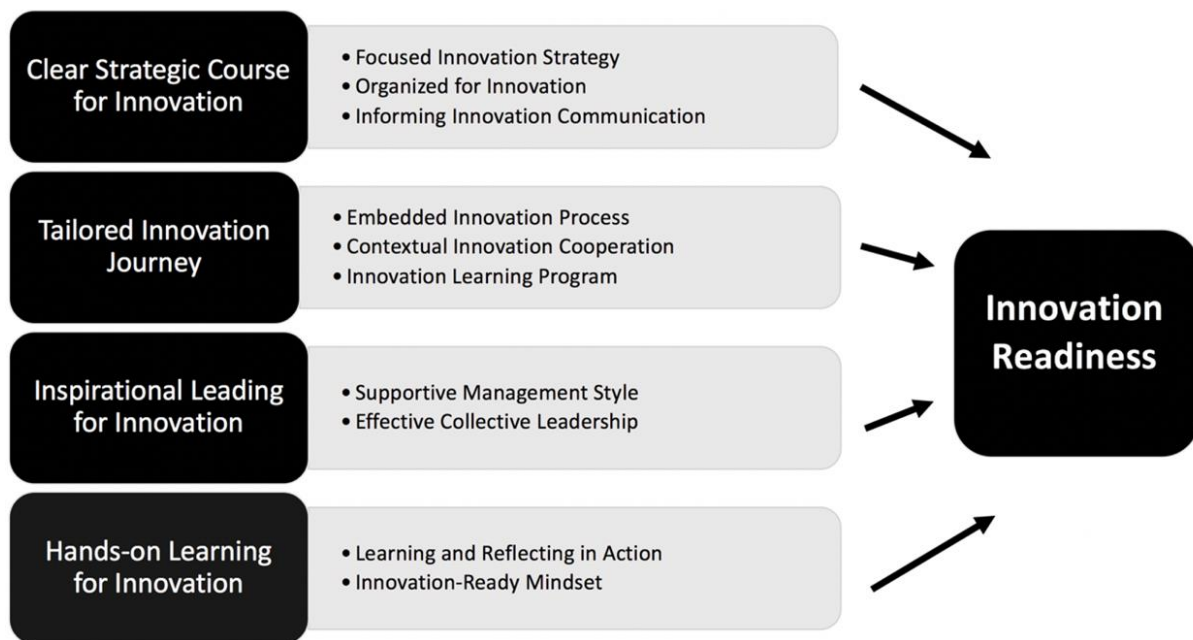
^a Long-term care organization for older adults providing medical and nursing care, housing, personal care, assistance, and social services to older adults who cannot live independently

^b Annual reports 2023

Factors enabling Innovation Readiness

We identified 4 main factors that, according to the respondents, might lead to innovation readiness in long-term care. Each main factor entails 2 or 3 sub-factors. Based on these findings, we present 10 sub-factors that might lead to innovation readiness (Figure 1).

Figure 1 Factors enabling innovation readiness (based upon this study's findings)



Clear Strategic Course for Innovation

A clear strategic course for innovation refers to the organization's long-term direction to become innovation ready. It articulates the role and the importance of innovation for the organization and defines the allocation of resources. According to the respondents, having a clear strategic course for innovation enhances the ability to address future challenges, implement innovations successfully, and expand the support of care professionals for innovation decisions: *"You have to prepare upfront...you have to decide on your envisioned direction and the budget you intend to invest"* (respondent 1, academic). This main factor consists of the 3 sub-factors 'focused innovation strategy', 'organized for innovation', and 'informing innovation communication'.

Focused Innovation Strategy

Focused innovation strategy concerns the organization's activities in formulating strategic objectives and choices regarding innovation that serves as a framework for decision-making around innovation: *"We have*

defined several innovation themes based on our long-term direction against which innovation activities are reviewed" (respondent 6, (top) management). Most respondents (n=14) mentioned the relevance of an innovation strategy and pointed out the need to take the organizations' goals as a starting point. In their eyes, the objective of an innovation strategy is to create conditions that facilitate innovation and enable care professionals to innovate. The respondents linked developing an innovation strategy with defining the innovation ambition: *"From your strategy originates your ambition which defines your type of innovation"* (respondent 1, academic).

Organized for Innovation

Organized for innovation concerns the conditions prepared by the organization to implement the innovation strategy. Thirteen respondents pointed out that, to become innovation ready, the innovation strategy should be embedded in a coherent set of organizational elements. According to them, a multiannual innovation roadmap for the execution of the innovation strategy is especially valuable, as it ensures quick decision-making on innovation opportunities: *"Innovation readiness is about having a strategy, policies, processes, focus—knowing what's going on and about making choices"* (respondent 11, employee).

Respondents considered it relevant to organize the following aspects to become innovation ready: finance, HRM, and ICT infrastructure; teams that are diverse in terms of function and discipline; and easily accessible support (organizational and technical). Most respondents mentioned that their organization assigned innovation teams (also referred to as a platform, committee, or community) with the responsibility to organize strategic, tactical, and operational innovation activities. These teams perform activities such as setting the innovation agenda, decision-making on innovation execution, retrieving innovation questions, and guiding innovation processes.

Informing Innovation Communication

Informing innovation communication concerns corporate communication about the innovation strategy, projects, and results to internal and external stakeholders. Fourteen respondents mentioned that innovation communication gives employees, clients, relatives, and the external network insight into the progress and results of innovations. Stakeholders might thus be motivated to become involved in innovation. In the eyes of the respondents, communication about innovation should highlight how the organization is structured for innovation, the innovation methods, the innovations chosen for implementation, and the innovation's added value for the stakeholders: *"Yes, along the long-term vision, you have to be able to show we're getting results. To communicate to employees what innovations we chose, which we didn't, and why. But also towards the CEO: look this is the result of the investments we make together"* (respondent 9, innovation employee). The organization's intranet and internet, separate innovation websites, company visits, social media, and newsletters were cited as communication channels.

Tailored Innovation Journey

A tailored innovation journey concerns organizing innovation deployment to enable the strategic innovation course. In the eyes of the respondents, employees with a diversity of functions, disciplines, and hierarchical levels should be part of the innovation journey and be aware of what role in innovation is expected from them. According to respondents, innovation journeys are hard to control: *"An innovation journey doesn't dictate what innovation should be about. It's methodical working on innovation based on the innovation method you have chosen"* (respondent 11, innovation manager). This main factor consists of the 3 sub-factors 'embedded innovation process', 'contextual innovation cooperation', and 'innovation learning program'.

Embedded Innovation Process

An embedded innovation process concerns the steps that are taken in (parts of) the organization from the development of an idea to sustaining the innovation. Thirteen respondents mentioned the following elements of the innovation process as relevant: decision-making on innovation, collecting feedback from stakeholders, and use of innovation methods and tools. *"Methodical working on innovation means that you work in a structured and documented way. You can use existing tools such as appreciative inquiry or design thinking"* (respondent 2, academic). The respondents highlighted that the process should fit the type of innovation,

ranging from a small improvement to a disruptive innovation. According to respondents, guiding and screening innovations via a pre-agreed process helps the organization to bring out, execute, and decide on proceeding or terminating innovation opportunities that best fit the innovation strategy.

Contextual Innovation Cooperation

Contextual innovation cooperation concerns collaboration to acquire knowledge to enhance innovation readiness: *“Yes, I actually think that organizations should bring some external expertise on innovating to make it work in daily practice”* (respondent 14, consultant). All 16 respondents mentioned the importance of interaction with internal and external stakeholders consisting of clients, relatives, employees, municipalities, regional long-term care organizations, knowledge institutions, care administration offices, government, and broader society. They indicated that networks are valuable to sharpen the strategic direction of the organization and to form strategic partnerships to collectively tackle innovation challenges. Besides that, the respondents mentioned that partnerships and cooperation with knowledge institutions and other long-term care organizations provide an opportunity to share and exchange knowledge between science, practice, and policy.

Innovation Learning Program

An innovation learning program concerns developing a vision and a plan to increase innovation readiness via learning and reflecting. All 16 respondents referred to the value of a program to facilitate learning about and from innovating. Aspects of a learning program that were mentioned: a vision on learning how to innovate, design of a work environment that promotes innovation, provision of time and training for internal innovation talents, training on innovation tools and methods, and leadership training for management. *“We really take learning experiences into account to increase innovation readiness of the organization”* (respondent 7, (top) management). All respondents pointed out the importance of time to innovate and in more detail mentioned ‘time to think about innovating’ for management, as well as ‘time to be involved in innovation’ for healthcare professionals and employees from support departments. Although the respondents sketched that long-term care organizations are taking steps toward building an internal knowledge infrastructure for innovation readiness, they mentioned that the ‘capacity to learn’ is not nourished and is underexposed in their organizations.

Inspirational Leading for Innovation

Inspirational leading for innovation concerns the attitude, behavior, and motivation of employees in leading the way to innovation readiness: *“Working on innovation, that is a responsibility for everyone at any position in the organization. So not working on innovation because someone tells you to, but because you see that innovations bring results”* (respondent 2, academic). This main factor consists of the 2 sub-factors ‘supportive management style’ and ‘effective collective leadership’.

Supportive Management Style

A supportive management style concerns the attitude and behavior of management in supporting innovation readiness. Fifteen respondents pointed out that the role of (top and middle) management is crucial in guiding, facilitating and stimulating the innovation journey: *“I’m putting my name on this innovative project. With that you indicate as a leader or as a manager, guys this is crucial for us as an organization”* (respondent 1, academic). They mentioned that (top and middle) managers stimulating innovation in the workplace motivates employees to experiment, and employees perceive this behavior as a signal from the organization that innovative behavior is appreciated. Managers can support the innovation process, according to the respondents, by starting innovation in teams that are ‘innovation enthusiastic’ and staying supportive when things go wrong.

Effective Collective Leadership

Effective collective leadership concerns employees with diverse skills working together toward jointly developed goals while leadership is felt and executed by all team members. Eight respondents mentioned ‘collective leadership’ and referred to employees showing intrapreneurship for their ideas and projects. To

become innovation ready, an organization needs collective leadership, in the eyes of the respondents, as innovating is ideally a balance between bottom-up and top-down activities: *"Acting as a collective will support the organization to become innovation ready"* (respondent 15, consultant). Furthermore, they outlined that working together on innovation is relevant, as it unlocks the shared intelligence that emerges from collaboration. Respondents mentioned that the organization can support collective leadership by having decision-making processes and policies in place.

Hands-on Learning for Innovation

Hands-on learning for innovation concerns the learning process of the organization and transforming the resulting knowledge into collective know-how on innovation readiness. In the eyes of the respondents 'hands-on learning for innovation' will increase the organization's ability to address future challenges. *"The health care landscape changes... an organization can stay upright because you have gathered skills to use new developments to your advantage"* (respondent 9, employee). This main factor consists of the 2 sub-factors 'learning and reflecting in action' and 'innovation-ready mindset'.

Learning and Reflecting in Action

Learning and reflecting in action concerns the organization and employees become better at innovating through learning and reflecting in practice while working on innovation. All but one respondent pointed out the importance of individual and collaborative learning and reflecting while innovating. *"Learning is still very difficult. How can we go from our current focus of 'performing' to 'learning', as I find it crucial for innovation"* (respondent 10, employee). They indicated that becoming innovation ready involves, on the one hand, earlier accumulated knowledge of employees and, on the other hand, learning about and from innovation and sharing knowledge. Respondents mentioned organizational actions that support individual readiness for learning and reflecting: invitation of employees to participate in innovation, expressing trust in employees, and encouraging employees to be inquisitive. Furthermore, according to the respondents, the ability to interpret, adapt, and use what has been learned can be stimulated by applying acquired knowledge in one's workplace and taking time for unplanned conversations. Additionally, to make room for learning, teams can be invited to design and develop their own pilots and have experienced colleagues available to learn from. Moreover, respondents mentioned that learning across the organization can be organized via skills training, active recording of experiences, meetings to share learning experiences, and physical 'innovation spaces' to facilitate this.

Innovation-Ready Mindset

An innovation-ready mindset concerns the attitude, behavior, experiences, and motivation of employees that enable innovation readiness. All but one respondent pointed out that the organization benefits from 'innovation enthusiastic' people having a view that they can make productive. *"It starts with intrinsic motivation, yes, because that is what you need if you want to innovate as an organization"* (respondent 12, employee). According to the respondents, employees with an innovation-ready mindset make room for experimenting, will persuade colleagues and customers to embrace innovation, and might act as agents for colleagues to learn from. Respondents described 4 relevant elements of an 'innovation-ready mindset': 1) accept that risks are involved and therefore employees need to have courage and be able to learn (also) from failures, 2) work on the innovation journey with the intended added value in mind, 3) be patient (as innovation takes time), and 4) develop an exploring attitude and dare to ask questions. Respondents indicated that innovation readiness can be seen as 'the new normal' and involves taking risks. *"Given the urgency, have the guts to take a road that hasn't been traveled before"* (respondent 4, academic). At the same time, respondents indicated that employees do not automatically adopt a 'learning to innovate' mindset, as long-term care employees have not been educated to do so and have a deep-seated fear of making mistakes.

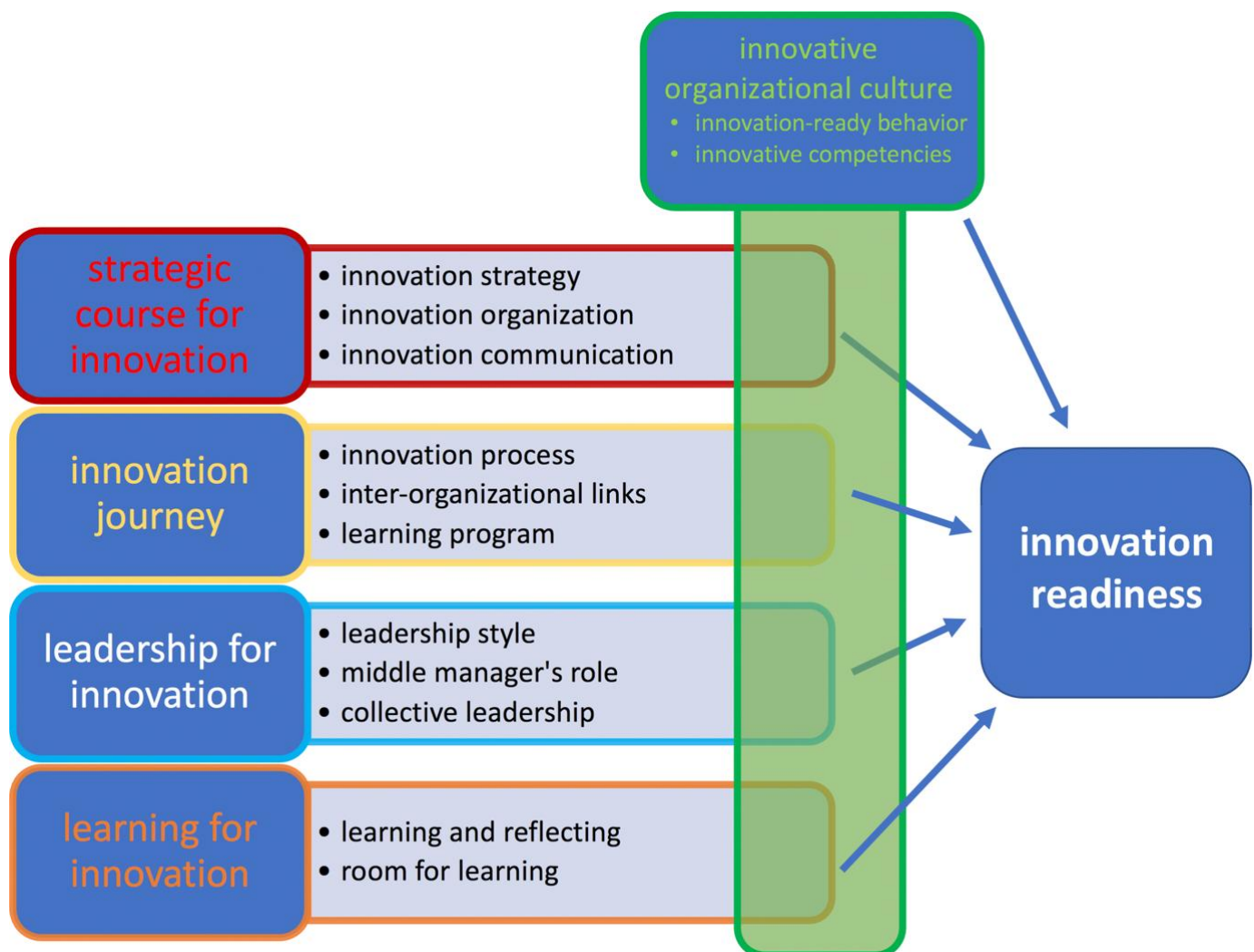
DISCUSSION

This study identified 4 main factors that contribute to the innovation readiness of long-term care organizations for older adults: 1) a clear strategic course for innovation, 2) a tailored innovation journey, 3) inspirational leading for innovation, and 4) hands-on-learning for innovation (Figure 1). These findings for long-term care

reveal corresponding and additional factors compared to the factors contributing to the innovation readiness of healthcare organizations studied in previous research (2). The findings of this study correspond to the main factors ‘strategic course for innovation’ and ‘leadership for innovation’ (2). This study’s additional main factor ‘tailored innovation journey’ reflects the respondents’ attention to preparing the organization for innovation readiness via the deployment of the innovation strategy. Furthermore, this study presents an additional main factor ‘hands-on learning for innovation’ that indicates the importance of learning about and from innovation for employees and the organization. Moreover, 2 additional sub-factors were revealed by the respondents: ‘informing innovation communication,’ to create awareness about the innovation activities of the organization, and ‘innovation learning program’, which expresses the need to envision how the organization is learning to innovate and sharing knowledge.

The findings of previous research (2) combined with this study result in 5 main factors: 1) strategic course for innovation, 2) innovation journey, 3) leadership for innovation, 4) learning for innovation, and 5) innovative organizational culture (combining commitment to innovate and climate for innovation). A general framework that represents the combined factors enabling innovation readiness is presented in Figure 2 (combining previous research (2) and this study’s findings).

Figure 2 Factors enabling innovation readiness (combining previous research (van den Hoed et al., 2022) and this study’s findings)



Based on this study, it can be concluded that the interplay of main factors is vital for innovation readiness. This study’s findings support the notion that innovation readiness benefits from an approach at the individual, team, organizational, and inter-organizational levels, although this study does not provide insight into the contribution and the interplay of factors enabling innovation readiness. Furthermore, our findings indicate that some factors might be more conditional, such as an innovation roadmap, and other factors might play a more supportive role, such as physical ‘innovation spaces’. Gaining more insight into the contribution and interplay of factors might support long-term care organizations in becoming innovation ready.

Worth mentioning is the importance given to 'preparing' the internal and external organization for innovation. According to the respondents, innovation readiness should not be developed as an ad-hoc initiative but should be embedded into the corporate strategies and processes. The factor 'strategic course' shows some overlap with the literature on innovation strategy in business (23) and health care (10). Herewith, the additional sub-factor 'innovation communication' is seen as relatively new (5). Innovation in long-term care is about changing behavior and routines to be able to implement innovations (24). Respondents' attention to innovation communication underlines the significance of communication to support knowledge sharing and give insight into the progress of innovations (25).

The factor related to 'leadership' from management has been described thoroughly in the literature as being relevant for becoming better at innovating (26). Studies in health care indicate that (top and middle) managers can enhance the success of innovations as they can ensure that the 'right' factors are in place during the innovation process (24). Although this role of managers and team leaders should shift from controlling to leadership that helps to initiate and amplify support for innovation, as mentioned by Uhl-Bien and Arena (27). Respondents' attention to the leadership factor for all employees is encouraging. They stressed 'collective leadership' as a source of innovation (28) by drawing on the strengths of employees (29). Collective leadership, a relatively young movement in the scientific literature, sees leadership not as an individual capacity, but as a form of leadership in which many people work together on issues that go beyond everyone's primary responsibility (30). Silva, Mininel (31) pointed out that the increasing complexity of health care requires leadership of multiple professionals to share viewpoints and knowledge. This study's findings endorse that all organizational levels, board – management – staff – health care professionals, have to be involved in innovation readiness. Strategies to develop collective leadership in long-term care might be key to achieving innovation readiness at all levels in the organization (28).

Interestingly, all of the respondents viewed acquiring knowledge on innovating via cooperation and 'learning for innovation' as necessary. The importance of organizations learning from innovating corresponds to innovation management literature in business (23) and health care (32). Williams (13) indicated that opportunities for reflection and learning at all levels make new ways of working more acceptable. Employees with an innovation-ready mindset are described by respondents as 'intrapreneurs', referring to long-term care professionals taking the lead in innovations. Verleye and Gemmel (33) concluded that, for the future of long-term care, it will be necessary to motivate all long-term care professionals to learn from innovating, regardless of discipline and function. Therefore, long-term care organizations for older adults need to make time for professional learning (34) and to install learning strategies (35).

Our study provides suggestions for management at long-term care organizations for older adults to become better at innovating. Foremost, management is encouraged to prepare the organization for innovation readiness by formulating the innovation course and subsequently organizing the necessary innovation processes. Furthermore, management should build a professional learning culture in which learning and development are self-evident and integrated into daily activities (35). Besides that, management should understand the impact of the wider policy environment (12) and collaborate with long-term care stakeholders and policy-makers to contribute to innovation readiness in long-term care. If the study's context would change to a different country or healthcare setting, results of this study may vary as a result of socio-cultural, economic, and institutional differences. Therefore, in terms of transferability, we will be unable to make any generalizations about the findings of this study to other contexts or settings.

This study has several strengths and limitations. In terms of strengths, this study is the first to explore the perspectives of stakeholders on factors that might lead to innovation readiness in long-term care for older adults. The stakeholders were also able to share information from their perspectives and were not limited by answer options provided by the researcher. The interviews provided the opportunity to gather the perspective of stakeholders and yielded detailed information about factors that might lead to innovation readiness.

The study was conducted in the Dutch long-term care. Although the findings may be most relevant within this context, they may inform organizations and researchers working in healthcare settings by highlighting relevant dimensions of innovation readiness. Further researcher in other settings could help to test and refine the framework and support its transferability. The study was conducted using a transparent and replicable research process. However, our study also presents some limitations. Its results are subject to

participant bias, because we included only 4 respondent groups. We did not include clients and relatives, based upon the notion that articulating viewpoints on factors enabling innovation readiness might not be expected from them. Furthermore, this study is also subject to researcher bias, as the researcher performing the interviews and the analysis had previously acquired knowledge of a scoping review on innovation readiness. Researcher bias was prevented by using a clear, piloted interview guide (Table 1) and by transcribing the interviews verbatim. The analysis of the interviews was done by 2 authors (AB, MWH) and discussed in the research team.

Practice Implications

- 1) *Prepare the organization for innovating* - Foremost, management is encouraged to prepare the organization for innovation readiness by formulating the innovation course and organizing innovation processes accordingly.
- 2) *Integrate learning into daily activities* - Organizations should support managers to integrate professional learning into daily practice and facilitate learning from innovation advocates. Middle managers can contribute via creative ways to discuss learnings, facilitating open communication and sharing mistakes.
- 3) *Collaborate with stakeholders* - Given that the environment outside long-term care organizations for older adults significantly influences innovation readiness, management should actively collaborate with long-term care stakeholders, knowledge institutions, and policy-makers.

CONCLUSION

This study provides a step toward evidence-based factors that contribute to the innovation readiness of long-term care organizations for older adults. This study's 4 main factors contributing to innovation readiness are substantiated by existing literature. Therefore, the findings of this study can support long-term care (top and middle) managers to structurally embed innovation. Research into the innovation readiness of healthcare organizations is a rather new field. A better understanding of the contribution and the interplay of factors enabling innovation readiness at all stages of the innovation process is needed. Furthermore, future research could be directed toward verifying the findings of this study and developing a scan, based on this study's innovation readiness factors, indicating the maturity of long-term organizations for older adults.

Competing interests:

The authors declare that they have no competing interests.

Authors' contributions:

MWH, RB, RD, and JPH contributed to the design of the study. MWH collected and analyzed the data and drafted the manuscript. MWH and AB performed the coding. MWH, RB, and RD discussed the study results. AB, RB, RD, and JPH made substantial intellectual contributions to revisions of the manuscript. All authors read and approved the final version of the manuscript.

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Appendix 1 Ten-step methodological protocol for specifying saturation (22)

| | |
|---|--|
| 1 Define the underlying disciplinary framework | academic discipline: health services research |
| 2 Specify the target class precisely | 4 respondent groups working in the long-term care setting |
| 3 Show how respondents or cases were selected or excluded | maximized diversity by ensuring respondents included diverse functional roles in long-term care organizations for older adults |

| | |
|---|--|
| 4 Describe techniques to minimize inadvertent or indirect selection bias | diversity of geographical location and size of the organization |
| 5 Report homogeneity or heterogeneity of cases, compare focus of analysis | same themes (main and sub-factors) are raised by each stakeholder group |
| 6 Report processes for elicitation or extraction of information content | semi-structured interviews (Tabel I), conducted individually, in Dutch, use of photocards; analyses performed on written text (based on audio recording) |
| 7 Select code, meaning, or model saturation | full code saturation was reached, as the last #4 interviews (from #16) contributed no new codes and did not change the coding tree |
| 8 Specify code and concept fineness or granularity | main factor involving the lowest amount of coded text contained 5 subcodes |
| 9 Report order and randomization of cases in post facto tests of saturation | case order was determined by the order of the interview date |
| 10 Define the level of precision in post facto tests of saturation | all respondents contributed to the main factors of the coding tree |

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