Symposium: Operationalizing Wellbeing Frameworks

Operationalizing Wellbeing Frameworks for Ageing Societies: ISO 25554 and Care Innovation H. Sato (Convener). *Gerontechnology* 25(s)
Presenters: H.Sato (Japan), H. Miwa (Japan), S. Freeman (Canada), H.McNeil(Canada)

ISSUE
This symposium will explore how ISO 25554, an international guideline for promoting wellbeing in communities and organizations, can be operationalized in ageing societies. By integrating indicator-based approaches with care standards such as ISO/FDIS 25557, and practical innovations, the session aims to provide actionable strategies for improving wellbeing and care quality.

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Presentation 1 (H. Sato):
What is Wellbeing in ISO 25554:2024? Principles, Governance, and Continuous Improvement
Overview of ISO 25554 principles, governance model, and alignment with SDGs and WHO Healthy Ageing. Emphasis on PDCA-based continuous improvement and indicator-driven evaluation.

Presentation 2 (H. Miwa):
Developing Care Standards in ISO 25557 and Creating Wellbeing in Care Fields
Introduction to ISO 25557's inclusive care framework and discussion on hybrid approaches combining ISO 25554 and ISO 25557 for ageing-in-place strategies.

Presentation 3 (S. Freeman):
Utilizing D-CGA with ISO 25554 Framework for Aging in Place

This project demonstrates the digitization of Comprehensive Geriatric Assessment (D-CGA) to improve care quality and responsiveness for ageing-in-place. The research evaluates a variety of sensor technologies for measuring wellbeing-related indicators in older adults, structured within the ISO 25554 framework.

Presentation 4 (H.McNeil):
Building an AgeTech Theory of Change to Operationalize Wellbeing and Inform Impact Metrics

This presentation reports on Phase 1 of a co-led research initiative to develop an AgeTech Theory of Change (TOC) as a foundation for harmonized impact evaluation. The resulting TOC aligns with ISO 25554 by providing a structured, indicator-oriented foundation that supports PDCA-based continuous improvement, while remaining flexible to local definitions of wellbeing and diverse implementation contexts.

CONCLUSIONS / ANTICIPATED OUTCOMES

- Practical roadmap for implementing ISO 25554 in ageing societies
- Integration model linking wellbeing frameworks with care standards and indicator-based digital solution.
- Identification of collaborative research opportunities for standard-based innovation

Keywords: ISO 25554, wellbeing framework, ISO 25557, quality of care, CGA
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What is Wellbeing in ISO 25554:2024? Principles, Governance, and Continuous Improvement
H. Sato and M. Hosono. *Gerontechnology* 25(s)

Purpose Ageing societies face increasing complexity in maintaining wellbeing across communities, including local entities and enterprises of all sizes. Although wellbeing is widely recognized as a policy priority, there is no universal definition or standardized process for its promotion, as wellbeing encompasses a broad range of human life dimensions. ISO 25554:2024[1] was developed to provide guidelines for establishing, implementing, and continuously improving wellbeing initiatives. The standard emphasizes community-driven concepts, alignment with global frameworks such as the SDGs[2] and WHO[3] Healthy Ageing, and structured governance to ensure inclusivity and sustainability. To realize the framework ISO 25554 presents, Digital Comprehensive Geriatric Assessment at Home: (D-CGA@home[4]) is developed in the joint project between Canada and Japan to use the framework of ISO 25554:2024. **Method** ISO 25554:2024 introduces a structured process that begins with defining a locally agreed concept of wellbeing rather than imposing an external definition across communities. This requires leadership to build consensus among stakeholders and establish a shared vision. Once the concept is defined, evaluation indices are set to express this vision in measurable terms. These indices are broken down into specific measurement items, referred to as indicators, which guide service design to ensure alignment with wellbeing goals. Implementation involves delivering services while collecting data on these items, enabling ongoing evaluation. The process follows a PDCA (Plan-Do-Check-Act) cycle, enabling continuous improvement by refining indicators, redesigning services, or introducing new approaches to meet evolving community needs, as shown in Figure 1. The framework described in *Figure 1* will be developed with digital technologies to visualize the state of wellbeing of an older person at home as D-CGA@home. Additionally, ISO 25554:2024 outlines the role of community leaders and provides guidance on leveraging digital infrastructures, including related standards for information security and privacy risk management. **Results and Discussion** The iterative PDCA-based framework supports sustained progress and adaptability, those are tried to reveal with “D-CGA@home” in the joint project. In ageing societies, embedding wellbeing goals such as social participation, health maintenance, and a sense of purpose into this cycle can enhance Quality of Life (QoL) for older adults. ISO 25554:2024 enables communities to create inclusive, responsive systems that evolve over time, ensuring that wellbeing initiatives remain relevant and effective.

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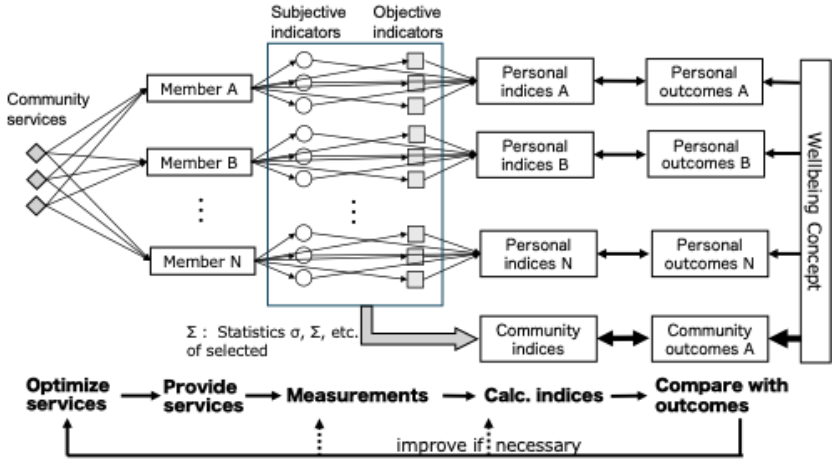

Figure 1 Wellbeing promotion framework modified from ISO 25554:2024

Developing Care Standards in ISO 25557 and Creating Wellbeing in Care Fields H. Miwa.
Gerontechnology 25(s*)*

Purpose Ageing societies require care systems that extend beyond medical treatment to ensure dignity, social participation, and overall wellbeing of older persons. ISO 25557[1], which is currently at the FDIS stage, provides an inclusive framework for care services designed to support ageing in place through integrated services, rights-based approaches, and community engagement. As the Project Leader of ISO/AWI TR 25998, we are collecting practical examples related to ISO 25557 from multiple countries. This study aims to demonstrate the framework of ISO 25557 and how this standard can be applied in real-world contexts to improve the quality of life for older persons. In addition, to achieve care services of excellent quality, it is crucial to align not only with care quality metrics such as ISO 25557 but also with broader wellbeing frameworks such as ISO 25554. This study also aims to examine how care quality metrics and wellbeing frameworks can be integrated, focusing on the complementary use of ISO 25557 and ISO 25554[2].
Method This study adopts a conceptual approach. ISO 25557 provides clear requirements and accountabilities to enable care home teams, governing bodies, and other stakeholders to work together toward a common vision for resident-centred, high-quality care. In particular, this document supports integrated care, the person-centred approach based on the United Nations Principles for older persons. However, due to the broad scope of ISO 25557, there are no practical examples that fully cover its requirements and recommendations. Therefore, we are collecting practical examples from Japan, Europe, and North America related to ISO 25557 to illustrate care innovation. For example, community-based facilities in Japan offer activities that encourage interaction among older persons and other generations, as well as activities for care prevention, frailty prevention, and health promotion within the community-based integrated care system. On the other hand, a general service system includes three stakeholders—management, employees and customers—and higher employee satisfaction driven by management commitment increases customer satisfaction. We mapped each ISO 25557 clause to these stakeholders as shown in Figure 1. This indicates that the ISO 25557 contains key components for enhancing service quality and driving the sustainable service system. However, to achieve excellent care services, customer delight through outstanding customer experience based on the concept of value co-creation is important. We consider that updating the framework by linking wellbeing indicators (ISO 25554) with care quality metrics (ISO 25557) would be a solution. This can be achieved by using PDCA cycles for continuous improvement in both wellbeing and care provision among stakeholders. **Results and Discussion** ISO 25557 provides a foundation for integrated care systems, while ISO 25554 offers a process for promoting wellbeing. Combining these standards enables holistic strategies for ageing in place, integrating health, social participation, and community engagement. The international case collection under ISO/AWI TR 25998 will provide evidence-based insights to guide implementation globally.

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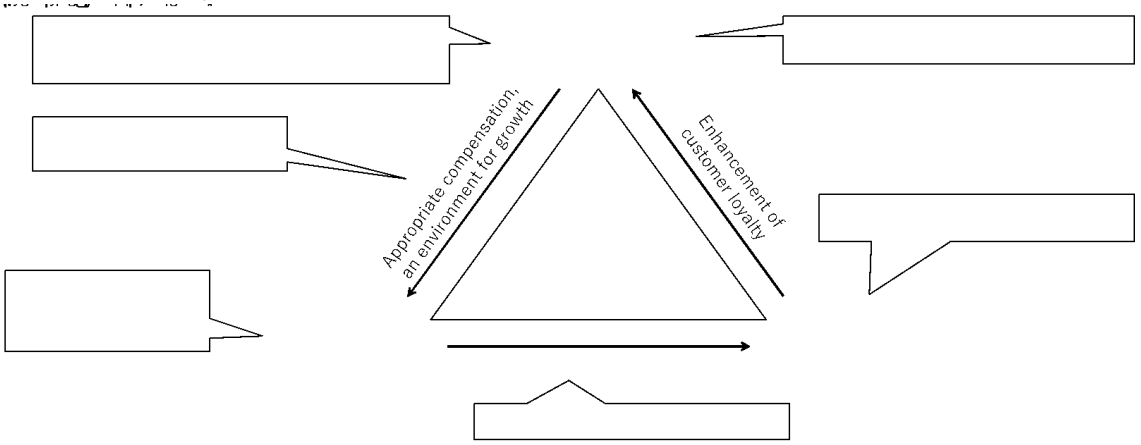

Figure 1 Mapping of ISO 25557 clauses to a sustainable service system for care services

Utilizing D-CGA with ISO 25554 Framework for Aging in Place S. Freeman. *Gerontechnology* 25(s*)*

Purpose
As populations age, delivering high-quality, personalized care at home is increasingly critical. Traditional Comprehensive Geriatric Assessment (CGA) methods are effective but limited by infrequent updates, administrative burden, and inconsistent data quality[1]. The Digital Comprehensive Geriatric Assessment (D-CGA) model aims to overcome these challenges by digitizing CGA processes and integrating AI-supported care planning. This approach aligns with ISO 25554's wellbeing framework and complements ISO/FDIS 25557's inclusive care principles, supporting ageing-in-place strategies through indicator-driven evaluation and continuous improvement[2,3]. **Method** The D-CGA@home project was designed to develop and evaluate a digital, home-based Comprehensive Geriatric Assessment model to improve care quality and responsiveness. Its core components include AI-supported care planning, usability testing, and structured evaluation of sensor technologies. ISO 25554 provides a wellbeing framework based on PDCA cycles and indicator-driven evaluation, such as functional ability and social participation, while ISO/FDIS 25557 ensures care quality and rights-based approaches in home and community settings. To validate this approach, a multi-layered research strategy was employed. Relevant commercial and AGE-WELL sensor technologies were identified through market scans and innovation databases, resulting in 83 technologies. A classification matrix documented functionality, data characteristics, and validation status [4,5.] These technologies were mapped to RAI-HC assessment domains based on data relevance[1,6]. Mappings were validated through a comprehensive literature review and expert consultation to assess practical feasibility. **Results and Discussion** The analysis revealed that five domains—mobility, activity level, falls, home environment, and medication management—can be directly assessed using sensor technologies, while five domains such as IADL tasks, social participation, and ADL self-performance can be partially supported, and five domains including psychosocial wellbeing and disease diagnosis still require clinical judgment[4,5]. ISO 25554 provides a PDCA-based wellbeing framework emphasizing indicators such as functional ability and social participation, while ISO 25557 ensures rights-based care quality in home and community settings. Integrating sensor data into D-CGA enables frequent, objective updates, improving care planning and early intervention. However, successful implementation requires careful attention to privacy, informed consent, and equitable access.
This study demonstrates that sensor technologies can enhance D-CGA in line with ISO 25554 and ISO 25557, but emphasizes the continued importance of human judgment and the need for further real-world validation.

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Building an AgeTech Theory of Change to Operationalize Wellbeing and Inform Impact Metrics
H. McNeil, C. Genge, and Metrics Working Group. *Gerontechnology* 25(s*)*

Purpose AgeTech innovation is advancing rapidly in response to ageing societies, yet implementation and adoption remain fragmented across standards, evaluation approaches, and governance structures. Ecosystem-level work to scan and align AgeTech standards and guidelines has demonstrated that while guidance exists across domains such as inclusive design, privacy and security, and care quality, there is limited integration between wellbeing frameworks, innovation pathways, and decision-making needs (Abhari et al., 2025). Without shared impact metrics and coordination mechanisms, wellbeing risks being inconsistently defined and weakly translated into practice. **Method** This presentation reports on Phase 1 of a co-led research initiative with AGE-WELL, the National Research Council of Canada (NRC), and a pan-Canadian working group to develop an AgeTech Theory of Change (TOC) as a foundation for harmonized impact evaluation. The TOC was co-created using a modified Delphi-informed, multi-stage consensus process involving experts by lived experience, researchers, innovators, health and social care leaders, and policy and regulatory representatives. The Phase 1 process focused on conceptual development, drawing on a structured, expert-informed scan of peer-reviewed and grey literature to identify salient frameworks related to healthy aging, AgeTech, and impact measurement and iterative online working sessions. The group articulated the mechanisms through which AgeTech can contribute to wellbeing across the life course. Key results included identification of multiple, interacting forms of complexity—relational, experiential, dynamic, and governance-related—that shape technology adoption and impact. These insights were synthesized into a co-created conceptual model illustrating pathways from innovation to wellbeing outcomes.
The resulting TOC aligns with ISO 25554 by providing a structured, indicator-oriented foundation that supports PDCA-based continuous improvement, while remaining flexible to local definitions of wellbeing and diverse implementation contexts. **Results and Discussion** Developing a shared Theory of Change is a critical step in operationalizing wellbeing frameworks such as ISO 25554 within ageing societies. This work provides a conceptual and methodological foundation for the next phase of research, which will focus on co-creating a harmonized, stage-appropriate impact metrics framework to support responsible AgeTech adoption, improved care quality, and evidence-informed decision-making.

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