

Symposium

From Ethics to Governance: Making AI Accountable in Aging and Care M. Chrostowski (Convenor).
Gerontechnology 25(s)

PARTICIPANTS: A. Mihailidis (Canada), J. Boger (Canada), S. McKay (Canada), M. Chrostowski (Canada).

ISSUE As AI becomes embedded in care for older adults, the gap between ethical principles and operational accountability widens. Attempts at governance can struggle with distributed responsibility across complex sociotechnical ecosystems, exclusion of older adults from technology development, and implementing oversight in decentralized care environments. This symposium addresses: (1) establishing accountability across fragmented stakeholder networks; (2) authentically incorporating age-related values when validated data and inclusive practices are scarce; and (3) implementing oversight and governance in decentralized care settings.

CONTENT Mihailidis (Canada) will present on accountability as distributed responsibility across the AgeTech ecosystem, drawing on research in social robots, monitoring systems, and health assessment tools. This will include discussion of how innovation ecosystems prioritize speed over responsibility, creating accountability gaps, and proposes relational governance approaches embedding accountability into research design, funding, and partnerships. Boger (Canada) will address incorporating age-related values into AI through case studies in ambient monitoring, virtual reality exergames, and dementia workplace support. The presentation will examine how excluding older adults creates gaps between AI training data and authentic contexts, arguing for digital literacy, equitable access, and systemic culture change including humanities perspectives. McKay (Canada) will explore differential oversight requirements in care setting with an emphasis on home-based care, where AI operates in decentralized environments. The presentation will position governance as safeguard and enabler, using contemporary examples from home care, including predictive analytics for hospital readmission risk and AI-enabled scheduling systems. Following the presentations, a panel discussion moderated by Chrostowski (Canada) will explore pathways forward for advancing AI accountability in aging and care, synthesizing insights across ecosystem-level responsibility, values-driven design, and operational governance to identify concrete next steps for researchers, practitioners, and policymakers. **CONCLUSIONS/ANTICIPATED OUTCOMES** This symposium illuminates critical tensions between AI's promise and its accountable implementation in aging contexts. By examining accountability across ecosystem, design, and operational levels, the presenters will capture why current approaches fall short and what fundamental shifts are needed. This framing provided points to needed research in governance mechanisms, inclusive design methodologies, and context-sensitive oversight models

Keywords: AI accountability, AI governance, values-based design, care ecosystems

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Symposium

Accountability for AI in AgeTech: A Sociotechnical Ecosystem Perspective A. Mihailidis. *Gerontechnology* 25(s)

Purpose This presentation examines accountability as a distributed responsibility across the sociotechnical ecosystem of age-related technologies, arguing that accountability must extend beyond developers and users to encompass technology designers, care providers, health systems, research institutions, funders, and policymakers who collectively shape how AI-enabled systems support aging in place. **Method** The presentation draws on two decades of research designing, deploying, and evaluating AI-enabled technologies for older adults, including social robots,¹ intelligent monitoring systems,² and AI-driven health assessment tools.³ Examples from pilot studies, living labs, and real-world deployments are analyzed to illustrate how accountability is fragmented across stakeholders and innovation ecosystems. **Results and Discussion** Current innovation ecosystems prioritize speed, novelty, and scale over sustained responsibility, creating structural accountability gaps that disproportionately affect older adults. Accountability is fragmented in practice, with responsibilities for system performance, user safety, clinical outcomes, and long-term impacts distributed across multiple actors without clear governance.^{1,4} The presentation argues for shifting from technology-centered accountability models toward relational and governance-oriented approaches that embed accountability into research design, evaluation frameworks, funding mechanisms, and institutional partnerships. Strengthening feedback loops between older adults, care providers, researchers, and industry is essential to establishing accountability as an ongoing collective commitment rather than a one-time requirement.^{3,4}

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Making it Real: Inclusion of Age-Related Values in AI Technologies J. Boger. *Gerontechnology* 25(s)

Purpose The explosion of AI's capabilities has opened the floodgates of "AI forward" technologies. AI holds immense promise for enabling personalised support, but to do so authentically it must dovetail with the values of the people using it; namely, it must respect the principles, priorities, and preferences that guide what people consider important, meaningful, and worth protecting in their lives. Current products often miss the mark because they are an inaccurate reflection of the lived experience of aging.¹ Digital agism abounds,² such as AI systems designed to prioritise efficiency over meaningful interactions, home-based monitoring that seems more like surveillance, assistance coming across as patronising, and support for dementia failing to accommodate highly dynamic changes in abilities. This talk focuses on practical considerations regarding the inclusion of values related to aging in AI-based technologies. **Method** Structured studies and anecdotal evidence from 25 years of hands-on development and implementation of AI technologies in academic and industry applications are combined with current market trend analysis to surface key themes related to incorporating values into AI systems. Case studies are examined from representative aging-focused applications, such as ambient health monitoring,^{3,4} virtual reality exergames,^{5,6} and supporting early onset dementia in the workplace.⁷ **Results and Discussion** The chronic exclusion of older adults from technology development has created a dearth of validated data, resulting in poor designs and an over-reliance on stereotyping, which perpetuates exclusion. This cycle has resulted in a significant gap between the data that powers AI systems and authentic older adult contexts, particularly how to use AI to complement values of older adults. While concepts and frameworks such as values-based engineering, values-sensitive design, and ethical by design are good in theory, they are not well-aligned with the current realities of technology development practices.^{8,9} Effective digital literacy and equitable access for older adults, their families, and their communities along with systemic culture change for the greater inclusion of humanities and older adults themselves in AI technology development is required to bridge the gap. Doing so is fundamental to unlocking AI's potential to support the plurality of dynamic and often complex situations that come with aging, opening up untapped opportunities for values-aligned solutions in technology for aging.

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Oversight of AI Across Care Contexts: A focus on homecare S. McKay. *Gerontechnology* 25(s)

Health systems are navigating a fragile post-pandemic recovery amid population aging, rising clinical complexity, persistent workforce shortages, and sustained cost pressures. These challenges are particularly acute in home-based care and institutional long-term care, sectors that face ongoing issues of workforce capacity, stability, and access. The promise, and increasing pressure, to adopt artificial intelligence (AI) as a solution to complex system challenges raises fundamental questions about how organizations balance innovation with risk management, and how appropriate oversight should vary across care contexts.¹ **Purpose** This symposium presentation examines how oversight requirements differ between institutional settings, such as long-term care, and home-based care, where AI is deployed in highly decentralized environments involving remote workforces, digital care technologies, and care delivery in private homes. While high-level frameworks exist to guide AI decision making, many organizations struggle to operationalize effective governance controls that are proportionate to risk and align with organizational risk tolerance. This challenge is intensified by the lack of harmonized regulatory standards governing model transparency, training data and potential sampling bias, external validity and population generalizability, and performance metrics related to accuracy and optimization. Within the context of AI, these limitations are further compounded by the rapid proliferation of modular AI components integrated into end-to-end clinical and operational systems. **Method** Drawing on contemporary examples from home care, this session explores governance as both a safeguard and an enabler of sustainable AI adoption, particularly in contexts where evidence for clinical AI remains emergent, data maturity is uneven, and regulatory clarity continues to evolve.² **Results and Discussion** The presentation argues that the highest-performing systems are distinguished not by individual tools, but by a systematized approach that aligns AI investments with enterprise goals, integrates robust data and digital infrastructure, and establishes clear leadership accountability. Examples include the use of predictive analytics to anticipate hospital admission and 30-day readmission risk³, optimize workforce planning, and target interventions to address inequities in access and outcomes, alongside operational applications such as AI-enabled scheduling, virtual assistants, documentation support, and language translation.

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