GERONTOLOGICAL SOCIETY OF AMERICA®

1101 14th Street NW, Suite 1220
Washington, DC 20005
1.202.842.1275
www.geron.org

Meaningful Lives As We Age

July 15, 2025

RE: NOT-OD-25-117, Request for Information (RFI): Inviting Comments on the NIH Artificial Intelligence (AI) Strategy

Office of The Director, National Institutes of Health (OD)

To whom it may concern,

On behalf of the Gerontological Society of America (GSA), we appreciate the opportunity to comment on the request for information on the National Institutes of Health (NIH) Artificial Intelligence (AI) Strategy. Furthermore, we appreciate the Office of the Director's efforts to develop an AI strategy that not only addresses research silos and improves transparency but also prioritizes the translation of research and development for the benefit of patients. It is critical that AI-driven innovation puts improved healthspan and longevity at its center, while focusing on the unique opportunities for the federal government to promote AI research and development and maintain the United States' dominance in the field of AI.

GSA's mission is to foster excellence, innovation, and collaboration to advance aging research, education, practice, and policy. We envision "meaningful lives as we age." GSA's 6,000 members include gerontologists, health professionals, behavioral & social scientists, biologists, demographers, economists, and many other disciplines. These experts study all facets of aging with a life-course orientation. The multidisciplinary nature of the GSA membership is a valued strength, enabling the Society to provide a rich perspective on the issues facing our population as we age. Our members come from more than 50 countries.

GSA publishes five peer-reviewed journals with research that advances the focus on biomedical research and social sciences, as well as more than 60 interest groups formed around a topic or issue that cuts across disciplines. One of our interest groups, "Technology and Aging," investigates possibilities for applying the results of rapid advances in technology to improve the lives of the growing number of older people.

AI holds transformative potential to support the health, independence, and well-being of all of us as we age, including America's aging population. From new diagnostic tools and wearable devices to virtual assistants and social robots, AI applications can empower older people. However, to realize these benefits, we recommend AI systems that are intentionally and thoughtfully designed to consider the needs, preferences, attitudes, and abilities of older people and their caregivers. It is vital to include diverse age cohorts in thoughtfully developing, implementing, and regulating AI. We recommend that the NIH Artificial Intelligence (AI) Strategy reflect both the promise of these technologies for older people and the potential harms they may pose, promoting benefits while minimizing risks.

Strategic Architecture

As NIH develops its AI strategy, it is essential to recognize that trust is not evenly distributed across populations. For older people, trust in AI-generated health information is especially limited. According to the National Poll on Healthy Aging, nearly three-quarters of adults age 50 and older report having little or no trust in health information generated by AI, and one in five say they are not confident in their ability to identify health misinformation online (Keenan et al., 2024). These concerns are even more pronounced among people with physical or cognitive limitations, who are often the very individuals most in need of reliable AI-powered health support. To build systems that are truly trustworthy, AI development must prioritize transparency, explainability, and inclusivity from the start (Li et al, 2024).

Data readiness should include the active inclusion of older people in training datasets (Chu et al., 2022, Park et al., 2021). Like all technologies, translation of AI research into clinical tools must account for age-related changes in cognition, perception, and technology use (Charness & Boot, 2022). Workforce development efforts should cultivate AI scientists, clinicians, and human factors researchers who understand the needs of aging populations and who work collaboratively with gerontologists, caregivers, and older people. Trust will not be created through technical sophistication alone, but through careful, ethical design centered on human dignity.

Research & Innovation Actions

High-impact use cases for AI must include applications that support aging in place, reducing social isolation and loneliness, improving clinical decision-making for older people, and promoting independence and well-being. Of particular importance is the potential for AI to enable earlier detection of emerging health, functional, and cognitive challenges, identifying problems before they escalate into crises (Merkin et al., 2022; Morgan et al., 2019; Wang et al., 2019). AI-powered monitoring systems, predictive algorithms, and decision-support tools can help detect subtle changes in behavior, cognition, and physiology, enabling timely interventions and improving treatment outcomes. This early detection capability holds promise for delaying or preventing functional decline, reducing hospitalizations, and supporting quality of life as people age.

Reproducibility and benchmarking efforts must examine age-related performance variations, ensuring that AI models are validated not only on younger, healthier populations but also on diverse cohorts that reflect older people's lived experiences and health profiles (e.g., Bilionis et al., 2025).

AI systems can perpetuate and amplify societal ageism when they are trained on biased data or designed without considering older people's needs. If older people are underrepresented in datasets or excluded from user-centered design processes, AI may misinterpret their behaviors, fail to meet their needs, or produce discriminatory outcomes, reinforcing existing disparities (Chu et al., 2023; Saumure et al., 2025). Proactive design and oversight are essential to prevent these harms.

Intramural-Extramural Synergy

NIH's intramural AI efforts should include the development of age-inclusive datasets and tools that are shared with the extramural community. For example, health monitoring datasets, voice interaction models, and assistive robotics tools should reflect older people's use cases and be made available through open science frameworks (Gaya-Morey 2025; Nyaniro et al., 2022). Shared governance structures must prioritize ethical stewardship of AI models that affect older people, including older people living with cognitive and functional limitations. (Ahmadova et al., 2024; Bartlett 2025).

Operational Excellence

AI should follow universal design principles, ensuring that older investigators, reviewers, and research participants can engage with these systems. The design of AI technologies must consider the unique needs, preferences, and abilities of diverse groups of older people (Cho et al., 2025).

Facilitating & Validating AI in Healthcare Delivery

Older people often experience complex multimorbidity, functional limitations, and sensory changes that AI tools must accommodate. NIH can lead in establishing best-practice frameworks and testbeds that evaluate AI systems across our heterogeneity as we age. Regulatory science collaborations should address the safety of AI systems used in geriatric care, cognitive impairment screening, fall risk prediction, and social engagement technologies. Validation efforts must go beyond clinical accuracy to assess usability, accessibility, and trust among older people.
It is also crucial to bridge the AI health digital divide to empower older people and their caregivers to promote access and agency, whether in dementia education, technology intended for caregiver support, or elder-care technology more broadly (Martin et al., 2024; Berridge et al., 2025, Berridge et al., 2022). There is a growing body of evidence of discriminatory harms and age-related biases against older people, which is also critical to address prior to incorporating AI broadly into healthcare delivery (Chu et al., 2024; World Health Organization 2022; Stypinska 2023; Neves et al., 2023).

Reproducibility and Trust

For older people, trust in AI systems is fragile given long-standing concerns about privacy, autonomy, and equitable treatment (Lanne & Leikas, 2021). Reproducibility efforts must include transparent reporting of how models perform across age groups and functional ability levels. Community-driven standards should include voices from aging research and advocacy communities, ensuring that older people are not overlooked in the pursuit of technical validation.

Research indicates that shifting from a focus on "trust" -- which makes the person/patient the responsible actor -- to building "trustworthy" systems and processes may be more effective. There is evidence of widespread mistrust of AI generated health information among older people (Keenan et al., 2024) and disconnects between older people's AI data privacy needs and that which is offered them (Berridge et al., 2023; AARP, 2024). A survey of people age 50 and older who were open to using AI health applications found that 76% have concerns about privacy and security threats, which are unaddressed policy and practice problems (AARP, 2024).

AI tools and systems will also be more trustworthy when ethical and bioethical principles are directly addressed. There are several resources on ethical issues of patient autonomy, data and personal privacy, transparency, explainability, locating accountability, and AI harms discovery and mitigation (Solaiman 2024; Ho 2023; Lukklen et al., 2024; Ienca M et al., 2018; Berridge et al., 2021). These include a highly relevant book chapter on direct-to-consumer health and wellness devices used by older people and their care partners (Ho, 2023).

Partnerships & Ecosystem Building

NIH should build partnerships with agencies and organizations that serve older people, such as the Administration for Community Living, the Department of Veterans Affairs, and aging-focused non-profits and philanthropic entities. Efforts must balance open science and innovation with the protection of vulnerable populations from exploitation or harm.

Conclusion

AI holds tremendous promise to improve the lives of older people if their needs, values, and rights are prioritized in its development (Czaja & Ceruso, 2022). Older people face unique usability barriers and risks of exclusion in AI systems. Ethical frameworks should be strengthened through alignment with international efforts such as the Human Rights Council's Resolution 58/13 (United Nations Human Rights Council 2025), which calls for a legally binding instrument to protect the rights of older people. Inclusive AI is essential to improving health outcomes for all people across the lifespan. AI is reshaping the future of health, aging, and decision-making for all of us as we age. Its benefits will only be fully realized if the technologies are developed with age-inclusivity, ethics, and usability at the core.

Thank you for the opportunity to provide input. If you have any questions, please contact Patricia D'Antonio, Vice President of Policy and Professional Affairs at pdantonio@geron.org or 202-587-5880 or Jordan Miles, Director of Policy at jmiles@geron.org or 202-587-5884.

Sincerely,

James C. Appleby, BSPharm, MPH, ScD (Hon)
Chief Executive Officer

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