Will Digital Technologies, Including AI, Help or Hinder the Future Provision of Care? A Geriatrician's Perspective

Dr. Samir Sinha MD, DPhil, FRCPC, FRSM, FCAHS, AGSF
Director of Health Policy Research, National Institute on Ageing
Geriatrician and Clinician Scientist, Sinai Health and University Health Network
Professor of Medicine, University of Toronto, Toronto Metropolitan University, and the Johns Hopkins University Schools of Medicine
2024-2025 Visiting Fellow, Institute for Ethics in AI and All Souls College, University of Oxford

2026 Asia-Pacific Regional Conference on Population Ageing – October 28, 2026

NATIONAL INSTITUTE ON AGEING




THE ARTHRITIS CURE
ECONOMICS
KENNETH C. DAVIS
HEAVEN IN A CHIP
IDIOT'S
BIOLOGY
URBANMAN
ALBERT EINSTEIN
The AUDACITY of HOPE
POITIER THE MEASURE OF A MAN
ETHICS IN AN AGE
SUPREMISMS OF DOUBLETALK
How to Write It
GRAY'S ANATOMY
Encyclopedia of NUTRITIONAL SUPPLEMENTS
THE MODERN ERA
GOD'S BRAIN
COOL IT
Cross-Cultural Design
RECORDS
SCIENCE
Le Corbusier
Psycho!
Design for Survival
DOLOMITE


Will Digital Technologies
Help or Hinder the Future of Care?

Older Canadians Views on Digital Technologies

When asked, ***"What is your general feeling about the future, in terms of making use of new kinds of digital technologies that will become available over time, and as you age?"***

Older Canadians have told us:

24% – I am keen to adopt new digital technologies because they will help me as I get older

47% – I am hopeful that I can make good use of new digital technologies to help me as I get older

25% – I am uncertain about how new digital technologies will be of much help to me as I get older

4% – *Cannot say*

(National Institute on Ageing, 2024)

Views on Wearable Technologies

79% of Canadians of all ages, and **95%** of Canadians 75 years of age and older believe that wearable technologies have the potential to extend their ability to live securely and independently in their own homes as they age.

(National Institute on Ageing, 2020)

Older Canadians Reported Use of Digital Technologies/Apps to Support Health

82% of Canadians 65+ own a smartphone, but only **51%** rely on them daily.

49%– Do not use any digital technologies to support/manage their health

31%– Track their exercise or physical activity
23%– Schedule or keep track of their medical appointments
13%– Measure or track their blood pressure
10%– Track their calories
9% – Track their medications and prescriptions
7% – Measure or track their blood sugar
4% – Detect falls

(National Institute on Ageing, 2024)

Older Canadians Reported Use of Digital Technologies/Apps

75% – Keeping in touch with family and friends
68% – Doing banking and paying bills online
57% – Staying informed about news and current events
35% – Ordering products and services (such as food orders)
31% – Scheduling meetings or appointments
30% – Watching movies and TV online
23% – Listening to podcasts or the radio online
23% – Maintaining or organizing digital tasks or “to-do” lists
11% – Organizing transportation with an app (such as Uber or Lyft)

(National Institute on Ageing, 2024)

Supportive Technologies to Enable Healthy Ageing and Ageing-in-the-*Right*-Place



Smart Phones and Communication Devices



Smart Watches, Fitness Trackers, and Surveillance Technologies



Remote Health Monitoring Systems



Personal Emergency Response Services (PERS)



AI-Enabled Virtual Companions and Chatbots



Smart Home Devices, Care Robots

How Could Digital Technologies Enable Healthy Ageing and Ageing-in-the-*Right*-Place?

- Improve Access to Care and Support, Diagnosis and Management
- Reduce Isolation and Loneliness – by helping people stay and/or feel better connected with others.
- Bring Greater Expert Support into One's Place of Residence.
- Empower and Enable Greater Care, Independence and Safer Living Options.
- Summon Help More Quickly if Needed.
- Make Caring More Efficient and Address Significant Labour Shortages?

We must be aware of the dangers of "techno-solutionism."


ROBEAR



Care is Complex and ‘Entangled’

What Are Barriers to Adopting Technologies

- Cost and Connectivity Issues are creating “Digital Divides” and new forms of discrimination that further play on educational and ethnocultural factors that ultimately influence Access.
- Stigma, Usability and Limited Training for Care Recipients, Caregivers and Care Providers ironically *Increases* Burden of Use.
- Not Being Adaptable to Evolving Circumstances – ie Vision and Hearing Loss, and Cognitive Decline and the Loss of Mental Capacity.
- Challenges Establishing Value for Money and Overall Effectiveness.
- General Reliability, Safety and Security Concerns.



What Are Some Ethical and Other Concerns?


iRobot | Roomba Combo

Americans are attaching Apple's AirTags to their loved ones who have DEMENTIA as part of 'imperfect' method to make it easier to track their relatives if they go missing

- Apple AirTags are $30 tracking devices that present an imperfect way to locate loved ones that can wander off, according to a Wall Street Journal report
- However, exerts in the report argue the issue is not ethically straightforward and consent should be required to track all individuals
- Experienced caregivers argue that worrying about the ethics is naïve and that any tools that make their job easier are valuable
- AirTags can also be inaccurate, failing to provide tracking information in real time, and Apple only supports them for the use of tracking personal items

By NEIRIN GRAY DESAI FOR DAILYMAIL.COM
PUBLISHED: 11:43 EDT, 16 October 2022 | **UPDATED:** 12:09 EDT, 17 October 2022

The New York Times

For Older People Who Are Lonely, Is the Solution a Robot Friend?

New York officials believe a robotic companion called ElliQ, which can discuss complicated subjects, is helping older residents feel less alone. Critics are concerned about data collection.

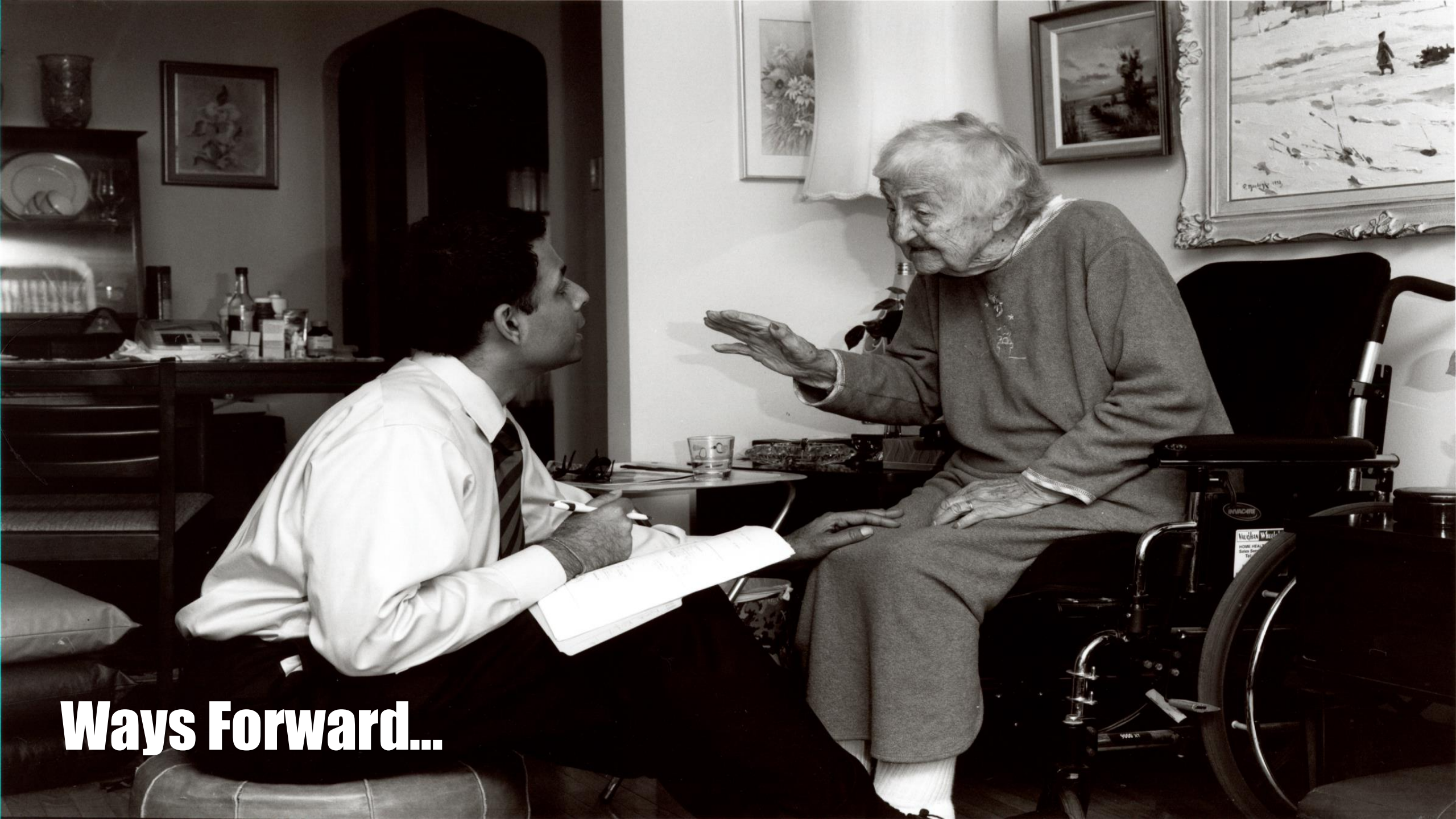
Listen to this article · 8:43 min Learn more

Share full article



What Are Some Ethical and Other Concerns

- Where AI Systems rely on vast amounts of personal data to function effectively, how are we ensuring the appropriate protection and responsible use of this data?
- How clearly and transparently are we communicating with users of technologies around their use and purposes?
- Technologies could actually worsen social isolation and loneliness by minimizing in-person interactions.
- Technologies that don’t control for bias and are exclusionary can ultimately cause harm.


Ways Forward...

We WILL Enable the Future of Care with Technologies

- Enabling Healthy Ageing and Ageing-in-the-*Right*-Place requires a ***shift*** in traditional thinking much beyond how we currently think about providing care and supporting health.
- Digital Technologies including AI have the potential to better promote health, well-being, independence, dignity and respect, but could also cause harm and not be widely adopted if not developed and deployed well.
- Enabling healthy ageing needs to be collaborative, sustainable and ethically sound, while safeguarding our most vulnerable from its potential harms.

NATIONAL INSTITUTE ON AGEING



Thank You!

Samir K. Sinha MD, DPhil, FRCPC, FRSM, FCAHS, AGSF

Director of Health Policy Research, National Institute on Ageing

Geriatrician and Clinician Scientist, Sinai Health and University Health Network

Professor of Medicine, University of Toronto, Toronto Metropolitan University, and the Johns Hopkins University Schools of Medicine

2024-2025 Visiting Fellow, Institute for Ethics in AI and All Souls College, University of Oxford

samir.sinha@sinaihealth.ca