

Research report

The digital divide: Impacts on older people from migrant communities

Ethnic Communities' Council of Victoria (ECCV) September 2024

About ECCV

Ethnic Communities' Council of Victoria (ECCV) is the peak body for people from migrant and refugee backgrounds in Victoria. ECCV works closely with more than 220 member organisations including ethnic associations, multicultural service providers, and regional ethnic communities' councils.

ECCV has been advocating for human rights, freedom, respect, equality and dignity for migrant and refugee communities, and for a socially cohesive and inclusive Victorian community, since 1974.

ECCV has a strong record of informing industry, practice and influencing Federal, State and Local governments to promote culturally responsive approaches and equitable access to services, antiracism and socially just policy.

Acknowledgements

ECCV would like to gratefully acknowledge our members, Networks, Policy Advisory Committees and stakeholders, including the Positive Ageing and Aged Care Policy Advisory Committee (PAACPAC), for participating in consultations and sharing their insights and expertise. We would particularly like to acknowledge Dr Medha Gunawardana from Australian Multicultural Community Services (AMCS) and the ECCV Board who contributed invaluable advice and direction for this research, as part of the reference group alongside ECCV staff members. Thank you to everyone who contributed to the development of this report.

A note on language

The term 'people from migrant and refugee backgrounds' is used in this document to refer to people and communities who have entered Australia through a variety of pathways, including through humanitarian, family, and skilled migration pathways. ECCV uses this term to refer to people with backgrounds and ancestry that is not part of the dominant Anglo-Celtic Australian population. This term is inclusive of people seeking asylum in Australia, people on temporary visas, undocumented migrants, and people born in Australia.

Suggested citation

Borrell, J 2024, *The digital divide: Impacts on older people from migrant communities,* Ethnic Communities' Council of Victoria, Melbourne.

Further information

This submission was prepared by ECCV Policy Advisor, Dr Jennifer Borrell. For enquiries, please email eccv@eccv.org.au





ECCV acknowledges the Traditional Owners of Country throughout Victoria and their continuing connection to land, water and community. We pay respect to their Elders past and present.



This research paper was supported by the Victorian Government.

Table of Contents

Executive Summary	3
Methodology	3
Findings on older people and digital literacy	3
International	3
Australia	3
Findings on Artificial Intelligence (AI)	5
Summary of Recommendations	6
Introduction	7
Outline of this paper	ç
Methodology	10
What is 'digital literacy'?	10
Topics and sources	10
Reference group	11
Literature search methodology	12
Findings	13
International research on the digital literacy of older people	13
Digital exclusion	13
Digital inclusion	15
Programs and initiatives	15
Key points	16
Australian research on the digital literacy of older people	17
Digital exclusion	17
Digital inclusion	19
Programs and initiatives	19
Key points	23
Australian research on the digital literacy of older people from migrant backgrounds	24
Digital exclusion and inclusion	24
Programs and initiatives	26
Key points	29
Local NFP insights into support needs of older Victorians from migrant and refugee backgrounds	30
Digital exclusion	30
Alternatives to digital for culturally diverse seniors	33
Key points	35
Acceptance, ethics and potential usefulness of Artificial Intelligence (AI)	35
Key points	39
Conclusion	
Recommendations	
General	42
Alternatives to digital	42
Digital literacy	43
Artificial Intelligence (AI)	43
References	
Attachment: Illustrative sample of digital literacy programs	50

Executive Summary

Digital literacy for older people from migrant and refugee backgrounds has emerged as a pressing issue, as digital connection is now routinely required for access to a range of services and organisations, to manage daily affairs and to access required supports. The impacts of the digital divide have been identified by ECCV through community projects, policy work, research projects, and ECCV's membership and policy advisory committees - in particular the Positive Ageing and Aged Care Policy Advisory Committee (PAACPAC).

Methodology

ECCV carried out a thorough literature review of academic research and some 'grey' literature as deemed relevant. Topics included digital exclusion for older people, particularly those from migrant and refugee backgrounds, and programs and solutions to address this. Research was also carried out on Artificial Intelligence which is a type of rapidly-expanding digital technology garnering widespread interest, as relevant to seniors in maintaining their health and wellbeing.

The research was supported by a reference group, which met twice during the research process.

Findings on older people and digital literacy

International

- An abundance of international studies demonstrate that digital exclusion of older people is a pervasive, world-wide issue.
- An increasingly disabling societal context requires mastery of digital devices and connection to the internet for social inclusion, and civic participation.
- It is now commonly expected that people engage with digital technology to receive information and services, leading many older people and other vulnerable groups to be effectively 'locked out of society', and unable to participate in everyday life.
- Impacts of digital exclusion include less independence, a higher risk of financial abuse, reduced personal safety, and limits to the exercise of human rights.

Australia

- The strong relationship between age and digital literacy levels in Australia has been well
 established, with older people being particularly disadvantaged.
- Australians over 75 years of age, experience higher levels of digital exclusion and score well below average in relation ability, as well as access and affordability.
- There has been rapid growth in the use of digital platforms by banks, governments and essential services, and as the online world becomes more complex, many older people need

- extra support to use online services and resources. Of particular concern, they are increasingly vulnerable to exploitation and scammers.
- Barriers to digital inclusion for senior Victorians include: a lack of ability to use and keep up
 with technology, the cost of maintaining and updating systems, and the difficulty of finding
 someone to help improve technology skills.
- Successful programs to improve the digital skills of older people have several common elements including:
 - o face-to-face learning, and interpersonal support
 - partnerships and co-locations with community organisations and service-based organisations
 - o 'co-creation' of programs, and flexibility in the way programs are delivered
 - o a learner-oriented and interests-based approach.
- Some seniors will never become digitally literate and alternatives to online connection for information and support need to be provided and continued for this group
- The Victorian and Australian Governments have released data and digital strategies that seek to optimise and streamline digital technologies, provide better management connectivity, and make platforms more user-friendly, however they also recognise that meeting broader objectives will still require alternatives to digital connection for many older people.

Digital literacy of people from migrant and refugee backgrounds

- While there is a widening gap in digital literacy between senior Australians and the rest of the population, digital exclusion is a particular issue for older Australians and Victorians from culturally and linguistically diverse backgrounds.
- Certain groups will never be able to use digital services, particularly older people from
 migrant and refugee backgrounds with a lower level of education, not literate in their own
 language, with lower proficiency in English and/or who came to Australia in the post World
 War 2 period.
- Some older people can't afford installation, connections and devices to connect online.
- Reliable internet connectivity is a particular issue in regional communities presenting yet another barrier for seniors from migrant backgrounds living in those areas.
- Low digital literacy has been a barrier for those running ethno-specific seniors clubs in Victoria, as the requirement to connect online for administration purposes has increased.
- Digital exclusion is entangled with structural modes of social exclusion associated with generation-based norms. While young people can share their digital skills with seniors in cross-generation programs, seniors could also share their skills with younger people in reciprocal learning arrangements.
- Successful digital literacy programs for older people from migrant backgrounds have included: harnessing the motivations of learners, the fostering of 'communities of practice',

- the choice to work individually with tailored support as well as in groups, and appropriate educational/technological/infrastructure/social support.
- Despite government reports and strategies highlighting the necessity of providing information and access to services via means alternative to digital, in practice digital connection by seniors is usually required, leading to many older people from migrant and refugee backgrounds missing out on the support they need.

Local context

- A wide range of local community organisations, including ECCV, have witnessed close-hand the digital exclusion of older Victorians from migrant and refugee backgrounds, presenting barriers to health, employment, information, services, banking, social connection and a variety of activities.
- Their digital exclusion can lead to financial abuse, elder abuse, vulnerability to scams, social
 isolation and inhibit their capacity to navigate their world and maintain a safe and fulfilling
 place for themselves in Australia.
- Many older Victorians from migrant backgrounds find it impossible to connect with the support and services they need unless they are fortunate enough to have someone who is able and willing to help, and who is digitally literate and speaks their language.
- Solutions include tailored and culturally sensitive digital literacy programs, as well as alternatives to digital connection in the form of bicultural workers, and/or local ethnospecific organisations.

Findings on Artificial Intelligence (AI)

- Artificial Intelligence as an expanding form of digital technology has garnered worldwide interest, particularly for the possibility of providing support to ageing populations, amid government concerns about budgetary costs.
- Burgeoning research on the potential for AI and related smart technologies to support older people has yielded mixed findings, with little focused on the particular needs and aspirations of older people from migrant backgrounds.
- Serious ethical dimensions need to be addressed such as consent (especially for older people
 with cognitive impairment), protection of privacy, and maintaining genuine social connection
 before introduction of Al-based technologies into aged care and support is considered,
 whether at home or in residential settings.
- Research involving consultation with older people suggests that some AI technologies may
 be used to augment support by human carers, but not replace it. This echoes the findings of
 research into digital literacy that many older people suffer in the absence of human
 communication and support with the increased reliance on digital technology, and this is
 exacerbated for older people from diverse cultural and linguistic backgrounds.
- More research is needed that includes the voices of older people themselves, particularly those from migrant and refugee backgrounds.
- Well-researched, strict and enforceable ethical guidelines need to be designed before the
 introduction or expansion of AI technologies into the aged care and support space, especially
 relating to older people from migrant backgrounds.

Summary of Recommendations

Recommendations included the following:

- 1. Proactively consult with people from migrant and refugee backgrounds and their representative bodies for the ongoing development of the Australian Government's *Data* and *Digital Government Strategy*.
- 2. Develop a nationwide combined service and digital inclusion policy that prioritises the needs, aspirations and human rights of seniors.
- 3. Continue provision of alternatives to digital connection by governments and organisations for services and information to support seniors, particularly those from migrant and refugee backgrounds. (See list of specifications in full recommendation).
- 4. Continue development and implementation of a communication strategy by each Victorian Government Department to proactively include the currently digitally excluded, with a particular focus on older people from culturally diverse backgrounds.
- 5. Continue paper-based options for seniors clubs for compliance and grant applications until such time when club representatives report to Victorian Government that they are comfortable with fully digitalised systems.
- Improve websites within existing digital technologies to make them more user-friendly
 for older people, particularly those from migrant and refugee backgrounds, with the
 meaningful involvement of these potential end-users in the development of these
 measures.
- Include and engage seniors in the design and provision of digital literacy programs to assist them in developing digital competencies according to their interests and capacities.
- 8. Continue resourcing digital literacy programs for seniors, including elements that have been identified as important for success. (See list of specifications in full recommendation).
- 9. Develop, monitor and enforce ethical guidelines for any potential use of AI in the support and care of older people, including those from migrant and refugee backgrounds.
- 10. Resource/carry out research to explore which forms of AI, if any, might be useful and ethical for older people, particularly those from migrant and refugee backgrounds, that allow them to remain in their homes as they prefer, while supporting them to exercise control over their lives and maintain optimal health and wellbeing, as consistent with their human rights.
- 11. Involve older people, including those from diverse cultural backgrounds. in the design and implementation of any research into the use of AI to support seniors.
- 12. Consider any introduction of forms of AI as an augmentation to human care and interaction for older people, rather than as a replacement.

(See full recommendations p. 43).

Introduction

Digital literacy for older people from migrant and refugee backgrounds has emerged as a pressing issue, as digital connection is now routinely required for access to a wide range of services, supports and organisations and, in general, to manage daily affairs. This has been identified by Ethnic Communities Council of Victoria (ECCV) through community projects, policy work, research projects, members, and policy advisory committees - in particular the Positive Ageing and Aged Care Policy Advisory Committee (PAACPAC).

Even while not the primary focus, the problem of digital exclusion for seniors has emerged as a substantial issue across various research projects carried out either in part or full by ECCV (Houghton 2018; Abdulhadi & Rukas 2020; ECCV 2022b; ECCV 2023a; Tribuzio & Rittinghausen 2023). Evidently those with low English proficiency face significant barriers to accessing support, when language barriers are combined with low digital literacy (ECCV 2023a). During the COVID-19 pandemic and the associated lockdowns, an increased reliance on digital communication amplified the barriers for those from migrant and refugee backgrounds, with older people being particularly susceptible to online scams (ECCV 2022b). The increased reliance on digital communication also led to social isolation for this cohort, without easy access and connection to digital technology (ECCV 2022b). Another study which ECCV supported found that culturally diverse older people whose preferred language wasn't English missed out on information and support services, and were more likely to experience digital exclusion (Tribuzio & Rittinghausen 2023). Again, this exclusion was said to increase during the COVID-19 pandemic, along with reduced access to essential physical and mental health services, a heightened risk of elder abuse and, overall, diminished health and wellbeing (Tribuzio & Rittinghausen 2023).

ECCV's grassroots 'intelligence' from migrant communities and the ethnic support sector certainly supports these research findings, namely that seniors from culturally and linguistically diverse backgrounds are struggling in the face of rapidly changing digital technologies and, most importantly the growing need to connect online for a range of basic services such as Centrelink¹, MyGov², My Aged Care³, Medicare⁴, and the NDIS⁵, as well as for banking, utilities and everyday activities like paying for parking. In fact, the need for digital proficiency has become pervasive for most areas of contemporary life. Difficulties and barriers, which are often experienced as insurmountable, have also come to ECCV's notice over time through its direct program work with carers, through elder abuse workshops, in connecting older people applying for the Power Saving Bonus⁶, and the Victoriawide Access & Support⁷ network that ECCV manages, to name a few. In addition, we are hearing the

¹ Services Australia delivers Centrelink social security payments and services to Australians.

^{2 &#}x27;myGov' is a way to access government services online in one place. Viewed 7 July 2024 at: https://my.gov.au/

³ My Aged Care is the starting point for accessing Australian Government-funded aged care services. Viewed 7 July 2024 at: My Aged Care | HomeMade (homemadesupport.com.au)

⁴ Medicare can help with the cost of seeing a doctor or specialist, getting medicines and going to hospital. Viewed 7 July 2024 at: https://my.gov.au/en/services/health-and-disability/seeking-medical-help/help-paying-for-medicines-and-health-care/medicare#about-medicare

⁵ The NDIS provides funding to eligible people with disability to gain more time with family and friends, greater independence, access to new skills, jobs, or volunteering in their community, and an improved quality of life. It also connects them to services in the community. Viewed 7 July 2024 at: https://www.ndis.gov.au/understanding/what-ndis

⁶ The Power Saving Bonus was a Victorian Government program that offered eligible Victorian households a \$250 payment to help ease cost-of-living pressures and encourage them to compare energy offers and save money.

⁷ The Access and Support (A&S) program supports people with diverse needs to live independently at home by providing them with information and connecting them with in-home aged care service providers.

same themes from our collaborators and partner organisations in the migrant support and aged care sectors.

Centrelink is often given as an example of digitally-excluding practice. Older people from migrant backgrounds, and support professionals either working for or associated with ECCV, recount the reduced availability of face-to-face support at Centrelink offices, with older people asking for information or assistance often being pointed to a bank of computers and told to go online. It should be added that we occasionally hear of exceptions with responsive and helpful Centrelink staff in some offices. When such help is not forthcoming bilingual workers from community-based organisations very often step into the breach, as do some unpaid community members and leaders, albeit performing unfunded but vital work as intermediaries.

Learning about and accessing My Aged Care is another example of digital exclusion, preventing older people from receiving vital support. In general, seniors from culturally and linguistically diverse backgrounds need someone who is digitally (and bureaucratically) literate and who speaks their preferred language to hear about and access My Aged Care, receive an assessment for support, and to understand their aged care package when and if they receive one.

In general, as the requirement to go online to manage one's own life has become ubiquitous, it has created a new 'disability' i.e. being 'digitally illiterate'. Seniors are increasingly asked to 'log in', create an account, download an app, or navigate their way through English-language website pages to find their way to text in their preferred language. This, of course, assumes that older people from migrant backgrounds are literate in their own language, which is not always the case. In such circumstances text-based information is not helpful at all, whether online or in a paper flyer.

Even when seniors from migrant and refugee backgrounds are literate in their first language and/or in English, and they have basic digital literacy, the frequent and rapid change in digital technologies, applications, and websites creates enormous stress. Additionally, websites are often incomprehensible for seniors e.g. because of being in small print, using technical language or jargon, and/or being inaccessible for people who are vision or hearing impaired. In this vein, we have heard that even 'Telehealth' is difficult for older people from migrant backgrounds who have hearing problems, who then require a trusted person at hand to interpret what the interpreter is saying. This all points to the evident intersectionality of barriers to inclusion, relating to ability/disability, preferred language, level of literacy and education as well as digital literacy.

It should also be noted that not all seniors, whether or not from English-speaking backgrounds, have smart phones, laptops or other digital devices, or even email addresses for that matter. This presents a substantial impediment to connecting with the supports, services or information they need.

Presented with such barriers, it is not surprising that many do not even make it to 'first base', 'simply' going without the vital information and services they need. As recounted by a reference group member for this review: 'People from CALD backgrounds miss out on lots of services because of low digital literacy. Sometimes they give up. One got an Aged Care Package, but couldn't navigate the system and she died before she could get help'.

The fortunate ones have a tech-savvy intermediary in the form of a family member, friend, community contact or service provider who speaks their language, is 'digitally literate' and willing or able to help. Nevertheless, not all family members are able to assist and, conversely, many seniors are ashamed or embarrassed to ask anyone for help, especially when they have always managed their affairs independently.

While we hear that many seniors go to libraries, councils, neighbourhood houses, or mainstream service providers for help to navigate online platforms for a range of purposes, when they are from a migrant background they still tend to encounter language and cultural barriers as further impediments.

Thus, as more services and organisations are requiring people to 'go online', notably government services, many older people who are not 'digitally literate' or digitally connected find themselves excluded from the help and services they need. Too often they are less able to manage their own affairs, become isolated, and face declining health in the absence of the support they need. Many times they feel frustrated, disempowered, disconnected and even humiliated as their general lifecompetence is brought into question.

Alarmingly, the ubiquitous need for digital literacy to manage one's affairs is making many older people from migrant and refugee backgrounds more vulnerable to elder abuse, along with their increased dependence on adult children. As one support professional said: 'Where is their voice, if their children are talking for them'. She added that 'financial abuse is the number one form of elder abuse', as older people are forced to hand over management of their financial affairs to family members. Online theft from strangers is a problem too, as older people from culturally diverse backgrounds become particularly vulnerable to scams.

For these reasons, ECCV chose the research topic of digital literacy for seniors from migrant and refugee backgrounds, as one of high and urgent priority.

Outline of this paper

The 'digital exclusion' of seniors is far from being unique to older people from culturally diverse backgrounds, even while they experience substantial additional layers of exclusion associated with their language and cultural backgrounds. With this in mind, following the Methodology section, the first three areas of investigation in the Findings section are:

- international research on the digital literacy of older people in general
- Australian research on the digital literacy of older people
- Australian research on the digital literacy of older people from migrant backgrounds.

The latter section concludes with the relevant views and experiences of Not-For-Profit organisations as expressed in submissions to the *Victorian Parliamentary Inquiry into the Support Needs of Older Victorians from Migrant and Refugee Backgrounds* in late 2021 and early 2022, providing considerable validation and grounding to some of the academic research previously cited.

A fourth sub-section introduces the topic of Artificial Intelligence (AI) as a quickly emerging form of digital technology, which was elevated as a topic of interest by the reference group for this research.

The Findings from the report are reflected on and discussed as a whole in the Conclusion, followed by a list of Recommendations.

Methodology

What is 'digital literacy'?

In providing the background interest for this research, the introduction explored a range of meanings and manifestations of 'digital literacy' and what happens in its absence i.e. 'digital exclusion' for older people from migrant and refugee backgrounds. While it would not make sense to conclusively define 'digital literacy' including its parameters 'a priori' i.e. before the current research is carried out (Borrell 2008, pp.18,19), it may be useful to some people to have a description that is broad and elastic enough to allow for what might be discovered in the research process.

JISC⁸ usefully offers a definition of 'digital wellbeing' which places 'digital literacy' (mastery of digital tools, devices and platforms) within real-world contexts, which might be useful for this project:

The capacity to look after personal health, safety, relationships and work-life balance in digital settings; To use digital tools in pursuit of personal goals (e.g. health and fitness) and to participate in social and community activities; To act safely and responsibly in digital environments; An understanding of the benefits and risks of digital participation in relation to health and wellbeing outcomes (JISC 2019).⁹

Topics and sources

The research was exploratory, with a literature review carried out on the following topics:

- *digital exclusion,* particularly for people from migrant backgrounds forms this takes, effects, and factors involved
- *digital inclusion,* particularly for people from migrant backgrounds forms this takes, effects, and factors involved
- programs, remedies, initiatives and actions to address digital exclusion, particularly for older people from migrant backgrounds.

The main sources of information were:

- peer-reviewed academic articles
- selected Government reports and policy documents (Australian and Victorian)
- internet search of relevant programs and initiatives

⁸ JISC is a UK-based, NFP digital data and technology agency focused on tertiary education and research.

⁹ Full definition of digital wellbeing: 'The capacity to look after personal health, safety, relationships and work-life balance in digital settings; to use digital tools in pursuit of personal goals (e.g. health and fitness) and to participate in social and community activities; to act safely and responsibly in digital environments; to negotiate and resolve conflict; to manage digital workload, overload and distraction; to act with concern for the human and natural environment when using digital tools. An understanding of the benefits and risks of digital participation in relation to health and wellbeing outcomes' (JISC 2019).

- relevant submissions to the Victorian Parliamentary Inquiry into the Support Needs of Older Victorians from Migrant and Refugee Backgrounds Government
- some 'grey literature' deemed to be of particular relevance (including reports produced by ECCV, submissions to government, and program descriptions).

The literature search methodology is provided at the end of this section.

Reference group

The research was guided and supported by a reference group, which met twice during the project. The four members were:

- ECCV Board member/ Chair of ECCV Positive Ageing and Aged Care Policyt Advisory Committee/ AMCS Manager Community Strengthening
- ECCV Ageing Well Lead
- ECCV Senior Policy Advisor
- ECCV Director, Advocacy & Strategic Communication.

The researcher chaired the reference group meetings and took notes on meeting discussions.

The role of the reference group was to:

- provide guidance for the research project and provide collective reflection and analysis
- make suggestions for research directions, articles, and reports for the literature review
- provide feedback on the research halfway (at 1st meeting) and provide suggestions for following directions
- provide feedback on the Draft Report.

Literature search methodology

Digital literacy

A search for research articles about digital literacy was carried out at the Baillieu Library at the University of Melbourne, using the 'Discovery' search engine which has access to all data bases held by the University's libraries. The initial search was limited to:

- Peer-reviewed journals
- Published last five years (1/1/2019 to 31/12/2024¹⁰)
- Older people
- Digital literacy
- English

The number of references retrieved was 89, later revised by the search software to 43 when duplicates were removed.

Subsequent searches were generated to focus on people from migrant and culturally diverse backgrounds, with the following terms used one-by-one in addition to those above i.e.: migrants, migrant background, non-English speaking, culturally diverse, linguistically diverse, CALD and culture. Given the much smaller sample of research articles, these searches were expanded from the 'last 5 years' to 'last 10 years'.

Altogether, these searches yielded nine additional articles. After removing those already retrieved and articles that were not relevant, two new articles were found. While not a large number, these were of high relevance – relating to the digital literacy of older people from migrant backgrounds in Australia¹¹.

In addition, relevant documents identified in previous ECCV searches were followed up, which related to government policy, ECCV documents, and community programs raising the digital literacy of older people from migrant backgrounds.

A desktop search was also carried out to find information about digital literacy programs in Australia. 'Digital literacy programs older people' was typed into the Google search engine. Programs found via this and related terms are outlined in the Attachment.

Artificial Intelligence (AI)

While 'Artificial Intelligence' rarely featured in these sources for 'digital literacy', it was deemed to be of interest and relevance by members of the Reference Group. A subsequent preliminary search was thus carried out by the same method outlined above broadly speaking. Specific search terms (in combination) were: Artificial Intelligence, Older people, Support, Peer-reviewed journals, Published last five years, English, Academic journals, and Full text. Twenty-eight articles from this search were deemed to be of initial relevance for this project.

¹⁰ Actually a little over four years and four months)

¹¹ During a subsequent visit to the library, searches using the same parameters were made, however without restriction to 'peer reviewed'. This yielded, 107 results, 57 after duplicates were removed. Following discussion with a policy colleague at ECCV, it was decided not to use these, given that the academic integrity of the articles could not be verified and also because most did not specifically refer to people from migrant or culturally diverse backgrounds.

Findings

International research on the digital literacy of older people

A central finding from the literature search for this project was the abundance of relevant international studies indicating that digital exclusion of older people is a pervasive, world-wide issue of concern with similar themes reverberating across a range of nations and jurisdictions, albeit with some differences according to local contexts. This section explores key insights and findings from this literature relating to digital exclusion and programs, and initiatives designed and implemented to increase digital inclusion.

Digital exclusion

As described in an article published by the World Economic Forum, it is commonly expected that 'consumers' engage with digital technology, leading many older people and other vulnerable groups (including people with disability) to be effectively 'locked out of society', and unable to participate in everyday life in a myriad of ways (Wilson-Nash & Tilson 2022). Examples of such exclusion include inability to: pay for parking or train tickets, to shop when QR codes are used, carry vaccine or COVID-19 passports, use self-service checkouts, go on holidays, get health care and prescriptions, and connect with social groups that use digital platforms (Wilson-Nash & Tilson 2022).

In an Irish study, impacts of an increasingly digitised society on older people were said to include:

- barriers to accessing financial services, which may necessitate handing financial control to a friend or relative
- risks of financial abuse
- reduced access to government services in the context of a 'digital first' approach e.g. renewing a driving license or passport
- reduced personal safety in emergencies
- overall less independence
- reduced ability to participate in public policy development and consultation (Age Action for All Older People 2020).

Negative impacts from the digitalisation of services were said to exist, even when non-digital avenues were used, for example with the closure of Post Offices and banks, stamps becoming pricier, and higher costs to make international phone calls (Age Action for All Older People 2020). A central point made in this report was the increasingly disabling nature of a societal context that requires mastery of digital devices and platforms for social inclusion, civic participation and the ability to manage one's own affairs.

While the COVID-19 pandemic and the associated 'lockdowns' increased the use of digital communication technology (ICT), it also accelerated and exposed the 'digital divide' i.e. between more adept users of digital technology who were connected to the internet and had suitable devices (generally younger), and those not connected or confident with digital technology (generally older).

An exploratory paper based on an extensive literature review by Martins Van Jaarsveld found that the older population which was worst affected by the virus and the lockdowns benefitted least from digital solutions, with the 'digital divide' reflecting a longer standing inequality world-wide (2020). The author advocates for increased attention, resources, and measures to improve digital literacy and '(to close) the digital divide for good' (Martins Van Jaarsveld 2020).

In similar vein, Mikolajczyk looked at the digital literacy of older people in the context of human rights, specifically the capability of universal rights instrument to compel states to work toward digital inclusion of older people. An important premise of the study was that 'transferring many life activities to the global network during the 2020 pandemic has clearly proved that low digital literacy may result in social exclusion and limit ... the exercise of various human rights' (2023, p.403).

Access to *healthcare* was identified as a particular issue during COVID-19. One qualitative synthesis of the research literature found that COVID-19 highlighted digital inequalities in people's access to services such as healthcare, with the experiences and perceptions held by older people of communicative e-health being generally negative. Barriers to digital access included extrinsic factors in limited support networks and complicated application interfaces, as well as the intrinsic factor of low digital literacy, (Aslan, Mold, van Marwijk & Armes, 2024). Highlighting the social aspect of any 'remedy', it was recommended that greater emphasis be placed on the provision of support networks to increase the adoption and use of communicative e-health services (Aslan et al, 2024).

Interestingly, one international research team looked at 'life after lockdown' and the experiences of older adults in a 'contactless digital world'. The investigation included a qualitative survey with 93 UK-based respondents and subsequent interviews with nine people, all aged over 50. The thematic analysis revealed both intrinsic factors (digital literacy) and extrinsic factors (malfunctioning technology) as not only limiting social inclusion but also sometimes leading to feelings of social humiliation. With the latter in mind, it is perhaps not surprising that self-directed ageism was revealed as one de-motivational factor for using digital technology (Morrison, Nicholson, Wood & Briggs 2023).

Another study investigating social media use by older adults via in-depth interviews uncovered substantial variation in purpose for engaging, use patterns, contributions and challenges. Overall, it found that insufficient media literacy options limited their capacity to address their issues in the mediated spaces of social media. In conclusion the researchers identified a need to include and engage seniors in the design and provision of media literacy programs to assist them in developing digital competencies (Zainab, Mansoor & Bukhari 2022).

Also relating to the social realm, an Italian study of people over 60 years old which utilised data from 1,381 questionnaires highlighted that low digital literacy and poor use of technology exposed older people to the risk of social exclusion. Digital education projects were therefore deemed important, with barriers being digital disconnection, lack of use and comfort with digital devices, and above all the lack of motivation to improve digital skills. Interestingly, across the time of the study (comparing 2019 and 2022), the respondents' opinion of the digital world actually became worse (Claudio 2023).

Other studies have focused on particular types of digital exclusion or inclusion. An interesting South Korean study looked at older people's experiences of self-service technology in fast food restaurants. An off-site survey was conducted of people in their 60s and 70s, with a statistical analysis of results showing that perceived ease of use and also time pressures influenced the (pervasive) level of negative emotion toward self-service technology. The study recommended the development of a nationwide digital inclusion policy to help bridge the digital divide (Nam, Kim, & Jung 2023).

A Chinese study focused on financial implications of low digital literacy in older people. Using household survey data, with comparisons made across age and region, it was concluded that digital literacy increases risky asset ownership in the financial market among middle aged and elderly population groups, with findings implying that the digital divide may lead to an asset divide and wealth inequality (Wang, Liu & Lan 2023). Again elevating the important of the 'social', it was suggested that family and social assistance to improve the digital literacy of disadvantaged population groups may increase financial inclusion (Wang et al, 2023).

Digital inclusion

While few studies focus solely on the *benefits* of digital inclusion, this topic is often implicit in research on digital exclusion (as a counterpoint to being excluded from various dimensions of life) and in the design of progressive programs and initiatives that aim to improve digital inclusion (with the benefits either clearly articulated or taken as a given).

The briefing paper by Irish advocacy group: Age Action for All Older People, describes some of the benefits of digital literacy in more detail. Use of the Internet by older people was said to:

- increase positive health-related outcomes
- decrease loneliness and isolation
- assist in connecting with family around the world
- enable use of Internet to start a business
- enable campaigning on social issues or building support or craft groups
- support creation of blogs and videos to capture local history (2020).

More generally, an academic study in Iran using a survey methodology concluded that 'all parameters of digital literacy had a direct and significant effect on quality of life of the elderly' (defined as people 64 years and older) (Hatamnezhad, Ghafari Ashtiyani & Seyedi 2021). Additional findings from the academic literature about the nature and benefits of digital inclusion for older people are included in the following sub-section on 'programs and initiatives'.

Programs and initiatives

Many programs to improve older people's digital literacy have been trialled, implemented and evaluated overseas. Some have had a broader goal of increasing social and civic participation and inclusion, rather than digital connection alone.

Elements of successful digital literacy programs include the following:

- Assessment of access to ICT (Information and Communications Technology) at intake; flexible and customised training to match skills (Finkelstein & Brennan-Ing 2023).
- Beginning with older person's interests, preferences, and/or needs (Finkelstein & Brennan-Ing 2023; Mullins 2022; Zaid, Rauf, Ahmad, Zainal, Razak & Shahdan 2022).
- Good communication such as through community-based organisations, intergenerational learning, group activities and collaborative (peer) learning – usually to solve real-life problems (Mullins 2022; Zaid, Rauf, Ahmad, Zainal, Razak & Shahdan 2022).

- Flexibility in program design and delivery e.g. one-to-one, group, or drop-in options (Mullins 2022).
- Translation of curriculum information into multiple languages (Mullins 2022).
- Peer-led technical support approaches for use of digital media (Hunsaker, Nguyen, Fuchs, Karaglu, Djukaric & Hargittai 2020; Mullins 2022).
- Partner support (which could either aid or discourage, depending on how assistance was provided) (Marler & Hargittai 2024).
- Ensuring that participants understand online security (Mullins 2022).
- Provision of own devices and access to Wi Fi to reinforce learning (Casselden 2023); tablets as preferred devices (Mullins 2022).
- Addressing fears of digital technology, and lack of confidence (Casselden 2023).
- Safe and supportive context of sheltered housing (Casselden 2023).

One study which focused more broadly on local democratic processes and 'age-friendly digital urban governance' revealed the importance of coordinated, multi stakeholder initiatives in promoting digital literacy and overcoming barriers based on ageism. Furthermore:

...True representation of older people in local governments, the promotion of co-creation initiatives led by seniors, and the standardisation of universal design and accessibility are some of the key contributions made by Spanish cities in their transition toward places that are digitally inclusive and age-friendly (Kolotouchkina, Vinaras-Abad & Manas-Viniegra 2023).

The question of whether the social and civic inclusion of older people can or should rest entirely on their digital skills and programs will be explored in the following sections pulling together relevant Australian research.

Key points

- An abundance of international studies demonstrate that digital exclusion of older people is a pervasive, world-wide issue of concern.
- An increasingly disabling societal context requires mastery of digital devices and connection to the internet for social inclusion, and civic participation.
- While the COVID-19 pandemic and the associated 'lockdowns' increased the use of ICT, it also accelerated and exposed the 'digital divide'.
- It is now commonly expected that people engage with digital technology to receive
 information and services, leading many older people and other vulnerable groups to be
 effectively 'locked out of society', and unable to participate in everyday life.
- Impacts of digital exclusion include less independence, a higher risk of financial abuse, reduced personal safety, and limits to the exercise of human rights.
- Intrinsic factors (digital literacy) and extrinsic factors (malfunctioning technology) may sometimes lead to feelings of social humiliation.
- Successful elements of digital literacy programs include: assessment of digital skills and access at intake, peer-led technical support, good communication such as through

community-based organisations, and flexible and customised training beginning with older person's interests, preferences and needs.

Australian research on the digital literacy of older people

Moving from the international context, this section focuses on the situation of older people in Australia and their experiences of digital exclusion and inclusion. Key findings from the academic literature are examined, as well as programs and initiatives from the research and from government strategies.

Digital exclusion

The issue of digital exclusion of our seniors is particularly pressing in the context of an ageing population in Australia. By 2062 it is expected that the number of people over 65 will double and the number of people over 85 will more than triple (Australian Government 2024a, p.5). This will require an increase in the aged care workforce to meet the demand (Australian Government 2024a, p.5).

Beyond important support and care needs, the implications of digital literacy and digital exclusion for this expanded older population, are broad. As stated in the Australian Government's *Data and Digital Government Strategy*, it is difficult to think of aspects of our life that aren't touched on in some way by digital technologies (2023, p.4). While it is acknowledged that 'Australians increasingly take up technology to do everything from banking to accessing support payments to seeing a doctor', the Strategy focuses on improved digital solutions as per its purpose i.e.:

The Strategy sets out the Australian Government's vision to deliver simple, secure and connected public services for all people and business, through world-class data and digital capabilities... (2023, p.4).

Nevertheless, consultations for the initial Strategy confirmed that those most in need of government services can often feel left behind by the shift towards digital technology (2023, p.7), and that there is a persistent digital divide for certain population groups such as Aboriginal and Torres Strait Islander people, people from lower social-economic backgrounds, those living in regional and remote areas, and older people (2023, p.7). Certainly, the strong relationship between age and digital literacy levels in Australia has been well established (Australian Government Office of the eSafety Commissioner 2018; Thomas, McCosker, Parkinson, Hegarty, Featherstone, Kennedy, Holcombe-James, Ormond-Parker, & Ganley, 2023). As identified by the Australian Digital Inclusion Index, the number of Australians who are highly excluded has declined but remains substantial, with some groups — particularly people over 75 years of age, experiencing higher levels of digital exclusion and scoring well below average in relation to the three main dimensions of (digital) access, affordability, and ability (Thomas et al, 2023). To elaborate:

Despite gains in overall scores between 2021 and 2023, people aged over 65 maintain lower scores than the national average. Those aged 65-74 record scores 12.1 points below the national average, while those over 75 record scores 24.6 points below. For people over the age of 75, disparities in Digital Ability (41.6 points below the national average) and Access (18.0 points below the national average) are considerable (Thomas et al, 2023, emphasis mine).

In particular, the figure below shows how low the Digital Ability score is for Australians 75 years and over, as compared to other age groups, using the Australia Digital Inclusion Index (viewed 24 July 2024 at: https://www.digitalinclusionindex.org.au/dashboard/Digital.aspx).

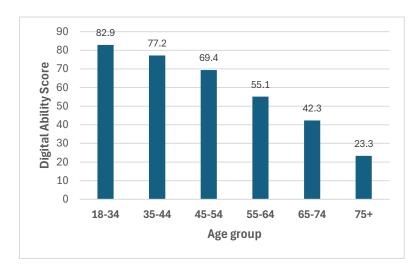


Figure 1: National Digital Ability Score X Age group

This is indeed a problem for a majority of our senior citizens – not only for their social and civic participation, but also for their capacity to exercise life competence and manage their lives in fundamental ways. As pointed out by the Victorian Government, Department of Families, Fairness & Housing (DFFH) given the rapid growth in use of digital platforms by banks, governments and essential services, and as the online world becomes more complex, many people need extra support to use online services and resources (2022). They are vulnerable to exploitation and scammers, with older people being the most vulnerable:

The Australian Competition and Consumer Commission reports that between January and September 2021 people aged 65 years or older lost the most money of any age group to scammers: in total, \$49.1 million or 23 per cent of total losses occurred in that period (Victorian Government DFFH 2022, p.16).

While many people turned to digital connection with family and services during the COVID-19 pandemic, the so-called 'digital-divide' was exposed during this time, namely the widening gap between those connected and those not-connected (Victorian Government DFFH 2022, p.16). As mentioned in the previous section, this was a worldwide phenomenon. It is certainly consistent with ECCV's own research centred on Victoria, which will be expanded on in the following section (ECCV 2022b; Tribuzio & Rittinghausen 2023).

Specific barriers to digital inclusion identified by the Commissioner for Senior Victorians in consultations in 2019 included: a lack of ability to use and keep up with technology, the cost of maintaining and updating systems, and the difficulty of finding someone to help improve technology skills (Victorian Government DFFH 2022, p.16). The resonances with international research as outlined in the previous section are obvious.

Digital inclusion

At the same time, the benefits of digital connection were highlighted in the Victorian Government report cited above, particularly with reference to the COVID-19 pandemic and associated lockdowns i.e.:

There are many social benefits to being online and connecting with family, friends and communities of interest across the globe. There are economic benefits in being able to take advantage of online goods and service offers. These parts of the 'new normal' of the pandemic include:

- shopping online
- completing forms or applications on websites
- using telehealth for medical appointments
- accessing digital vaccination certificates
- getting information for help and support online
- family connection and essential services during lockdowns (Victorian Government DFFH 2022).

Conversely, these dimensions of life management become negative if not equally accessible to those not digitally proficient or lacking access to devices and online connection.

Programs and initiatives

The Australian Government's *Data and Digital Government Strategy* acknowledges that various groups experience disadvantage through digital exclusion, stating that:

Some individuals and community groups still have very limited or no access to the internet or are excluded because of a lack of availability, affordability, poor design or digital ability. It is crucial the Government delivers services in a way that recognises these accessibility issues and still meets the needs of their diverse users...The Government will ensure everyone, whether they are living with disability, live in remote and regional communities, are culturally or linguistically diverse, have limited digital ability, or otherwise, can access and engage with the government services and programs they need (Australian Government 2023a, p.13, emphasis ours).

However, in line with the (digital) focus of this Strategy, better digital access is largely framed as the remedy i.e.:

To ensure all people can access and benefit from its services, the Australian Government commits to:

- providing omni-channel service delivery to ensure digitally delivered services are accessible over the phone or face to face
- ensuring all websites and services meet the latest Web Content Accessibility Guidelines
- implementing the Digital Service Standard to embed best-practice service design and accessibility across the APS
- embracing new technologies and leveraging data and insights to increase empathetic service design e.g., natural language processing to enhance services for non-English speakers (Australian Government 2023a, p.13).

As well as focussing on the infrastructure of digital technology to make it more user-friendly and accessible, many programs in Australia, as well as internationally, aim to improve people's digital skills and online access.

Focusing on older cohorts, an evaluation of a national program to increase digital literacy, 'Be Connected', provides some valuable insights for optimal program design (Suchowerska & McCosker 2022). This program aimed to increase the confidence, skills and online safety of older Australians using digital technology. Resources provided through the program included a website with information and training tools and, importantly, access to personalised support and mentoring through numerous local organisations such as libraries, neighbourhood houses, community clubs and retirement villages (Suchowerska & McCosker 2022).

The investigators cite prior research supporting the localised aspect of Be Connected, specifically that the interpersonal support provided by community-based organisations supported older people to use ICT, whether this was through intergenerational mentoring, training in local libraries, or computer club gatherings for culturally diverse groups (Suchowerska & McCosker 2022). This is consistent with a study of Australian and Canadian libraries which investigated how these local places create programs to increase the digital literacy of older people, support informational interests and combat ageism (Wynia Baluk, McQuire, Gillet & Wyatt 2021). The approach in both countries was community engagement, strategic partnerships and experimentation, with the latter experimental approach suggesting an iterative approach of trying out new ideas and then responding to what works or doesn't work, in turn leading to further refinement of programs. This could be termed a 'community responsive' approach. Consistent with this, the researchers suggested that programs be co-located with community services for older people (Wynia et al 2021). The interpersonal face-to-face dimension of such programs is no doubt important, a point highlighted by the Australian Government Office of the eSafety Commissioner:

Older Australians, particularly those aged 70 years and over, with limited or no experience in using digital devices, have identified that face-to-face learning is the preferred option for building digital skills and confidence (2018).

In reviewing the relevant literature, the authors of the Be Connected evaluation further found that programs emphasising a *learner-oriented* and *interests-based* approach had been particularly successful in building skills and engaging older learners, with digital participation being embedded in the activities and requirements of everyday life (Beh, Pedell & Mascitelli 2018; Davis, McCosker, Bossio & Schleser 2018, as cited by Suchowerska & MCosker 2022).

On a higher level, the evaluation of Be Connected itself, found that the effectiveness of the model relies on balancing the provision of centralised, standardised resourcing with localised adaptation and responsiveness to people and groups (Suchowerska & McCosker 2022). The second factor underpinning effectiveness of the program related to the first i.e. achieving cohesion through shared goals while also promoting diversity and independence of local organisations. The researchers elaborate that such balance can be achieved through the 'co-creation' of programs and that the co-creation of program resources is necessary for engaging vulnerable groups (Suchowerska & McCosker 2022). Perhaps not surprisingly, such co-creation is said to be deeper and more effective when occurring *earlier* in the development of programs and initiatives. The researchers also found that effectiveness would be improved with closer involvement of the resource creators with digital literacy programs on the ground. In the words of the researchers:

In the context of Be Connected, more hands-on involvement in the day-to-day activities of networked organisations could have offered new opportunities for co-creation that brought together different types of expertise to improve the validity of the content of resources and how they were structured (Suchowerska & McCosker 2022, p.7).

Overall, digital inequities in society were said to require state-based intervention, while a localised approach to program design and delivery is required, in collaboration with community organisations and groups (Suchowerska & McCosker 2022).

When goals are cast more broadly, such as capacity to manage one's own affairs, access to information and services, or quality of life, 'solutions' also tend to be broader than 'merely' increasing seniors' digital literacy. The Victorian Ageing Well Action Plan presents this case well (Victorian Government Department of Families, Fairness & Housing 2022). While the Plan includes as a priority 'tech-savvy seniors', and notes a request to the Commissioner for Senior Victorians to provide advice about how to improve levels of digital connection for senior Victorians, it also acknowledges that some seniors may never become digitally literate and that alternatives need to be provided for this group. This is illustrated in the following quote, with onus placed on government departments to provide alternatives to online access.

Some people may never make the leap across the digital divide. We will ask government departments to develop options for alternatives to online access for services targeted to seniors. This will include key social services that currently only offer online access (Victorian Government Department of Families, Fairness & Housing 2022).

Another Victorian Government plan, the *Digital Strategy 2021-2026*, inevitably places higher priority on optimising digital connection and capacity, given it is a *digital* strategy. However while two of its three outcomes are: *a digital-ready public sector*, and *a thriving digital economy* (with a focus on greater integration of information and a single portal for users to access services), its first-listed priority is broader: 'better, fairer, more accessible services'. In another part of the strategy, this is expressed as: 'universally accessible government services', with the elaboration: 'Design services to be accessible by all including those with poor digital access, disability, low income and culturally or linguistically diverse backgrounds' (Victorian Government 2021).

At a national level, the recently released *Aged Care Data and Digital Strategy 2024-2029*, also notes that alternatives to digital connection need to be provided for older people requiring support, for example:

Despite the Strategy's digital focus, older people can still get aged care information and services in person or by phone if they prefer (2024a, p.7).

The Strategy is not about forcing older people and their support networks to adopt digital technology or replacing face-to-face contact with digital channels. Instead, it provides more ways for older people to access information and services they need, while also freeing up time for workers to deliver high-quality care (2024a, p.8).

Nevertheless, with the Strategy having a digital focus, the means by which older people are to experience health and wellbeing and a good quality of life are deemed to be best served through digital technology. As illustrated in the Box below, Outcome 1 of the Strategy is most closely aligned with the focus on this paper i.e. that 'older people and their support networks can navigate and actively participate in their care and wellbeing' (2024a, p.7).

Aged Care Data and Digital Strategy 2024-2029

Vision

To deliver the highest quality person-centred care for older people while driving a sustainable and productive care and support economy through data and digital innovation.

Outcomes

Outcome 1: Older people and their support networks can navigate and actively participate in their care and wellbeing.

Outcome 2: Aged care workers, service providers and health professionals are digitally empowered to provide higher quality and better-connected care.

Outcome 3: Data is shared and reused securely to deliver a sustainable and continually improving aged care system.

Outcome 4: Modern data and digital foundations underpin a collaborative, standards-based care system.

(Australian Government 2024a, p.7).

While Outcome 1 focuses on older people's wellbeing, and their agency in finding and accessing the care they need, progress on this Outcome is said to mean: 'making data and digital technology more accessible and useful...' The following elaboration provides the reasoning or 'program logic' for this statement:

Building and sustaining digital literacy and using this to increase people's health literacy should enable people to take greater control of their own ageing and age well. This outcome looks to improve digital inclusion for older people and their carers, including a focus on vulnerable groups... (Australian Government 2024a, p.23).

With this in mind, it is not surprising that 'key indicators' of success for Outcome 1, do not relate directly to the broad and laudable outcome of older people and their support networks navigating and actively participating in their own care and wellbeing. Specifically, the three indicators for this outcome are: (i) older people's digital and health literacy score, (ii) number of users for key digital channels (such as My Aged Care, and Be Connected), and (iii) percentage of users satisfied with engagements via digital channels (Australian Government 2024b, p.26).

Outcome 2, that 'aged care workers, service providers and health professionals are digitally empowered to provide higher quality and better connected care', similarly includes a focus on the 'quality and delivery of person-centred care' (Australian Government 2024a, p.24). One of the priority areas to achieve this outcome is 'Maximise time for direct care', which is said to be about: 'using data and digital technology to optimise the use of time and resources, so more time can be dedicated to providing high-quality care for older people'. By this account, efficiencies are not directly aimed at cost savings per se or increasing the workforce, but on increased time that is freed up for the direct care of seniors (Australian Government 2024a, p.24). Nevertheless, the key indicators for this outcome do not reflect this, but rather focus on digital mastery and uptake as an end in itself i.e.: (i) worker digital literacy scoring, (ii) provider digital maturity assessment, and (iii) number of automated data pipelines developed (Australian Government 2024b, p.26).

Overall, the development of the *Aged Care Data and Digital Strategy 2024-2029*, was guided by a 'principles-led approach', reflecting the Statement of Principles, aligned with the Statement of Rights

in the new Aged Care Act (Australian Government 2023b). The Strategy's Principles were designed to support the following rights:

- informing choice about care
- protecting the privacy of personal information
- supporting an individual's identity, culture and diversity (Australian Government 2024a).

Continuing from the third listed right, the following section focuses on digital literacy issues for older people in Australia from *culturally diverse backgrounds*, bringing us to the core area of interest for this review.

Key points

- Australia's older population is projected to expand into the future, increasing demand on aged care services.
- Australians over 75 years of age, experience higher levels of digital exclusion and score well below average in relation to access and affordability as well as ability.
- There has been rapid growth in the use of digital platforms by banks, governments and essential services, and as the online world becomes more complex, many older people need extra support to use online services and resources. Of particular concern, they are particularly vulnerable to exploitation and scammers.
- Barriers to digital inclusion for senior Victorians include a lack of ability to use and keep up
 with technology, the cost of maintaining and updating systems, and the difficulty of finding
 someone to help improve technology skills.
- Successful programs including Be Connected have some common elements such as:
 - o personalised support and opportunities for face-to-face learning
 - partnerships and co-locations with community organisations and service-based organisations
 - o experimentation and flexible responsiveness
 - o a learner-oriented and interests-based approach
 - o 'co-creation' of programs.
- Some seniors will never become digitally literate and alternatives to online connection for information and support need to be provided and continued for this group.
- The Victorian and Australian Governments have released data and digital strategies that seek to optimise and streamline digital technologies, provide better management connectivity, and make platforms more user-friendly, however meeting broader objectives will still require alternatives to digital mastery and connection for many older people.

Australian research on the digital literacy of older people from migrant backgrounds

A substantial proportion of older Australians come from migrant backgrounds. According to the 2016 Census, one in 5 (20%) of older Australians (aged 65 and over) were born in non-English speaking countries, and 18 per cent spoke a language other than English at home (AIHW 2024). It should be noted that such figures are usually underestimates due to suboptimal practices in current Australian data collection and reporting on cultural, ethnic and linguistic diversity, including for the planning and delivery of aged care services (FECCA 2020).

This section examines the issues for older people from migrant and refugee backgrounds in Australia and in the state of Victoria, as relating to digital exclusion, digital inclusion, and implications for overall health and wellbeing.

Digital exclusion and inclusion

The *Inquiry into support for older Victorians from migrant and refugee backgrounds* in 2022 concluded that digital exclusion is a substantial issue for older Victorians, particularly those from culturally and linguistically diverse (CALD) backgrounds. For example, its findings included the following:

- Older people are more likely to experience digital exclusion, exacerbated for CALD older people whose first language is not English (Finding 42).
- Access to government services is increasingly via digital platforms, hence CALD older people may miss out on timely information and services (Finding 43).
- Reliable internet connectivity is a particular issue in regional communities (Finding 45), presenting yet another barrier for seniors from migrant backgrounds.
- Digital service delivery can increase access to support and care but it can prevent CALD older people from accessing services (Finding 7) (Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022).

Shedding more light on this issue, various studies have specifically focused on the situations of older people from migrant backgrounds in Australia, and how they interact with or are affected by digital technology. One study, 10 years old now but still highly relevant, looked at how seniors from migrant backgrounds get their health information. The research included interviews with 54 older Australians aged from 63 to 94 years who were born in Italy or Greece and migrated to Australia, mostly as young adults after World War 2. They had lived in Australia for an average of 47 years, and all were living in the community and in good health (Goodall, Newman & Ward 2014). The researchers found that older migrants from culturally and linguistically diverse backgrounds preferred print and inperson resources for health information. The majority (71 per cent) did not use the internet to find health information and most had no internet connection (Goodall et al 2014, p.735). In general, they relied on adult children, and ethno-specific health professionals and service providers for access to information. Nevertheless reliance on children as interpreters was not without problems, for example:

As interpreters, adult children accept a responsible role, but one that is not without consequences. Our study found the close family relations between parent and child place an additional emotional

burden on children if required to translate distressing information of a personal nature to a parent: acting as interpreters, adult children become ethno-linguistic gatekeepers and in doing so may exercise power in their potential to filter information... (Goodall et al 2014, p.734).

Importantly this study suggested that certain groups of older people will never use 'electronic services' – particularly those with a lower level of education and lower proficiency in the language of the host country (in this case being English) (Goodall et al 2014, p.735).

Despite this, and as already mentioned, in Australia the government prioritises access to information and services through online platforms including for aged care – at least in practice, even while various plans and strategies acknowledge the need for alternative avenues of communication, engagement and support to be provided. (Several examples are provided in this paper).

This 'default to digital' tends to exacerbate the digital divide, creating a sort of 'digital citizenship' that many older people are excluded from (Millard, Baldassar & Wilding 2018). Millard et al were also interested in the relationship of digital literacy with the wellbeing of older migrants, seeing this as an important equity issue, as health information and social engagement increasingly move online (Millard et al 2018). While they view digital literacy as important for maintaining support networks and social engagement, and access to healthcare services, they also note that some older people are not able to afford installation and connections at home, and need the support of government ICT infrastructure (Millard et al 2018).

As noted in the Introduction to this paper, several ECCV studies have highlighted the hardship and exclusion of various sorts for people from migrant and refugee backgrounds due to the now common requirement for everyone to be digitally literate and connected in order to access services, information and make transactions, for example:

...Digital ability is crucial to ensuring fair and equitable access to essential services and online opportunities. When low levels of digital literacy are combined with lack of English fluency, the overall barriers are significant (ECCV 2023).

In particular, risk factors for elder abuse which were exacerbated by the pandemic included increased reliance on digital communications, with many older people from migrant and refugee backgrounds facing barriers to access, and those with conditions such as hearing loss and cognitive impairment being more susceptible to scams (ECCV 2022b).

An interesting study by ECCV involving consultations with representatives from ethnic senior citizens' clubs and culturally diverse seniors groups in Victoria highlighted a widening gap in digital literacy between Australians aged over 65 and the rest of the population (Houghton 2018). This was the case with all culturally and linguistically diverse groups i.e. they had a lower level of digital literacy and familiarity with online services, which presented substantial difficulty for some people involved in running ethnic senior citizens' clubs (Houghton 2018, p.17).

But as others have pointed out, digital inclusion and participation is not only about access, use or even skills; it is also entangled with structural modes of social exclusion associated with generation-based norms (Bossio & McCosker 2021). In one study, four workshops were carried out with two groups of seniors in inner and outer metropolitan Melbourne, with 22 participants aged between 64 and 86. They were mainly from 'Australian' (sic) backgrounds, but with English, Filipino, Greek, Indian, Sri Lankan and Chinese ethnicities represented. Despite the desire to make better use of

digital communication tools, the demands of online platforms for visual self-representation were difficult because participants (a) lacked the social context to negotiate the modes of intimacy and self-expression common to social media use, and therefore (b) they felt they lacked cultural competence to manage or integrate more complex social boundaries associated with social media interaction (Bossio & McCosker 2021). It might be added that an understanding of the dangers of over-sharing personal information may be viewed as a strength that seniors might share with younger people.

Programs and initiatives

As already discussed, various studies and reports have suggested ways to counteract the growing social and functional exclusion of older people, arising from low digital literacy in a world where digital mastery is increasingly assumed or expected. This section looks at ideas and initiatives to counter digital exclusion for older people from migrant and refugee backgrounds in particular – either through improving their digital literacy and access, or providing alternatives to digital connection.

Improving digital literacy, affordability and connectivity

In 2020 ECCV released an 'Issue Brief' based on information provided by CALD seniors clubs and ethnic seniors' federations from the beginning of the COVID-19 pandemic (Abdulhadi & Rukas 2020). As well as reinforcing the value of these organisations in keeping older people from culturally diverse backgrounds connected and healthy, a key recommendation (No.6) was that the Victorian and local governments invest in advancing 'CALD seniors' internet accessibility, digital literacy, and access to computers and tablets in partnership with peak bodies such as Neighbourhood Houses Victoria, Universities of the 3rd Age and ECCV (Abdulhadi & Rukas 2020).

Similarly, the Victorian Government 'Inquiry into support for older Victorians from migrant and refugee backgrounds' highlighted the importance of enhancing the digital inclusion of older people through increasing the access and affordability of devices and internet connections, as well as raising the digital literacy of seniors from culturally diverse backgrounds (Parliament of Victoria 2022, Chapter 7). The Inquiry also recommended that the government work with libraries, neighbourhood houses, local governments and community organisations to loan out digital devices [No.54] and increase investment in internet connectivity in regional and rural Victoria [No.55] (Parliament of Victoria 2022).

Community-based ways of engaging seniors to raise their digital skills, were proposed in the same report, for example it was recommended that 'the Victorian Government advocate to the Australian Government to fund the Be Connected network to create tailored digital mentoring programs and digital literacy resources for culturally diverse older people' (No.52). Furthermore, bilingual workers were seen to provide an important role:

Digital literacy training provided by bilingual mentors in community settings is the most effective way to reach culturally diverse older people and improve their digital skills and confidence (Parliament of Victoria 2022, Finding 44).

An interesting study of the role of digital citizenship for the wellbeing of older migrants highlighted the importance of *motivation* to increase digital literacy and supporting this with others in *'communities of practice'* (Millard et al 2018), which is consistent with the research on older people and digital literacy as per the previous section relating to older Australians in general. The organisational context was an internet café provided by Multicultural Community Care Services in Perth, with in-home support for digital connection being provided as well. The study found that older peoples' social engagement, maintenance of support networks, and their access to healthcare services could be enhanced when they were motivated to increase their digital literacy, with this enhanced digital literacy occurring through appropriate educational, technological, infrastructure and social support (Millard et al 2018). Support was more likely to be effective through social learning systems that created 'communities of practice', and it was also important that the older people in the program could choose to work individually with tailored support as well as in groups. The main activities found to motivate engagement were: (i) opportunities for social engagement, (ii) accessing services and information, and (iii) connecting with places and memories of the past and with family overseas (Millard et al 2018).

Providing alternatives to digital connection

As discussed in previous sections, it is evident that many older people will never have the capacity to become digitally connected, and alternatives to digital connection are required for them to be informed, connect with services and manage their own affairs. This is especially the case for older people from migrant backgrounds who came to Australia in the first decades after World War Two (WW2), many of whom were not highly educated and often did not work in jobs where learning English was encouraged or required.

Goodall et al's study in 2018 of people aged between 63 and94 who were born in Italy or Greece and migrated to Australia mostly as young adults after WW2 (already cited) found that they did not generally use computers, the Internet or mobile phones to get (health) information. Personal contact with health providers from the same language background was important, as was receiving information via adult children. Other personal sources of information were doctors and spouses. Media sources most commonly accessed were local TV and the local paper and radio. Not surprisingly, text-based information was not so useful for those with a low level of literacy in their first language as well as that of their host country, thus personal contact with health providers who could speak in their first language was crucial (Goodall et al 2018, p.736). The researchers suggested that certain parties were needed to mediate (in first language) digital access such as adult children, ethno-specific service providers, and general practitioners (Goodall et al 2018, p.736), and recommended that there be simultaneous funding of different non-electronic options such as telephone access (Goodall et al 2018, p.736).

In similar vein, reinforcing the importance of personal, in-language communication and support, studies carried out by ECCV and collaborators found that:

- connections must be made at the grassroots level and information should be provided in places where people already meet and feel safe, rather than in unfamiliar venues or locations (ECCV 2023)
- it is vital for support services to allocate sufficient time to support carers from CALD backgrounds to understand information or provide case management support where needed (ECCV 2023)
- translating and interpreting must be offered when necessary (ECCV 2023)

 digital literacy training provided by bilingual mentors in community settings is the most effective way to reach culturally diverse older people and improve their digital skills and confidence (Tribuzio & Rittinghausen 2023).

Similarly, while ECCV's study of ethnic seniors' clubs and groups supported training in digital literacy for those running them, it also recommended that paper-based options be continued for reporting, registration, compliance and grant applications until such time that club representatives report to Victorian Government that they are comfortable with fully digitalised systems (Houghton 2018).

This is consistent with certain recommendations of the Victorian *Inquiry into support for older Victorians from migrant and refugee backgrounds* i.e. that the Victorian Government and service providers continue to resource face-to-face service options and non-digital communication methods (No.7), and that each government department develops a communications strategy to include the digitally excluded (No.52) (Parliament of Victoria 2022).

A Victorian Government response to this report reiterated a focus on increasing digital literacy, without explicitly acknowledging that a substantial proportion of older Victorians from migrant and refugee backgrounds will never become digitally literate and that inclusion can only be ensured for this group through alternative means of information, communication, engagement and connection with government services (Victorian Government 2023). It stated that the Victorian Government's digital priorities are outlined in *A future-ready Victoria*: *Digital Strategy 2021-26* and the *Digital Inclusion Statement*, with the approach being to remove barriers to digital access and increase opportunities for economic, social, cultural, and community participation through online technologies including for people from culturally and linguistically diverse backgrounds (Victorian Government 2023). Nevertheless, as noted in the previous section, the Victorian Government's *Ageing Well Action Plan* requires government departments to develop options for online access for services targeted to seniors, in addition to its priority of 'tech-savvy seniors' (Victorian Government DFFH 2022).

Beyond the capacity for digital engagement, the Royal Commission into Aged Care Quality and Safety was very clear about the need for an aged care system that is designed for diversity, for example it stated:

To deliver high quality and safe care, those providing services must respect the diverse backgrounds and life experiences of every older person, and tailor the delivery of care to meet their needs. Diversity must be core business in aged care (Australian Government 2021, p.98).

Most recently, the *Aged Care Data and Digital Strategy 2024-2029*, also highlights the need to provide non-digital access to certain groups, including those from culturally and linguistically diverse backgrounds, for example:

Our vision is inclusive, ensuring that lack of digital access through circumstance or choice is not a barrier to quality care. The cultural safety of all individuals and services will be fostered, with particular attention paid to groups with known access issues or specific needs, including:

- First Nations people
- people in remote and rural locations
- Culturally and Linguistically Diverse groups
- LGBTIQA+ people
- people in socio-economically disadvantaged circumstances

• those with limited access due to disability, age, skills or choice (Australian Government 2024a), p.13) (italics mine).

Key points

- There is a widening gap in digital literacy between senior Australians and the rest of the population. Digital exclusion is a substantial issue for older Australians and Victorians, particularly those from migrant and refugee backgrounds.
- The pervasive requirement to 'go online' for information and services is exacerbating the digital divide and creating inequities and a sort of 'digital citizenship' that many older people from diverse cultural backgrounds are excluded from.
- Reliable internet connectivity is a particular issue in regional communities presenting yet another barrier for seniors from migrant backgrounds living in those areas.
- A study of older migrants from culturally and linguistically diverse backgrounds who came to Australia in the post WW2 period did not use the internet to find health information, preferring print resources and in-person communication with professionals who speak their language, or adult children.
- Certain groups of older people will never use digital services, particularly those with a lower level of education, who are not literate in their own language, and have lower proficiency in English.
- Some older people can't afford installation, connections and devices to connect online.
- Digital literacy has presented a barrier for those running ethno-specific seniors clubs in Victoria.
- The Australian Government *Aged Care Data and Digital Strategy 2024-2029* highlights the need to provide non-digital access to certain groups, including those from culturally and linguistically diverse backgrounds.
- While various reports and plans by the Australian Government and the Victorian
 Governments highlight the need to provide information and access to services via non-digital
 avenues, in current practice digital connection by seniors is usually required, leading to many
 older people from migrant and refugee backgrounds missing out on the support they need.
- Digital exclusion is entangled with structural modes of social exclusion associated with generation-based norms. While young people can share their digital skills with seniors in cross-generation programs, seniors could also share their skills with younger people such as the dangers of over-sharing personal information or images.
- Successful digital literacy programs for older people from migrant backgrounds have included: harnessing the motivations of learners, fostering 'communities of practice', providing the choice to work individually with tailored support as well as in groups, and giving appropriate educational/ technological/ infrastructure/ social support.
- One study found the main activities for motivating engagement were: (i) opportunities for social engagement, (ii) accessing services and information, and (iii) connecting with places and memories of the past and with family overseas.

Local NFP insights into the support needs of older Victorians from migrant and refugee backgrounds

This section echoes many points already discussed from the relevant academic research, with 'grassroots' intelligence drawn from submissions to the *Victorian Parliamentary Inquiry into the Support Needs for Older Victorians from Migrant and Refugee Backgrounds* made in 2021 and 2022. These submissions provide valuable insights into the implications of a general requirement for older people from culturally diverse backgrounds to be digitally adept and connected. The submissions also recommend ways of remedying this through training, devices and connection and/or supporting seniors via alternative methods such as in language and face-to-face support and through culturally appropriate services based in trusted organisations.

This section also draws community insights from a recent focus group with older people from migrant backgrounds carried out by ECCV in collaboration with Australian Multicultural Community Services (AMCS) in June 2024, to inform a submission by our national peak body Federation of Ethnic Communities' Council of Australia (FECCA) for the Inspector General of Aged Care (IGAC) review of My Aged Care¹².

Digital exclusion

As highlighted by AMES Australia in its submission to the *Inquiry into the Support Needs for Older Victorians from Migrant and Refugee Backgrounds*, digital skills have become a pre-requisite for most social and community services, which applies equally to older adults who need to engage with digital health, social platforms, and tax and employment services.

According to Cohealth, many older people from culturally diverse backgrounds experience reduced in-person access to information, services and activities with this move to a digital environment:

The increasing use of digital methods such as websites, text messaging and telehealth for information and access to services and activities can provide valuable virtual links and access, as demonstrated during the COVID pandemic. However, for those uncomfortable using these methods, or with limited digital literacy and skills, who do not have the devices, or who cannot afford devices and/or data, the move to digital service provision creates a barrier to participation. When these resources are predominantly provided in English there is an additional barrier for older people from migrant and refugee backgrounds (AMES 2021).

Drawing from its own research, the Good Things Foundation made similar claims, specifically in relation to new migrants:

Research collected in our *Increasing Digital Participation of Refugees and New Migrants* ... and *Digital Nation Australia* ... report(s) show that older Australians and new migrants and refugees are at higher risk of being digitally excluded. Without the skills, confidence and technology to participate online, the settlement experience of new migrants and refugees can be impacted as they face additional barriers to accessing essential services and news online (Good Things Foundation Australia 2021).

¹² IGAC review page viewed 21 June 2024 at: https://www.igac.gov.au/what-we-do/reviews/administration-my-aged-care

The Multicultural Centre for Women's Health (MCWH) highlighted that older women from migrant backgrounds are a subgroup particularly vulnerable to digital exclusion, stating that: 'many technology-based modes of service delivery further exacerbate... the digital divide as it excludes older women of non-English speaking backgrounds from accessing timely early intervention services'.

As well as access to required services, Financial Counselling Victoria (FCVic) pointed out that digital exclusion seriously impedes the ability of older people to manage their own finances, making them highly vulnerable to financial abuse:

Banking and money management introduce significant points of vulnerability for older Victorians. When someone cannot undertake their own money management it is all too easy for a person to help them, and then help themselves to some of the money... Online banking and services may be particularly challenging and, in addition to the 'person helping' situation ..., can expose older people to additional risk from unconscionable conduct and scams. FCVic is aware of some scams that have targeted specific cultural communities (FCVic 2022).

In its submission to the Inquiry, Victorian Arabic Social Services (VASS) also explained how the move to digital platforms during the COVID-19 lockdowns led to social isolation for Victorians from migrant and refugee backgrounds, presenting a significant barrier to accessing services:

Social isolation has long been an issue for older Victorians from migrant and refugee backgrounds... For this group, this is exacerbated by financial disadvantage, loss of family and friends through the refugee and migration experiences, physical and mental health issues and a lack of culturally and linguistically appropriate avenues for socialising. This has only worsened during the COVID-19 pandemic. Relatedly, digital literacy and access to technology is low. This is due to financial constraints, actual literacy (in both English or their own language) and other factors. This has led to reduced informal social support during COVID-19, and has also made it harder to access services... (VASS 2021).

Reinforcing the research findings above, VASS highlighted that literacy in people's own language as well as in English cannot be taken for granted, a point that the design of all communications and services needs to account for. This includes the design of any digital skills training, and whether such training is appropriate at all for certain migrant cohorts.

The focus group carried out by ECCV in collaboration with AMCS, to support FECCA's submission for IGAC's review of My Aged Care, provided rich grassroots information supporting many of the above points. There were 10 Participants in the group, who were from Italian Macedonian, Maltese and Serbian backgrounds. Most had received some level of support through the aged care system, with several also providing care and/or system navigation to older people needing assistance.

While the subject of digital literacy was not specifically introduced to the group, members spoke on the topic, sometimes at length and with frustration and passion. Evidently being unable to use internet platforms was an insurmountable barrier to learning about and accessing required services for some, including but not limited to My Aged Care. All participants said that older people could not get the help they needed unless they were 'lucky' enough to know someone who was digitally literate, could navigate the aged support system, and was willing and able to help. A typical comment was:

The using computers that is required of us, we don't have the skills to go through. Even on your mobiles it is so complicated. I'm computer-stupid and the first one to put my hand up. We didn't have any training in computer skills. Now everything is online, how do you know where to go? Who do you

trust? I'm fortunate because I have a [family member] who is an IT professional and he does my paperwork. Otherwise there is no way I could go to the computer and fill out all the forms.

Another participant highlighted: 'You'll find the majority of us, we're not IT savvy'.

The digital barrier that participants spoke about was evidently compounded by other impediments associated with being from a migrant background i.e.: having no or little proficiency in English, not being literate in one's own language, and not understanding forms (said to be numerous) and the aged care system itself. Even when they made contact with the system they often described it as rigid, bureaucratic, unfeeling and unresponsive.

Digital inclusion via training, devices and online connection

Many of the submissions to the *Inquiry into the Support Needs for Older Victorians from Migrant and Refugee Backgrounds* advocated for raising the digital inclusion of seniors from culturally diverse backgrounds, through training, devices and online connectivity, as part of a suite of measures to support their health and wellbeing. For example, United Spanish Latin American Welfare Centre proposed that funding be provided to increase the capacity of older people to address the digital divide and social inequities relating to access to services and civic participation, while also arguing that 'hands on support' is needed to get people connected online (2021).

In similar vein, and with detailed suggestions for remedy, AMES argued:

...As institutions (including those under the auspices of the Victorian Government) pivot to online delivery, it is critical to ensure digital inclusion of older migrants and refugees: through access to digital literacy training, devices, affordable internet, and access to reliable, stable connections... (2021).

In addition, AMES proposed a role for the Victorian Government in delivering targeted digital skills education and improving the quality and frequency of materials distributed online in first languages (2021).

Continued access to *in-person* services was also considered important by Cohealth. Additionally it advocated for the provision of digital training in community languages, and access to affordable devices and data to assist those wanting to take up such options (Cohealth 2021). With a focus on financial literacy, Financial Counselling Victoria similarly recommended that the Victorian Government provide funding for financial counsellors to deliver community-based activities to develop financial capability and associated digital literacy (FCVic 2022).

The joint submission by NARI, Carers Victoria, Seniors Rights Victoria, and Multicultural Centre for Women's Health (MCWH), highlighted some of advantages associated with digital technology, while also recommending measures to increase digital inclusion, and also to provide alternative avenues for seniors who are not digitally literate:

Digital technologies, such as animation and chat-bots, hold considerable potential to improve care because they are available 24/7, offer instant and consistent answers, promote participant engagement, and help to navigate services. Such technologies also overcome barriers of limited time, geographic isolation, and limited literacy. Via smartphones, tablet devices, and/or computers people can access information online, learn where to seek help, and how to provide care... ... (NARI et al 2021).

Hence, this joint submission recommended investment in initiatives to increase digital literacy among older migrant and refugee Australians, arguing this would increase health and financial literacy, and reduce social isolation and loneliness, albeit delivered in a way that minimised vulnerability to scams. The submission also advocated for the provision of digital hardware such as tablets, modems, and accurate in-language information, and support for internet connection (NARI et al 2021). (The next sub-section will explore Artificial Intelligence options, as suggested here in the use of chat bots and animation).

In its submission to the same Inquiry, and in line with the above submissions, ECCV recommended that the Victorian Government addresses barriers to services and promotes digital access and inclusion¹³ - specifically that the Government:

- builds on a range of initiatives that address the digital divide by supporting digital inclusion initiatives that provide devices and subsidised internet connections to older people from migrant and refugee backgrounds on low incomes (Recommendation 12)
- increases investment in digital literacy training for older people from migrant and refugee backgrounds, including tailored bilingual programs (Recommendation 14) (ECCV, 2022a).

Alternatives to digital connection were also recommended, which brings us to the next subsection.

Alternatives to digital for culturally diverse seniors

As indicated above, the submissions from NFP and ethno-specific organisations to the *Victorian Parliamentary Inquiry into the Support Needs for Older Victorians from Migrant and Refugee Backgrounds* made a variety of suggestions for information provision, support and the social, financial and civic inclusion of older Victorians from migrant backgrounds, that would *not* require digital connection and capability.

In general, suggestions included:

- · alternatives to digital avenues for accessing information and services
- face-to-face support options
- access to bilingual and bicultural workers
- services in preferred language in ways that are culturally safe
- opportunities to develop relationships with trusted cultural-specific services and organisations
- resourcing and proactive offering and provision of translations and interpreters
- more streamlined service provision.

ECCV's submission to the same Inquiry recommended that the Victorian Government establishes and promotes policies that provide alternatives to online platforms in order to improve access to information, services and support (Recommendation 13). More specifically, Financial Counselling Victoria recommended the Victorian Government takes meaningful steps to ensure that access to its

-

¹³ As part of Recommendation 28.

services and supports does not require access to a smartphone or computer (Recommendation 3) (ECCV 2022a).

Cohealth highlighted the importance of providing continued access to in-person services, and recommended:

- increasing investment in language services interpreting and translating for older people (by the Victorian Government) (Recommendation 1)
- developing a workforce plan to increase bicultural and bilingual workers in services that support older people from migrant and refugee backgrounds (Recommendation 2)
- ensuring all service information is routinely available in preferred languages, services are culturally safe, and that bi-cultural and bilingual workers who reflect the communities they work in are funded (Recommendation 5)
- investing in roles that assist older people from migrant and refugee backgrounds find and access health and social support services, such as bicultural care navigators/care finders and care coordinators (Recommendation 4) (Cohealth 2021).

Consistent with the above recommendations, ECCV proposed improvement of services and systems to meet the needs and aspirations of older people from migrant backgrounds including:

- working more effectively with multicultural and ethno-specific organisations that are trusted by older people in their communities
- using language services, particularly the skill of professionals to work with interpreters and translated written material
- streamlining and integrating services, and supporting older people from migrant and refugee backgrounds to understand and navigate complex systems and services
- promoting services and information more effectively through ethnic community media (ECCV, 2022a).

Evidently a default to 'digital-only' information, connection and support only serves to compound the considerable barriers that already exist for people from culturally diverse backgrounds to information, services, and the capacity for day-to-day management of their lives.

Supporting the need for ethno-specific services and bicultural workers, participants in the recent focus group carried out by ECCV in collaboration with AMCS, to inform a submission by FECCA, relied heavily on helpful and knowledgeable community members, and support professionals who spoke their language (often unfunded for this work). One said:

A lot of us don't feel confident enough and that's why, the person that knows, then it gets spread. We rely on our neighbours and our friends... The majority of us, we don't have much education because of the times that we were born; we didn't have the opportunity and a lot of us in our community, when we fill in forms we have to help our people fill out the forms because they don't know how to speak English very well... They don't know where to go.

General sources of information were said to include in-language media such as TV and newspapers, as well as friends.

Quotes from submissions to the *Victorian Parliamentary Inquiry into the Support Needs for Older Victorians from Migrant and Refugee Backgrounds*

- ... it is important to recognise that many older people, particularly those with any communication difficulties or low digital literacy, may struggle with online options. It is important that services are still resourced to conduct face-to-face services, particularly in instances such as giving legal advice where documents need to be viewed, and decision-making capacity assessed (NARI et al 2021, p.4).
- ... In order to ensure that older people from all cultures and ethnicities are properly supported, elder abuse services need to be resourced to provide culturally appropriate services that can be accessed in multiple ways and are not reliant on the involvement of younger family members, English-speakers or those with a high degree of digital literacy. There needs to be a commitment to face-to-face services, the provision of bilingual workers where possible, and the active building of relationships between family violence and elder abuse services with the variety of cultural groups and services in Victoria (NARI et al 2021, p.6).
- ... In Victoria there are many ethno-specific service providers (like VASS), who can provide appropriate support, particularly through the use of bilingual and bicultural staff. This also enables community members to build trust in that organisation, which is otherwise a major barrier to services for people of migrant and refugee backgrounds. However, these organisations are often under-resourced and do much work that is unfunded... (VASS 2021).

Key points

- A wide range of local community organisations, including ECCV, have witnessed firsthand the
 digital exclusion of older Victorians from migrant and refugee backgrounds, presenting
 barriers to health, employment, information, services, banking, social connection and
 activities.
- Their digital exclusion can lead to financial abuse, elder abuse, vulnerability to scams, social isolation and inhibit their capacity to navigate their world and create a safe and fulfilling place for themselves in Australia.
- Older Victorians from migrant and refugee backgrounds are particularly vulnerable, with many finding it impossible to connect with the support and services they need unless they are fortunate enough to know someone who is able and willing to help, and who is digitally literate and speaks their language.
- Solutions include tailored and culturally sensitive digital literacy programs, as well as
 alternatives to digital connection in the form of bicultural workers, and local ethno-specific
 organisations (who may 'go online' on their behalf to obtain information and register for
 services).

Acceptance, ethics and potential usefulness of Artificial Intelligence (AI)

This section has a special focus on a rapidly expanding type of digital technology, 'Artificial Intelligence (AI). Just as digital solutions have been adopted by organisations, companies and governments to increase efficiencies and reduce costs, AI is increasingly being looked to for the same reasons. In particular, with the growing ageing population in Australia and many countries overseas,

amid concerns by governments about the costs and staffing to support and care for older people, there has been increased interest in AI, at least as a partial solution (e.g. Koc 2023; Portacolone, Halpern, Luxenberg, Harrison & Covinsky 2020; Street, Barrie, Eliott, Carolan, McCorry, Cebulla, Phillipson, Prokopovich, Hanson-Easey, Burgess et al 2022). As stated by Street et al:

Given that residential aged care is expensive, keeping people at home as long as possible through the use of community care may be both cheaper and more desirable to many. Therefore, Australian policymakers are considering how best to support individuals to remain in the community as they age. Smart technologies may offer low cost, sustainable solutions for maintaining support and safety for this group, and have been adopted or trialed in some community aged care settings (2022).

Street et al explain that 'smart technologies' in the form of smart homes, robotics, smart wearables and autonomous vehicles all rely on AI (2022). Furthermore, they are all part of what is termed the 'Internet of Things' which connect to the internet and are capable of sharing data with each other and with care providers (Street et al 2022). The burgeoning research on the potential for AI and related smart technologies to assist older people to receive care and maintain quality of life has yielded mixed findings, and very little has focused on the needs and aspirations of older people from migrant backgrounds.

Broadening the scope of 'digital literacy', from the ability to connect online, use devices to do so and navigate platforms and websites, some of the research provides support for AI based technologies to assist older people in their daily lives, albeit often qualified. For example, an experimental study by Borna, Maniaci, Haider, Gomez-Cabello, Pressman, Haider, Demaerschalk, Cowart and Forte (2024) drew from 10 articles found to be of relevance from 2012 to 2023, and highlighted a role for AI in aiding and 'easing the burden' on informal caregivers. Moving from the home to care settings, a review of the roles of AI in healthcare for elderly people by Koc (2023) found that AI systems can help healthcare providers assess and monitor medication regimes, and Al-supported robots can support carers while providing rehabilitation and enhanced mobility for the 'elderly'. A study by Papadopoulos, Castro, Nigath, Davidson, Faulkes, Menicatti, Khaliq, Recchiuto, Battistuzzi, Randhawa, Merton, Kanoria, Chong, Kamide, Hewson and Sgorbissa (2022) also cautiously supported a possible role for culturally competent, socially assistive robots to improve the psychological wellbeing of older adults in care settings. Abdi, de Witte, and Hawley surveyed a group of health and social technology experts on the potential of 10 emerging technologies to meet older people's needs in five care and support domains (2021), which yielded mixed results. According to the thematic analysis, some technologies such as AI-enabled applications, 'wearables', and the 'Internet of Things' showed the potential to support basic self-care and access to health care, however other technologies like robotics faced technical and acceptability issues for users (Abdi et al 2021).

Arnold, Kolody, Comeau, Aidan and Miguel Cruz (2024) carried out a review of studies that explored the use of personal voice assistant technology by older adults living in the community, with 22 studies included for the final analysis. While the researchers found that personal voice assistants are currently being used by older adults for a range of activities including setting up reminders, searching for information, and checking the weather, at this point it is still unknown whether personal voice assistants can support older adults' ability to 'age in place' and this requires further research (2024).

Interestingly, research carried out in Bangladesh revealed limited acceptance of automation systems as a substitute for care giving and support provided by real people (Shareef, Ahmed, Giannakis,

Dwivedi, Kumar, Butt & Kumar 2023). Associated values and concerns by older people about belonging and caring, were linked with their cultural backgrounds, said to be more relational and less individualistic as compared to western culture (Shareef et al 2023). According to the researchers:

... it was observed that elderly people's acceptance of automation systems driven by ambient intelligence as a substitute for caregiving support directly from human beings was linked to their concerns about emotional belongingness and social interaction as well as their ability to use the technology. Thus, in developing trust in this machine autonomy, their expectations around personal ability and the feeling of caring are two important issues for elderly people. To form the behavioural intention to accept this machine autonomy, trust plays a crucial role; however, this might vary depending on the differences in personality and behavioral attitude (Shareef et al 2023).

Speaking from the Australian context, Street et al make a similar point:

Overlaying the participants' personal concern was an uneasiness about the potential impact of smart technology use on society as a whole. In particular, the participants feared that smart technologies might be used as a substitute for human care, as they had in other areas of life, and that this may further exacerbate the isolation experienced by many older people. The participants across the (World) Cafes were adamant that smart technologies should be an adjunct to current human carers, not a replacement for them... (2022).

Other studies have addressed and explored ethical issues associated with the use of AI in the support of older people. For example, a study by Portacolone et al (2020) focused on the long-term care of older adults with cognitive impairment and, in an experiment, they introduced an avatar on an electronic tablet that was displayed as a dog or a cat. The researchers explain that 'whereas artificial intelligence guides most artificial companions, this application also relies on technicians "behind" the on-screen avatar, who via surveillance, interact with users'. The researchers highlighted that the case is notable because it illustrates the tension between the endless opportunities offered by technology and the ethical issues stemming from limited regulations, especially using AI with people who are cognitively impaired, and for whom knowledgeable consent may not be possible. The researchers conclude:

Reviewing the case through the lens of biomedical ethics, concerns of deception, monitoring and tracking, as well as informed consent and social isolation are raised by the introduction of this technology to users with cognitive impairment (Portacolone et al 2020).

Some studies have advocated for and implemented participatory research approaches relating to the use and design of AI and assistive technologies for older people - for usefulness, and social and ethical reasons (e.g. Martin-Hammond, Vemireddy & Rao 2019; Street et al 2022; Tierson, Batey, Harrison, Naar, Serban, Daniels & Calvo 2021). Through the engagement of older people in discussions and activities and following a thematic analysis, Martin-Hammond et al found that the older participants saw 'Intelligent Assistants' (IAs) 'as potentially useful for providing recommendations, facilitating collaboration with other caregivers, and for alerts of serious illness, however, they also wanted familiar and natural interactions with IAs (eg, using voice) that were able to provide fluid and unconstrained interactions, reason about their symptoms, and provide information or advice (Martin-Hammond et al 2019). Others discussed the need for IAs that could be used by older people with low technical resources or skills (Martin-Hammond et al 2019).

However as pointed out by Street et al (2022) 'smart technologies to support ageing in place are already being introduced in communities in Australia and overseas, often with little consultation with end-users'. To address this, the authors conducted five World Cafés in two Australian states, aiming to capture citizen knowledge about the possibilities and challenges of smart technologies. The 84 participants were aged 55 years and over, English-speaking, and living independently. Themes from the consultations reflected participants' understanding, resistance, and acceptance of smart technologies, and the ethical principles, including beneficence, non-maleficence, autonomy, privacy, confidentiality, and justice. Many of the older people consulted demonstrated 'cautious and conditional acceptance of smart technologies, while identifying concerns about social isolation, breaches of privacy and confidentiality, surveillance, and stigmatisation' (Street et al 2022). The authors concluded that attention to understanding and incorporating the values of older citizens will be important for the acceptance and effectiveness of smart technologies to support independent and full lives for older citizens (Street et al 2022).

As already noted, a particularly strong point emerging from this study, was that the participants did not favour AI and associated technologies replacing real human contact and support (Street et al 2022). This is further illustrated in the following extract from the discussion of findings:

As others report ..., some people rejected the use of any technologies requiring internet access, while others enthusiastically welcomed the advent of new smart technologies. Most, however, exhibited a cautious acceptance of smart technologies but with caveats, accepting their use only under certain conditions, particularly as an alternative to institutional aged care and with the additional stipulation that smart technologies should augment the actions of human carers and not simply replace them... (Street et al 2022).

... Our participants suggested that an assistive robot helping them manage the network of new technologies might be helpful, but an alternate solution would be to incorporate social interaction with a human technician or a peer leader, who could offer both education and technical assistance. (Street et al 2022).

Interestingly, while participants thought an assistive robot might help them manage the network of new technologies – as a new technology to manage existing technologies, they proposed an alternative solution of incorporating social interaction with a human technician or a peer leader who could offer *both* education and technical assistance (Street et al 2022). This is consistent with recommendations from the aged care sector and expressly desired by seniors themselves that bicultural workers assist them in accessing online information and support services.

Thus while the Australian Government *Action Plan for Aged Care Data and Digital Strategy 2024-2029,* includes actions to explore and embrace the use of AI as part of 'Priority 8: Encourage innovation and provide stewardship' (2024), caution should certainly be exercised, especially amid frequent media reports about under-regulated and unethical AI data collection and applications already in use (e.g. ABC 2024; Human Rights Watch 2024). For this reason, the following actions in the Plan should be supported and well resourced:

- review existing evidence and research regarding the safe and effective use of AI
- evaluate existing guidelines and guidance for implementing and leveraging AI
- investigate risks and relevant controls for deploying AI solutions

- adopt government guidelines for safe, controlled trials and pilots of emerging solutions
- promote trials and pilots in promising areas (Australian Government 2024b, p.23).

Key points

- Artificial Intelligence as an expanding form of digital technology has garnered worldwide interest, particularly for the possibility of providing support to ageing populations, amid government concerns about budgetary costs.
- Burgeoning research on the potential for AI and related smart technologies to assist older people to receive care and maintain quality of life has yielded mixed findings, with little focus on the particular needs and aspirations of older people from migrant backgrounds.
- Serious ethical dimensions need to be addressed such as consent, privacy and social connection before any introduction of AI-based technologies into aged care and support spaces, whether at home or in residential settings.
- Research involving consultation with older people suggests some AI technologies may be
 used to augment support by human carers, but not replace it. This echoes the findings of
 research into digital literacy that many older people suffer in the absence of human
 communication and support with the increased reliance on digital technology, and this is
 exacerbated for older people from diverse cultural and linguistic backgrounds.
- More research is needed that includes the voices of older people themselves, particularly those from migrant and refugee backgrounds, to understand forms of AI or 'smart technology' that may support and empower them in their daily lives, while adhering to ethical standards.
- Well-researched, strict and enforceable ethical guidelines need to be designed before the
 introduction or expansion of AI technologies into aged care and support, especially relating
 to older people from migrant backgrounds.

Conclusion

This research confirmed that many older people from refugee and migrant backgrounds are severely disadvantaged through the routine requirement for them to 'go online' for vital information and services, and for the daily management of many aspects of their lives. Very often this costs them their health, control over their lives, and the ability to remain at home rather than entering an aged care residential facility. For certain segments of this population tailored digital literacy training may be the answer, along with the provision of devices and internet connection, but many will never become 'digitally literate' and require alternative avenues of information, engagement and service access.

From ECCV's research and grassroots 'intelligence', the current situation is certainly one of crisis, as too many older people from migrant and refugee backgrounds go without the support they desperately need. In addition some older people may become more vulnerable to elder abuse by family members and carers.

Ian Henschke from National Seniors says that the current level of 'digital hurdles' constitutes a form of *institutional* elder abuse, while governments and organisations optimise efficiencies and profits through the use of internet platforms (Kollmorgen 2023). Henschke explains his reasoning:

One of the things that we should always remember is that one of the definitions of elder abuse is neglecting someone's needs. So in a sense we are witnessing a form of institutionalised elder abuse. (Kollmorgen 2023).

It should also be highlighted that the human rights of older people may certainly be violated in the perennial 'default to digital' and the neglect of our older citizens by institutions, despite the efforts, policies and strategies of some government departments, such as the Victorian Department of Families, Fairness and Housing and the federal Department of Health and Aged Care, that recognise and seek to address the problem within their planning documents. According to the Australian Human Rights Commission (AHRC) we are all entitled to the enjoyment of human rights without discrimination of any kind, including discrimination on the basis of our age. It names certain human rights and freedoms that are particularly relevant to older people such as:

- an adequate standard of living including access to adequate food, clothing and housing
- the highest possible standard of physical and mental health
- safety and freedom from violence
- freedom from cruel, inhuman or degrading treatment (AHRC 2024).

Human rights issues faced by older people in Australia do include: barriers to appropriate and adequate aged care facilities and health care, barriers to accessing government services and other opportunities to participate in community and public life, as well as financial/physical/psychological abuse (AHRC 2024). Such human rights abuses and omissions were certainly recognised by the Royal Commission into Aged Care Quality and Safety as occurring in Australia's aged care system, leading it to recommend a rights-based approach in the new Aged Care Act i.e. to guarantee universal access to the supports and systems that older people are assessed as needing (Australian Government 2021). Subsequently, the Exposure Draft: *Aged Care Bill 2023* is underpinned by a Statement of Rights (Australian Government 2023b).

From the evidence gathered for this research, including from the Royal Commission report just mentioned, all of these rights need greater attention and prioritisation in the context of the widespread digital exclusion of many older people from migrant and refugee backgrounds. However the types of exclusion outlined in this paper extend beyond the aged care system to most areas of life, even while accessible and good quality care and support systems is of paramount importance.

This paper offers guidelines for effective and accessible digital literacy training for older people for whom this is appropriate, including those from culturally diverse backgrounds, but it also confirms that becoming 'digital literate' is an impossibility for many and this cohort will require alternative methods of information and access to services and organisations on an ongoing basis.

Nevertheless, digital 'solutions' have evidently been widely adopted, with management efficiencies and savings being largely made possible through less employment of real people to provide tailored information and support. This goes to the heart of the problem for many seniors, particularly those from migrant and refugee backgrounds who are not digitally literate, face additional cultural and language barriers, and who require direct in-language information and support. The move to Albased support, in particular, may be seen as an extension of this conundrum i.e. with both digital and Al technologies being associated with a reduction in personal and tailored assistance. This is not to say that such technologies necessarily have to *replace* the human assistance that is required by so many seniors - certain digital technologies might conceivably *augment* it with a central and mindful focus on the interests and quality of life of older people and protection of their human rights.

Certainly, with growing concerns about the cost of caring for an ageing population, we should exercise caution in rushing to new forms of AI technology and viewing them uncritically as necessarily progressive. Nevertheless, this research highlights that any type of assistive technology, whether digital and/or AI-based, should focus on supporting the self-identified needs and aspirations of older people, enabling them to harness it for their own purposes i.e. not the other way around with older people being subject to technologies they don't feel mastery over. In addition, there are critical ethical issues to be addressed before any roll-out of AI 'solutions' such as informed consent, privacy of information, surveillance, and human connection (ABC 2024, Human Rights Watch 2024, Zuboff 2019).

We certainly need proactive polices, programs and services that prioritise the human rights and quality of life of seniors, particularly those from migrant and refugee backgrounds, While some will benefit from digital literacy programs, based on optimal design features revealed through this research, human-based communication and support evidently remain crucially important. For those from culturally diverse backgrounds, this is paramount, particularly the tailored support that can be provided by trained and trusted bi-cultural workers who can speak in their preferred language.

Recommendations

General

Australian Government:

- 1. Proactively consult with people from migrant and refugee backgrounds and their representative bodies for the ongoing development of the Australian Government's *Data and Digital Government Strategy*.
- 2. Develop a nationwide combined service and digital inclusion policy that prioritises the needs, aspirations, and human rights of seniors.

Alternatives to digital

Australian and Victorian Governments:

- 3. Continue provision of alternatives to digital connection by governments and organisations for services and information to support seniors, particularly those from migrant and refugee backgrounds, including:
 - 3.1. personal contact with support workers and health providers who can speak in the older person's preferred language
 - 3.2. easily accessible phone options (not involving complicated 'phone trees') for information and to respond to queries in preferred language
 - 3.3. information provision through community leaders, and in places where people already meet and feel safe, rather than in unfamiliar venues or locations
 - 3.4. resourcing for support services to have sufficient time to assist carers from migrant and refugee backgrounds backgrounds to understand information and provide case management support where needed
 - 3.5. resourcing for proactive offering of translating and interpreting by support services as necessary
 - 3.6. resourcing of community-based mentors who can assist older people needing support to connect online or through other methods for information, registrations, and arranging for assessment and services
 - 3.7. promotion of services and information via ethnic community media.

Victorian Government:

- 4. Continue development and implementation of a communication strategy by each Victorian Government Department to proactively include the currently digitally excluded, with a particular focus on older people from culturally diverse backgrounds.
- 5. Continue paper-based options for seniors clubs for reporting, registration, compliance and grant applications until such time when club representatives report to Victorian Government that they are comfortable with fully digitalised systems.

Digital literacy

Australian and Victorian Governments:

- 6. Improve websites within existing digital technologies to make them more user-friendly for older people, particularly those from migrant and refugee backgrounds, with the meaningful involvement of these potential end-users in the development of such measures¹⁴.
- 7. Include and engage seniors in the design and provision of digital literacy programs to assist them in developing digital competencies according to their interests and capacities.
- 8. Continue resourcing digital literacy programs for seniors, including elements that have been identified as important for success, including:
 - 8.1. assessment of participants' digital skills, internet access, motivations and interests at intake
 - 8.2. flexible and customised training and mentoring to match participant skills, preferences, needs and motivations
 - 8.3. group participants matched according to digital skill level and motivations
 - 8.4. face-to-face safe and culturally appropriate training and mentoring, in the preferred language of participants
 - 8.5. training and mentoring provided by bicultural/bilingual support workers in trusted multicultural or ethnic specific agencies where there are opportunities to develop relationships, including in regional areas
 - 8.6. flexibility in program design and delivery, including possibilities for one-to-one support, peer learning and collaboration, and group activities
 - 8.7. translation of curriculum information into multiple languages, and provided verbally for those who are not literate in their own language
 - 8.8. training that includes online security, how to protect one's privacy, financial literacy and protection against online scams
 - 8.9. provision of devices and access to the internet in-home and/or in community settings as preferred.

Artificial Intelligence

Victorian and Australian Governments/researchers/service providers/AI developers:

- 9. Develop, monitor and enforce ethical guidelines for any potential use of AI in the support and care of older people, including those from migrant and refugee backgrounds.
- 10. Resource/carry out research to explore which forms of AI, if any, might be useful and ethical for older people, particularly those from migrant and refugee backgrounds, that allows them to remain in their homes as they prefer, while supporting them to exercise control over their lives and maintain optimal health and wellbeing, as consistent with their human rights.
- 11. Involve older people, including those from diverse cultural backgrounds. in the design and implementation of any research into the use of AI to support seniors.
- 12. Consider any introduction of forms of AI as an augmentation to human care and interaction for older people, rather than a replacement.

The digital divide: Impacts on older people from migrant communities Ethnic Communities' Council of Victoria (ECCV) 2024

¹⁴ e.g. touch screen tablets with preferred language on first page and simple options to 'press' indicating an issue or request.

References

- NB: All journal articles are peer reviewed.
- ABC (20 June 2024) 'The fight to keep your personal messages private', 7.30 Report interview of Margaret Whittaker (president of the Signal Foundation), *ABC*, accessed 21 June 2024 at: https://www.abc.net.au/news/2024-06-20/the-fight-to-keep-your-personal-messages-private/104004638
- Abdi, S, de Witte, L & Hawley, M 2021, 'Exploring the potential of emerging technologies to meet the care and support needs of older people: A Delphi Survey', *Geriatrics*, vol 6, Issue 1.
- Abdulhadi T & Rukas G 2020, Connecting CALD seniors during the COVID-19-19 pandemic, ECCV, Melbourne.
- Age Action for All Older People 2020, *Briefing Paper 6*: Supporting digital literacy among older people. AAAOP, Ireland.
- Aggar, C, Sorwar, G, Seton, C, Penman, O, Ward, A 2023, 'Smart home technology to support older people's quality of life: A longitudinal pilot study', *International Journal of Older People Nursing*, vol 18.
- AMES Australia 2021, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds*, Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Arnold, A, Kolody, S, Comeau, A, Miguel Cruz, A 2024, 'What does the literature say about the use of personal voice assistants in older adults? A scoping review', *Disability & Rehabilitation: Assistive Technology*, vol 19, issue 1.
- Aslan, A Mold, F, van Marwijk, H & Armes, J 2024, 'What are the determinants of older people adopting communicative -health services: a meta-ethnography', *BMC Health Services Research*.
- Australian Government: Office of the eSafety Commissioner 2018, *Understanding the digital behaviours of older Australians; Summary of national survey and qualitative research,* Australian Government, Canberra.
- Australian Government 2021, Royal Commission into Aged Care Quality and Safety Final report: Care, dignity and respect, Australian Government, Canberra. Viewed 17 July 2024 at: https://www.royalcommission.gov.au/aged-care/final-report
- Australian Government, Digital Transformation Agency 2023a, *Data and Digital Government Strategy*, Australian Government, Canberra. Viewed 27 June 2024 at: https://www.dataanddigital.gov.au/sites/default/files/2023-12/Data%20and%20Digital%20Government%20Strategy%20v1.0.pdf
- Australian Government 2023b, Exposure Draft: Aged Care Bill 2023, Australian Government, Canberra. Viewed 17 July 2024 at: https://www.health.gov.au/resources/publications/exposure-draft-aged-care-bill-2023?language=en

- Australian Government, Department of Health and Aged Care 2024a, *Aged care data and digital strategy 2024-2029*, Australian Government, Canberra. Viewed 17 July 2024 at: https://www.health.gov.au/resources/collections/aged-care-data-and-digital-strategy-2024-2029
- Australian Government, Department of Health and Aged Care 2024b, *Action plan for aged care data and digital strategy 2024-2029*, Australian Government, Canberra. Viewed 17 July 2024 at: https://www.health.gov.au/resources/publications/action-plan-aged-care-data-and-digital-strategy-2024-2029?language=en
- Australian Human Rights Commission (AHRC) 2024, *Human rights and older people*. Viewed 28 June 2024 at:
 - https://humanrights.gov.au/sites/default/files/content/letstalkaboutrights/downloads/HRA_older.pdf
- Australian Institute of Health and Welfare (AIHW) 2024, *Culturally and linguistically diverse older people*. Viewed 19 July 2024 at: https://www.aihw.gov.au/reports/older-people/older-australians/contents/population-groups-of-interest/culturally-linguistically-diverse-people#Information?
- Barber, R, Ortiz, F J, Garrido, S, Calatrava-Nicolás, F M, Mora, A, Prados, A, Vera-Repullo, J A, Roca-González, J, Méndez, I & Mozos, Ó M 2022, 'A multirobot system in an assisted home environment to support the elderly in their daily lives', *Sensors*, vol 22, issue 20.
- Borna, S, Maniaci, M J, Haider, C R, Gomez-Cabello, C A, Pressman, S M, Haider, S A, Demaerschalk, B M, Cowart, J B & Forte, A J 2024, 'Artificial intelligence support for informal patient caregivers: A systematic review', *Bioengineering*, vol 11, issue 5.
- Borrell, J 2008, *Understanding problem gambling: The interaction of personal and structural processes*, VDM Verlag, Germany.
- Bossio, D & McCosker, A 2021, 'Reluctant selfies: Older people, social media sharing and digital inclusion', *Continuum: Journal of Media & Cultural Studies*, vol 35, issue 4, pp. 634-647.
- Casselden, B 2023, 'Not like riding a biked: How public libraries facilitate older people's digital inclusion during the COVID-19-19 pandemic', *Journal of Librarianship & Information Science*, vol 55, issue 3, pp. 704-718.
- Claudio, M 2023, 'Elderly People and the barriers to digital education', *Italian Journal of Sociology*, vol 15, issue 2, pp. 37-53.
- Cohealth 2021, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds,* Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Ethnic Communities' Council of Victoria (ECCV) 2022a, Submission to Parliament of Victoria:

 Legislative Assembly Legal and Social Issues Committee 2022, Inquiry into support for older

 Victorians from migrant and refugee backgrounds, Victorian Government, Melbourne. Viewed 5

 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Ethnic Communities' Council of Victoria (ECCV) 2022b, *Literature review: Elder abuse against people from migrant and refugee backgrounds*, ECCV, Melbourne. Viewed 17 June 2024 at: https://eccv.org.au/wp-content/uploads/2022/06/Elder-Abuse-Literature-Review.pdf

- Ethnic Communities' Council of Victoria (ECCV) 2023a, *Elder abuse in care relationships: Key learnings from the Recognising and Respecting Carers from CALD Backgrounds project*, ECCV, Melbourne. Viewed 17 June 2024 at: https://eccv.org.au/wp-content/uploads/2023/09/Elder-abuse-in-care-relationships-paper.pdf
- Ethnic Communities' Council of Victoria (ECCV) 2023b, Submission to the Multicultural Framework Review, ECCV, Melbourne. Viewed 17 July 2024 at: https://eccv.org.au/submission-to-the-multicultural-framework-review/
- Ethnic Communities' Council of Victoria (ECCV) 2024a, Submission on the Aged Care Act (Exposure Draft), ECCV, Melbourne. Viewed 17 July 2024 at: https://eccv.org.au/submission-on-aged-care-act-exposure-draft/
- Ethnic Communities' Council of Victoria (ECCV) 2024b, Submission to the Inspector-General of Aged Care (regarding access and navigation of the aged care system), ECCV, Melbourne. Viewed 17 July 2024 at: https://eccv.org.au/submission-to-the-inspector-general-of-aged-care/
- Federation of Ethnic Communities' Councils of Australia (FECCA) 2020, Issues paper: If we don't count it... it doesn't count: Towards consistent national data collection and reporting on cultural, ethnic, and linguistic diversity, FECCA, Canberra. Viewed 17 July 2024 at: https://fecca.org.au/wp-content/uploads/2020/10/CALD-DATA-ISSUES-PAPER-FINAL2.pdf
- Federation of Ethnic Communities' Councils of Australia (FECCA) 2024, Submission to the Office of the Inspector-General of Aged Care: Review of the administration of My Aged Care, FECCA, Canberra. (NB: Not publicly available at the time of this paper).
- Financial Counselling Victoria (FCV) 2022, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds,* Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Finkelstein, R, Wu, Y, & Brennan-Ing, M 2023, 'Older adults' experiences with using information and communication technology and tech support services in New York City', *Frontiers in Psychology*, 5/1/2023, pp. 1-12.
- Good Things Foundation Australia 2021, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds,* Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Goodall KT, Newman LA & Ward PR 2014, 'Improving access to health information for older migrants by using a grounded theory and social network analysis to understand their information behaviour and digital technology use', *European Journal of Cancer Care*, vol 23, issue 6, pp. 728-738.
- Hatamnezhad, K, Ghafari Ashtiyani, P, & Seyedi, F 2021, 'Investigating the relationship between electronic literacy and quality of life in Arak, Iran', *Bulletin of Science, Technology & Society*, vol 41, Issue 1, pp. 3-9.
- Houghton, J 2018, *Ethnic seniors' clubs and groups: Planning for the future of seniors' groups in Victoria*, ECCV, Melbourne.

- Human Rights Watch 2024, *Australia: Children's personal photos misused to power AI tools.* Viewed 2 July 2024 at: <a href="https://www.hrw.org/news/2024/07/03/australia-childrens-personal-photos-misused-power-ai-tools#:~:text=Analysis%20by%20Human%20Rights%20Watch%20found%20that%20LAION-5B%2C,or%20the%20URL%20where%20the%20image%20is%20stored.
- Hunsaker, A, Nguyen, MH, Fuchs, J, Karaglu, G, Djukaric, T & Hargittai, E 2020, 'Unsung helpers: Older adults as a source of digital media support for their peers', *The Communication Review*, vol 23, No. 4, pp. 309-330.
- JISC 2019, *Defining digital wellbeing*. Viewed 18 June 2024 at: https://digitalcapability.jiscinvolve.org/wp/2019/09/03/defining-digital-wellbeing/
- Koc, M 2023, 'Artificial intelligence in geriatrics', Turkish Journal of Geriatrics, vol 26, issue 4.
- Kollmorgen, A 2023, Online access still difficult for many older and elderly Australians, *CHOICE*. Viewed 28 June 2024 at: https://www.choice.com.au/electronics-and-technology/internet/connecting-to-the-internet/articles/digital-access-for-the-elderly
- Kolotouchkina, O & Vinaras-Abad, M, Manas-Viniegra, L 2023, 'Digital ageism: Emerging challenges and best practices of age-friendly digital urban governance', *Media & Communication*, vol 11, issue 3, pp. 6-17.
- Marler, W & Hargittai, E 2024, 'Division of digital labor: Partner support for technology use among older adults', *New Media & Society*, vol 26, issue 2, pp. 978-994.
- Martin-Hammond, A, Vemireddy, S & Rao, K 2019, 'Exploring older adults' beliefs about the use of intelligent assistants for consumer health information management: A participatory design study', *JMIR Aging*, vol 2, Issue 2.
- Martins Van Jaarsveld, G 2020, 'The effects of COVID-19-19 among the elderly population: A case for closing the digital divide', *Frontiers in Psychiatry*, vol 11.
- Mikolajczyk, B 2023, 'Universal human rights instruments and digital literacy of older persons', *International Journal of Human Rights*, vol 27, issue 3, pp. 403-424.
- Millard, A, Baldassar, L, & Wilding, R 2018, 'The significance of digital citizenship in the wellbeing of older migrants', *Public Health*, vol 158, pp. 144-148.
- Morrison, BA, Nicholson, J, Wood, B & Briggs, P 2023, 'Life after lockdown: The experiences of older adults in a contactless digital world', *Frontiers in Psychology*, vol 13, pp. 1-14.
- Mullins, E 2022, *Building digital literacy among older adults: Best practices,* Samuel Centre for Social Connectedness, Canada.
- Multicultural Centre for Women's Health (MCWH) 2021, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds*, Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Nam, J, Kim, S & Jung, Y 2023, 'Elderly users' emotional and behavioural responses to self-service technology in fast-food restaurants', *Behavioural Sciences*, vol 13, pp. 1-17.

- NARI, Carer's Victoria, Seniors Rights Victoria & Multicultural Centre for Women's Health 2021, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, Inquiry into support for older Victorians from migrant and refugee backgrounds, Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Papadopoulos, C, Castro, N, Nigath, A, Davidson, R, Faulkes, N, Menicatti, R, Khaliq, A A, Recchiuto, C, Battistuzzi, L, Randhawa, G, Merton, L, Kanoria, S, Chong, N-Y, Kamide, H, Hewson, D & Sgorbissa, A 2022, 'The CARESSES Randomised Controlled Trial: Exploring the health-related impact of culturally competent Artificial Intelligence embedded into socially assistive robots and tested in older adult care homes', *International Journal of Social Robotics*, vol. 14, issue 1.
- Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds,* Victorian Government Printer, Melbourne.
- Portacolone, E, Halpern, J, Luxenberg, J, Harrison, K L, Covinsky K E 2020, 'Ethical issues raised by the introduction of artificial companions to older adults with cognitive impairment: A call for interdisciplinary collaborations', *Journal of Alzheimer's Disease*, vol 76, issue 2.
- Shareef, M A, Ahmed, J U, Giannakis, M, Dwivedi, Y K, Kumar, V, Butt, I & Kumar, U 2023, 'Machine autonomy for rehabilitation of elderly people: A trade-off between machine intelligence and consumer trust', *Journal of Business Research*, vol 164.
- Street, J, Barrie, H, Eliott, J, Carolan, L, McCorry, F, Cebulla, A, Phillipson, L, Prokopovich, K, Hanson-Easey, S, Burgess, T, et al 2022, Older adults' perspectives of smart technologies to support aging at home: Insights from five world café forums', *International Journal of Environmental Research & Public Health* vol 19. Viewed 20 June 2024 at: https://doi.org/10.3390/ijerph19137817
- Suchowerska, R & McCosker, A 2022, 'Governance networks that strengthen older adults' digital inclusion: The challenges of metagovernance', *Government Information Quarterly*, vol 39, issue 1.
- Thomas, J McCosker, A Parkinson, S Hegarty, K Featherstone, D Kennedy, J Holcombe-James, I Ormond-Parker, L & Ganley, L 2023, *Measuring Australia's Digital Divide: Australian Digital Inclusion Index: 2023*, ARC Centre of Excellence for Automated Decision-Making and Society, RMIT University, Swinburne University of Technology, and Telstra, Melbourne. Viewed 2 May 2024 at: https://www.digitalinclusionindex.org.au/key-findings-and-next-steps/
- Tierson, F, Batey, P, Harrison, M J C, Naar, L, Serban, A-I, Daniels, S J C, & Calvo R A 2021, 'Smart Home Sensing and Monitoring in Households With Dementia: User-Centered Design Approach', *JMIR Publications*, vol 4, issue 3.
- Tribuzio, L & Rittinghausen, N 2023, Exploring the needs of aged care providers in regional Victoria, Centre for Cultural Diversity in Ageing supported by Benetas with funding from the Australian Government Department of Health and Aged Care, Melbourne. Viewed 17 June 2024 at:

 https://www.culturaldiversity.com.au/images/Exploring-the-Needs-of-Aged-Care-Providers-in-Regional-Victoria-Final-Report-combined.pdf
- United Spanish Latin American Welfare Centre 2021, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds*, Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions

- Victorian Arabic Social Services (VASS) 2021, Submission to Parliament of Victoria: Legislative Assembly Legal and Social Issues Committee 2022, *Inquiry into support for older Victorians from migrant and refugee backgrounds*, Victorian Government, Melbourne. Viewed 5 June 2024 at: https://www.parliament.vic.gov.au/get-involved/inquiries/olderVictorians/submissions
- Victorian Government Department of Families, Fairness & Housing (DFFH) 2022, Ageing Well Action Plan, Victorian Government, Melbourne. Viewed 23 May 2024 at: https://www.vic.gov.au/ageing-well-action-plan
- Victorian Government Digital Strategy 2021-2026, Victorian Government, Melbourne. Viewed 23 May 2024 at: https://www.vic.gov.au/a-future-ready-victoria/digital-strategy-2021-2026
- Victorian Government, Department of Families, Fairness and Housing (DFFH) 2023, Access, support, and inclusion for older Victorians from migrant and refugee backgrounds Response to the Parliamentary Inquiry into support for older Victorians from migrant and refugee backgrounds, Victorian Government, Melbourne. Viewed 29 May 2024 at:

 https://www.parliament.vic.gov.au/4946ed/contentassets/dc40a004f9ee4f78a6bdb3ee063ed16f/inquiry-into-support-for-older-victorians-from-migrant-and-refugee-backgrounds.pdf
- Wang, Q, Liu, C & Lan, S 2023, 'Digital literacy and financial market participation of middle-aged and elderly adults in China', *Economic & Political Studies*, vol 11, issue 4, pp. 441-468.
- Wilson-Nash, C & Tilson, J (2022) *Technology is alienating people and it's not just those who are older*, World Economic Forum, viewed 15 May 2024 at:

 https://www.weforum.org/agenda/2022/06/technology-is-alienating-people-and-it-s-not-just-those-who-are-older/
- Wynia Baluk, K, McQuire, S, Gillet, J & Wyatt, D 2021, 'Aging in a digital society: Exploring how Canadian and Australian public library systems program for older adults', *Public Library Quarterly*, vol 40, issue 6, pp. 521-539.
- Zaid, NNM, Rauf, MFA, Ahmad, NA, Zainal, A, Razak, FHA & Shahdan, TST 2022, 'Learning elements for digital literacy among elderly" A scoping review', *Journal of Algebraic Statistics*, Vol 13, issue 3, pp. 2850-2859.
- Zainab, S, Mansoor, M & Bukhari, M 2022, 'Media literacy and senior adults' navigation to social media: Practices, participation and challenges', *Observatorio*, vol 16, pp. 139-155.
- Zuboff, S 2019, The Age of Surveillance Capitalism, Profile Books, London.

Attachment: Illustrative sample of digital literacy programs

Program name ¹⁵	Program description	Link
Be Connected (Australia) Young Mentors	Be Connected supports Australians over the age of 50 to boost their online skills, with access to free digital literacy training and devices. It is provided though thousands of community based organisations around Australia. The program includes support to access essential services that have transitioned to the digital space, such as online banking, shopping, telehealth appointments, and government services. The program also includes an intergenerational initiative, Young Mentors, enabling secondary school students to take on the role of digital mentors.	https://beconnected. esafety.gov.au/
Council on the Ageing (Australia)	COTA (Council on the Ageing) offers a range of free digital mentoring courses in different states and territories e.g. in the ACT (See link).	https://cotaact.org.a u/become-a-digital- mentor-with-the- help-of-cota-act/
Digital literacy for older Aboriginal people (WA)	Program aims to improve the digital literacy of older Aboriginal people, making them less susceptible to scams and digital crime, via education sessions for up to 600 people in regional Western Australia, delivered by two Aboriginal organisations.	Government funding to improve digital literacy of older Aboriginal people
Digital Literacy Seniors Program (Victoria)	Digital Literacy for Seniors Program, supporting public libraries to conduct hands-on digital training programs for Victorian seniors in 2023. Training programs include one-to-one or small group sessions on both hardware and software topics such as how to manage mobile phones, data and apps, understanding the internet, and how to get the most out of laptops and tablets. The program also funds the hiring and training of staff to deliver programs, upgrade library digital devices like laptops and iPads, and minor changes to library facilities to better facilitate programs.	https://www.premier. vic.gov.au/new- library-program- keeps-seniors- connected-digital-age
Moonee Valley libraries	New Tricks Series, delivered by Moonee Valley libraries is funded through this initiative.	https://libraryevents. mvcc.vic.gov.au/serie s?si=&sn=new+tricks
Yarra Plenty Regional Library	Tea and Tech Talk: 'Yarra Plenty Regional Library is consulting with seniors within the library, via outreach and in aged care and nursing home facilities. These co-design consultations will find out what seniors would like to learn and what learning approach they would like us to take. We are reaching out to include Culturally and Linguistically Diverse communities and multicultural support agencies.	https://www.yprl.vic. gov.au/blogs/tea- and-tech-talk/
Digital Literacy Training for Seniors programme (NZ)	Programme priorities: support 5,000 more participants to learn essential digital skills target older population groups at greater risk of digital exclusion improve the sustainability of digital training programmes for older people (offered through a range of community based organisations).	https://officeforsenio rs.govt.nz/our- work/digital- inclusion/digital- literacy-training-for- seniors/

¹⁵ Programs are in Australia unless otherwise specified.

		I
Digital Piazza, AMCS (Victoria)	AMCS provides free training for volunteers to mentor multicultural seniors to learn new digital skills. Seniors learn: to use technology devices, watch news and videos, make video calls, access online banking and shopping, access My Aged Care and Centrelink Online, use online meeting platforms, engage with hobbies, and connect with family and friends.	https://amcservices.o rg.au/projects/digital -piazza/
Little Brothers- Friends of the Elderly (Boston,US)	Brings intergenerational, technology, and arts programming to older Bostonians in public and affordable senior housing and senior centers. The Digital Dividends course gives older adults access to a full technology kit — including a Chromebook, internet hotspot, chargers, a mouse and a coursework book, and partners them with local college students to support participants in their learning journey.	https://lbfeboston.or g/
Senior Digital Literacy Program – Indian Support Centre (NSW)	The Senior Digital Literacy Program is designed to provide adults over 50 years with the skills and confidence needed to navigate the digital world, stay connected with loved ones, and access valuable online resources. The Program includes: basic digital skills, Internet navigation, communication tools, Online safety, practical applications, and one-on-one assistance.	https://indiansupport center.org.au/service s/digital-literacy- seniors/
Shaping Connections (Victoria)	The Shaping Connections project is a partnership between RMIT University's School of Economics, Finance and Marketing and the University of the Third Age, which aims to help seniors understand the benefits of technology and how digital skills can improve their health and wellbeing. Overall, it aims to foster social connectedness and digital inclusion in older people. The project involves co-design workshops with older people from CALD backgrounds.	https://eccv.org.au/i mproving-digital- inclusion-for-seniors/
Tech Savvy Seniors (NSW)	Tech Savvy Seniors (from Telstra in partnership with the NSW government) offers face-to-face training and how-to guides in 14 languages. (You don't have to be a Telstra customer to access the resources. Other states have also partnered with Telstra.) Courses are run through participating libraries and community education centres.	telstra.com.au/tech- savvy-seniors
Tech, Tea & Tales, Jewish Care Victoria	An intergenerational 6-week program run by Humankind Enterprises (StoryPod) and Lively in partnership with Jewish Care. in an aged care facility, involving young 'story helpers' and 'tech helpers' working one-on-one with Jewish Care residents, to help them use technology to connect with friends, family and their interests, and record their stories and life experiences on film.	https://www.jwire.co m.au/generations- connecting-through- tech-tea-tales/
Your Health in Your Hands (Seniors Rights Victoria)	Your Health in Your Hands is a digital health literacy program delivered by Good Things Foundation Australia in partnership with the Australian Digital Health Agency (ADHA). The program is designed to improve people's uptake and confidence using My Health Record, supporting them to gain the essential digital skills and confidence to manage their health and wellbeing.	https://seniorsrights. org.au/news/digital- health-literacy/

Example of digital literacy programs in one council area

Blacktown City Council (NSW)

SydWest Multicultural Services/ Seniors Kiosk offers digital in house literacy programs provided to seniors 65+. For more information call 9621 6633. Blacktown City Libraries offer many digital literacy programs. Check out their what's on calendar for all their senior events and activities at the library.

Computer Pals Blacktown Inc trains their members to use most devices and PCs along with Apple Macs. They also cover most Microsoft programs to higher level. Book yourself into their daily sessions call 02 9920 0829.

Department of Social Services: Be Connected program aims to increase the confidence, skills and online safety of older Australians when they use the internet. (See above).

IT 4 Retirees provides tailored IT training from one-on-one to group formats. They also offer telephone support and customised guides to empower you to confidently use current technology.

The Leep in Lab offers free one-on-one technology support from a volunteer digital mentor. Bring in your tablet, phone or laptop and start learning more about your device and the internet today! Book in for a 1 hour session with a digital mentor by calling 4721 1866. Leep can also help recruit and train volunteers to deliver your own Digital Literacy Program. If your organisation would like to develop your own digital literacy program for your clients or community, Leep can provide free support to help you establish one. To learn more call 4721 1230.

Our Lady of Consolation Aged Care Service offers computer tutoring to home care package clients and it's residents. For more information and to book, email ipaterson@oloc.com.au or call 9832 5476.

Rooty Hill and Districts Seniors Computing Club offers training for small groups and individuals in a sociable setting. For more information call 9832 3117.

Western Sydney Dementia Advisory Services will help you understand technology. You will feel confident in using your mobile phones, computers, tablets and internet. For more information call 8805 0991.

https://www.blackto wn.nsw.gov.au/Com munity/Ourpeople/Olderpeople/Digitalliteracy-programs



Ethnic Communities' Council of Victoria (ECCV)

Suite 101, 398 Sydney Road Coburg VIC 3058

P: 03 9354 9555 **E:** eccv@eccv.org.au

eccv.org.au