**The future of dementia care in an increasingly digital world**

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**Editorial**

The pandemic has changed the shape of dementia care and how people can access it. Historically, inequalities in care relate to being from a minority ethnic background, residing in rural as opposed to urban settings, living alone, having a rare subtype of dementia, low education or health literacy, and poverty (Hu et al., 2022; Stephan et al., 2018; Watson et al., 2021). These are compounded by geographical and system-level inequalities, reduced post-diagnostic support in certain areas, poor workforce training, education, and support, and lack of health and social care resources.

Adding a global pandemic to these existing difficulties has led to severely detrimental impacts on care, plus a need to reflect, re-assess, and innovate to improve care in the context of an increasingly digitalised world. Whilst the sudden closures of social care and social support services, and face-to-face primary care, for people with dementia and their carers has affected their mental well-being (i.e. Giebel et al., 2021a; Tujit et al., 2021), and increased inequalities in accessing care (Giebel et al., 2021c), it has also led to innovation with health and social care services, having adapted to providing digital remote access and support. This may be all the more important considering the continued reductions in the health and social care workforce (i.e. Skills for Care, 2022).

Digitally accessible care services have provided a lifeline to accessing some elements of care, and enabled people from different regions, or indeed countries, to better connect with one another (Talbot & Briggs, 2022). However, the older population may have fewer digital literacy skills and technologies, and older people with dementia often require support in accessing Zoom meetings or face-time chats. This support was normally provided by adult child carers, again highlighting another barrier to accessing purely remote care since not every person with dementia has a family carer. Moreover, for people in the more advanced stages or with specific subtypes that include visual impairments, such as Posterior Cortical Atrophy, there can be limited benefit to accessing care via a Zoom chat.

With a move from face-to-face to remote or hybrid care delivery, the future of dementia care looks increasingly hybrid, with services maintaining remote care delivery. Benefits for some people with dementia and their carers, including those living remotely or unable to leave the person they care for to access a peer support group face-to-face. However, the danger is that services will rely too heavily on cheaper and quicker remote care delivery, where possible, potentially having long-lasting negative impacts on well-being. Raising the risk that underfunded, under-resourced, and understaffed settings take the cheaper and easier option and deliver care remotely when some of it may need to be in person. So remote interaction should not be seen as an equivalent replacement or simple substitute for personal human contact. Remote care may also move away from person-centred care. Kitwood and Bredin (1992) consider the importance of social health, environment and personal preferences, including a strong focus on interpersonal care, social relationships and context (Kitwood, 1998). A more recent take on person-centred care advances Kitwood’s approach by focusing on care provider perspectives and the importance of relationships and personal qualities of staff (Ross et al., 2015). This is not achievable via only remote care and support services, and there would be a danger for the quality of dementia care to decrease, neglecting a focus on the personhood of someone with dementia.

A move towards digitalised dementia care may be slower in LMICs, where the majority of people with dementia have care primarily if not solely provided by the family (ADI, 2022) as a result of culture, stigma, and lack of resources and health infrastructure, plus often an inadequately trained dementia workforce. The future of dementia care therefore needs to look at ways to support people with dementia and their carers better in different geographical and cultural contexts as well.

The digitalisation of care could potentially take a much bigger step in the coming years, spurred on by recent technological advances. More and more, people with dementia living at home, in sheltered accommodation or in a care home can use smart technology to support their care. Many are increasingly using smart technology in their own homes, including to order groceries, play music, turn on our heating systems and lights, or watch when people get in and out of bed. Whilst these can be beneficial to everyday life, such as to avoid falls with automatic light sensors, or receive reminders when to take dementia medication, there can be an undesired invasion into people’s privacy, and a danger of taking away people with dementia’s agency, which home adaptations and care packages try to maintain. Ethical considerations as part of the design and implementation of home-based technology dementia care are therefore critical to take into account (Hine et al., 2022). The future of dementia care thus looks increasingly digitalised, and it is important to make early decisions about what extent of digitalised care the person with the dementia would want to receive, as part of their Advance Care Planning.

Moreover, there also needs to be a more embedded involvement of people with dementia and carers in the development and design of technology. Technology and digital interfaces tend to be designed by younger people for young people, neglecting the fact that people with a cognitive impairment may struggle with certain designs. A recent literature review reported how people with dementia can influence the development of technology, albeit often only via qualitative formats (such as interviews), and only to a limited degree, with still a dearth of evidence on the nuanced details of how people with dementia are involved in the design processes (Suijkerbuijk et al., 2019). To ensure that the planned usage of home support and care technology is providing maximum benefit, people with dementia need to be integral in the development and piloting processes. Whilst there is a huge appetite for new technology, in many cases, existing technology such as smart phones and voice activated systems can often be more effectively repurposed to support people with dementia at home.

The next decade of care will be shaped by changes to how carers are supported, including the need for more targeted support from the start of their journeys. Carers should receive practical guidance at every step of the way, not just when starting out in the care sector or when their relative receives a diagnosis. For paid carers in particular, dementia care needs to include a better supported, motivated, and trained workforce, and many countries can learn a great deal from for example the Netherlands about how to ensure workforce retention, motivation, and support including ongoing in-job training and better pay.

The move to digital care has been accelerated by the pandemic but we can expect it to increase, including Artificial Intelligence (AI) technology moving into people’s homes. Examples include video monitoring software, smart technology putting on heating systems, or voice-activated systems controlling in-home technology. We need to put ethical and early decision-making processes in place so that people with dementia can make their own decisions where possible and give views on about their care preferences. And if we have learned anything from the pandemic, then it is the significance of face-to-face social interaction and care. No digital provision can replace the benefits of face-to-face engagement and support, so we need to be mindful of the degree of remote and hybrid care increasingly provided in future.

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