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5: Training the Aged Care Workforce in Technology: Evidence and Directions

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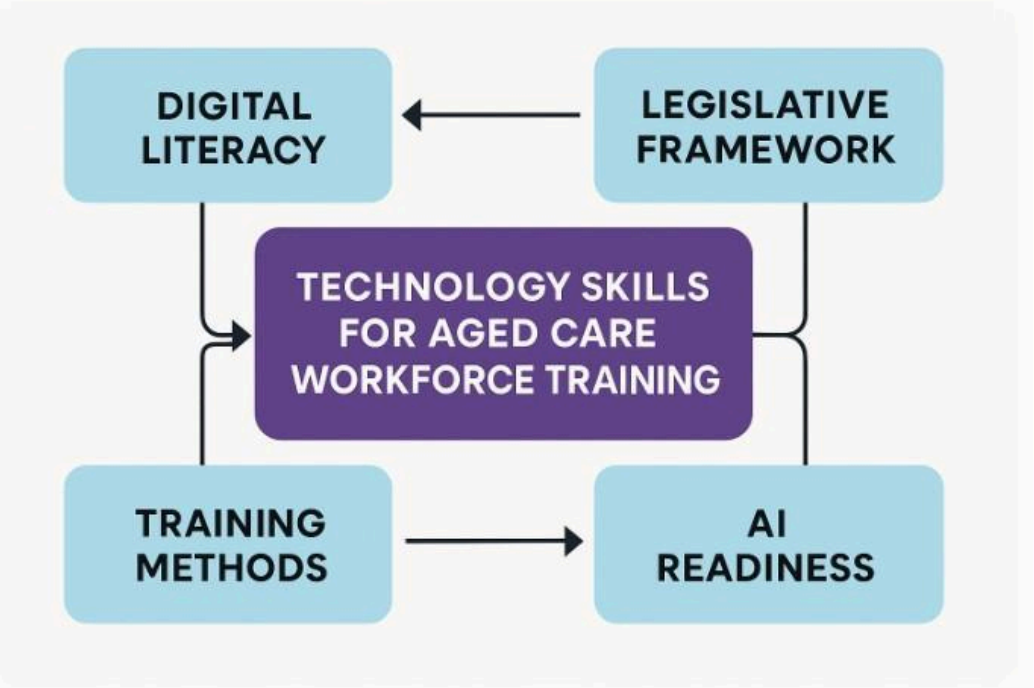

Introduction

Technological change is transforming the world of work. Across industries, automation, artificial intelligence (AI), and digital platforms are reshaping job tasks, skill requirements, and the pace at which workers must adapt. In 2019 an industry report projected that while technology will displace some roles, its dominant effect will be to redefine existing jobs, with most workers requiring new technical, digital, and interpersonal capabilities. Far from eliminating work, technology intensifies the demand for continuous learning and upskilling as an essential feature of employment. [1]

This technological transformation is acutely visible in healthcare and aged care. Once reliant almost entirely on interpersonal and manual labour, the sectors now integrate electronic health records, telehealth, mobile applications, robotics, and increasingly AI-driven tools. These technologies demand a workforce with not only clinical and interpersonal skills but also digital literacy, confidence, and adaptability. [2 - 3]

The rise of AI in healthcare underscores this shift. Artificial Intelligence systems are already used to support diagnostics, workflow automation, and personalised care planning. The Australian Government's Safe and Responsible AI submission stresses that worker training and digital skills development will be essential to integrate AI ethically and effectively into health and aged care. [4] Without deliberate workforce preparation and upskilling, the benefits of AI risk being undermined by mistrust, skills gaps, and implementation failures.

For nurses, personal care workers, and aged care workers, this means that digital confidence and ability is no longer optional: it is central to safe, high-quality care.

Workforce Readiness and Digital Capability in aged care

Digital transformation requires more than infrastructure. It depends on the readiness of the workforce to engage with technology. Gaps in digital literacy are significant in aged care, particularly among Certificate III-qualified workers, who typically receive little or no formal training in digital systems. [3] Older workers, those with limited prior technology exposure, or those for whom English is a second language, are more likely to report low confidence in technology use. [5]

These literacy gaps are not unique to aged care. Broader nursing surveys have long noted uneven digital skills and varying preferences for training modalities. (2011) found that while nurses are broadly willing to learn with technology, preferences for traditional classroom and simulation-based learning remain strong. Uptake of digital training depends on factors such as ease of use, familiarity, convenience, and perceived benefit. [6]

Technology Skills in the Aged Care Legislative Framework

The new Aged Care Act 2024, commencing on 1 November 2025, establishes a rights-based framework for aged care. While the Act does not list technology skills explicitly, it requires providers to demonstrate that their workforce is capable and competent, with the skills needed to perform their individual roles. The Aged Care Rules 2025 link provider registration to an audit against the Aged Care Quality Standards. Within those Standards, providers must plan for workforce needs and ensure workers are skilled, qualified, and given training and supervision. The Standards do not name “digital competence” explicitly, but compliance requires staff to hold the competencies necessary for their roles, which may include digital system use. [9] While also detailing the responsibility of providers to assist consumers with training, knowledge and support surrounding consumer digital literacy and the use of technology to combat social isolation. [9]

The most direct requirements appear in the Strengthened Aged Care Quality Standards (2025):

- Standard 2.5 (Incident management) requires providers to support the workforce including through provision of tools, training and clear policies to prevent, recognise, respond to and report incidents. [8]
- Standard 2.8 (Workforce planning) specifies that providers must identify the skills, qualifications, and competencies required for each role, while not specifically stated, it is reasonable to infer that digital literacy is included, given the nature of the roles and the technologies in use. [8]
- Standard 2.9 (Human resource management) obliges providers to maintain a training system that ensures workers have the necessary skills and competencies to perform their roles, including system-specific training, refreshers, and performance reviews. This includes as a minimum competency-based training into (a) the delivery of person-centred, rights-based care (b) culturally safe, trauma aware and healing informed care (c) caring for individuals living with dementia (d) responding to medical emergencies (e) the requirements of the Code of Conduct, the Serious Incident Response Scheme, the Quality Standards and other requirements relevant to the aged care worker’s role. [8]

Together, these reforms make it clear that technology skills are an embedded compliance expectation. Providers must demonstrate that digital competence is built into workforce planning, assessed through training and supervision, and maintained through regular competency reviews. From November 2025, evidence of worker technical skills, ranging from the use of electronic care management systems and reporting tools to AI-enabled applications, will form part of provider obligations under the Act, Rules, and Standards. [7 - 9]

Workforce Digital Literacy

Workforce digital literacy is a foundational enabler for technology adoption in aged care. Without sufficient digital skills, workers cannot fully engage with electronic systems, telehealth, or AI-supported care. Evidence shows that low digital literacy contributes to reduced confidence and slower uptake, while higher digital literacy improves willingness to use and explore technologies and potentially increase performance. [5, 10]

Targeted digital literacy training can overcome barriers. Digital microlearning models provide bite-sized, flexible modules that fit into daily routines and allow workers to build competencies gradually. [11] In the case of in-home aged care, assessing baseline literacy and tailoring training to worker needs has been shown to improve uptake and acceptance. [10]

At a policy level, workforce planning roadmaps stress that digital literacy must be embedded into vocational qualifications and continuing professional development if aged care is to meet future service demands. [12]

Importance of Training in Technology Implementation

Training is consistently identified as the linchpin of successful implementation of technologies. Evidence from telehealth adoption in Australian residential aged care found that frontline workers required structured training to build confidence and integrate new tools into practice. [13] Similarly, ongoing refresher training is essential: workers report frustration when system updates are rolled out without additional support. [14]

Effective training goes beyond technical operation. Worker's value understanding the purpose and scope of a technology, its benefits for care, and its risks and limitations. [3] When workers can see how technology aligns with their roles and improves resident outcomes, they are more likely to accept and embed it.

Organisational Support and Culture for technology adaptation

Technology training succeeds when paired with organisational support. Studies highlight the role of workplace culture, peer support, and technology champions in building workers confidence. [10] Without management commitment, training risks being perceived as an additional burden rather than a professional enabler. [15]

Simulation, blended learning, and peer-based approaches can ease generational differences in learning preferences, while organisational readiness planning ensures workers have the time and resources to participate meaningfully. [6]

Policy and Future Directions for digital health and care

The digital future of aged care will be shaped not only by technologies like telehealth, mobile platforms, and electronic health records but also by the integration of AI. As the Department of Health and Aged Care (2023) notes, AI introduces both opportunities and risks - improving efficiency, decision support, and personalised care, but raising challenges of trust, ethics, and worker readiness. [4]

Globally, census data on the digital health workforce stress the importance of defining roles and responsibilities and building clear professional pathways that include digital competency expectations. [15] Without these, digital technologies risk widening inequities in skill distribution and leaving sections of the workforce behind.

Recommendations for Care Providers

1. Assess and build worker digital literacy baselines
    - Conduct baseline assessments of worker digital skills before rolling out new systems [10]
    - Integrate digital literacy as a core component of worker induction and ongoing professional development. [3]

2. Embed technology and digital competency training into organisational practice

- Treat technology training as an ongoing process, not a one-off event, ensuring workers receive updates and refreshers when systems change [13]
- Provide training that goes beyond technical instruction to include purpose, scope, and risk management, enabling workers to understand how technology supports care. [3]

3. Use flexible and inclusive training approaches
    - Offer blended learning formats (classroom, online, simulation, microlearning) to meet generational and individual learning preferences [6]
    - Use microlearning and modular approaches to allow workers to build competencies incrementally without overwhelming their workloads. [11]
4. Foster supportive workplace cultures to embed technology
    - Identify and empower technology champions among workers to mentor peers and model positive attitudes toward digital adoption [10]
    - Ensure managers actively communicate support for technology integration and allocate time for training, avoiding perceptions that digital training is an additional burden. [15]
5. Plan for AI and emerging technologies
    - Begin preparing workers for the integration of AI-driven systems, with clear communication about ethical use, safety, and the role of human oversight [4]
    - Provide opportunities for workers to trial and give feedback on new tools to build trust and reduce resistance. [3]
6. Collaborate and share resources
    - Partner with other providers, training organisations, and industry bodies to pool training resources and share best practice [12]
    - Engage in sector-wide initiatives to align training with national strategies and standards. [2]

Conclusion

The impact of technology on jobs is profound, but in aged care the stakes are especially high. Worker digital literacy and training are not peripheral issues; they are the determining factors of whether technology enhances care or creates new barriers. Building a digitally capable aged care workforce requires:

- Embedding digital literacy in qualifications and ongoing CPD
- Using flexible training models such as microlearning
- Providing continuous organisational support and culture change
- Preparing the workforce for AI and emerging technologies
- Train and support managers to implement digital skills

Ultimately, a digitally confident aged care workforce will be critical to delivering safe, high-quality, and sustainable care in the decades ahead.

Summary

- **Digital literacy is now core to safe, high-quality aged care:** *Staff need technical, digital, and interpersonal skills to adapt to new systems such as electronic records, telehealth, and AI.*
- **Training is the linchpin of successful technology adoption:** *Ongoing, flexible, and inclusive training models (microlearning, simulation, blended approaches) are essential to build confidence and sustain digital capability.*
- **Organisational culture determines success:** *Leadership, peer mentoring, and supportive workplace practices are critical to embedding digital skills and avoiding staff resistance.*
- **Compliance and future readiness demand action:** *The Aged Care Act 2024, Aged Care Rules 2025, and Strengthened Quality Standards (2.7–2.9) embed technology skills as a workforce requirement, making digital capability central to provider accountability.*

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