



Cybersecurity Concerns TECHNOLOGY IN AGED CARE

This evidence theme on cybersecurity concerns is a summary of one of the key topics identified by a scoping review on human factors and technology in aged care.

Key points

- Cybersecurity refers to keeping computer networks and the private information they hold safe.
- Older adults are fearful that by using technology they will fall victim to 'hackers and scammers' who may steal their personal information.
- Cybersecurity should be considered in the code of conduct for technology developers, aged care providers, and care staff to ensure the safety of older people.

What is cybersecurity?

Cybersecurity is concerned with keeping computer networks and the information they hold safe. [1] It is becoming an increasing concern for aged care providers, care workers, care recipients and their families. As the use of electronic technology in aged care increases, so does the need for measures that keep personal information secure. Technologies that are connected to the internet and

store medical records and personal details are vulnerable to cyberattacks. Healthcare systems have become an attractive target for cybercriminals as their defences are relatively weak, and the theft of personal information for ransom attacks has become more frequent. [1] These threats are a particular concern for technology that aids with the management of medicines [2, 3] or controls medical devices such as pacemakers. [4] Here, cyberattacks may pose an immediate risk to life.

Aged care perceptions of cybersecurity risks

We found six studies on this topic. [2, 3, 5-8] If you require more information on this topic, try using our one-click PubMed searches below available on the [ARIIA website](#).

Aged care services use technology such as robots, 24-hour monitors, camera surveillance, and falls sensors to provide care. Many of these technologies connect to the internet and increase the risk of cyberattacks.

The six studies we identified discussed risks to cybersecurity and the influence this may have on uptake and engagement with technology in aged care. They reported:

- Aged care users may express reduced trust in technologies connected to the internet [6] and consider the use of robotics and autonomous systems such as artificial intelligence (AI) as risky. [8]
- Older adults may be fearful of having robots in their home and connected to the internet for fear of hacking, having personal information stolen, and having their interactions with robots influenced. [6]
- Many older adults are concerned that someone they do not know could watch them. [7]
- Aged care residents were apprehensive about 'hackers and scammers' and believed that the use of computers and technology could result in 'people stealing your name and information.' [5]

Recommendations

One article recommends that cybersecurity should be considered in the code of conduct for technology developers and that direct care workers need regular training to ensure the safety of older people and the security of the organisation's systems. Specific considerations for cybersecurity of the older LGBTIQ+ community is recommended. [6] People in this community may have chosen not to disclose their sexuality, HIV status, or gender identity to digital platforms such as My Health Record or My Aged Care for fear of adverse consequences. [9]

Limitations

The scoping review found a limited number of studies examining concerns for cybersecurity in aged care settings and the impact perceptions of risk may have on the uptake of technologies in home and residential aged care. Those studies found also varied in quality. Further studies are clearly needed to understand the relationship between cybersecurity worries and the acceptance and use of technology by older people and the aged care workforce. We report ethical considerations and concerns for privacy, safety, and dignity as separate evidence themes. These evidence themes are available on the [ARIIA website](#).

References

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