

The Impact of Emerging Technologies on Long-Term Care & the Health Workforce

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Issue: With rising demand for health workers due to an aging population, we examine how existing and emerging technological advances may facilitate, replace, or enhance recruitment, training, and retention of the LTC workforce.

Methods: We conducted an environmental scan of available information, repeating it 5 times over 5 months, to identify new products and to create a taxonomy of technological categories. We then conducted online interviews with roughly one company in each category.

Taxonomy of Technologies



Findings: Interviewees generally agreed that technology will not fully replace the direct care workforce in the near future, and they are not likely to mitigate the workforce shortage. Technology solutions that facilitate the workforce were more prominent in our findings. We also found technology that addressed workforce recruitment, retention, and staffing efficiency. Potential barriers to widespread adoption of an expanding number of new products and services include consumer concern about privacy and the security of health data, usability, and cost; potential differences in product specificity or acceptance among diverse racial and ethnic groups; and lack of internet connectivity in many rural areas.

Discussion: Long-term care technology is a growing industry with capital investments made in many new products and services developed each year. However, there is little research on which technologies will have the greatest potential impact on the workforce that is providing direct care. Reimbursement from federal and private payers is minimal, yet demand for government payment may grow as use of

these technologies expands in the LTC sector. There is opportunity for emerging LTC technologies to enhance quality of life for patients, assist friend/family caregivers, and improve workforce efficiencies.

Key Words: Technology, technologies, long-term care, LTC, aging, products, services

HWRC Website Link:

https://healthworkforce.ucsf.edu/sites/healthworkforce.ucsf.edu/files/LTC%20Tech_Final%20Report_190731.pdf