

Health Workforce Policy Brief

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

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I. Introduction/Background

Rapidly emerging technological advances have the potential to mitigate a portion of the rising workforce demand due to an aging population and the increasing chronic disease burden. They may help people remain in their homes, assist long-term care (LTC) facilities in their efforts to care for the aging, and/or improve home health and home care worker recruitment, retention, and efficiency.

Little is known about how technological advances will affect the size, skills, and training needs of the workforce required to care for aging Americans. This report addresses this knowledge gap with a scan of available technologies currently or soon to be in use for and by consumers and/or LTC workers; it also assesses which of these may facilitate, replace, or enhance recruitment, training, and retention of the LTC workforce.

II. Methods

The study included an environmental scan of peer-reviewed publications, gray literature, conference materials, and relevant company websites, repeated 5 times over 5 months. The research team reviewed the collected information and created a taxonomy of technology categories based on the products sold by 115 companies. They then conducted online telephone interviews with roughly one company in each category.

Conclusions and Policy Implications

- 1) Long-term care technology is a growing industry. However, there is little research on which technologies will have the greatest potential impact on the workforce that is providing direct care.
- 2) Reimbursement from federal and private payers is minimal to date, yet demand for government payment may grow as use of these technologies expands in the LTC sector.
- 3) There is opportunity for emerging LTC technologies to enhance quality of life for patients, assist friend/family caregivers, and improve workforce efficiencies.

Taxonomy of Technologies



III. 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 research 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.

IV. Conclusion

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

IV. Policy Implications

Reimbursement from federal and private payers is minimal to date, yet demand for government payment may grow as use of these technologies expands in the LTC sector.