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Communication Technology
Improved Staff, Resident, and Family Interactions in a Skilled Nursing Home During COVID-19

Long-term care (LTC) settings have implemented family visitor restrictions amidst the COVID-19 pandemic that may exacerbate isolation and loneliness among residents,¹,² which have been linked to worse health outcomes such as increased risk for cardiovascular disease and depression.³ In addition, visitor restrictions have been associated with increased stress and anxiety among family members.⁴ Incorporating communication technology, such as tablets and laptops, for residents to interact virtually with their families has been shown to increase social support and well-being.⁵ However, many LTC facilities do not have enough communication technology equipment to support resident needs.⁶,⁷ Therefore, we implemented a simple intervention at a skilled-nursing setting that increased the quantity of available technology to help staff and residents engage with families and other medical professionals during COVID-19 restrictions.

Methods

This intervention took place at an urban skilled-nursing home with 69 beds and 174 staff. We conducted a focus group with staff in February 2021 to determine types and quantities of equipment that were needed. Fifteen weeks after the facility received the equipment, we conducted a second focus group and distributed an electronic survey to staff to assess use and satisfaction. This study was deemed exempt by a university institutional review board (#1511016844).

Results

A total of 13 staff responded to the survey. Overall, 85% of staff strongly agreed that the new equipment improved communication. Equipment-specific ratings can be found in Figure 1.

A total of 10 staff participated in the focus group where they highlighted several positive outcomes. First, technology increased family engagement during care plan meetings. Staff expressed that being “able to put a face to a name and [families] are able to see us and interact with us versus just doing a phone conference” made the care process more personal. One staff, for example, highlighted how the therapy team now uses the video technology to show families exactly the type of therapy the resident is receiving. Enhanced communication helped families become more familiar with the resident care needs and goals during discharge. One staff member even suggested that resident and family engagement provided by the increased technology may shorten length of stay because families feel more prepared to provide care at home. Additional technology also made it easier for residents to connect virtually with outside consulting physicians, thereby saving time and transportation costs.

Residents enjoyed the increased privacy resulting from extra technology during calls with their family. Once staff set the equipment up, they could leave the tablet in front of the resident because it had a holder. In addition, extra equipment freed up staff time because they did not have to search for equipment or be physically next to the resident to hold the equipment. This also allowed the residents to speak with their families for longer periods.

Lastly, all equipment was user-friendly such that staff and residents with different comfort levels using technology were able to use them with no major issues. Staff also reported that all residents with different comfort levels using technology were able to use them with no major issues. Staff also reported that all residents were receptive to trying the technology. Overall, the increased technology facilitated communication among staff, residents, and families in new and substantial ways.

Discussion

Currently, many LTC facilities do not have infrastructure that promotes everyday technology use to help residents connect with providers and families.⁸ Barriers to technology access can worsen health disparities.⁶,⁷ One study, for example, found that LTC residents who did not have personal contact, including phone calls, with loved ones during COVID-19 restrictions experienced 35% greater excess mortality compared with residents who had personal contact.⁹ Considering this evidence, our data indicates that noticeable improvements in care processes and resident and family engagement can be observed simply by providing LTC facilities with communication technology equipment.

Although there have been calls to increase technology access for residents in nursing homes amid COVID-19,¹⁰ there are concerns that increasing availability and reliance on such technologies would increase staff burden associated with assisting residents in using the technology.¹⁰ However, our results show that technology actually reduced staff burden by helping residents engage independently with their families, thereby freeing up staff time for other activities. Unlike previous research indicating that incorporating new technology may be incompatible with residents’ limited technological experience,⁸,¹⁰ our findings highlight all residents at the facility were receptive to learning and adopting the new technology.
technology into everyday use. This additionally suggests resident unfamiliarity with new technology may be a small barrier to overcome.

Limitations of the current study include implementation at only one facility and soliciting feedback from a small sample. Future research should examine organizational and personal level factors impeding technology uptake and acceptability across different sites and assess the return on investment and long-term sustainability.

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