Literature and online resources for interventions to support (and metrics to measure) residents experiencing social isolation, failure to thrive, and cognitive impairment

There are many scholarly articles and studies on these issues, few of which make the transition to the COVID-19 era: for example, most suggest interactive therapies and activities that are no longer possible. Most promising are a set of articles describing the benefits of virtual reality, conducted via headsets but also through cell phones which have excellent potential for application in the COVID-19 context.

Residents vary along a continuum of active to less active, and some facilities are positive for COVID and some are negative. Facilities tend to interpret NMDOH and CMS guidance rigidly, leaving active, healthy residents confined to their rooms with little to no activities or social interaction. Facilities are interpreting current rules/guidance regarding non-communal activities to mean that residents must be confined to their rooms. There is no language in current rules or guidance that require facilities to forgo individual activities. Facilities should promote individual activities to address issues of failure to thrive and isolation, and provide guidance so they can do this safely. Solutions should be tailored to both residents who are not mobile and residents who are independent and do not need staff to assist/support.

Facilities should consider an in-room and out-of-room activity plan for both active and bed bound resident. For example, develop a 30 minute individual rotations to different rooms/outdoors (for art, exercise, etc.), with 15 minutes in between for cleaning where required.

Facilities may be able to obtain virtual reality applications and technology through NM DOH civil monetary penalty (CMP) funding. For instance, iN2L is a social engagement technology platform that facilitates social interaction and cognitive engagement. Some New Mexico facilities have already received CMP grants from NMDOH to use this technology.

Limitations and challenges exists regarding activities to enhance quality of life. There could be limited staff availability to assist residents using new technology to connect to family and friends and patients with dementia may find technology ineffective. Additional mobility and activity for some residents must be accompanied by sufficient PPE and by staff and resident monitoring.

Resources/Reference:


Older Adults With Cognitive and/or Physical Impairments Can Benefit From Immersive Virtual Reality Experiences: A Feasibility Study; Front Med (Lausanne). 2019; 6: 329; Published online 2020 Jan 15. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6974513/


**Literature summaries**

**SOCIAL ISOLATION**


  “Loneliness and social isolation have been associated with increased risk for several chronic conditions, including dementia (64 percent increase), stroke (32 percent increase), and coronary artery disease (29 percent increase). Social isolation has also been linked to increases in emergency department visits, hospitalizations, and nursing home placements. … To protect vulnerable patients, healthcare entities—including payers, providers, and
government organizations—must incorporate behavioral health into their crisis communication activities. This begins with communicating about the resources that are available to assist patients with their needs. During the COVID-19 outbreak, proactive information sharing can help elderly patients cope with social isolation and the accompanying sense of grief, anxiety, and stress. Outreach and links to helpful resources can reduce feelings of loneliness and replace them with a sense of inclusion. This time of crisis has resulted in healthcare systems that are overwhelmed by patient demand for services. It is critical to use available technology as a force multiplier to increase the reach of our human outreach capabilities.”


“Psychologist Lisa Brown, PhD, ABPP, a professor of psychology at Palo Alto University who researches trauma, stress and aging, encourages psychologists to brainstorm with residents’ loved ones to identify ways to connect when face-to-face options are not possible for the foreseeable future. … Variety paired with regular contact can help mitigate monotony, isolation and uncertainty, which Brown says can be toxic for nursing home residents. By using telehealth — or doing in-person visits wearing appropriate personal protection equipment — psychologists can focus on stress reduction, normalizing emotional symptoms and whenever possible, connecting residents with loved ones, says Barbera. It’s also important for mental health workers to prepare residents who will be released during or after the pandemic for the changes they will encounter in their communities, she adds. If psychologists use telepsychology for nursing home residents, they need to be sure that older adults are not overwhelmed or unable to use it, notes Lisa Lind, PhD, chief of quality assurance at Deer Oaks, a behavioral health provider focused on providing psychological and psychiatric services in long-term care across the U.S. As of April 30, the Centers for Medicare and Medicaid Services expanded Medicare coverage for audio-only phone services during the pandemic. This change is critical for residents who might not know how to operate video devices or residents with certain conditions whose symptoms could be triggered by a voice speaking through a computer. Telehealth is also limited by the availability of facilitators, as nursing home staff are already flooded with taking care of residents’ direct care needs. It’s also important for psychologists to be vigilant about looking for more subtle signs of anxiety and depression in residents, working with staff to identify potential negative effects of the pandemic and determining the appropriate screening tools, says Lind. “For depression, we normally look for isolation or withdrawal as symptoms, but since residents are quarantined and exhibiting these behaviors on a daily basis, mental health providers need to look for signs like increased negative thinking or worrisome thoughts,” she says.”

**FAILURE TO THRIVE**

These two studies explore geriatric failure to thrive, but neither place the condition in the context of the prolonged social isolation forced upon nursing home residents by the COVID-19 outbreak. As such, they are of limited utility – recommendations include more social activities and family time. However, searches for more COVID-19 specific information were fruitless.
VIRTUAL REALITY AS TREATMENT IN LONG TERM CARE

Studies/Abstracts


**VIRTUAL REALITY AS TREATMENT IN LONG TERM CARE**

Studies/Abstracts

- **Older Adults With Cognitive and/or Physical Impairments Can Benefit From Immersive Virtual Reality Experiences: A Feasibility Study;** Front Med (Lausanne). 2019; 6: 329; Published online 2020 Jan 15. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6974513/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6974513/)
  
  “Older adults living in long term care, rehabilitation hospitals, and seniors' residences often experience reduced mobility, sometimes resulting in confinement indoors and isolation, which can introduce or aggravate symptoms of depression, anxiety, loneliness, and apathy. As Virtual Reality (VR) technologies become increasingly accessible and affordable, there is a unique opportunity to enable older adults to escape their restricted physical realities and be transported to both stimulating and calming places which may improve their general well-being.... All participants completed the study with no negative side-effects reported (e.g., No dizziness, disorientation, interference with hearing aids); the average time spent in VR was 8 min and 76% of participants viewed the entire experience at least once. Participants tolerated the HMD very well; most had positive feedback, feeling more relaxed and adventurous; 76% wanted to try VR again.”

  
  “A mixed-methods study was conducted with 13 residents of varying cognitive capacity in a residential aged care facility (RACF) operated by a not-for-profit organization in Brisbane, Australia. Residents participated in one facilitated VR session, either as a group or individual session. Residents' mood and apathy were measured by the Observed Emotion Rating Scale (OERS) and the Person-Environment Apathy Rating Scale. Residents also completed a structured interview to provide their feedback after the VR session. In addition, four RACF staff members were interviewed about their experience of using the VR in residents and the ongoing feasibility. The experience of VR administered by a researcher and leisure and lifestyle coordinator as a leisure activity, significantly reduced apathy in residents through observations of increased facial expression, eye contact, physical engagement, verbal tone, and expression. The study did not find a VR impact on the OERS measures; no significant increase in fear/anxiety was observed. Reminiscence was clearly observed in six of the nine residents with the ability to verbally communicate. VR was found not to be helpful in residents during episodes of acute neuropsychiatric and behavioral symptoms. This study suggested feasibility of using fully immersive VR delivered by mobile phone technologies. It provides preliminary data for a controlled trial presently underway examining the effectiveness of VR as a group activity in RAC to improve mood states, behavioral...
symptoms, and pro re nata psychotropic medication use. Residents indicated that VR was enjoyable with low levels of physical and emotional discomfort reported or observed.”


  “Assistive technology including virtual reality and augmented reality has gained interest as a novel intervention in a range of clinical settings. This technology has the potential to provide mental stimulation, a connection to autobiographical memory through reminiscence, and enhanced quality of life (QoL) to people living with dementia (PLWD) and mild cognitive impairment (MCI). In this mini-review, 10 studies of varying study designs … and durations were examined. Overall, the virtual experiences were enjoyed by the participants, improved their mood and apathy, and were preferred when compared with non-virtual experiences. However, small sample sizes and variations in study design limit the generalizability of the results. Nevertheless, the use of virtual and augmented reality technology for PLWD and MCI is a novel and emerging method which may provide cognitive stimulation and improve well-being.”

**News Reports**

- **AARP:** Virtual Reality Opens the Door to New Worlds. 10/15/18


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