with limited technology experience. Next, Dr. Fazio will introduce Project VITAL which aims to impact social isolation by increasing accessibility to virtual education and support for care community staff, family caregivers, and individuals with dementia. Finally, Dr. Penfold will report on the translation of a paper-based, face-to-face intervention for reducing caregiver burden into a self-directed online learning program. Overall, these presentations highlight successes and challenges in incorporating virtual-based methods to maintain engagement with participants, individuals with ADRD, and caregivers during the pandemic and beyond.

## LONGEVITY STUDIES IN THE NEW NORMAL: THE MOVE TO VIRTUAL ASSESSMENT

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Extreme longevity is associated with resilience to Alzheimer's disease. A major goal of centenarian studies is therefore to identify factors associated with maintaining cognitive function throughout life. Over the past year, two studies of centenarians and their offspring (age 60-110+ years) have pivoted from in-home assessments of cognitive and physical function to hybridized, Zoom-based assessments including comprehensive cognitive testing, blood pressure, grip strength, and accelerometry and biological sample collections. Protocols were optimized for accessibility for individuals with limited technology experience (e.g., investigator remotely controls all functions of the participant's tablet) and sensory impairments (e.g., integration of wireless headphones) and include high-sensitivity data collection (e.g., sensor-based wearables and digital recording of cognitive test responses). Advantages of virtual administration included the ability to accommodate fatigue through multiday assessment and to include geographically-isolated individuals. Disadvantages included participant burden due to equipment setup and inability to collect certain measures virtually (e.g., carotid ultrasounds).

## A NEW NORMAL? CONTINUED IMPACT OF COVID19 ON ALZHEIMER'S CLINICAL TRIALS RESEARCH

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The COVID-19 pandemic has led to unprecedented challenges in Alzheimer's disease and related dementias (ADRD) clinical trials research. Scientists continue to grapple with the potential and multifaceted consequences of COVID-19. This presentation will discuss strategies used at a U.S. Alzheimer's Disease Research Center to implement virtual methods to counter COVID-19's impact on safety for continued research engagement; address the disparate impact by age, race, and ethnicity for online accessibility; and plans for virtual engagement in future research. As scientists navigate lasting implications of COVID-19, future study planning, design, and management will likely be altered. Specifically, increased awareness of participant-centered approaches, inclusion of psychosocial implications, and focus on ways to meet older adults' unique needs of virtual accessibility will be needed. We must be intentional to counter COVID-19's lasting impact on ADRD clinical trials research while maintaining rigor and reproducibility to uphold and progress advances toward treatment and cures for ADRD.

## BUILDING ON EXISTING TECHNOLOGY TO ENHANCE REMOTE ASSESSMENTS OF BRAIN HEALTH

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Tablets, smartphones, linked devices have features such as high-fidelity microphones, accelerometers, GPS locators, and gyroscopes can be used to capture brain health-related data. Collection of data remotely is especially important given the vulnerability of older adults to COVID and the need to protect from such exposure. As part of an American Heart Association/Gates Venture Strategically Funded Network, a number of remote assessments are being deployed to capture information related to brain health in a subset of the Bogalusa Heart Study cohort (mean age 51.4, SD 5.3). The Linus Health Platform includes applications that measure cognitive abilities, and collect digital voice features and phone sensor data that can be derived into surrogate measures of cognitive function and mood. A readily available suite of games (Lumosity) is also being used to assess cognitive health. These devices and applications offer a largely unexplored opportunity for acquiring and assessing data related to brain health.

## PROJECT VITAL: A STATEWIDE INITIATIVE USING TECHNOLOGY TO IMPACT SOCIAL ISOLATION

Sam Fazio, Alzheimer's Association, Chicago, Illinois, United States

Project VITAL leverages customized technology to enhance connection, engagement, education and support to individuals with dementia and their caregivers. The goal was to positively impact social isolation, stress, and well-being and help mitigate the effects of isolation experienced during the pandemic and beyond. Phase One included three components designed to impact connection, engagement, education and support. It's Never Too Late provided 300 customized tablets to 150 care communities to facilitate connections to family members and increase individualized, person-centered engagement. Project ECHO, a video-based learning platform, educated and supported care community staff. Virtual education and support were offered to family caregivers at home. Phase Two provided the program to an additional 150 care communities and added online professional training/ certification. Phase Three focuses on 150 family caregivers and individuals with dementia living at home. In addition to connection and individualized engagement, family caregivers now had direct access to virtual programs and services.