

**AGE-WELL Conference 2022 - Drinks & Demos**

Demo #	Location	Presenter(s) Name	Title of Demo	Demo Abstract
D01	Foyer	Ahmed Abou-Sharkh, Kedar Mate	How well do you have to walk to walk for health? A demonstration of a technological solution to an important question	<p>Every person at one point in their lives will experience a deterioration in mobility, notably walking. Walking is the most valued life activity and 2 of 3 seniors self-identify that they do not walk well. Many injured/older people do not walk BEST because of loss of heel- to-toe gait, weak push-off, limited arm swing, and limited foot clearance. These gait deficits lead to slow walking speed, increased work of walking, and increases fall risk. It is important to promote better and safer walking.</p> <p>Evidence shows that gait training is effective in improving gait pattern but effects abate with cessation of training. During gait training therapists use a number of verbal and visual cues to place the heel first when stepping. This simple strategy changes posture from stooped to upright, lengthens the stride, stimulates pelvic and trunk rotation, and facilitates arm swing. These principles guided the development of Heel2Toe sensor.</p> <p>The Heel2Toe sensor is a small device that clips on the shoe and provides an instant positive auditory biofeedback via Bluetooth to a smartphone when the walker makes a good step, one in which the step is initiated with a strong heel strike. This simple strategy changes a stooped, shuffling gait to one that is upright and striding. This type of positive reinforcement stimulates the brain that stamps in a safer, more efficient walking pattern. As walking is the most valued activity and is associated with longevity our Heel2toe sensor can make a difference to both quality and quantity of</p>
D02	Foyer	Mark Chignell	2RaceWithMe	<p>2RaceWithMe is an exergaming solution for older adults. Developed with AGEWELL funding to the Interactive Media Lab at the University of Toronto, and now being commercialized by Centivizer Inc.</p> <p>2RaceWithMe promotes physical exercise and encourages social interaction, providing families/caregivers a new way to connect with loved ones, and to encourage them to be more active. With 2RaceWithMe, users pedal over almost 200 scenic video courses and the faster they pedal the faster they move, with the video only playing if they keep pedaling. At the end of each video residents can see how far they pedaled. Family members receive a text message when their loved one is pedaling and can click on the link to videoconference with the resident while he or she is pedaling.</p> <p>2RaceWithMe is being used for rehabilitation, exercise, and virtual touring. With hand and foot pedals it can be used by people who are in wheelchairs as well as people who are ambulatory. The simple push button selection of videos makes it easy to use, in spite of physical or cognitive impairment. Opportunistic videoconferencing provides social interaction. Every time residents use the bike there is a chance to talk to family if available. They have plenty to do biking over scenic courses, but a video conference with family can be a wonderful surprise.</p> <p>As of July 2022, 2RaceWithMe was installing in sites across five Canadian provinces.</p>

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D03	Foyer	Silas Alves, Jon Morris	Aether and the Metaverse: a case study on how to leverage novel VR technology for robotics	Come and experience how VR and robotics are being employed to solve the specific challenges of providing care to older adults and people with Developmental Disabilities. The COVID-19 pandemic intensified the need for technology that helps caregivers while observing health protocols. We have seen increased adoption of robots and virtual reality (VR) to maintain seniors' mental and physical health. Experience the VR and simulation we leveraged to expedite the development of Aether™, a socially assistive robot that inspects a long-term care facility (LTCF) in search of hazards and fallen people. You will see digital twins (DT) of Aether and our partner's LTCF that allows you to impersonate avatars of residents or staff using a VR headset and immerse yourself in a VR space based on AltspaceVR designed to integrate caregivers into our research world. The simulators and AltspaceVR facilitate testing the robot and connecting with caregivers remotely. You will observe that the DTs adequately recreate the real floor plan of the facility, allowing for realistic detection and navigation. See how we will evaluate our fall detection system by simulating scenarios that would not be feasible in the real world. Our ultimate goal is to help Canadians overcome challenging environmental roadblocks to safely achieve client-centred and affordable research. We also invite you to join our Innovation Talk, where we will delve into the more technical aspects of our case study!
D04	Foyer	Noelannah Neubauer	An interactive tool to help people living with mild dementia stay safe while maintaining their freedom to go where they like	Resources on proactive strategies that mitigate risks associated with getting lost are scarce. Existing resources frame wandering negatively which limits the autonomy and independence of persons living with dementia. The Canadian Guideline for Safe Wandering was created and disseminated in 2019. The Guideline categorizes available resources by risk level. Initial evaluations indicated that the guideline is helpful to three target groups: persons with dementia, family care partners, and community facilities. To further enhance access to the Guideline and its impact, we created an interactive online or web-based version of the Canadian Guideline for Safe Wandering for use by persons living with dementia and their care partners (canadiansafewandering.ca). We completed usability testing of this website with persons living with A1:E25 dementia, and we are launching this online Guideline at the 2022 AGE-WELL Conference. Attendees can interact with the website during a demo session, respond to questions that determine one's risk of getting lost, and explore corresponding strategies to reduce these risks.

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D05	Foyer	Victor Fernández, Dr. Eleni Stroulia	VIRTUAL GYM: A Personalized Exergames Platform for Physical and Cognitive Training	<p>Virtual Gym is an XR( Extended Reality) exercise platform that offers personalized training within a virtual environment. The activities are specially designed for older adults' physical and cognitive needs. The individualized exercise programs (prescription) are configured to approximate the user's capabilities. The platform presents the prescription as XR gameplay, and the virtual environment presents goals, obstacles, and targets positioned in game-like activities that enable the user's personalized postures and movements. The speed and rhythm of the activities are adjusted for a comfortable yet challenging exercise session. The complexity of the game-like prescriptions and game adapts the mechanics to the user's cognitive abilities. The game catalogue of Virtual GymXR is co-designed with older adults to capture their preferences and handicap adjustments and set up an intuitive interaction based on basic rules. The platform is generated prescriptions in three sets of activities: Posture-based: define a sequence of postures presented in a virtual gameplay's goals are to incentive users to adopt upper-limb postures and hold them for a moment. Coordination: requires a coordinated movement from the left and right arms. The goals' are prescribed in pairs to challenge collaborative coordination using the upper limbs.</p> <p>Coordination and rhythm: synchronize music with gameplay to encourage coordinated rhythmic movements with upper limbs. Our algorithms drive the personalization and adaptation of difficulty levels to optimize training effectiveness. Procedural prescription generation. Cognitive parameters equilibrium. The analytics on demand are flexible methods to track and improve specific users' abilities.</p>
D21	Umbria	Busola Adekoya	Ethical and legal issues in the use of alert systems through the lens of personas	<p>A risk associated with dementia-related wandering is becoming lost and going missing which can lead to serious harm for persons living with dementia. Alert systems such as Silver Alert programs broadcast information about a missing person with cognitive impairment to the public, thereby aiding search and rescue efforts to locate the person quickly. However, concerns about releasing personal information about missing persons to the public in alert systems are yet to be examined. We conducted a scoping review of academic and grey literature to identify ethical and legal issues related to the release of personal information in alert systems. This demo will include interactive personas and scenarios that highlight the ethical and legal issues related to the release of personal information in alert systems that we identified in the literature and proposed recommendations. Attendees will be able to interact with the personas and scenarios, share with the presenters their opinions, relate their experiences about the issues, and provide recommendations to inform the design of alert systems that respect the rights of persons living with dementia.</p>

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D22	Umbria	Marc-Antoine Maheux, Dominic, Adina Panchea	Opentera and T-top the companion robot	<p>IntRoLab, the Intelligent/Interactive/Integrated/Interdisciplinary Robotics Lab of the Université de Sherbrooke (Québec, Canada) taking part in the SMART (Socially Mobile Assistive Robots for Telecare and Daily Activities of Older Adults) AGE-WELL project, explores ways to use socially assistive robots (SARs) to facilitate older adults' (OAs) care. We propose SARs or robotic solutions that could be useful and adapted to OAs' needs. We do so by developing them through deployments in care facilities to collect initial and generalized opinions that OAs may have regarding robots. For instance, we showcase the T-Top companion robot, designed to be an open-source tabletop platform for conducting research on SARs. It integrates a wide range of advanced audio, vision, and processing capabilities on the same embedded platform and can track and follow a person's face, follow sound sources, dance, and tell the weather, among other things. T-Top is designed to provide an experimental platform capable of implementing richer interaction modalities and developing higher cognitive abilities from interacting with people. Also, T-Top uses a microservice architecture called OpenTera, an end-to-end open-source telehealth framework, that aims to help software and robot developers prototype remote assistance solutions. OpenTera employs a series of independent modules for tasks such as data and session management, telehealth, and daily assistive tasks/actions, together with smart devices and environments, all connected through the framework. Interfaced with ROS, robots using OpenTera can be made to support OAs as well as healthcare personnel in long-term deployments, allowing them to communicate with smart-devices via cloud.</p>
D23	Umbria	Bryan Hong, Morgan D. Barensse	HippoCamera: A neuroscience-guided digital platform to improve memory for everyday events	<p>We tend to lose the specific details that make up the events from our lives with age—this process is exacerbated in individuals with Alzheimer's disease or dementia. Memory loss can have profound consequences on the self-identity, personal autonomy, and social relationships of those affected, which can in turn further worsen memory loss.</p> <p>One promising avenue to mitigate memory loss is digital memory augmentation, where portable devices record information about everyday episodes to aid in later review and recollection. Previous studies have demonstrated the memory benefits of these tools compared to traditional memory aids, such as keeping a diary. Although these studies serve as an informative proof-of-principle, they use devices with unintuitive user interfaces that fail to consider decades of neuroscientific research to better facilitate memory retrieval.</p> <p>We developed HippoCamera, a validated, easy-to-use smartphone-based memory aid. With HippoCamera, users record and replay rich memory cues for real-life events in a manner that mimics the function of the hippocampus, a brain region that is essential for acquiring and retaining new memories. Specifically, HippoCamera captures dynamic multimodal video cues, as opposed to just photos, and then interconnects and replays the memories in a speeded and contextually-linked fashion, similar to the hippocampus. HippoCamera helps users implement memory-enhancing strategies such as intentional encoding, self-generated memory cueing, and distributed reviewing. We have found robust and long-lasting memory with an average 47% boost in event-specific detail compared to baseline. These gains lasted up to 3 months and were associated with sharpened brain activity in the hippocampus.</p>

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D24	Umbria	Antonio Miguel Cruz, Christine Daum, Noelannah Neubauer, Serrina Philip, Keshi Maheswaran, Lili Liu	A questionnaire to assess acceptance and usability of locator devices	Studies have shown that there is no clear, standardized approach for assessing the technology acceptance, technology adoption, and usability of information and communication technologies for people living with dementia and their care partners. We have created an acceptance and usability of locator devices questionnaire for persons living with dementia and their care partners. The acceptance and usability of locator devices questionnaire is a tool that supports persons living with dementia and their care partners to identify a locator device that best suits their needs. In this demonstration, we will present two versions of the questionnaire: one for persons living with dementia and one for care partners. Each questionnaire has 18 items. We will showcase how the questionnaires were developed using a virtual "road map". Attendees will also be able to interact with both questionnaires on tablets to demonstrate how the questionnaire rates a person's acceptance and usability of locator devices.
D25	Umbria	Samantha Marshall, Serrina Philip, Christine Daum, Hector Perez, Antonio Miguel Cruz, Lili Liu	Data collection of missing incidents involving persons living with dementia: A White Paper	Approximately 40-60% of persons living with dementia will become lost at least once during their lifetime. However, this statistic is potentially outdated and based on American data, it has not been confirmed in Canada. A consistent approach for data collection and integration at the national level would provide a more accurate picture on the prevalence and characteristics of missing incidents. It could also facilitate the prediction of future missing incidents, enabling the development and implementation of preventative strategies. We present a knowledge mobilization product in the form of a White Paper, that elucidates the complexity of the problem associated with collecting and integrating data on missing person incidents involving persons living with dementia and provides directions for a national strategy. This White Paper summarizes findings of a scoping review that identified data collection methods reported in academic and grey literature, semi-structured individual and group interviews with first responders and policy experts, and a synthesis of data structures and analyses that could be encompassed in a national data collection strategy. Our demonstration features interactive case scenarios that simulate the experiences of what first responders, persons living with dementia, and care partners may encounter during missing incidents. By participating in these scenarios, attendees will develop an appreciation for the challenges of collecting and integrating data to inform policy and preventative strategies.

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D27	Umbria	Hector Perez, Antonio Miguel-Cruz, Christine Daum, Elyse Letts, Emily Rutledge, Andrew Faller-Saunders, Lili Liu	Risk factors for getting lost in persons living with dementia: A conceptual framework	<p>Persons living with dementia are at risk of getting lost and going missing. Missing incidents impact persons living with dementia, their care partners, and communities. Outcomes can include injury and death. However, evidence on the risk factors associated with missing incidents is limited. We present a conceptual framework for risk factors associated with going missing and getting lost among persons living with dementia. This framework was developed by conducting: 1) a systematic scoping review; and 2) interviews with stakeholders who have lived experience with going missing and getting lost (i.e., persons living with dementia, care partners, service providers). Our framework considers 27 risk variables categorized into three domains: demographics and personal characteristics; health conditions and symptoms; environmental and contextual antecedents. At our demonstration, attendees will explore the risk factors and their component variables that may influence a person living with dementia to go missing by using a technology-based concept interactive map. During this demo, the concept map will illustrate how the 27 initial risk variables are transformed into the final classification of risk factors based on the perspective of persons with dementia, their care partners, and communities. As well as presenting definitions for each risk variable, this demo includes excerpts from participants conveying the critical importance of each risk factor. Identifying risk factors associated with getting lost and going missing allows for predicting missing incidents. These risk factors can be paired with proactive strategies to prevent missing incidents and inform policies to create safer communities.</p>
D28	Umbria	Fraser Robinson, Zinan Cen, Hani Naguib, Goldie Nejat	Dressed to Impress!: A Socially Assistive Robot-Smart Clothing System for Dressing Assistance of Older Adults	<p>Older adults living with cognitive impairments are faced with unique challenges in independently completing activities of daily living. Among these activities, dressing is especially important for older adults as it enables self-expression and is directly linked to personal identity. We have developed the first autonomous socially assistive robot-smart clothing system to provide dressing assistance through human-robot interaction, prompting and guiding users through the required dressing steps. Smart clothing embedded with strain sensors is used to track a user's pose during the activity. Pose information is used by the social robot to detect and classify different dressing steps such as putting the head through the neck hole in a t-shirt or buttoning buttons on a dress shirt. The robot uses a hierarchical reinforcement learning method to learn appropriate assistive behaviours to aid a user with these steps. Robot demonstrations will showcase the socially assistive robot Leia helping with upper body dressing using a combination of cooperative and motivational persuasive strategies via speech and gestures. Leia adapts its assistive behaviours based on the actions of the user. Our demonstrations will showcase cutting-edge intelligent socially assistive robotic-smart clothing technology that can empower older adults to continue to express themselves and their self-identity through clothing in order to promote independence and wellbeing.</p> <p>Venue Requirements:</p> <p>Table (minimum 72 x 30 inches)</p> <p>Electrical outlet nearby</p>

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Demo #	Location	Presenter(s) Name	Title of Demo	Demo Abstract
D29	Umbria	Charles Gouin-Vallerand, Nathalie Bier	Towards a mixed reality headset cognitive orthosis	<p>Mixed reality is an emerging technology aimed at blending virtual content with the real environment. Using a headset, which can be compared to glasses, it allows virtual content to be displayed at any time, anywhere.</p> <p>People at the beginning of the dementia continuum are often able and wish to live independently at home. But they may have difficulty finding a solution to satisfy certain needs, planning this solution, or taking the steps to carry it out. These difficulties may impact their ability to continue to live independently at home.</p> <p>To support independence at home for people at the beginning of the dementia continuum, we are investigating the utility of using a mixed reality headset as a cognitive orthosis. There are several theoretical advantages to using this technology in this context: the headset is able to interpret the context of the person and provide the necessary assistance when needed with appropriate gradation (to stimulate their residual cognitive potential); the assistance is provided in the user's environment, so they do not need to look away (to a screen for example); the environment does not need to be modified to use it. The design of the cognitive orthosis is based on a user-centered design methodology and follows the "zero effort technologies" principles.</p> <p>During this demonstration, people will be able to try the current development of the demo, which will be a unique opportunity for us to gather feedback from people involved in the aging technologies and users.</p>
D30	Umbria	Kenya Kondo, Karen McDonald, Jacquie Eales, Janet Fast	MyMatchWork.com: Connecting older workers and family caregivers to meaningful employment	<p>Growing the economy post-pandemic requires us to tap into the resourcefulness and experience of all workers, regardless of age. Yet many older workers (including those with family care responsibilities) face stereotypes, prejudices and discrimination – unconscious and negative thoughts, feelings and actions about their abilities – because of their age. MyMatchWork.com (MW) is an online employment services platform for non-profit agencies that support job seeking clients who experience challenges to securing meaningful employment. We help job seekers and employers understand what drives people to work (income aside), what barriers they may be facing in connecting to work, and what meaningful work looks like for each person. MW optimizes employment support agencies' efforts to match people to work, tailoring supports to individual job seekers to get the best from them, and helping employers find the right job candidates. MW data and insights from job seeking clients are compiled and available in real time as a dashboard to employment support agencies to inform their decision-making and document the impact of their program for funders. Collaborating with academic researchers and community organizations to extend MyMatchWork.com to older workers and family caregivers boosts capacity in the non-profit sector, co-creating a technology solution that helps connect workers with meaningful jobs tailored to their unique skills and attributes, matched with those sought by employers, that recognize the relational nature of employment in which both sides are valued, and that advance the creation of an age-inclusive workforce.</p>

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D31	Umbria	Bruce Wallace	Tochtech Sleepsense – Case Studies	<p>Background: In retirement communities, the night staff are tasked with checking and monitoring on a large number of residents, some of which may suffer from mobility and/or cognitive impairment. Residents living with cognitive impairment such as dementia, often experience episodes night-time wandering. It is important for their health to sleep during the night hours. When staff perform frequent rounds and resident checks, they run the risk of waking the residents, and interrupting their sleep, causing episodes of wandering and potential falls. Bed sensing technology could be used to provide insight on bed occupancy status, as well as other vital sign measures to relieve staff of unnecessary checks.</p> <p>Method:The TochTech Sleepsense bed sensor is installed under under the bed leg. In a retirement community, these sensors were programmed to send notifications to night staff based on resident bed exit, or delayed return to bed, depending on the individual’s needs.</p> <p>Results:While the TechTech Sleepsense bed sensor was primarily used for bed occupancy status and alerts, the sensor also gathers data on vital signs, such as heart rate. Through this data collection the sensors were able to identify a death, an increase in body tremors during sleeping hours, and an increase in time spent in bed for one resident infected with COVID-19.</p> <p>Attendees can see and try the Sleepsense sensor as sensing technology could remove the need for unnecessary staff rounds and checks, allowing staff in retirement communities to spend their working hours more efficiently.</p>
D32	Umbria	Neil Thomas, Laura Ault	Home Sensor Feedback Application	<p>In this demo we will exhibit a feedback system designed to summarize data collected from a home sensor platform, the Collaborative Aging Research using Technology (CART). This sensor platform is comprised of motion and contact sensors, an activity monitoring watch, a bed sensor and a medication tracking pill box. This passive and unobtrusive data collection system has been installed in four Ottawa homes of persons living with cognitive impairment and their care partners. With input from these care partners and others in the community, a user interface was designed to summarize and display information related to changes in daily activities. An algorithm was developed that collects this sensor data, parses appropriate measures of steps, sleep, room occupancy and time spent together, and displays the metrics in easy-to-read graphical representations.</p> <p>We will display the user interface of the feedback system with programmed simulated data for attendees to navigate and explore. We will also ask those that may be interested to complete a short questionnaire on their understanding of the data presented and the usability of the user interface.</p>



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D33	Umbria	Rachel Cohen	Drink Detection Demo	Older adults have a high risk of dehydration leading to adverse outcomes such as hospitalization and even death. Older adults can often forget to drink for a multitude of reasons including a decreased thirst sensation. Therefore, it is important to prompt older adults to drink regularly throughout the day. We have created a system that accurately detects when a drink event occurs and the amount consumed, which can be used to track intake throughout the day. The system uses cameras and depth cameras, which are more privacy preserving, and deep learning models. Our system has achieved a high drink detection accuracy in a robust dataset of eating, drinking, and other activities of daily living. In this demo, we will show the drink detection in real time using a webcam. We will allow attendees to drink from any container to showcase the system.
D34	Umbria	Rachel Cohen	Tele-rehabilitation	Tele-rehabilitation has the potential to considerably change the way patients are monitored from their home during the care process by providing equitable access without the need to travel to rehab centers or the high cost of personal in-home services. Developing a tele-rehab platform with the capability to automate exercise guidance and support efficient communication with the therapists will have a significant impact on rehabilitation outcomes of aging population. Our goal is to design and validate a platform that aides the patient to properly perform the exercises, track recovery progress, and transmit the information back to the clinician. A biofeedback system using depth cameras and deep learning with a 3D Convolutional Neural Network (CNN) identifies the quality of the performed exercises and inform the patients to refine their movements. Various datasets were used to test the algorithm, where each exercise was labelled as "Correctly" or "Incorrectly" by a clinician. The proposed 3D-CNN was able to classify the rehabilitation videos and give feedback on the quality of exercises. In this demo, we will present the platform that patients can use for automated rehab. It includes a visual of the user doing the motion in real time, provides the order and explanations of the exercises, and informing them if they are doing the exercise properly. It also includes the clinician side of the platform, which shows clinically relevant statistics such as the joint angles.

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D35	Umbria	Shital Desai, Hyunju Park, Ben Giannis, Arlene Astell	Designing for rituals in people with dementia using AR technologies	<p>Mixed reality Assistive Technologies have the potential to support older adults in early stages of dementia to participate in everyday activities that they usually find difficult to complete on their own. However, these technologies need to be designed using Human Centred Design (HCD) methods, involving users in the design process. To ensure adoption of these emerging technologies in everyday life, they should be designed for habituation of everyday rituals such as making a cup of tea.</p> <p>The demo will show design and development of an Augmented Reality (AR) interface that prompts People with Dementia (PwD) in making a cup of tea. Observation methods were used to understand interactions of PwD with mixed reality environments (AGE-WELL Catalyst 1.5) resulting in an interaction modality framework for PwD. We are now using Research through Design (RtD) methods to prototype everyday activities such as tea making in HoloLens 2, a head mounted mixed reality device from Microsoft. These design efforts will inform new knowledge about designing for rituals in PwD using Mixed reality, thus referred to as RtD.</p> <p>The work is informing future work in design of prompts for everyday activities taking cultural implications and habituation (adaptation of objects for example) into consideration. The demo session will support future evaluations of the design with PwD and other stakeholders, incorporation of new activities in the AR environment and development of interfaces in other AR configurations such as Azure Kinect.</p>
D36	Umbria	Sho Conte	Storytelling with Virtual Reality: Virtual Folk Music Festival	<p>The use of virtual reality has the potential to promote the physical and social well-being of older adults. Through storytelling and reminiscence, creative expression has also been found to support well-being across the life course. We are studying virtual reality storytelling to support social engagement by enabling older adults to experience their own stories through new technology. Participants are involved in designing a VR environment that reflects and celebrates their memories that can be used to host immersive social gatherings. In this demonstration, we present the work of Tom Kane, a photographer and participant in our study on virtual reality worldbuilding and his virtual reality creation: A photography exhibit and folk music festival celebrating the men and women of the site crew over the decades.</p>

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<b>D37</b>	Umbria	Vivian Tran, Dr. Thomas Hadjistavropoulos, Dr. Eleni Stroulia	Demonstration of a pain assessment app for long-term care staff	Pain is highly prevalent among long-term care (LTC) residents but pain problems among residents with dementia with limited ability to verbally communicate are often under-assessed and under-treated compared to their cognitively intact counterparts. The Pain Assessment Checklist for Seniors with Limited Ability to Communicate-II (PACSLAC-II) is a validated assessment tool for healthcare professionals to assess pain in this population. mHealth apps are becoming an increasingly accessible tool but there is only a limited number of validated apps designed specifically for healthcare professionals working in LTC settings. A tablet app, based on the PACSLAC-II, has been shown to improve pain assessment practices in LTC and has demonstrated high clinical utility. Feedback from healthcare professionals indicated that they preferred the app over the paper-and-pen version of the PACSLAC-II for a number of reasons including its ease of use, convenience, enhanced data security, and provision of additional information (i.e., graphing of resident pain scores over time). This demonstration will showcase the PACSLAC-II app as well as two associated websites which can be used by healthcare professionals to facilitate pain assessment and pain management strategies in LTC settings. Participants will also have the opportunity to trial the app during the demonstration using tablets provided by the presenter.
<b>D38</b>	Umbria	Baoqun Zhang, AltumView Systems Inc.	AltumView's Sentinare Smart Activity Sensor for Senior Care	In this talk, we will present the AltumView Sentinare smart activity sensor that we have developed for senior care, which was a CES 2021 Innovation Awards Honoree, and has been selected by Amazon as one of only three fall detection devices for its Alexa Together emergency service. The sensor uses a built-in AI chip to monitor the activities of seniors, collect health statistics, and notify the caregivers when emergencies such as falls are detected. To protect the privacy, only stick figure animations are transmitted, instead of videos.
<b>D39</b>	Umbria	Stephen Robinovitch, Alexandra Korall, Kathryn Sibley	Preventing falls and injuries in older adults through education and sharing of a video database of real-life falls among a community of practice	
<b>D40</b>	Umbria	Rich McAloney	Centre for Technology Adoption for Aging in the North	