



LEVERAGING TECHNOLOGY TO ENHANCE THE FUTURE OF AGING

The journey to EVRTalk

MEET THE PANEL



Jen Williams, Project Manager
, Council on Aging (AAA-1)



Anna Goubeaux, Caregiver
Support Team Lead, Council on
Aging (AAA-1)



Ming Tang, Director of XR-Lab,
University of Cincinnati



Jai'La Nored, Senior Innovation
Designer, Council on Aging
(AAA-1)

01

Understand how technology is being leveraged in the world of aging.

02

Explain the effectiveness of leveraging technology to explain tough concepts to clients and their informal caregivers.

03

Discuss the importance of leveraging partnership with introducing technological solutions.

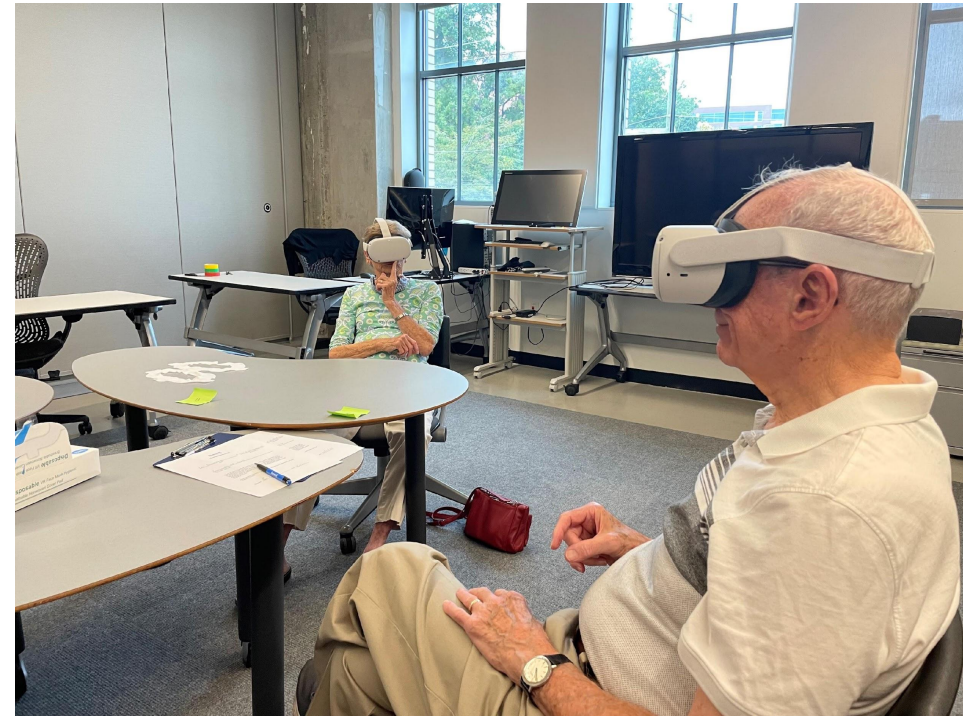
WHAT WILL BE DISCUSSED IN THIS SESSION

WHAT IS EVRTALK?

Over a year and a half, COA in partnership with the LiveWell Collaborative created EVRTalk. EVRTalk is an immersive Virtual Reality educational experience for non-professional caregivers intended to shift perspectives and create empathy.

IT'S FOR RESOURCING RELATIONSHIPS

EVRTalk can resource caregivers who have been exposed to many aspects of a caregiving situation. Resulting in older adults who can receive **more compassionate care**. Ultimately, relationships between older adults, their caregivers and family may encounter **less stress**.



COLLABORATION FOR THE FUTURE



The LiveWell Collaborative, a non-profit academic-innovative center started in 2007 by P&G and the University of Cincinnati, tailors project teams and final deliverables to meet the clients' needs from upstream, pipeline development to lean solutions for today's problems. Through qualitative research grounded in viability, our multidisciplinary teams balance engaging stakeholders with your objectives.

COA has been partnering with the LiveWell Collaborative for about 3 years to define and research solutions to address the problems identified in this solution.

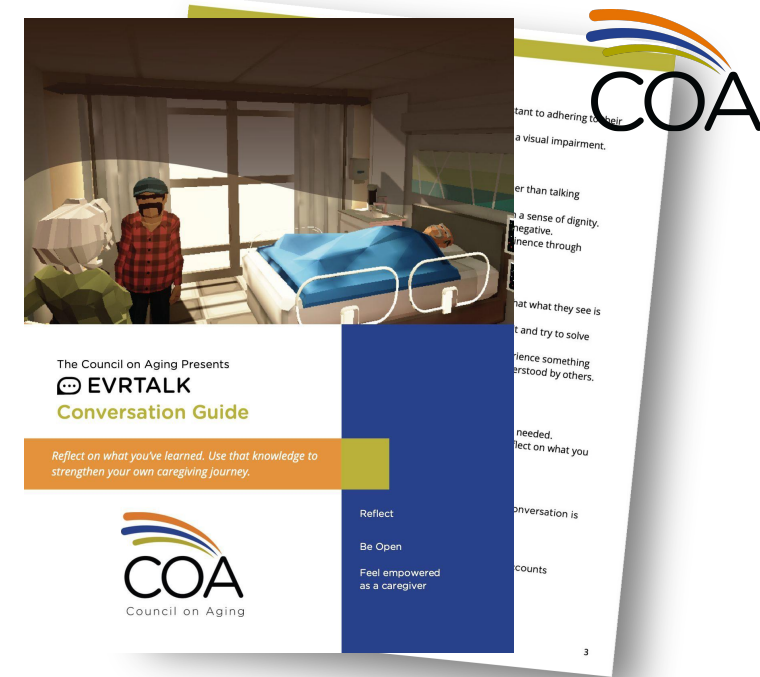
COA has also partnered with other organizations in the Greater Cincinnati area and across the US through training and funding opportunities.

Special thanks to the Consumer Technology Association Foundation, The University of Cincinnati, The LiveWell Collaborative, Catholic Charities of Southwestern Ohio, Hospice of Cincinnati, and Council on Aging staff, leadership, and boards for continual support in this initiative.

HOW DOES IT WORK?

COA uses Meta Quest 2's that have the EVRTalk "game" loaded on them. The Meta Quest 2 is a virtual reality headset. It allows users to have a 3-dimensional immersive experience through a pair of goggles.

After experiencing EVRTalk users can leverage guides and or a Caregiver support to discuss what they have experienced.



WHERE IT BEGAN

In 2019, COA provided 1.5 million hours of home care assistance through its provider network. And is only seeing the need increasing as the population of older adults continues to rise as fewer solutions are available. This drop in service utilization and availability became more impactful by the Covid-19 pandemic that began in 2020.

To fill the gap, in home care assistance needs, non-professional caregivers (mostly family members) have been left to fill the void.

In 2020, COA began the journey to test and develop a Virtual Reality (VR) solution by taking a multimedia approach to address nonprofessional caregiver training.



WHY VR?

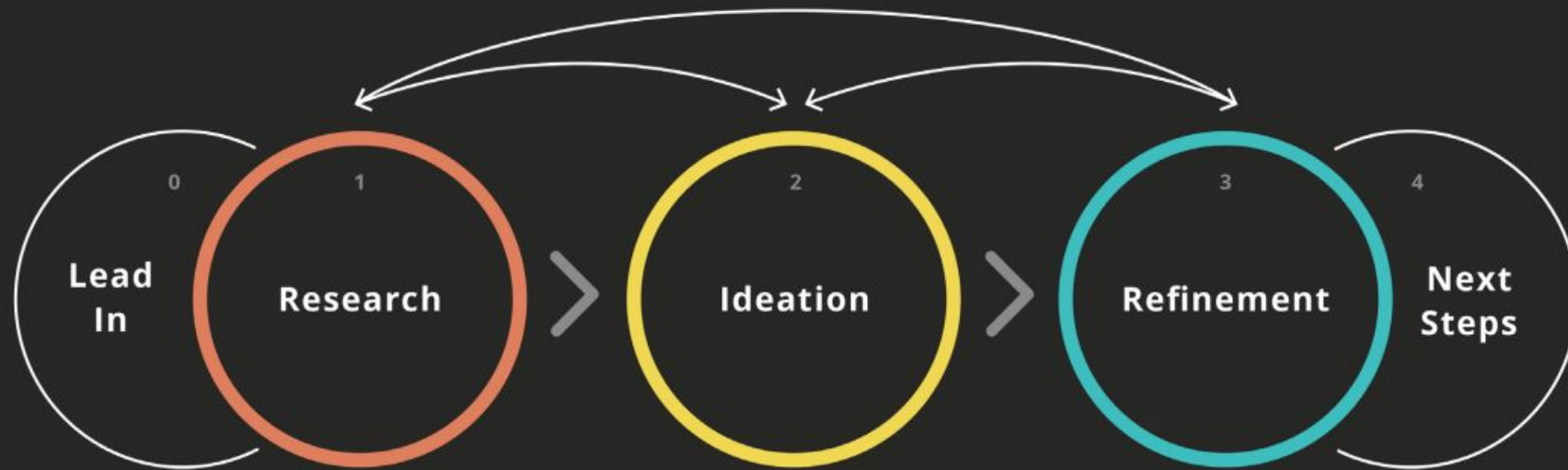
Limitless uses

Great for information Retention

Growing evidence for the benefit to those cognitively impaired

SCENARIO DEVELOPMENT

Every Scenario currently in EVRTalk derived from Brainstorming and cycling through an iterative process.



Phase 0

The problem space is identified and the project sponsor collaborates with the Live Well project lead on the project brief.

Phase 1, 2, 3

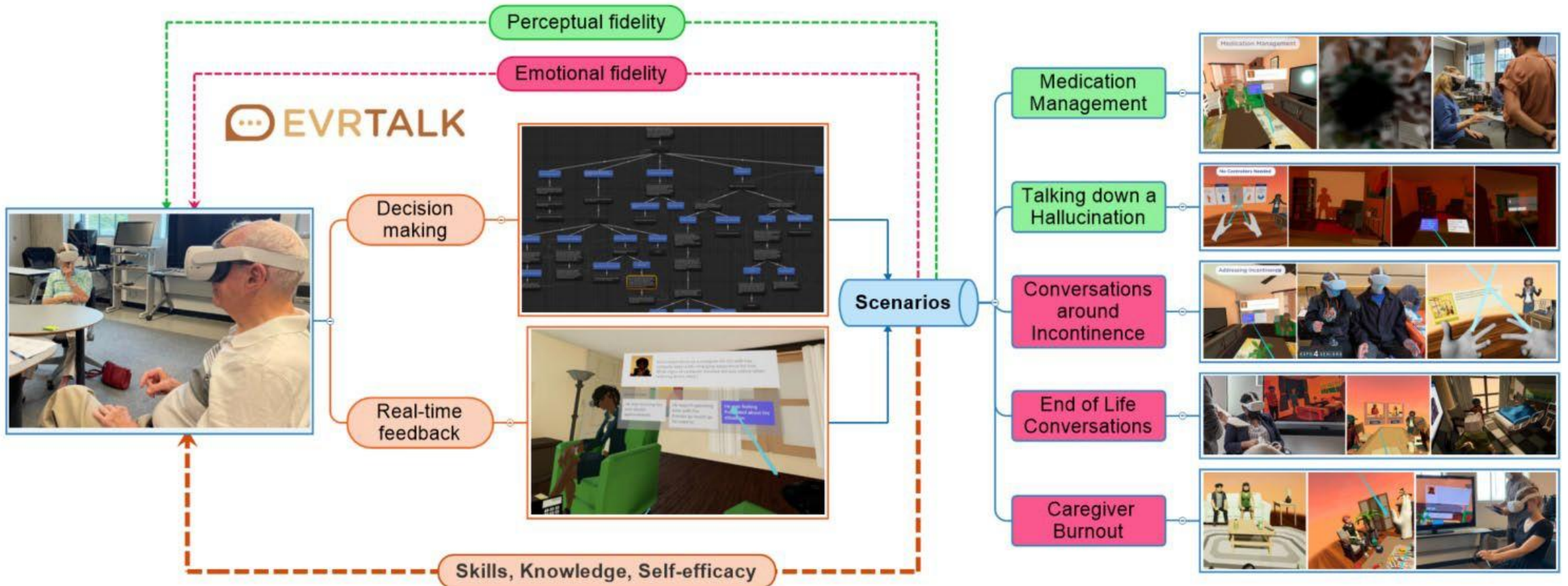
The research team focuses on obtaining knowledge about the topic, translates insights into concept ideas, and tests and refines concepts to meet the needs of the project sponsor.

Phase 4

The sponsor and LWC discuss potential future opportunities regarding the project results.

HOW VR TECHNOLOGY IMPACTS EVRTALK

Designing Empathy

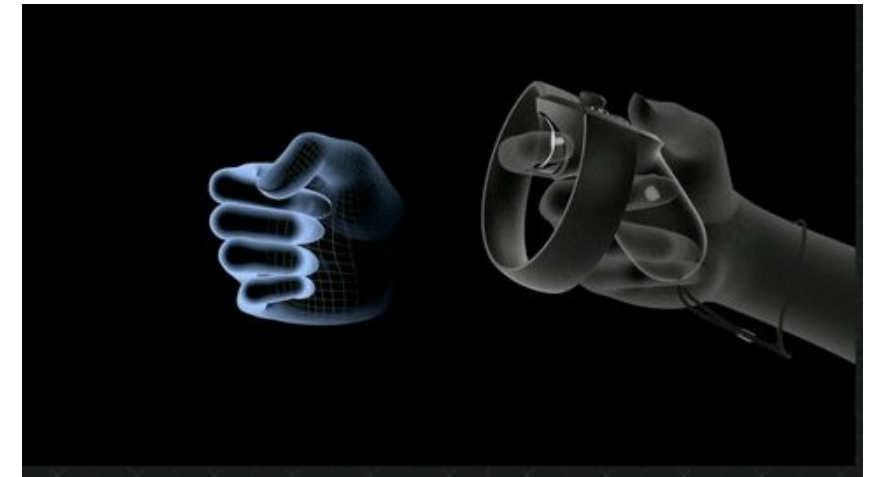


MAXIMIZING THE LATEST TECHNOLOGY

Hand Tracking

Users can use their hands or the remote to navigate EVRTalk. Throughout the game there are built in cues to show users how to use the method selected for them.

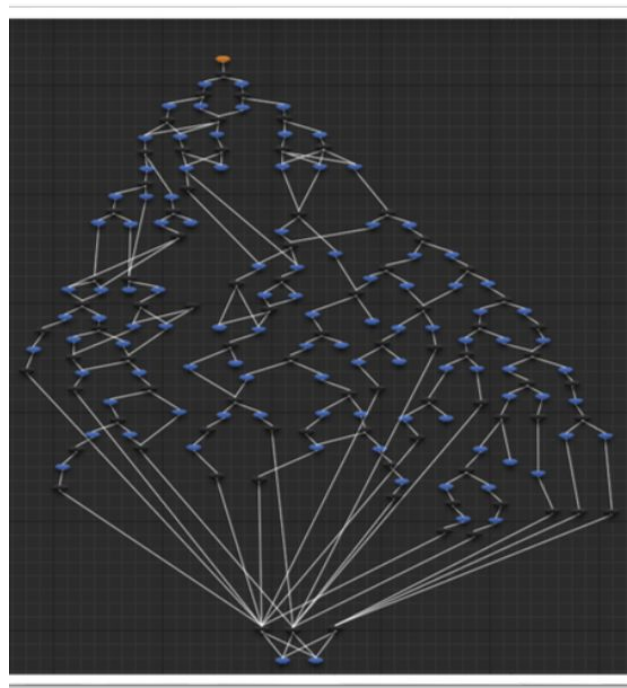
Hand tracking, a **feature that lets you use your hands to access different menu features**. The system detects your hands and fingers through the cameras on the Quest headset. It uses this information as input to determine which action to perform



MAXIMIZING THE LATEST TECHNOLOGY CONTINUED

Simulated Decision Tree

Use the dialogue system of game engine to create complex decision trees to drive the behavior of non-player-controlled character.



CONTINUALLY BUILDING ON THE SOLUTION

Bringing the Solution to the Community

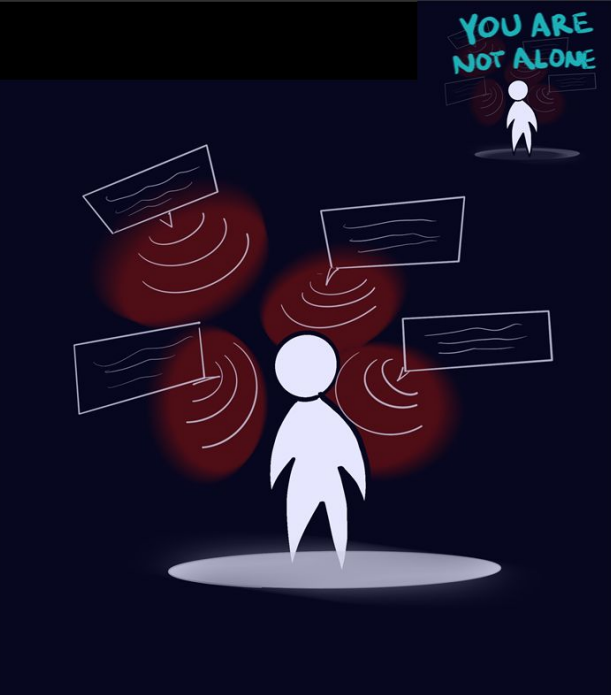
- ▢ 1:1 Caregiver Support
- ▢ Community Events and Expos
- ▢ Non-Profit Partnerships with Caregiver funding

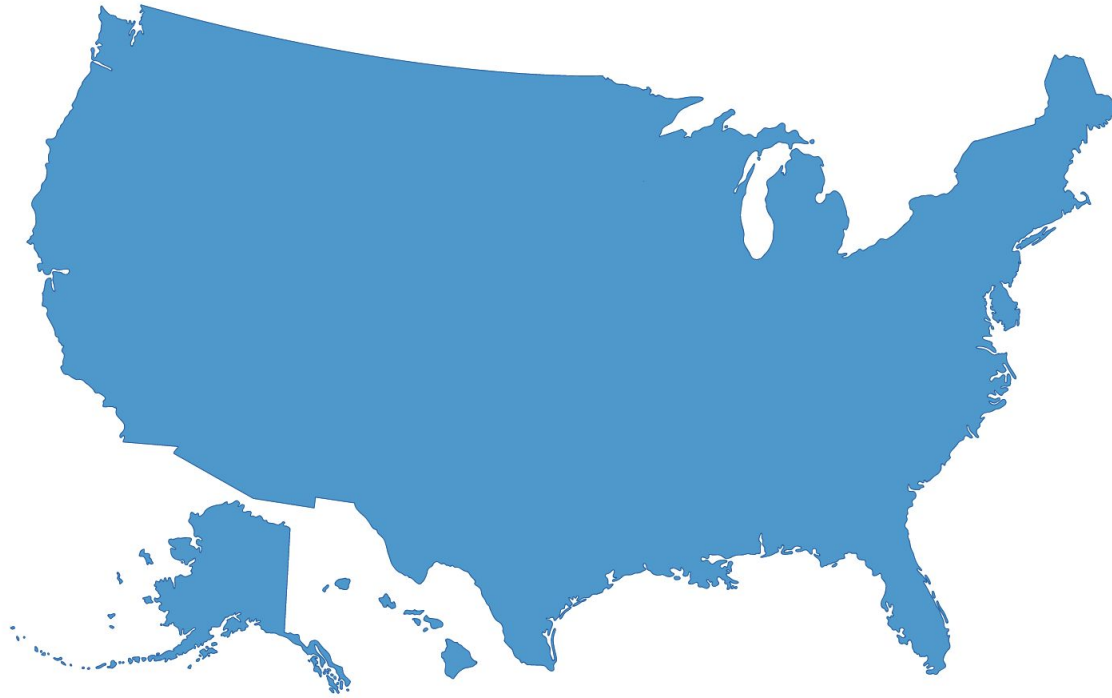
Bringing the Solution to the Caregivers

- ▢ Caregiver Business Training

Building on the unique experience

- ▢ Adding Scenarios and Hardware to enhance the user experience





THE IMPACT OF CAREGIVING NATIONALLY

Average age of Caregivers:
49.4 yrs

24% of caregivers are caring
for more than 1 person

About **89% of caregivers** are
providing care for a family
member

Caregivers spend an average of
23.7 hours each week
providing this care

When asked about having a
choice to take on the role of
caregiver, **53% report** they
felt they did not have a choice

THE IMPACT OF CAREGIVING IN OHIO

7th most populous state

6th largest older population in the nation (2.8 million 60+)

By 2025, **more than 1 in 4 Ohioans will be 60+ and by 2035**, there will be more Ohioans over 65 than under the age of 18.

With the growing need for **family caregivers**, comes a responsibility to educate and support them in their journey.

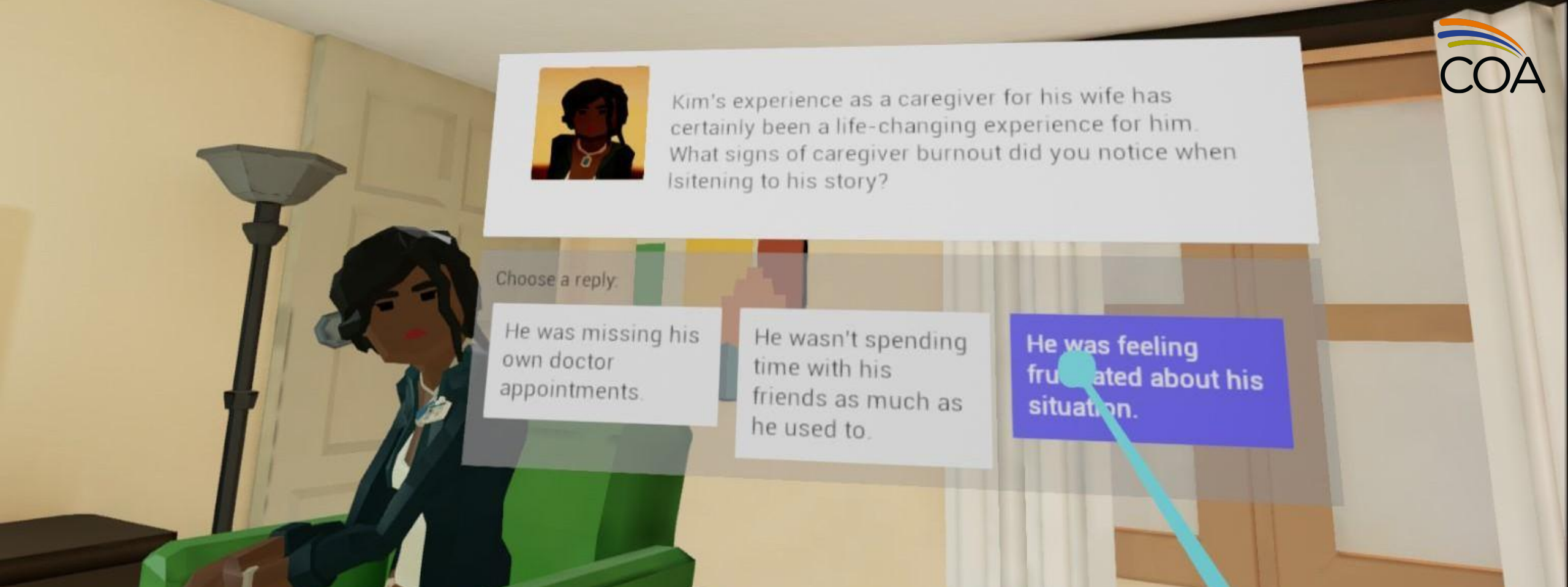


"Learning to live in their reality, I also learned the correct way to handle that type of situation."

"Knowing that this is available was nice, and also realizing there are a whole lot more people studying this and helping caregivers. It feels like we're all going to be taken care of, and that's reassuring."

EVRTALK IN THE COMMUNITY

How EVRTalk has impacted
Caregivers in Southwestern Ohio



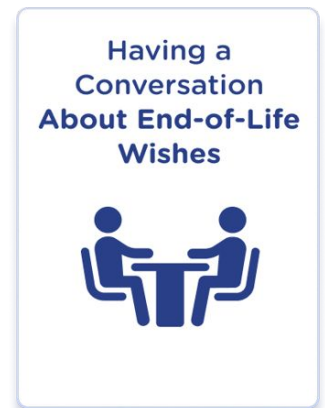
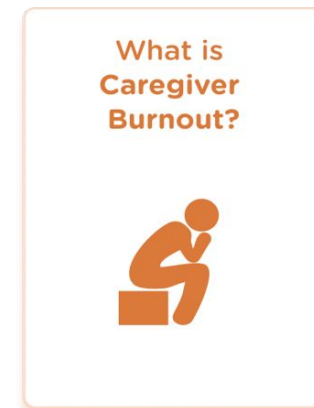
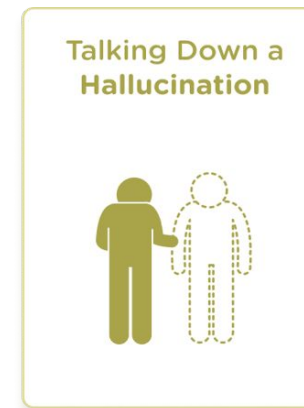
TOUGH CONVERSATIONS IN 3D

Scenario Overview and how
COA maximizes each
encounter.

VIRTUAL REALITY CARE SUPPORT

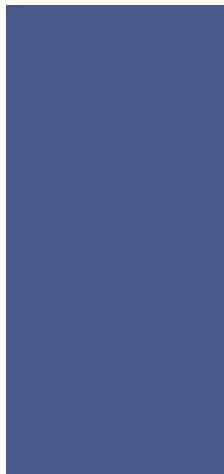
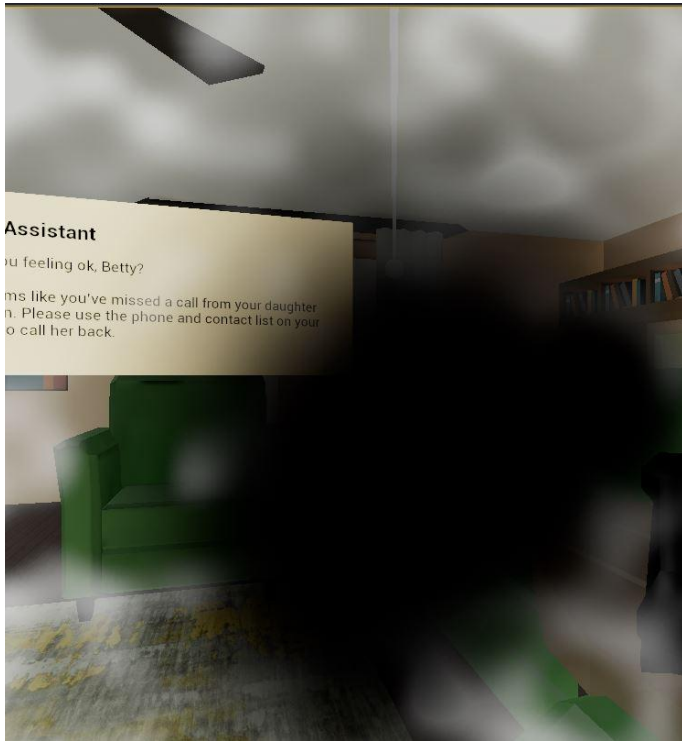
The EVRTalk scenarios reflect key discussion points for the family support caregiver and the older adults, as their relationship shifts from simply a family relationship to a family and caregiver relationship. The scenarios cover the following topics:

- Medication Management
- Incontinence
- Hallucination
- End of Life Planning
- Caregiver Burnout



HESITATION TO TAKE MEDICATION

In this scenario the audience experiences conversations around medication management from the perspective of Betty (the older adult) and her informal Caregiver.



CONVERSATION AROUND INCONTINENCE

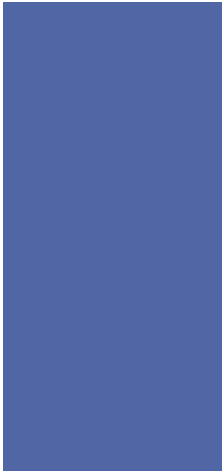
In this scenario, the audience weighs in about incontinence from the perspective of the Caregiver and Betty (the older adult).





TALKING DOWN A HALLUCINATION

In this scenario the audience experiences managing hallucinations from the perspectives of Kaitlyn (the Caregiver) & Don (the older adult).



CAREGIVER BURNOUT

Help caregivers recognize when they are experiencing burnout.

Give caregivers tools and ideas that may help address their burnout.

Let caregivers know they aren't alone, and that feelings of burnout are very common and not something to feel guilty about.



END-OF-LIFE CONVERSATIONS

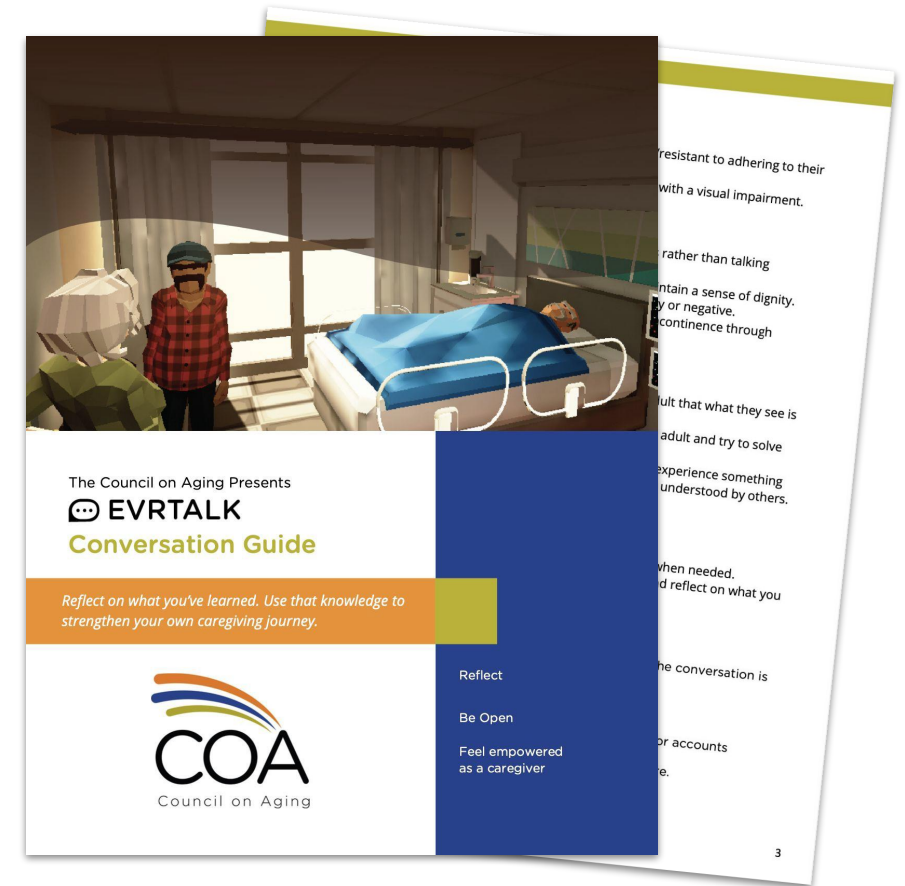
Show the benefits of having end of life conversations by compare/contrasting how emergencies can play out with and without prior discussion.

Provide an opportunity to experience difficult conversations and build confidence without having to go into a real-life conversation blind.



CONVERSATION GUIDES

- Encourages deeper conversations
- Equips caregivers with knowledge
- Exposes caregivers to other perspectives
- Older adults receive more compassionate care



FOR GROUPS



Conversation guide designed to help support group leaders guide their caregivers to discuss what they learned from the EVRTalk experience, how they plan to make changes in their own caregiving situation and encourage them to brainstorm ideas together.

Includes:

- Descriptions of each scenario
- Questions to get the conversation going for each topic
- Local resources

Value:

- Encourages deeper conversations after going through the EVRTalk experience
- Guidance for group discussions

FOR INDIVIDUALS



Take-Away material designed to help caregivers reflect on what they experienced within the scenarios and translate that knowledge into their own caregiving situation.

Includes:

- Descriptions of each scenario
- Thought provoking questions
- Actionable next steps
- Local resources

Value:

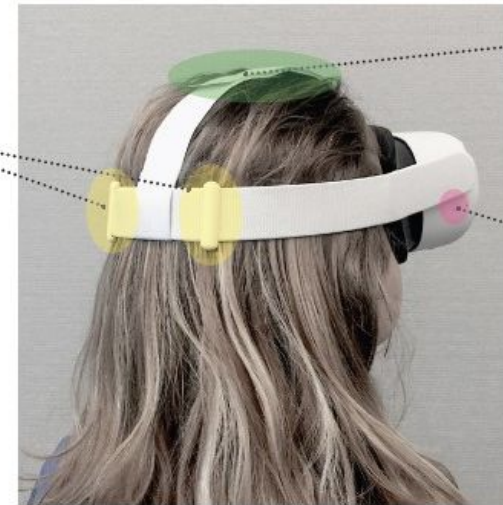
- Allows the caregiver to look back on what they learned with EVRTalk
- Topic specific resources and guidance
- Physical product they can keep and take with them

WEARING THE HEADSET

Side Strap Sliders

Adjusting the Tightness with the Side Strap Sliders

- To adjust the side straps, move the two sliders on either side of the top strap.
 - To loosen the side straps, move the sliders toward the top strap.
 - To tighten the side straps, move the sliders away from the top strap.
 - After you move the sliders, center the top strap between the sliders so that the two sides are equal, and the top strap is centered on your head when you put the headset on



Top Velcro Strap

On/Off Button

Keep in mind, you'll need to remove the headset from your head to adjust the side straps with the sliders.

Adjusting the Tightness with the Top Velcro Strap

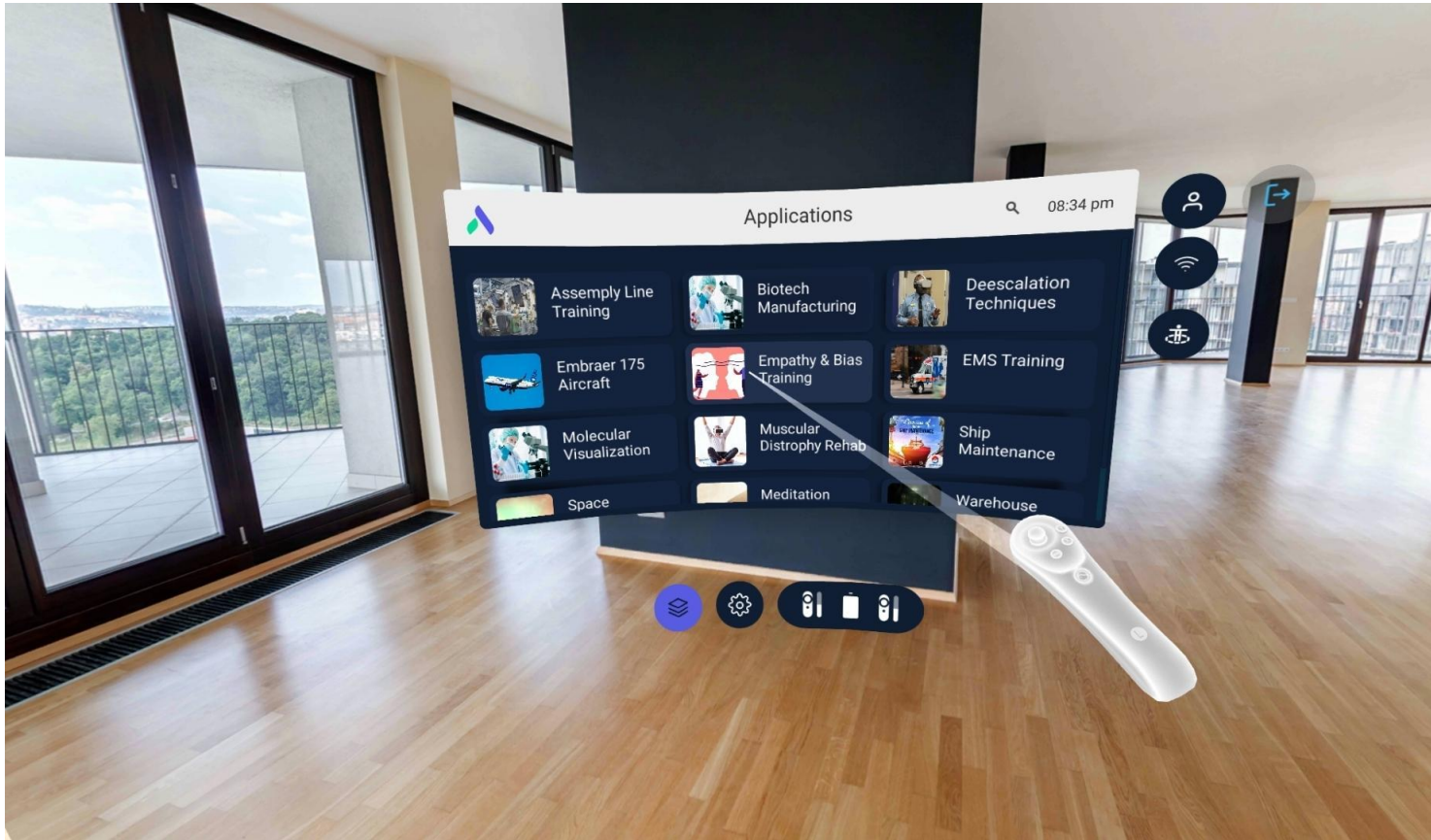
Once you've got the side straps set, put your headset back on and adjust the top strap. You can adjust the top strap by pulling apart the Velcro and reattaching it so that your Quest headset rests lightly on your face and the picture is clear.

Place the headset on your head, then remove it and make any additional adjustments to the side straps as needed.



Guardian is a built-in safety feature that lets you set up boundaries in VR that appear when you get too close to the edge of your play area.

BOUNDARIES



Kiosk Mode is an app on the Oculus headset that locks down the device and prevents end users from accessing the device's home environment and stock settings.

WHAT IS KIOSK MODE?

ADDITIONAL INFORMATION ABOUT THE EXPERIENCE

VR Sickness is real but, you shouldn't expect it with this experience.

- We have designed EVRTalk to be a short and stationary experience. Meaning you shouldn't experience illness because we have decreased the triggers.

EVRTalk is technically a game, but none like you have experienced.

- EVRTalk is a 3D window into a version of hard events aging people deal with on a day-to-day basis. It worth the watch, trust us!

This device is built for individuals 13 and older.

- EVRTalk was designed to align with the criteria of the Oculus Quest 2. Our "game" is for everyone (older that 13) young and old.

EVRTALK EXPERIENCE BREAK



Provide Feedback here: <https://forms.office.com/r/cSHik6BXV2>

THE EVRTALK IMPACT

We know the Caregivers we built EVRTalk for have positive experiences with the virtual reality training. We also know the positive response will drive the need to build more scenarios and create more points of access to address the stress and new impacts in their lives. This solution is adaptable and can be successful to expand to other populations. We are currently working to:

- Expand the design and technology that support the program to reach a broader audience
- Increase the modules to enhance EVRTalk
- Mobilize the headsets with the Virtual Training to the family/friend caregivers we support

EVRTALK CAREGIVER TRAINING TEAM

COA has dedicated a team of experienced individuals to build, test, implement, and support EVRTalk. As COA brings EVRTalk to southwestern Ohio, we also bring our experience with caregivers, technology, virtual reality, and the aging adult.



OUTREACH

160+

Total people

- Catholic Charities
- UC Students/LiveWell staff
- OLLI participants
- COA staff
- General Public
- Community Caregivers

40+

Engaging with
Caregivers

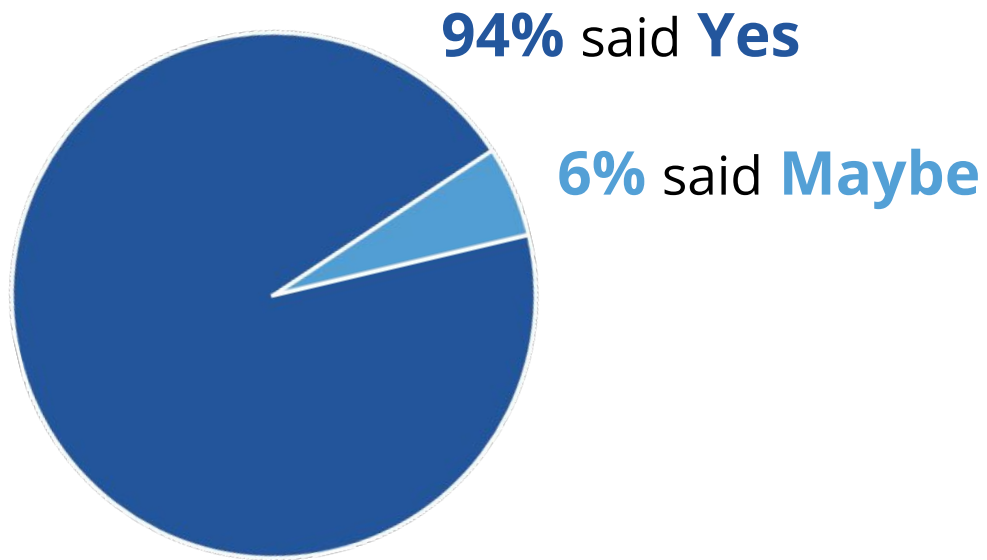
We tested with more than 40 caregivers, most of whom (80%) were currently providing care to someone.

1,000 hrs+

Internal Testing and
Development

With every update pushed, the development team went back into the headset to test the update to ensure its success

WOULD YOU WANT TO USE VR FOR FUTURE TRAINING OR EDUCATIONAL PURPOSES?

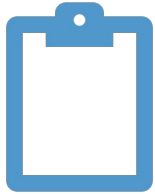


"I can imagine a whole suite of videos like this."

"I'd love to check this out of a library or subscribe. The beauty is that they're short. I can't sit down for 30 minutes because I don't have 30 minutes."

"If the AA offered this as a program, or we could rent it to try with others at home."

FEEDBACK FROM THE COMMUNITY



91% of participants agree that using VR for this experience was useful compared to other methods of training.



100% of participants felt engaged in the EVRTalk scenario(s).



95% of participants agreed that EVRTalk increased their awareness about the challenges faced by older adults.

FEEDBACK ABOUT THE EXPERIENCE

"It was really impactful.
It reminded me that we should be talking more about the end-of-life."

"I learned more about caregiver burnout because I hadn't heard about it before. My mom might be experiencing it, now that I'm thinking about it."

"I really identified with the characters."

"I forgot you all were here!" (COA's Ken Wilson)



Suzanne
Burke



Ken Wilson



COA Delivery

- One-One experiences for COA caregivers
- Group experiences for COA caregivers
- Partner with caregiver support networks
- Fee for service delivery to external partners



Train the Trainer

- Lease headset(s) to partners
- Train the Trainer on the support model and technology
- Provide technical support as needed
- Collect surveys and feedback



Licensing

- License EVRTalk Modules to VR service groups or retailers
- Licensing fees may include set-up, subscription, resale and/or service fees

WHAT'S NEXT?

LEVERAGING EVRTALK TO SUPPORT CAREGIVERS & FURTHER COA INNOVATION

LET'S TALK

Ask Question

Tell us about your experience

Tell us your scenario ideas

