# Prescribing VR

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# THIS IS YOUR HEALTH SYSTEM

#### ALLE WORLD'S ALAB IT HAS ALL THE TOOLS YOU NEED. DESIGN FOR THE MESSINESS OF THE REAL WORLD: THAT'S WHERE INNOVATION HAS TO LIVE.

## TAKE THE USERS'

THE AVERAGE USER IS JUST & STATIS US, DEOPLE APE DIVERSE

### PERSPECTIVE.

### "In every walk with nature, man receives more than he seeks"

- John Muir

#### People living with dementia around the world

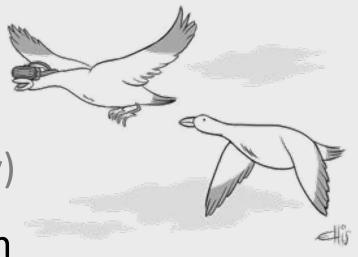
World Alzheimer Report 2015



## $Prescribing \ VR_{\! X} - {\sf Pilot feasibility study}$

Research Objectives:

- 1. Determine if VR is safe for people living with Dementia or Cognitive Impairment (nausea, dizziness, weight of HMD, range of movement)
- 2. Identify optimal characteristics of VR experiences for this population (duration, dose, sound volume, light, multi-modality)
- 3. Does VR-therapy impact PBSD: depression and anxiety, and increase relaxation



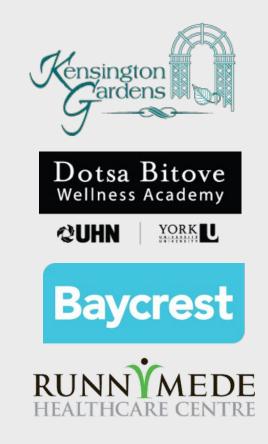
"It's like I'm actually walking."



## VR<sub>x</sub> Study Methods



- Prospective, non-randomized intervention pilot study
- Intervention:
  - Participants seated in swivel chair
  - 5-15 minutes of 360° VR footage
  - Natural settings displayed using Samsung GearVR
- Pre/post-intervention survey and interview
- Standardized observation session



### Population

- 66 participants
- Mean Age: 80
- 61% female; 39% m
- Cognitive Scoring (MoCA, CPS, MMSE)
- 80% wear glasses
- 20% trouble hearing
- 22% limited/ no head mobility
- 59% limited/ no body mobility

#### Comfort, Safety, and Satisfaction, oh my!

- 85% HMD easy to get used to: "forgot I had it on"
- 9% HMD too heavy: but "worth the mild discomfort"
- 25% image resolution was a challenge
- 96% did not experience nausea or dizziness
- 75% would recommend the experience to a friend
- 80% wanted to try it again
- Symptoms improved post-intervention (feeling more energetic, relaxed, adventurous, and less tired, worried and stressed)

### the LiVRary project

Photo Credit: Dee Dee Yelverton is Senior Developer Outreach Engineer for AMD.

### uniVRsal design

Photo Credit: Codrin Talaba, Forward-Rewind

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