

## **Co-design Workshop Series: Shaping the Design and the Values of ZenctuaryVR+ Together**

To inform the development of Zenctuary, a nature-based virtual reality experience designed to support mental well-being in hospital contexts, we conducted a multi-stakeholder co-design workshop series. The process brought together two key end-user groups whose perspectives are essential for meaningful adoption: older adults living with chronic illness in inpatient care, and healthcare professionals who may integrate VR into therapeutic practice.

### **Co-design with older adult participants (June-July 2025)**

Three workshops were held on-site in Budapest over the course of one month with a continuous group of older adult participants (60+). Working with the same group across sessions allowed trust, shared references, and cumulative learning to develop gradually. All workshops were facilitated at a gentle pace, with a strong emphasis on psychological safety, participant agency, and inclusive participation.

The first workshop focused on eliciting restorative nature preferences through image-based discussion. Participants selected and reflected on nature photographs, sharing emotions, memories, imagined activities, and sensory associations. This session helped establish a shared vocabulary around what makes a natural environment feel calming, safe, and meaningful.

The second workshop introduced participants to Zenctuary as a VR prototype. Participants alternated between guided VR experiences and a parallel painting activity that explored nature atmosphere through colour and texture. This dual structure supported continuous engagement and generated rich, multimodal feedback. Group discussion connected VR impressions and paintings, helping articulate qualities such as warmth, openness, softness, and safety across media.

The third workshop focused on collaborative landscape-building based on Kevin Lynch's theory. Using tactile materials and natural objects, participants co-created navigable nature environments together. Simple spatial concepts—such as paths, resting points, landmarks, and boundaries—supported shared thinking about orientation, movement, and refuge. The process foregrounded how a restorative environment should feel, how it should guide attention, and how it could support calm exploration in VR.

### **Co-design with healthcare professionals (September 2025)**

In parallel, two workshops were conducted with healthcare professionals, primarily clinical psychologists, alongside geriatric physicians and research staff. These sessions ensured that emerging VR concepts aligned with therapeutic goals, clinical workflows, and ethical considerations.

The first workshop focused on mapping therapeutic processes, with particular attention to mechanisms such as learned helplessness. Participants identified which elements of existing therapeutic practice could meaningfully translate into a VR-supported intervention and developed a shared glossary of key terms.

The second workshop evaluated emerging VR interaction concepts and supported the development of a clinical decision pathway for their use. A structured module was also used to map a typical therapeutic VR session, identify practical pain points, and highlight conditions under which VR works well in care settings.

Together, these co-design activities grounded Zenctuary in lived experience, clinical expertise, and shared understanding—ensuring that the emerging VR environment is not only immersive, but also meaningful, usable, and responsibly embedded in care contexts.

### **Early prototype of ZenctuaryVR released on Meta Store**

Zenctuary VR has been released on the Meta Store, developed by the MOME Future Care Lab research group in collaboration with Code and Soda. The free-to-download application explores whether the calming, restorative effects of nature can be experienced within an interactive VR environment.

The virtual garden was tested with both ADHD and neurotypical focus groups, with measurements confirming its anxiety-reducing effects. The further developed application, which is optimised for standalone VR devices, can be used in both hospital and home settings. The experience has been refined in collaboration with psychologists and physiotherapists and will begin testing at partner institutions.

Zenctuary VR offers a calm, unhurried nature experience on Meta Quest headsets, free from scores or time limits.

### **Learn more:**

[https://www.meta.com/experiences/zenctuary/9817871484945365/?srsltid=AfmBOoqGAUpgjGZ2Qhb07ObRRtDre-ASxEdqTP-\\_2\\_vy2Vw5QK92E0B7](https://www.meta.com/experiences/zenctuary/9817871484945365/?srsltid=AfmBOoqGAUpgjGZ2Qhb07ObRRtDre-ASxEdqTP-_2_vy2Vw5QK92E0B7)