

Rehabilitation that patients want to come back to.

ReCode XR is a VR platform for physical rehabilitation after injury, amputation and musculoskeletal trauma. Clinically grounded exercises in a game format — in the clinic first, and later at home.

~400,000

Ukrainian soldiers wounded¹

100,000+

war-related amputations²

6 in 10

people with an amputation live with phantom limb pain³

The problem

- The number of people recovering from injury and amputation has risen sharply.
- Rehabilitation is long, often painful and monotonous. Up to half of patients do not follow their home exercise programme⁴.
- Phantom limb pain is widespread and inadequately addressed.
- Between visits, clinicians have no objective view of progress.
- International solutions are not adapted for Ukraine; local ones are often expensive and less engaging.

The solution

ReCode XR turns rehabilitation exercises into clinically grounded VR scenarios with gamification, biofeedback and a clinician web dashboard. The patient trains in VR, while the clinician sees progress, receives metrics and adjusts the load remotely.



Game-quality visuals

The look of modern VR games, a personal avatar, progress and rewards.

Medical expertise

Scenarios are built together with rehabilitation specialists.

Data for clinicians

Objective metrics instead of subjective observation.

Accessibility

Clinic first, home next. Ukrainian localisation. Affordable standalone hardware.

How it works

1

The clinician prescribes a programme in the web dashboard: scenario, difficulty, duration.

2

The patient completes a VR session on a standalone headset, with sensors when needed.

3

The system collects data: movement, pain before and after the session, heart rate. Works offline too.

4

The clinician sees progress and adjusts the programme to the patient's condition.

Meta Quest 3

Unreal Engine 5

Bluetooth sensors: EMG, motion, heart rate, pressure insoles

Works offline

GDPR-ready

Therapy scenarios

VR mirror therapy **MVP** Limb loss, phantom limb pain

Motor rehabilitation **MVP** Combat wounds, musculoskeletal injuries

Pain distraction **PLANNED** Burns, painful procedures

Graded exposure **PLANNED** Fear of movement (kinesiophobia)

Balance training **PLANNED** Lower-limb injuries

What we aim for

- Help people adapt to limb loss.
- Reduce phantom limb pain.
- Make rehabilitation easier to follow and more continuous.
- Give clinicians objective data on progress.

How we'll measure it: pain before and after each session, range of motion, and how many patients complete the course. These outcomes will be measured during the clinical pilot.

Where we are

Current stage: market and clinical research, in-depth interviews with clinicians and rehabilitation specialists, product concept defined, first advisers on board.

Next: prototype with 1–2 scenarios → MVP and clinical testing with partners → launch in Ukrainian rehabilitation centres → home use and new areas.

Team

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Partners

- **Mriya Production** — CGI, virtual production and XR studio, developer of the platform. 20+ years of CG experience.
- **MCOP Ukraine** — nationwide centre for modern prosthetics and rehabilitation.
- **FFU Foundation** — international charitable foundation, humanitarian and medical programmes.

Interested in ReCode XR? Let's talk.

Let's make rehabilitation after injury more accessible, more motivating and more continuous.

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