ONEBONSAI

CASE STUDY

PaediatricPro

Immersive VR training for pediatric nursing, developed in cross-border collaboration with SyncVR Medical to revolutionize how nurses learn critical pediatric care procedures.

Platform: VR / Partners: SyncVR Medical / Region: Belgium & Netherlands

Project overview

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About the project

PaediatricPro is an innovative cross-border collaboration between OneBonsai and SyncVR Medical, supported by CrossRoads and the European Union, to revolutionize the training of pediatric nurses through immersive Virtual Reality (VR). Against the backdrop of a critical shortage in healthcare staff, this project develops a standardized, engaging, and scalable VR curriculum specifically tailored for pediatric care.

Challenge

Critical Shortage of Trained Pediatric Nurses

Training with real patients-especially children-is rarely possible due to ethical and safety constraints. Traditional training methods fail to provide the hands-on experience needed for high-risk pediatric procedures such as nasogastric tube insertion, PICC line placement, and IV setup.

Healthcare institutions face a critical shortage of skilled pediatric nurses, and existing training approaches cannot ensure consistent, standardized learning experiences across different hospitals and educational programs. There was a clear need for an innovative training solution that could safely simulate realistic pediatric scenarios.

> *"Training with real patients-especially children-is rarely possible. We needed a way to give nurses hands-on practice without putting anyone at risk."*

Solution

VR-Based Pediatric Nursing Curriculum

OneBonsai and SyncVR Medical developed PaediatricPro, an immersive VR training platform featuring a comprehensive curriculum for pediatric nursing. The solution includes realistic simulations of critical procedures such as nasogastric tube insertion, PICC line placement, and IV setup.

The platform enables self-paced, autonomous learning with immersive simulations that ensure both safety and standardization. Nurses can practice high-risk procedures repeatedly in a safe virtual environment, building confidence and competence before working with real patients.

Approach

Cross-Border Innovation in Healthcare Training

PaediatricPro was developed as a cross-border collaboration supported by CrossRoads and the European Union, encouraging innovation between Flanders and the Netherlands. The project brings together OneBonsai's VR development expertise with SyncVR Medical's deep understanding of medical training needs.

The approach focused on onboarding at least 3 hospitals in Belgium and the Netherlands to pilot and implement the curriculum. By simulating realistic, high-risk pediatric scenarios without involving real patients, the platform ensures consistent, repeatable learning experiences across institutions while boosting engagement and reducing variability in clinical skills.

> *"By combining cross-border expertise and cutting-edge VR technology, we created a training solution that scales across institutions."*

Outcome

Increased Nurse Confidence and Preparedness

PaediatricPro delivers measurable improvements in nurse confidence, knowledge retention, and clinical preparedness. The VR-based curriculum provides a scalable, engaging alternative to traditional training that can be deployed across multiple healthcare institutions.

The platform successfully addresses the challenges of pediatric nursing training by providing consistent, repeatable learning experiences that increase nurse confidence and reduce variability in clinical skills among newly trained nurses. The project sets a new standard for how healthcare education can leverage immersive technology to improve patient care outcomes.

> *"VR training increased nurse confidence and ensured consistent skill development across all participating hospitals."*

Discuss a similar project

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