



VIPPSTAR. Visually Impaired children and adolescents: bridging the gap with Personalized Prevention Strategies, Tools, Approaches, and Resources - A project financed by the HORIZON-EUROPE Programme (Project n. 101156763-2)

VIPPSTAR: Personalized AI and Digital Health for Empowering Children and Adolescents with Visual Impairment

The VIPSTAR project, launched in January 2025 and funded by the HORIZON-Europe Programme with a budget of €8.1 million over four years, is set to revolutionize care for children and adolescents with visual impairment (VI).

Visual impairment affects an estimated 3.82% of young people globally, impacting their physical, cognitive, and social development. Current care models often lack the continuous, personalized support these children need.

VIPPSTAR aims to bridge this gap by providing personalized prevention strategies, tools, approaches, and resources, leveraging advanced digital tools and artificial intelligence (AI) technologies, used ethically and safely. By integrating AI and digital health tools into care, VIPSTAR aims to empower children and adolescents with visual impairments to lead fuller, healthier, and more independent lives.

Key features for Personalized Care will include:

- a **Digital Telemedicine Platform**, with personalized tools co-designed with visually impaired youth and their families for rehabilitation and daily life support;
- **AI-Powered Avatar Assistant** that guides children through health routines and offers tailored advice; **Serious Games** to enhance neurocognitive vision.
- **Nutrition Coach**: AI-vision based food recognition and personalized dietary advice for adolescents with visual impairment;
- **VIPPSTAR-NET**: a transnational surveillance network dedicated to VI in children and adolescents to enable personalized treatment and research.

The expertise

The VIPSTAR project brings together a diverse partnership of 19 organizations from 11 countries, each contributing their expertise in specific fields. Vision rehabilitation experts focus on improving cognitive and sensory development for visually impaired youth, while AI specialists develop virtual assistants and wearable technologies. Researchers in social cognition (social understanding) and e-learning design tools to support visually impaired youth's learning and physical activity. Medical and regulatory experts ensure that telemedicine solutions are compliant, and a cross-European network is being created to collect valuable data on children with visual impairments. The partnership's collective expertise ensures the development of accessible, innovative solutions for visually impaired children and their families.



The partners (Principal Investigators):

Università degli Studi di Brescia (Elisa Fazzi) - Italy
Lifescience Innovation Good Healthcare Technology (Cesare Furlanello) - Italy
Azienda Socio-Sanitaria Territoriale Degli Spedali Civili (Serena Micheletti) - Italy
Katholieke Universiteit Leuven (Els Ortibus) - Belgium
Tuebingen University (Marina Pavlova) - Germany
Università degli Studi Di Trento (Paola Venuti) - Italy
Spindox Labs Srl (Cristiano Carlevaro) - Italy
Comftech Srl (Alessia Moltani) - Italy
University Of Limerick (Cristiano Storni) - Ireland
Republican Rehabilitation Center for Children (Ecaterina Gincota) - Moldova
The University Of Edinburgh (John Ravenscroft) - Scotland
University of Ioannina (Dimitris Fotiadis) - Greece
Istituto Superiore Di Sanita (Maria Luisa Scattoni) - Italy
Eodyne Systems Sl (Santiago Brandi) - Spain
Views International (Anca David) - Belgium
Association Les Glénans (Olivier Gutt) - France
Real Eyes Sport (Daniele Cassioli) - Italy
Erasmus MC (Johan Pel) - The Netherlands

Project Coordinator: Prof. Elisa Fazzi (UniBS), Technology coordinator: dr. Cesare Furlanello (LIGHT),
Head of Advisory Board: Prof. Lotfi Merabet (Harvard Medical Center).

Further information

For more information and updates on VIPPSTAR's work and progress, visit [the project's official website](#).
There, you can also learn more about [the Consortium and the expertise of its partners](#).



Funded by
the European Union

