

# CONNECT-CARE

## Inclusive Healthcare Access and Personalized Health Management for Children and Adolescents

### ABSTRACT

The proposal addresses the urgent global epidemic of obesity, impacting billions of individuals worldwide. Obesity significantly elevates the risk of chronic conditions such as type 2 diabetes and cardiovascular disease, imposing substantial burdens at both individual and community levels, as well as incurring enormous economic costs for healthcare systems.

Current guidelines mainly focus on acute treatment rather than long-term therapy, with important differences based on gender and socioeconomic background. Moreover, traditional community-based health strategies face significant challenges in effectively reaching and supporting vulnerable populations like young individuals, low-income families, and migrants. These challenges significantly contribute to health inequalities and hinder the effectiveness of current programs. This highlights the urgent need for novel multidisciplinary approaches with patient engagement at its core to implement effective prevention strategies.

The project aims to develop and implement an innovative and interactive platform (CONNECT-CARE platform) to empower children and adolescents in managing their health and adopting healthier lifestyles. With ground-breaking digital tools at its core, this new platform will go beyond traditional prevention strategies by reshaping the way young individuals' access and engage with healthcare systems. Through implementing a streamlined and bidirectional user-healthcare interaction as well as introducing an Artificial Intelligence (AI)-assisted personalized obesity management approach, the project will transform how young individuals receive and perceive health messages. To achieve these aims, the project will use data from primary healthcare systems, encompassing clinical, socioeconomic, behavioural, and cultural aspects, to allow for the development of a pan-European Youth Empowerment Hub (YEH), which will harbour all digital tools and resources including the personalized obesity management platform (NutriFit Advisor) and an online educational platform.

The YEH will be seamlessly integrated into the healthcare system for a bidirectional interaction between users and health professionals, improving healthcare providers' capacity to deliver services efficiently. The feasibility and effectiveness of the YEH and its digital solutions, will undergo evaluation in two randomized-controlled pilot studies in Spain and Denmark. The implementation of a bidirectional communication platform with AI at its core will serve as a transformative tool, reshaping the relationship between users and healthcare providers. By facilitating seamless interaction, it will enhance healthcare access for users while simultaneously improving service delivery for healthcare providers. Furthermore, the project will establish the AI-assisted NutriFit Advisor as a trusted and reliable tool for young individuals, addressing a critical need for more tailored and effective health interventions. Finally, the emphasis on prevention, supported by better use of tools and data to improve the quality of obesity care, will contribute to more cost-effective and personalised care. In summary, this project will shift the paradigm of healthcare delivery towards more patient-centred and digitally-enabled models transforming health and care in daily life, and ultimately leading to better health outcomes.

## KEYWORDS

- Childhood Obesity
- Physical activity
- Personalized care
- Nutrition
- Self-management
- AI-based tools

## DURATION

36 months

## PARTNERS

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