**Project Partner Search Form**

[x]  I offer my expertise to participate as a Partner in a Horizon Europe Project

[x]  I am planning to coordinate a project and I am looking for Project Partners

**TOPICS OF INTEREST**

HORIZON-HLTH-2024-DISEASE-13-01: Implementation research for management of multiple long-term conditions in the context of non-communicable diseases (Global Alliance for Chronic Diseases - GACD)

**PARTNER INFORMATION**

#### Background

SharkBiit is developing an AI-driven platform to empower general dentists to effectively diagnose and treat Obstructive Sleep Apnea (OSA) during routine dental visits. The platform's core technology lies in its AI-assisted analysis of Cone Beam Computed Tomography (CBCT) images, a readily available, common and affordable imaging modality. By interpreting these images, SharkBiit's AI algorithms can identify anatomical factors for the upper airway obstruction, and facilitate personalized treatment planning, including the selection, configuration and adjustment of oral appliances, as well as recommending alternative OSA treatment modalities. SharkBiit also provides intuitive 3D visualizations of the patient's breathing system, helping to increase patient engagement and improve their understanding of their condition, while giving practitioners powerful and easy-to-use tools.

#### Value Proposition and Addressing Expected Outcomes

The high prevalence of undiagnosed OSA in disadvantaged populations poses a significant challenge, impacting health outcomes and socioeconomic development. SharkBiit addresses this challenge by:

* **Early detection and intervention.**

SharkBiit's AI-powered analysis of CBCT images allows for the early and accurate diagnosis of OSA and treatment personalization, even in resource-constrained settings. This enables timely intervention, preventing the progression of OSA and its associated comorbidities. By facilitating early diagnosis and personalized treatment, SharkBiit contributes to improving the overall quality of life for individuals with OSA.

* **Capacity building and knowledge transfer.**

The platform's educational resources and decision support tools empower healthcare providers, particularly in disadvantaged populations with limited access to specialized training, to effectively manage OSA. This reduces the time and resources required for capacity building, making OSA management more accessible and sustainable.

* **Improved treatment adherence and outcomes.**

SharkBiit's personalized treatment plans and remote monitoring capabilities enhance patient engagement and adherence to therapy. This leads to better health outcomes, reduced healthcare costs, and improved overall well-being for individuals with OSA. By promoting patient engagement and adherence, SharkBiit contributes to the continuity of care and reduces health inequities.

#### Impact of Undiagnosed OSA and Addressing the Burden

The high rate of undiagnosed OSA significantly impacts disadvantaged individuals and communities. Chronic, untreated OSA elevates the disease burden by increasing the risk of hypertension, diabetes, cardiovascular disease, and many other NCDs. This, in turn, strains healthcare systems, hindering access to care for other conditions. SharkBiit's platform addresses these challenges by:

* **Reducing the burden of multiple chronic conditions.**

By enabling early detection and effective management of OSA, SharkBiit helps prevent the development of comorbidities, reducing the overall disease burden in disadvantaged populations.

* **Streamlining care pathways**

The platform's streamlined approach to OSA diagnosis and treatment reduces the complexity and fragmentation of care, improving efficiency and patient outcomes.

* **Empowering healthcare providers.**

By providing healthcare practitioners with the tools and knowledge to manage OSA effectively, SharkBiit expands the pool of qualified providers, improving access to care and reducing the burden on specialized healthcare professionals.

**Description of the Legal Entity**

[ ]  Higher Education [ ]  Research Institution [ ]  Public Administration

[x]  Industry /SME [ ]  NGO [ ]  Other: ***Please specify***

**Description of the (Research) Team**

SharkBiit's team comprises a blend of professionals with expertise in dentistry, medical imaging, AI, and business strategy. The co-founders, Dr. Jenny Chernobelsky, DMD, MBA, and Oleg Kuybeda, PhD, bring a unique combination of clinical, entrepreneurial, and technical skills. Dr. Chernobelsky has extensive experience in dental surgery and healthcare innovation, while Dr. Kuybeda has a strong background in AI and medical imaging. They are supported by a team of advisors, including experts in sleep dentistry, and a team of engineers and researchers.

**Expertise of the Team Leader**

Dr. Jenny Chernobelsky, DMD, MBA, and Oleg Kuybeda, PhD, are the visionary leaders and co-founders of SharkBiit. Dr. Chernobelsky, with her extensive experience in dental surgery and healthcare innovation, brings a deep understanding of clinical needs and patient care to the team. Dr. Kuybeda's expertise in AI and medical imaging has been instrumental in developing SharkBiit's cutting-edge technology. Together, they form a dynamic and complementary leadership duo, driving SharkBiit's mission to revolutionize OSA diagnosis and treatment.

**Potential role in the project**

[x]  Research [x]  Training

[x]  Dissemination [ ]  Other: ***Please specify***

Already experience as a Coordinator [ ]  YES [x]  NO

 Partner [ ]  YES [x]  NO

 Expert Evaluator [ ]  YES [x]  NO

**CONTACT DETAILS**

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