## THE PREVENTION AND EARLY DETECTION (BEHAVIOURAL CHANGE) CLUSTER GOALS:

1 Foster long-term behavioural changes that reduce cancer risk, by targeting modifiable risk factors such as smoking, unhealthy diets, and lack of physical activity.

2 Leverage cutting-edge technologies, including AI, wearable sensors, and digital platforms, to deliver personalised and scalable interventions that support individuals in adopting healthier behaviours.

3 Ensure that interventions are adaptable to different socio-economic, cultural, and environmental contexts. This includes addressing inequalities in access to care by considering the unique barriers faced by various populations.

4 Engage multiple stakeholders - such as educators, public health experts, policymakers, and affected individuals - through participatory design, ensuring interventions are relevant, effective, and widely accepted by the communities they serve.

**5** Generate scientific evidence to inform policymakers and health practitioners, shaping guidelines and frameworks that support systemic changes toward healthier environments and lifestyles that prevent cancer.

6 Assess the effectiveness of the interventions to ensure they are scalable and sustainable.

The cluster projects offer a holistic structure and approach to achieving the objectives of the Cancer Mission, ultimately improving the quality of life of EU citizens.

# THE PREVENTION AND EARLY DETECTION BEHAVIOURAL CHANGE CLUSTER

An initiative under the EU Mission on Cancer



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iBe€hange







The "Prevention and Early Detection (Behavioural Change) Cluster" is an EU-funded collaborative initiative under the EU Mission on Cancer, aiming at coordinating and exchanging efforts among three research projects: <u>iBeChange, MELIORA</u>, and <u>SUNRISE</u>. This cluster aims to enhance cancer prevention by promoting healthy lifestyles. Each project contributes to a shared strategy designed to foster sustainable, long-term behavioural changes that reduce cancer risk. Through evidence-based interventions, they target modifiable lifestyle factors such as smoking, diet, and physical activity, along with psychosocial influences, to support comprehensive cancer prevention efforts.

Technology plays a crucial role in this cluster, incorporating tools supported by **artificial intelligence (AI)** like **wearable sensors and virtual coaches** for personalised recommendations, as well as **digital platforms** such as educational games and social media. Each project emphasises co-creation with societal actors - educators, public health experts, policymakers, and at-risk individuals - ensuring interventions are tailored to diverse social, cultural, and environmental contexts. All three projects prioritise inclusivity and equity, focusing on disadvantaged socio-economic population groups, vulnerable populations, and rural communities.

### HORIZON EUROPE MISSION ON CANCER

Cancer affects individuals of all ages, genders, and social backgrounds, presenting a significant challenge. The EU Mission on Cancer is a collaborative effort under Horizon Europe, the EU's key funding programme for research and innovation aiming at tackling pressing societal challenges and boosting Europe's global competitiveness. This Mission brings together cancer-focused research and innovation projects, with the ambition of improving the lives of over 3 million people by 2030.

#### The EU Mission on Cancer's four key objectives are:

- Gaining a deeper understanding of cancer
- Facilitating the prevention and early detection of the disease
- Developing improved methods for diagnosis and treatment
- Enhancing the quality of life for patients and their families







**STRANDS OF CLUSTER WORK** 

Addressing

inequalities

Data

Management

Research

and Innovation

#### **CLUSTER PROJECTS**

IBeChange.

Addressing psychosocial and lifestyle risk factors to promote primary cancer prevention: an integrated platform to promote behavioural change.

#### 2 MELIORA.

Multimodal engagement and sustainable lifestyle interventions optimising breast cancer risk reduction supported by artificial intelligence.

#### **3** SUNRISE.

Citizen

engagement

Sustainable interventions and healthy behaviours for adolescent primary prevention of cancer with digital tools.

Communication

and Dissemination