

# INSIDERS

## Involving underserved Screening Invitees in DEcision-making and Research on cancer Screening

### ABSTRACT

Individuals from lower socioeconomic or migrant backgrounds are at heightened risk of developing cancer yet remain the hardest to reach for screening and research. This disparity leads to severe health inequities and inefficiencies within healthcare systems. Compared to the general population, these groups are less aware of screening programs, benefit less from informed decision making, and rarely participate in follow-up diagnostics. Current digital solutions, although promising for enhancing accessibility and engagement, fall short in addressing the unique needs of these underserved communities. Our proposal aims to develop tailored and inclusive digital tools that are specifically designed to overcome these barriers, ensuring equitable health care access and improving system sustainability.

This proposal seeks to revolutionise cancer screening and research by harnessing mobile health technologies (mHealth) to empower underserved populations. The primary goal is to enhance informed decision-making and participation in cancer screening programs, while simultaneously integrating these individuals into scientific research. This approach acknowledges both the benefits and risks associated with cancer screening—such as over-diagnosis and procedural risks—ensuring decisions are well-informed and aligned with personal health values and preferences. Specific objectives include:

1. **Identify and Overcome Barriers:** To conduct comprehensive investigation to identify the unique barriers faced by underserved populations in accessing cancer screening and research, and methods to overcome these.
2. **Develop and Integrate mHealth Solutions:** To select and tailor digital tools that can mitigate these barriers. This will involve collaborating with stakeholders e.g., health care authorities, the target populations — to co-develop a multifaceted mHealth application that supports seamless and inclusive health communication and data collection. The mHealth application will be based on solutions already tested and validated in other setups.
3. **Pilot Implementation:** To deploy the mHealth application within existing cancer screening pathways, and follow the user from the initial invitation to the follow-up diagnostics. The pilot will test the application's effectiveness in real-world settings, focusing on enhancing participation and informed decision-making among underserved groups.

The project will initially focus on well-established screening programs for colorectal, breast, and cervical cancers—predominantly implemented across Europe—and will also consider inclusion criteria for emerging screening tests for cancers such as lung, prostate and gastric cancer. By integrating digital technology into the screening process, this project aims to create a more equitable health system that not only increases the participation rates among historically underserved communities but also enhances the quality and effectiveness of cancer screening and research across Europe.

Our proposal aims to transform cancer screening services by developing an mHealth application in co-creation with a diverse consortium that includes underserved individuals, healthcare professionals, and researchers across multiple disciplines and countries. This application will significantly enhance the reach and engagement of underserved populations in cancer screening programs for colorectal, breast, cervical, lung, gastric, and prostate cancer. By integrating stakeholders at every stage—from design to pilot implementation—we ensure that the application addresses real-world challenges and conditions unique to each country, and thereby transferability and upscaling across different European countries and health care systems. The application will not only facilitate better access to cancer screening but also streamline data collection and research recruitment, leading to continuous improvements in screening strategies and diagnostics.

## KEYWORDS

- Cancer screening
- mHealth
- Informed decision
- Underserved groups
- Inclusive research
- Co-creation

## DURATION

36 months

## PARTNERS

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