

1. Publishable Summary

The DARE project is a pioneering initiative in research, focusing on innovation and technological advancements, especially in the healthcare system. SPOKE 2 (SP2), a key component, is dedicated to instigating change and innovation in primary prevention through the integration of new technologies or repurposing existing ones with novel functionalities. Within SP2, Work Package 4 (WP4), titled "Digital tools for Primary Prevention," encompasses the design of eight pilot projects. These projects aim to promote primary prevention activities through technological innovation, grounded in scientific evidence, with the objective of developing strategies applicable to broader contexts.

WP4's goals include enhancing collaboration between primary health care and hospitals by deploying experimental protocols and digital tools for data acquisition, management, and analysis. The focus spans disease surveillance, vaccination programs, cardiovascular risk profiling, and fall prevention initiatives.

An operational architecture outlines tasks within WP4, such as predictive disease surveillance, digital support for vaccination programs, large-scale fall prevention, and innovative tools for personalized cardiovascular prevention. Various data sources, including hospital and territorial data, are employed while adhering to privacy regulations.

Efforts are concentrated on creating a logical data architecture using the Alma Health DB model[1], fostering collaboration between pilots, and establishing data warehouses for comprehensive accessibility. A detailed overview of pilot projects, their development phases, and potential synergies is provided, emphasizing the cross-applicability of technologies for cohesive implementation.

The Agile Framework[2] guides the iterative development phases, ensuring requirements are met for effective technology utilization. Individual pilot highlights include predictive disease surveillance models, vaccination program enhancements, and large-scale fall prevention strategies.

API Library Model[3] implementation is emphasized to facilitate data exchange, improve communication, and enhance security in the development of technologies across various pilots. The use of RESTful[4] tools and software development kits is planned to support the seamless integration of data from diverse sources.



In conclusion, the activities provided within WP4 in SP2 represent a comprehensive and collaborative effort to leverage digital tools and technologies for primary prevention, emphasizing innovation, scalability, and evidence-based strategies.