

### Introduction

There is currently limited evidence for the development of integrated solutions that support appropriate healthcare system management, longterm health policy making, and platforms that increase the provision of actionable insights at the point of care.

The EVOTION project generates evidence to support integrated decision support in a platform for the creation of holistic hearing loss management policies. The EVOTION platform includes big data analytics and enable the collection and analysis of heterogeneous data related to hearing loss. According to the World Health Organization, hearing loss is one of the most prevalent chronic condition and the 5th cause of disability. Hearing loss increases the risk of cognitive decline, mental illness, and depression, and leads to social isolation, unemployment/early retirement, loss of income and work discrimination.

EVOTION has access to big datasets of such data from five different organizations and will support their continuous update by real time data produced by sensors and HAs used by 1000+ HL patients.

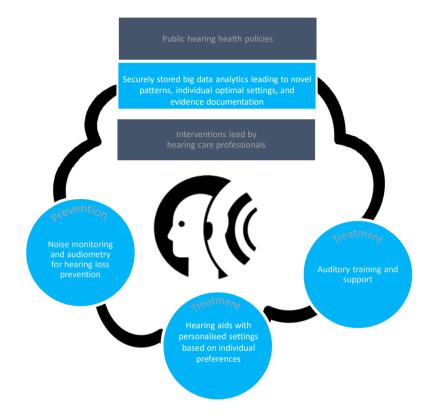
The EVOTION platform will help health care professionals and health policy makers to identify, simulate, select and monitor the effectiveness of current and new hearing loss interventions.

# **EVOTION** platform



#### Platform

- Interface with Hospital systems!
- Privacy and security
- Anonymization
- Visualization
- Access rights Online data
- Retrospective data ٠



#### EVOTION DATA REPOSITORY COMPONENTS (data acquisition)

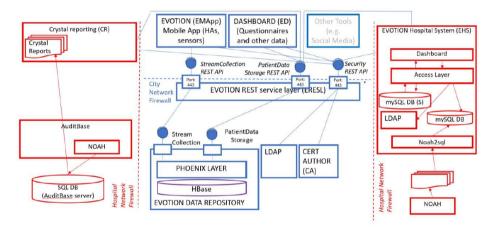
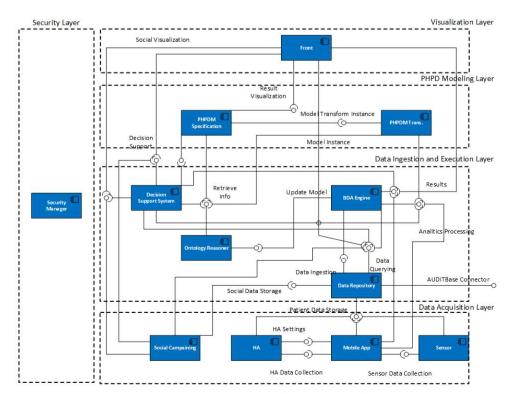


Figure 1: Pre-existing and to-be-developed components participating into the EVOTION solution.



Live from October this year (only core data collection functionality)

## App

- Hearing aid remote control
- Security
- Connectivity to hearing aid, to wearable biosensor, to platform **Hearing aids**
- Fitting guides for clinicians
- Instruction for clinicians on how to fit the new hearing aids
- Instruction material for the users

#### ٠ First data

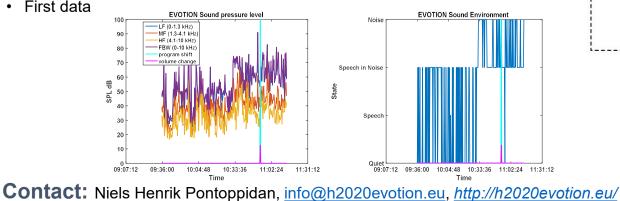


Figure 1 the architecture overview of the EVOTION platform