

# Implementation of mHealth tools to foster quality of care for patients with chronic diseases

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## Abstract

### Problem description

- **Diabetes** affects over 60 million European citizens, introducing a significant burden to their life and the healthcare systems
- **Tinnitus** affects ~50.8 million EU citizens, of which 5.1 million severely bother by it.
- **Lifestyle** is a major contributing factor in chronic diseases that has to be controlled

### Available knowledge

- **Self-management** strategies can decrease the need for medical attention, with downstream impacts on healthcare costs
- Increasing **health literacy** and reinforcing **self-management** are key components for **patient empowerment**

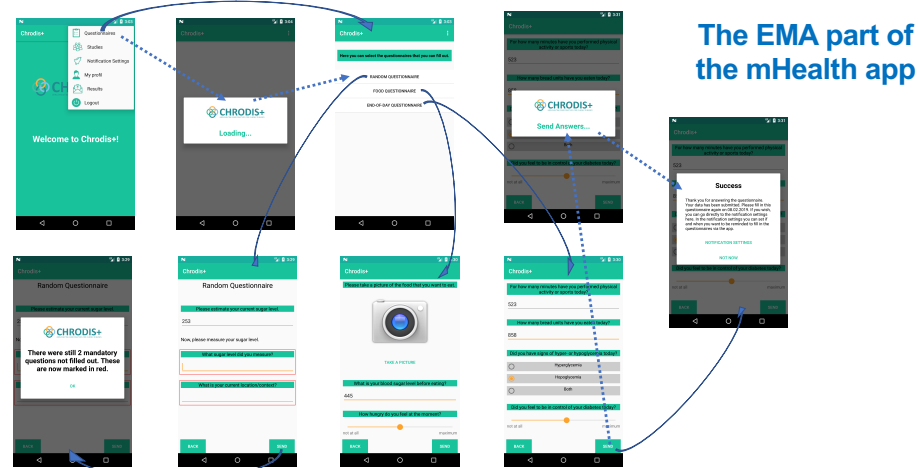
### Specific aims

To what extent the above features contribute in **patient control over the disease**: (a) EMAs, (b) Personalised feedback, and (c) An interactive educational agent

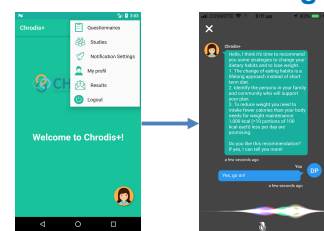
### Key performance indicators

- Recordings in the enrolment vs final day of patient participation
- Basic vs. extended features of the app
- Patient compliance with the treatment plan
- Caregiver satisfaction
- Factors of patient behavioural change

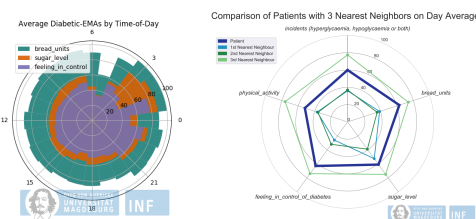
- The pilot on mHealth tools aims to assess to what extent various self-management and patient empowerment features (i.e. ecological momentary assessments [EMAs], personalised feedback and education) contribute in patient control over their chronic disease
- The pilot brings together 3 technology providers (ULM, CERTH, OVGU) and 3 pilot sites (CSC, NCPHA, UHREG)
- Diseases of focus: Diabetes (CSC, NCPHA) & Tinnitus (UHREG)



### Interactive educational agent



### Data analytics



## Enablers

### Information & Communication Technologies (ICTs)

- ICTs can contribute in better self-management of chronic diseases, giving patients the opportunity to be involved in their own care and facilitate their behavioural change
- The value of ICT tools for this purpose has been illustrated in multiple projects (mostly research-oriented)

## Barriers

### Knowledge & Organisational Gaps

There are important gaps hampering the introduction of ICT-based tools in actual clinical practice, such as lack of **expertise**, lack of **resources**, **difficulty in adapting the ICT** in the current clinical setting, as well as poor **digital literacy** for the patients.

## Key message

ICT to inform health policy making  
The current pilot will provide important insights as regards the contribution of various ICT-based self-management and patient empowerment components to patient control over the disease, aspiring to inform health policy makers for the adoption and uptake of relevant interventions

## Aknowledgements

To all the members of the Local Implementation Working Groups