

---

## CONFERENCE ABSTRACT

### **'Patients should be supported, and not blamed for non-adherence' – the role of digital adherence coach in the GATEKEEPER ecosystem.**

ICIC20 Virtual Conference – September 2020

Przemyslaw Kardas<sup>1</sup>

1: Medical University Of Lodz, Lodz, Poland

---

#### ***Background:***

Patient non-adherence to medication is a major public health problem. Not only it undermines the effectiveness of evidence-based therapies, yet also leads to negative health outcomes, or even deaths. It is also a driver of increased healthcare services use, particularly hospitalisations, and related costs. WHO report provides round average of 50% of chronic treatments that are subject to non-adherence. In reality, this number might be even higher: our recent analysis of e-prescription data showed that just the level of primary non-adherence (i.e. scenario that the drug prescribed is not collected from pharmacy) reaches 20% in Poland.

Traditional approach to non-adherence included identification of high-risk patient groups. This, however, might be erroneous, as new data prove that multimorbid patients express diverse levels of adherence across various treatments. Therefore, patients should not be blamed for non-adherence. Instead, they should be supported along they journey. This was the underlying idea of the digital coach to increase health literacy and awareness of aging population with asymptomatic conditions.

#### ***Methods:***

Our digital coach app will be embedded in the framework of GATEREKEEPER Project. GATEKEEPER is a flagship project of the EU to foster the large-scale deployment of integrated digital solutions, mainly AI and Big Data, in the healthcare domain. GATEKEEPER will develop a platform capable of combining information obtained from the health ecosystem and the user's daily activity with all security and privacy guarantees, making possible the use of Big Data for the benefit of individual care. GATEKEEPER will make possible the innovation and development of a wide range of digital health services with the ultimate aim of improving early identification and better treatment of non-communicable chronic diseases.

#### ***Results:***

Digital coach will target citizens aged 50+ with asymptomatic chronic conditions: hypertension, type 2 diabetes, and hyperlipidaemia. Carefully designed with patients, it will provide older adults with basic knowledge, and practical hints necessary to carry on long-term treatments. Special emphasis will be put on explaining lack of visible gains of these treatments to the patients. In order to increase the motivation of the users to keep taking their prescribed drugs, relevant psychological methods will be also employed.

***Conclusions:***

Rapid ageing of the global population creates enormous challenge to the healthcare systems. Ageing leads to multimorbidity, and the need of long-term treatments, often for asymptomatic conditions. In such circumstances, patient adherence is a challenge. Continuous support provided to the patients is more than advisable to let them continue their therapies, and fully benefit from achievements of modern medicine. The digital coach that will be developed within GATEKEEPER project might be expected to help this problem. At the same time, thanks to the data collected from real-world users, it will feed back entire GATEKEEPER ecosystem, letting the care provided to the citizens be more personalised, and more effective.

***Disclaimer:***

Co-funded by HORIZON 2020 Programme of the European Union