

## **PROMs+ : AI-based PROMs (Patient-Reported Outcome Measures) as a Decision Support System (DSS) for the physician**

PROMs are based on patient's perception of a disease and its treatment. It is used to collect important data from the patient regarding a disease progression or treatment outcomes that might not be captured by a clinical measurement at the clinic and may be as important as clinical measurements for treatment adjustment as well as to the patient's quality of life. Examples are functional or mental condition and medication side effects. This mode of patient-physician communication also enables remote treatment in cases of inability to have a physical meeting with homebound patients (e.g. isolation, COVID19) or when expert care in remote areas is needed. PROMs+ are a unique platform, developed at HIT, composed of PROMs, sensors and AI-based DSS for medication adjustment and personalized care. PROMs+ is a generic platform, designed for patients with various chronic diseases (e.g. Parkinson Disease-PD, CHF etc.) with a daily reporting module and a set of sensors (IoMT). The information received from the patient can be integrated with EHR data and by using expert knowledge and AI-based DSS can advise the physician about medication adjustment. The research at Rabin Medical Center will integrate EHR data, expert knowledge and PD patients PROMs data for the purpose of medication adjustment. The presentation will demonstrate the platform and discuss the use of such tools in routine treatment and its effect on quality of care, patient's empowerment and patient-physician relationship.