



P-emPOWER - Patient e-empowerment for participatory, personalized, predictive and preventive care

With the rise in non-communicable chronic disease, societies are in need of healthcare solutions that are participatory, personalized, predictive, and preventive. Technological advancements in medicine have enabled the development of innovative, multidisciplinary clinical information systems integrating new technologies for personalized, predictive healthcare.

However, crucial information that can only be provided by patients is still missing from these systems. Over 90% of the prevention and management of chronic disease, as well as recovery from acute care medical interventions, occurs outside the formal healthcare context. Patients themselves have unique data vital to determining risk and crafting personalized prevention and treatment plans.

Patient participation in a multi-disciplinary healthcare provider team is essential. This cannot be fully realized until patient-reported data become an integral component of healthcare information systems.

P-emPOWER will provide an integrated, unified platform of digital tools that enables healthy individuals and patients to take an active part in managing their own health, in partnership with their healthcare providers. The P-emPOWER platform will:

- enable them to record and share lifestyle (diet, physical activity, smoking), self-management and patient-reported outcome data with the healthcare provision team
- utilize patient-reported data as a basis for providing personalized, participatory counseling and prevention/treatment plans
- provide a crucial brick (patient-reported data) for enriching the learning healthcare system process and contributing to the delivery of high-quality, personalized, cost-effective care.

P-emPOWER fills the missing link in health information systems by capturing the “patient’s side of the story”. Through harnessing patient input and participation as actionable, integrated data, P-emPOWER will enable more effective personalized, predictive and preventive care to improve patient well-being.

Project team

Ofra Kalter-Leibovici, MD, is an endocrinologist and epidemiologist who directs the Cardiovascular Epidemiology Unit of the Gertner Institute for Epidemiology and Health Policy Research (GI). She has conducted population-based cohort studies on cardiovascular risk factors and health service utilization, and culturally-adapted, randomized clinical trials for assessment of lifestyle and healthcare delivery interventions among minority and mainstream populations. She is a faculty member at the Sackler Faculty of Medicine in Tel-Aviv University.

Kathleen Abu-Saad, PhD, is a nutritional epidemiologist in the GI Cardiovascular Epidemiology Unit. She has developed and evaluated dietary assessment/screening instruments, and conducted population-based observational studies investigating lifestyle and health outcomes, and a lifestyle intervention using digital tools in a high-risk minority population with literacy/numeracy barriers.

Arnona Ziv, M.B.A. is a senior system analyst who directs the GI Information and Computer Unit. She has expertise in initiating, designing, building, and managing national registries and other large clinical databases. She managed several health-systems software development projects, and has been active in the design and testing of an ICT tool for dietary and physical activity assessment and intervention.

Collaborations

Our project team has a history of collaborative projects and on-going working relationships with the two largest health funds in Israel: Clalit Health Services and Maccabi Health Services. We are also located on the campus of Sheba Medical Center, which has 120 departments and clinics and 1,700 beds.