

# TOGETHER

## Vascular age as a key for a Team-based approach to manage blood pressure and cardiovascular risk between community pharmacists and Primary Health Care Centers

### KEYWORDS

Primary Health Care, Community pharmacies, Team-based care, Patient's empowerment, Cardiovascular risk, Vascular Age, Hypertension

### DURATION

36 months

### ABSTRACT

Arterial hypertension (HTN) is the leading cause of premature death and living with disability in the world, and HTN related cardiovascular diseases are overloading hospitals. Reducing the burden of high blood pressure (BP) through better equipped and integrated Primary Care, closely collaborating with non-physician health care professionals, will increase the quality, efficiency, and sustainability of health care systems. Following strikingly positive observations in non-randomized feasibility projects, the TOGETHER initiative will provide innovative pathways, and investigate solutions in the setting of a randomized study: Subjects entering a Community Pharmacy will be asked to measure BP. If HTN is confirmed by ambulatory BP measurements, patients will be invited to participate. Pharmacies will be cluster-randomized into one arm of usual care, consisting of BP-related education and communication of the results to the general physician (GP). In the experimental arm, vascular age (VA) will additionally be assessed through estimated pulse wave velocity. The concept, consequences and therapeutic options of early VA will be explained to the patients and the GPs. Patients with HTN will be treated by their GPs according to best clinical practice. HTN-related education (plus VA related explanations in the experimental group) will be repeated once. After 6 months, a second assessment with ambulatory BP measurement will be performed to compare the level of BP control between arms. The degree of interaction patients-physicians will also be evaluated, as well as the economic implications. In the context of low control rates of HTN despite the availability of effective non-pharmaceutical and pharmaceutical interventions, TOGETHER will address five fundamentally unmet needs: First, the absence of low-threshold screening programs for HTN, leaving many patients undiagnosed (lack of awareness). Published experience in the three participating countries shows that offering measurements to subjects who enter a pharmacy significantly increases the detection of HTN. Second, the concept of cardiovascular (CV) risk is difficult to understand for most patients. This will be covered in the experimental arm by implementation of the concept of VA, which can be expressed as the difference from chronological age (your arteries are 10 years older than you). Understanding of VA is intuitive, simple, and much more informative for individuals, as compared to a theoretical 10-year risk from usual risk scores. Third, despite the availability of effective treatments, rates of treatment and control of BP remain poor, mainly due to patient's non-adherence and physician's inertia. Understanding CV risk on an individual basis (individual VA) will empower and motivate patients, improving their adherence to anti-hypertensive treatments. GPs will also be able to better understand the individual risk of the individual patient in front of them, likely reducing physicians' inertia for treatment changes. Fourth, Primary Care has limited time to offer

regular lifestyle advice. Community pharmacies have already explored empowerment and educational strategies for HTN with proven benefit. Our project will implement these programs, combining them with the concept of VA in the experimental group, surely enhancing their effect. And fifth, there is a lack of effective coordination between community pharmacists and GPs. Primary Care providers feel the need of enhancing this collaboration and to develop a team-based care approach to manage CV risk. Empowered patients with HTN will be supported through innovative patients' pathways, bridging Community Pharmacies with Primary Care. The complementary strengths, organizational settings and primary focus of Community Pharmacies and Primary Care will allow to create new strategies for early identification and intervention in HTN, ranging from lifestyle to medical treatment, taking social, economic, and behavioral aspects into acc

## PARTNERS

PI	Organisation	Country
Rodilla	Fundación de Investigación Sanitaria y Biomédica de la Comunitat Valenciana	Spain
Aichberger	Oberösterreichische Apothekerkammer	Austria
Ardelt	Oberösterreichische Gesellschaft für Allgemein- und Familienmedizin	Austria
Fernández Alfonso	Instituto de Investigación Sanitaria Hospital Clínico San Carlos	Spain
García Ortiz	Instituto de investigación Biomédica de Salamanca	Spain
Mayer	AIT Austrian Institute of Technology	Austria
Pereira	Instituto Politécnico de Coimbra. Escola Superior de Tecnologia da Saúde	Portugal
Santschi	La Source, School of Nursing Sciences, HES-SO University of Applied Sciences and Arts Western Switzerland	Switzerland