

## **POSTER ABSTRACT**

Integration of a web application in Osakidetza Basque Health Service information system to optimize and adapt pharmacy therapeutic of multimorbid patients.

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**Background:** Due to population aging and advances in medical science, people with chronic diseases and polypharmacy are living longer. Challenges are how healthcare systems can cope with the cost burden of chronic disease, sustain a quality independent living for patients; and ensure sustainable healthcare and social care systems. Innovative solutions as well as sustainable integrated workforce solutions are emerging as an alternative to tackle this challenge.

**Methods:** Within Gatekeeper, the Basque Country region is carrying out a "management of people with chronic diseases and polypharmacy" quasi-experimental study (non-randomized, concurrent and controlled study). The aim is to assess the effectiveness and experience of using a mobile application (My Treatment) to improve adherence of patients with polypharmacy and boost the optimization of pharmacological prescriptions by using a web platform (CheckTheMeds). This study plans to advance as well in the enhancement of Primary Care teamwork, coordination, and communication to acquire new roles to support each other, and offer holistic care to patients.

The intervention has been deployed in 11 Integrated Health Organizations of Osakidetza Basque Health Service, Basque Country (Spain). More than 275 healthcare professionals (doctors, nurses, and pharmacy staff) from Primary Care (PC) centers are participating in the intervention. Trained PC healthcare professionals have started the piloting. They have recruited 690 patients who meet the inclusion criteria (65 years of age or older, with 2 or more chronic diseases and 9 or more chronic or on-demand medicines prescribed). The piloting will last until June 2023.

**Results:** 690 patients (intervention and control group) have been included in the study. After signing the informed consent, their health status (Barthel test), prescribed drugs (CheckTheMeds platform), and adherence to treatment (Morisky Green test) are completed at baseline and after a 6-month follow-up. Preliminary data extracted from OAS (Oracle Analytics Services) of Osakidetza reflected that the average age of the recruited patients is 77.9 years, and 58% are male. The average prescription of these patients is 13.10 medicines. 51% of the users are independent (Barthel Test) and 80% of the patients are compliant (Morinsky Green test).

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The evaluation is being conducted with a mixed methods approach, integrating quantitative and qualitative techniques, by organizing a workshop (November 2022) and a focus group.

**Discussion and Conclusions:** Improved appropriate polypharmacy, together with adherence to prescribed medication, will result in more effective treatments with fewer PRMs and health complications, and therefore, in improved efficiency in the use of healthcare resources. As a consequence, a better use of resources, increasing coordination, and teamwork among primary care healthcare professionals,s and introduction of new roles can improve the efficiency of health systems. Thus, the coordinated action of healthcare professionals, in close collaboration with the patient, is postulated as a common denominator in strategies aimed at improving adherence to treatment and offering new caring skills. This integrated care model is flexible and can be replicated at large scales in different environments.