





Design, implementation and impact on patient safety of a mobile application for patients on antiretroviral therapy

Ferris Villanueva M¹, Chamorro de Vega E¹, Rodriguez González C¹, Mayo Canaleja B¹, Montero Antón MP¹, Bermejo Herrera S¹, Romero Jiménez R¹, Escudero Vilaplana V¹, Collado Borrell R¹, Ana Herraz-Alonso¹, María Sanjurjo-Sáez¹

¹Hospital General Universitario Gregorio Marañón, Pharmacy Department, Madrid, Spain

What was done?:



FarMCuida® is a mobile application designed for a closer and better pharmacotherapeutic monitorization of patients on antiretroviral therapy (ART).

Why was it done?

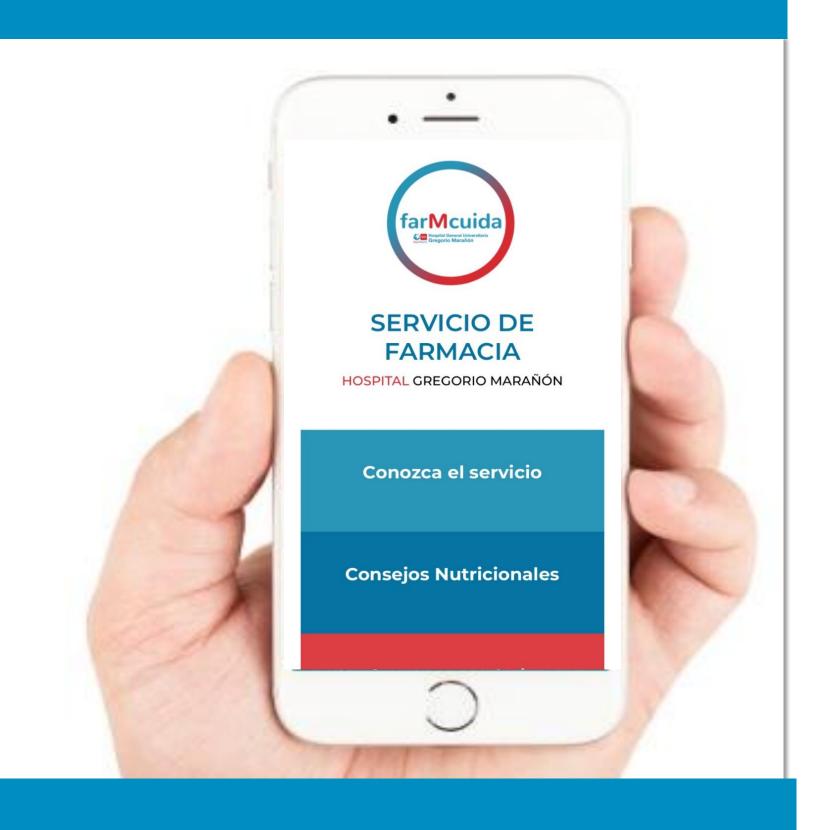
Patients are more active, autonomous and have greater information and communication needs.

Objectives:

- Allow patients to participate in their illness and/or treatment, promoting their compliance and safety and communication with the healthcare professional.
- Strengthen pharmacotherapeutic monitoring of patients receiving ART, avoiding visits to the emergency room and hospital consultations.
- Generate pioneering evidence on the impact of mobile applications on the pharmacotherapeutic monitoring of patients on ART.

How was it done?

- A multidisciplinary group was created to design and develop FarMCuida®
- Identification and inclusion of candidate patients was performed in the Pharmaceutical Care Consultation of the Pharmacy Service.
- The pharmacists responsible for the Infectious Diseases area performed real-time pharmacotherapeutic follow-up of the patients.
- Records of adverse effect (AE) and Safety-related messages received (Adverse effects, interactions, drug administration) are analyzed.



What has been achieved?:

- 152 patients were included
- 58 adverse events (AEs) were registered
 - 22% of the patients registered at least 1 AE
- 32% of patients used the Messages module
 - 126 telematics consultations were carried out
 - 205 messages were exchanged between the patient and the pharmacist.
- 43% of the consultations were doubts about interactions
 - Three type D interactions and one type X interaction were identified.
- 11% of the consultations corresponded to doubts about the administration of ART
- 5.2% were related to adverse effects experienced by the patient.

At least 3 visits to the emergency department were avoided, resulting in health care and economic savings for the health system.

What next?

Based on the limited studies on the impact of mobile applications on the pharmacotherapeutic follow-up of patients, the results obtained will allow us to generate evidence in this regard.

It is worth highlighting the flexibility FarMCuida® design, being easily adaptable to different pathologies and hospital centres.



Maria.ferris@salud.madrid.org



