



Editorial

[Translated article] Pharmaceutical care without borders

Atención farmacéutica sin fronteras



Almost a decade ago, a group of Hospital Pharmacy (HP) professionals with a shared passion for pharmaceutical care (PC) saw that there was an urgent need to rethink the care model prevailing in most Spanish hospitals. The enormous variability of care, difficulties in integrating multidisciplinary teams, the need to provide added value, and the opportunity to consolidate healthcare leadership were issues pervading a specialty that was being overwhelmed by the massive social, demographic, health, and technological changes that were taking place. These changes were strongly amplified by an economic crisis that, at that time, exacerbated the shortage of human and material resources that hindered a consistent response to that critical situation.

In 2014, far from wanting to provide a unilateral or simplistic solution to a profoundly complex problem that concerned the future of the profession, what was initially proposed within the SEFH was the creation of a working group to guide the collective—based on their demonstrated capacity and talent—in the design and development of a strategic map. Thus, the Strategic Map for Outpatient Care (MAPEX, from its name in Spanish) came into being.^{1,2}

Since then, we have succeeded in creating a shared strategic vision of what we are and what we want to be. To this end, a considerable number of professionals were recruited to lead a range of initiatives, all of whom were aware that a shared vision was the right response to address the challenges faced. We have worked to eliminate the barriers that have prevented and, in many cases, continue to impede the faster implementation of the improvements achieved.

A new care model has been developed with the aim of responding to the needs of today's patients by adapting to them in different ways. Published results suggest that the application of the model has led to significant and clinically relevant improvements in patient health outcomes.^{3,4} Taken further, an internationally groundbreaking initiative has been the development of a quality certification standard for excellence in pharmaceutical care (Q-PEX).⁵

Such proposals have been put to the test on numerous occasions. Without question, the COVID pandemic was the greatest challenge to our profession. However, we emerged stronger, thanks not only to our commitment, but also because the foundations of a new pillar of care had been laid, which today is already part of the “dual environment”: telepharmacy.^{6,7}

Nevertheless, this transformation requires ongoing work to ensure that the initiative becomes deeply rooted and definitively replaces every single element that can be improved.

Almost a decade has passed since the MAPEX project was proposed, and—even assuming that the “Diffusion of Innovation Theory” inexorably reigns in HP as well—the moment has come to bring in new leaders who possess the courage and determination to continue guiding others toward new objectives. And not just toward incremental improvements,

but rather toward disruptive initiatives. The first of these must be to rethink our main project. MAPEX arose in response to very specific types of patients, who we had delimited according to the physical and prescription environment in which they were then treated. However, the word “outpatient” now seems to be an anachronism that should be let go, because neither the physical environment in which they are treated nor the type of medication they receive are sufficient to define what professional resources are demanded from the HP to provide patients with optimal and individualized responses. No healthcare specialty has “outpatients”, it just has patients, with the focus being on the individual. Thus, it is time to reorient the concept toward the key elements—the complexity of care and, therefore, pharmacotherapeutics—that determine this demand for care from the perspective of efficiency. In this sense, the stratification models developed in recent years are very good tools, especially when, as has already been implemented in some areas, they are reoriented toward something absolutely fundamental to the care and understanding of patients: the multidimensional approach.⁸ It is essential to actively apply them such that patients achieve their pharmacotherapeutic objectives, while they are provided with the full range of specialized knowledge as well as immediacy of action within multidisciplinary teams, whether in the setting of specialized care, primary care, or virtual care.

However, all these aspects only represent the basis for action. In this regard, the proposals that have been made (case-mix, diagnosis-related groups, etc) have always been based on accessible structured data, which is available in typical healthcare environments for analysis and decision-making. Nevertheless, circumstances have changed. Generally speaking, what we know as “mobile health” and the digitalization of healthcare is already a reality that will continue to expand in the near future. Therefore, once “unstructured” data are added to structured data from medical records, we will be able to predict health events with enormous precision. Furthermore, no one doubts that in the present decade the patients' perspectives will be included in the clinical and objective assessment of health outcomes, with the full incorporation of Patient Reported Outcome Measures (PROM) and Patient Reported Experience Measures (PREM) in decision-making.⁹

If we start from the premise that healthcare systems will be environments of extremely high technological intensity in which care networks will be used, there will also be a need to integrate this new PC proposal within the strategic lines set out by organizations, with the general aim of providing patients with optimal lasting value in each interaction, whether face-to-face or telematic.¹⁰

On this point, we are practically welcoming the irruption of artificial intelligence into society as well as into the healthcare sector. At a glance, robotics, machine learning, deep learning, and content generators are going to have a radical impact on our way of managing PC.¹¹ It has

already been suggested that digital competencies in this field will be essential for our profession. Among other healthcare benefits, the assimilation and implementation of these professional skills will undoubtedly help us to increase what we could call our “increased range of capacity”: that is, to reach not only more patients but also in the best possible way and with the greatest possible impact. To this end, we will probably have to rethink the way we continue to organize HP services, which are based on the guidelines of the last century, and talk about comprehensive care teams, with different levels, modes, and types of shared communication with patients.

In order to achieve all these objectives, we need to reflect deeply, move beyond our comfort zones, and let go of traditionalism in order to face this new scenario and begin to take the next steps with courage and determination.

These demands are an undeniable reality and we have to admit that there is and will continue to be organizational and resource variability in our healthcare settings. Nevertheless, as professionals who aspire to be the bridge linking the healthcare system with optimal efficiency, and patients with their health outcomes, we must work to achieve homogeneity in terms of quality and to reap the benefits of this proposal.

All of this entails breaking through and overcoming a range of barriers, both physical and mental. The following aspects should be addressed: investing in and incorporating human and material resources; addressing technological limitations; redefining value and its contribution in multidisciplinary teams and information systems; the digital divide affecting patients (and professionals); and, obviously, updating the legal framework needed to support all the foregoing. Once again, this proposal is based on a clear premise: a commitment to collective intelligence, with connectivity as the basis of smart and dual organizations counting on established networks for both agile internal and external innovation in which strategic observation and learning during workflow as well as the handling of collective knowledge will enhance the speed and management of healthcare transformation. So, let's learn from our past successes and mistakes such that, as of now, we can make all of this the rule and not the exception.

Now, 7 years after reaching the first consensus on the future of this initiative, the “II Consensus Conference” of the MAPEX project will take place during the 68th Congress of the SEFH in Bilbao. Once again, we will have the opportunity to meet and rethink the next steps in order to face and anticipate the future.

Undoubtedly, what is analyzed, debated, and agreed upon there will drive some of the initiatives that will help us meet an established and increasing demand from society, healthcare systems, and the patients themselves: that is, for us to make the transition from being drug experts to being experts in the relationship between patients and their pharmacotherapy. This must be the case, because, and lest we forget, what will make us better pharmacists in the near future are the patients themselves and not simply the treatments prescribed or the technologies implemented to monitor them. Therefore, let's open our doors to PC without borders.

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References

1. Mapa Estratégico de Atención al paciente externo (MAPEX-SEFH). [accessed: 02-06-2023] Available from: <https://www.sefh.es/mapex/documentacion.php>.
2. Morillo-Verdugo R, Calleja-Hernández MÁ, Robustillo-Cortés MLA, Poveda-Andrés JL. A new definition and refocus of pharmaceutical care: the Barbate Document. *Farm Hosp.* 2020;44(4):158–62. doi: 10.7399/fh.11389.
3. Morillo-Verdugo R, Lazaro-Lopez A, Alonso-Grandes E, Martín-Conde MT, Díaz-Ruiz P, Molina-Cuadrado E, et al. Patient experience evaluation of the CMO-based pharmaceutical care model vs usual care in people living with HIV. *J Multidiscip Healthc.* 2022;15:2991–3003. doi: 10.2147/JMDH.S392398.
4. Caso-González A, Núñez-Rodríguez J, González-Pérez Y, Leralta-González C, Sanz-Alonso V, Obaldia-Alaña C. Effectiveness on adherence to biological drugs and experience of a pharmaceutical intervention based on CMO model in patients with rheumatic disease (AdHER-2 study). *An Sist Sanit Navar.* 2022;45(2):e1004. doi: 10.23938/ASSN.1004.
5. Morillo Verdugo R, Calvín Lamas M, Delgado Latorre ATJ, Ferrando Piqueres R, Fernández-Llamazares CM, Negro Vega E, et al. Development of the Q-PEX standard for quality certification of pharmaceutical care for outpatients of Pharmacy services. *J Healthc Qual Res.* 2021 Nov-Dec;36(6):324–32 Spanish: <https://doi.org/10.1016/j.jhqr.2021.03.010>.
6. Morillo-Verdugo R, Margusino-Framiñán L, Monte-Boquet E, Morell-Baladrón A, Barreda-Hernández D, Rey-Piñero XM, et al. Spanish Society of Hospital Pharmacy Position Statement on Telepharmacy: Recommendations for its implementation and development. *Farm Hosp.* 2020;44(4):174–81. doi: 10.7399/fh.11515.
7. Margusino-Framiñán L, Illarro-Uranga A, Lorenzo-Lorenzo K, Monte-Boquet E, Márquez-Saavedra E, Fernández-Bargiela N, et al. Pharmaceutical care to hospital outpatients during the COVID-19 pandemic. *Telepharmacy.* *Farm Hosp.* 2020;44(7):61–5. doi: 10.7399/fh.11498.
8. Morillo-Verdugo R, Aguilar Pérez T, Gimeno-Gracia M, Rodríguez-González C, Robustillo-Cortés MLA, representing the project research team belonging to the HIV Pharmaceutical Care group of the (SEFH). Simplification and multidimensional adaptation of the stratification tool for pharmaceutical care in people living with HIV. *Ann Pharmacother.* 2023 Feb;57(2):163–74. doi: 10.1177/10600280221096759.
9. Grønkvær LL, Lauridsen MM. Quality of life and unmet needs in patients with chronic liver disease: a mixed-method systematic review. *JHEP Rep.* 2021;3(6):100370. doi: 10.1016/j.jhepr.2021.100370.
10. Gómez Huelgas R, Díez Manglano J, Carretero Gómez J, Barba R, Corbella X, García Alegría J, et al. The hospital of the future in 10 points. *Rev Clin Esp (Barc).* 2020;220(7):444–9. doi: 10.1016/j.rce.2020.04.009.
11. Montero Delgado A, Gonzalez Perez Y. Hola Chat GPT ¿Qué hace una inteligencia artificial como tú en una farmacia hospitalaria como esta? *Rev OFIL Ilaphar.* 2023;33(2):117–20 [accessed 02-06-23]. Available from: <https://www.ilaphar.org/hola-chat-gpt-que-hace-una-inteligencia-artificial-como-tu-en-una-farmacia-hospitalaria-como-esta/>.

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