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The Spanish National Strategic Plan for Hepatitis C: A legacy of success

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April 2025 marks the 10th anniversary of the Strategic Plan for Addressing Hepatitis C (PEAHC) (1). The inception of PEAHC arose from the necessity to secure funding for the new direct-acting oral antiviral medications to treat hepatitis C in Spain. These drugs had already demonstrated efficacy in clinical trials worldwide and had been approved for use and funding in several European countries. In Spain, however, given the high prevalence of hepatitis C, an intense debate emerged concerning the economic sustainability of implementing these treatments on a large scale, as well as the necessity of prioritizing treatment for patients with the most advanced liver disease. This critical situation triggered an unprecedented collaborative response among individuals living with hepatitis C, healthcare professionals, scientific associations (among which he undoubtedly highlighted the role of the Spanish Association for the Study of the Liver, AEEH), representatives of the National Health System, and the pharmaceutical industry. Collectively, they identified the urgent need for a national strategy that would not only facilitate access to these groundbreaking therapies but also comprehensively address hepatitis C management in Spain. Consequently, the PEAHC was established in 2015, with a clear objective: to identify all patients infected with HCV, systematically provide them treatment without restrictions, and design an innovative financing model that enabled treatment for all infected individuals (1). This initiative exemplified a profound commitment to public health and equitable access to diagnosis and treatment, laying the foundation for the elimination of this disease in Spain. The crisis was successfully transformed into an opportunity, and Spain

implemented a plan that not only ensured access to cutting-edge treatments but also incorporated policies for early detection and exemplary resource management within the healthcare system.

The PEAHC was structured around four essential strategic lines. First, the disease burden was quantified through the analysis of hospital records of individuals diagnosed with hepatitis C and by conducting a national epidemiological study (2,3). At this stage, the initial—and pleasant—surprise emerged: the number of individuals actively infected with HCV was significantly lower than previously estimated, falling between 200,000 and 250,000 cases. The second strategic line, arguably the most ambitious and productive, entailed establishing a therapeutic strategy for facilitating access to direct-acting antivirals (DAAs). This strategy encompassed both treatment-naïve individuals and those who had previously undergone therapies, irrespective of liver disease severity or associated risk factors. Consequently, this guaranteed maximum equity in treatment access while optimizing healthcare resource allocation. In other words, universal, cost-free, equitable, and systematically organized access to these medications was provided, initially prioritizing patients with advanced liver disease during the early phases of the PEAHC implementation. The third strategic line established coordination mechanisms to effectively implement the plan throughout the entire national territory. Central to this strategy was the establishment of a national registry of treated patients, which systematically collected efficacy data. This registry enabled accurate financial planning, the evaluation of treatment effectiveness, and provided insights into the pace of patient enrollment in each autonomous community—a particularly critical aspect in Spain, given the decentralized nature of healthcare management. This collaborative effort ensured optimal patient treatment irrespective of geographical location. Finally—and in a highly disruptive approach for a national healthcare plan—the fourth strategic line emphasized the need to foster advancement in knowledge regarding prevention, diagnosis, and treatment of hepatitis C through targeted research, development, and innovation (R&D&I) activities managed by the ISCiii (Carlos III Health Institute). This proactive and innovative strategy has significantly contributed to positioning Spain at the global forefront of hepatitis C management.

Since its implementation, the plan has profoundly impacted health in Spain (4). In less than a decade, we have transformed a chronic, progressive disease with significant morbidity into an infection currently on track for elimination in our country (5,6). This achievement positions Spain among the first high-income countries expected to eliminate HCV by 2030, establishing our nation as an international benchmark in hepatitis C elimination. Below, we summarize some of the key accomplishments. A substantial reduction in hepatitis C-related mortality has been observed due to the effectiveness of direct-acting antiviral therapies, alongside a dramatic decline in the number of patients admitted to our hospitals with decompensated cirrhosis (7). Similarly, there has been a notable decrease in the incidence of HCV-related hepatocellular carcinoma and a significant reduction in the need for liver transplantation due to hepatitis C, thus extending the impact of this strategy beyond HCV itself (8). Indeed, this decrease in transplantation demand has enabled earlier access to liver transplants for patients with other severe liver diseases, reducing waiting times and improving transplant outcomes. This optimization in organ allocation represents one of the most beneficial consequences of HCV elimination, exemplifying how effective health policies can positively influence the entire healthcare system. Furthermore, this strategy has not only significantly improved both the quality and expectancy of life for our patients but has also proven to be cost-effective, yielding substantial savings by reducing advanced complications and long-term hospitalizations. The considerable decrease in the disease burden associated with hepatitis C virus infection—including fewer patients with cirrhosis and related complications—has translated into remarkable economic savings (9,10). Consequently, the initial expenditure on direct-acting antivirals should not be viewed merely as an expense but rather as a highly cost-effective investment for the healthcare system.

These health outcomes have positively affected the entire population, with particular impact on the most vulnerable segments of our society, as evidenced by the numerous micro-elimination programs developed concurrently with the PEAHC. Notably, these initiatives have resulted in the near elimination of HCV infection among incarcerated individuals and those living with HIV (11-13). Additionally, Spain has implemented numerous clinical best-practice strategies that have significantly improved disease

diagnosis rates, linkage to care, and treatment adherence, thereby optimizing healthcare delivery pathways (14). Prominent examples include universal screening programs targeting multiple groups selected based on risk factors (15), emergency department screening initiatives (16), strategies for identifying patients lost to follow-up (17), one-step diagnostic processes, comprehensive viral hepatitis diagnostics (18), decentralized and point-of-care diagnostic systems (19,20), a decalogue for hospital-based elimination (21), treatment simplification protocols, and coordinated strategies with harm reduction centers. Furthermore, in certain urban environments, mobile diagnostic and treatment units have been deployed with extraordinary outcomes (22). Finally, integrative social movements, such as the Alliance for the Elimination of Viral Hepatitis, have emerged, successfully consolidating the efforts of numerous scientific and patient associations (23). These initiatives aim to educate the general population, raise awareness among healthcare professionals regarding the critical importance of early diagnosis, encourage active participation in prevention, diagnostic, and continuity-of-care programs, and influence health and political authorities to recognize the feasibility and importance of developing comprehensive plans aimed at eliminating viral hepatitis.

In the absence of a specific vaccine, treatment for HCV infection has also become an essential prophylactic strategy, significantly reducing the incidence of acute infections among high-risk populations. Furthermore, the use of artificial intelligence has enabled the initiation of various projects aimed at enhancing the identification of undiagnosed patients through algorithms applied to electronic health records, as well as predicting geographic areas with high concentrations of undiagnosed cases, thereby facilitating informed decision-making on where to intensify screening efforts. These and other clinical best-practice protocols have not only improved hepatitis C management but have also served as exemplary models applicable to other chronic diseases. Lastly, the plan has stimulated substantial scientific output, generating abundant research recognized at both national and international levels, thereby reinforcing Spain's global leadership in combating this disease.

The PEAHC is guiding Spain towards the elimination of hepatitis C as a public health concern. If the current strategies are sustained, elimination could be achieved prior to

2030, ahead of the objectives set by the WHO. To reach this goal, intensification of universal screening and micro-elimination strategies will be crucial, since despite numerous advances in diagnostics and myriad initiatives to simplify screening and treatment, certain groups still pose significant detection challenges. Addressing this issue requires integrating innovative screening methods, such as self-testing for hepatitis C without the necessity of self-identifying as part of a risk group. Additionally, following the path of other countries that advocate universal screening for individuals within age ranges exhibiting higher HCV prevalence might be advantageous (24). Similarly, maintaining and reinforcing linkage-to-care strategies for vulnerable populations, whose access to screening and treatment is often limited and necessitates targeted community interventions, remains essential. Furthermore, it is imperative to generate real-time data on WHO-established indicators for hepatitis C elimination, such as the incidence of new infections and related mortality, underscoring the urgent need to enhance existing information systems.

The PEAHC has not only transformed the management of hepatitis C in Spain but has also established a legacy demonstrating how innovation, collaboration, and social and political commitment can effectively resolve a serious public health crisis. This collective endeavor has shown that, given appropriate political will, adequate resources, and a patient-centered approach, the elimination—or effective control—of severe diseases is an achievable goal. This accomplishment merits study by future generations as an exemplary illustration of what can be achieved when diverse societal sectors unite around a common purpose. It is a plan of which all participants—ranging from patients and healthcare professionals to policymakers and activists—should feel proud. Each has contributed to a profound paradigm shift in hepatitis C care, creating a model that has not only saved lives but also substantially enhanced their quality. Indeed, this plan should serve as an inspirational model applicable to other diseases and for other nations. Perhaps the most valuable lesson derived from this experience is that disease elimination or control relies not solely on drug availability but significantly on sustained political commitment, investment in healthcare, and the active involvement of all stakeholders within the healthcare system. Spain has demonstrated that when genuine commitment exists, the results can be extraordinary.

This represents a national achievement worthy of pride.

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