

Letters to the Editor

Monitoring Chronic Patients Between Primary Care and Cardiology

Seguimiento de pacientes crónicos entre atención primaria y cardiología

To the Editor,

We read the Falces et al.¹ paper with great interest. It describes a program that integrates cardiology and primary care, comparing it with conventional care. Through their research, the authors went from intuitive management to evidence-based management. This implies integrating specialized healthcare in hospitals and developing outpatient cardiology within them or in specialized health centers, some of which resolve patient problems in one visit.^{2,3} The article clearly shows how the clinical practice indicators improve when cardiologists are more present in healthcare centers. However, successive visits did not reduce the processes with the most impact—ischemic heart disease, heart failure, valve diseases and hypertrophic cardiomyopathy—although consultations did reduce banal issues and atrial fibrillation. The authors justify this because the patients were more severe, which has an impact on patient safety.¹

In an interlevel integrated healthcare model, the responsibility for public health should fall on the primary care doctor, the actual engine to integrate the levels, using information and communication technology tools, along with increasing individuals' shared responsibility for their own healthcare.

It is logical to think that healthcare demand is going to increase in coming years, in a society with greater longevity, patients with chronic and multiple disorders,⁴ a more and better informed population, and increasingly improved access to technology. However, the *Sistema Nacional de Salud* (Spanish National Health System) is based on different healthcare levels that are not well integrated with one another. Although effective at managing acute processes, they do not provide a good enough response for chronic patients, who must wander from consultation to consultation with different specialists, with poorly integrated care for their multiple disorders and little continuity of care. This segmentation can make access to the health system slow and inefficient. The actual opportunities for change and improvement must come from information and communication technologies, capturing, storing, and transferring information (electronic medical records with integrated medical imaging) and strengthening an online work system to produce results that could be more successful than the sum of all the parts (*e-Salud*). The traditional healthcare model would be replaced with integrated online centers in which knowledge will be shared, promoting research and education. With *e-Salud*, the public will be the system's main focus, improving

users' interaction with the multiple professionals caring for their health. It will represent a quality-oriented healthcare practice planned and organized around highly prevalent and/or resource-consuming processes, with integrated information and communication technologies in all aspects of healthcare.⁵ It will provide fully integrated (interlevel) healthcare, with up-to-date clinical pathways where the functions of each healthcare level and the referral criteria are identified, offering bi-directional communication with the public (*Salud 2.0*).⁶ Finally, it will be very useful to analyze the information to discover trends or patterns from which ideas could be taken and conclusions extracted with "business intelligence" tools. In summary, it is about being able to convert data into information, and being able to discover knowledge from this information.⁷

Manuel de Mora-Martín^{a,*} and Julio Diaz Ojeda^b

^a*Servicio de Cardiología, Hospital Universitario Carlos Haya, Málaga, Spain*

^b*Subdirección de Tecnología y Sistemas de Información, Hospital Universitario Carlos Haya, Málaga, Spain*

* Corresponding author:

E-mail address: manuel.mora@telefonica.net (M. de Mora-Martín).

Available online 22 September 2011

REFERENCES

1. Falces C, Andrea R, Heras M, Vehí C, Sorribes M, Sanchís L, et al. Integración entre cardiología y atención primaria: impacto sobre la práctica clínica. *Rev Esp Cardiol.* 2011;64:564–71.
2. Falces C, Sadurní J, Monell J, Andrea R, Ylla M, Moleiro A, et al. Consulta inmediata ambulatoria de alta resolución en Cardiología: 10 años de experiencia. *Rev Esp Cardiol.* 2008;61:530–3.
3. Montijano AM, Caballero J. La consulta de acto único en cardiología. *Rev Esp Cardiol Supl.* 2007;7:C30–6.
4. De Mora-Martín M, Pérez-Ruiz JM, Delgado-Prieto JL, Urbano-Carrillo CA. Comorbilidad de los pacientes ingresados por insuficiencia cardiaca en un servicio de cardiología. *Rev Esp Cardiol.* 2011;64:75.
5. Piqué JM. Unidades de procesos como base fundamental de la gestión sanitaria. In: Club Gertech, editor. *El hospital del futuro*. Madrid: Netwok; 2011. p. 36.
6. Narváez MI, Toribio C. Ciencias de la salud. *E-Salud 2010*. Estudio de prospectiva. Madrid: Fundación OPTI y FENIN; 2006. p. 1–96.
7. Cano Giner JL. *Business intelligence: Competir con información*. Madrid: Fundación Cultural Banesto; 2007. p. 23.

SEE RELATED ARTICLE:

DOI: [10.1016/j.rec.2011.02.024](https://doi.org/10.1016/j.rec.2011.02.024)

doi: [10.1016/j.rec.2011.07.004](https://doi.org/10.1016/j.rec.2011.07.004)