

Insight view of the Spanish Health System performance:

Assessing the impact on health and healthcare status of national measures to face the economic crisis.

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INTRODUCTION The main measure to address the long period of crisis experienced by Spain came to light on April 20, 2012 in the form of a real decree-law of urgent measures to "ensure the sustainability of the national health system and improve quality and safety of their benefits". To carry out the planned 10.7% budget reduction, this decree was presented as "a structural reform of the National Health System", with three lines of reform: condition of those insured, pharmacy and human resources. A few years later, the results must be evaluated.

OBJETIVES 1. To analyze the impact of the 2012 Royal Decree on the main indicators of Spanish health, deepening in territorial differences. 2. To explore the relationships between some key indicators whose evolution is striking, and the income of the CCAA - as the main factor that may explain their different territorial behavior. 3. To propose different hypotheses about the relations between these key variables describing the national health system, and variables describing the economic development of the Communities and Autonomous Cities, with the aim of contributing to the explanation of the differences between them regarding the provision of health services.

METHODS

1. The evolution (rate of change) of the Key Indicators of the National Health System (INCLASNS) provided by the Spanish Ministry of Health (<http://inclasns.msssi.es>) was analyzed for the period 2012-2014, in the areas of demographic characterization, morbidity, mortality, biological, lifestyles and social determinants, accessibility, effectiveness, resources, utilization, security, spending and satisfaction.

2. The indicators whose rates of variation for the period studied were more striking were selected.

3. A simple linear regression analysis of each selected indicator was performed. Each indicator, for its 2014 value, was the dependent variable of the per-capita income level of the Autonomous Communities in 2015. In two cases, other independent variables more related to the analyzed phenomenon were used (All-cause morbidity 2014 and Incidence of mental disorders 2014).

MAIN RESULTS

Morbidity and hospital discharges from all causes have increased in Spain between 2012 and 2014 by 2.5%, and this increase has been faced with budget cuts (reduction of per capita expenditure of 4.6%), with no workforce increases (except nursing) and, consequently, with extra effort of the doctors. This is reflected in an increase in waiting times (12.5% on average), and the consequent reduction in user satisfaction regarding the functioning of the health system (-2.90%). However, all-cause mortality rate has been reduced by 6.15%; lifestyle indicators such as alcohol, tobacco and cannabis consume, and physical inactivity, have improved; Other indicators regarding accessibility (vaccine coverage in the elderly and the percentage of mammograms performed in women aged 50-70 years), effectiveness (kidney and liver transplantation rates), and hospital safety (Nosocomial rate and overall in-hospital mortality rate) have also improved.

The 9 indicators that have called more attention for their evolution are:

1. Sedentary rate
2. Number of traffic victims
3. Number of victims of unintentional accidents
4. Pharmacy expense rate
5. Rate of hospital visits (vs. all-cause morbidity per 100,000 inhabitants and Autonomous Region 2014)
6. Percentage of the population aged 65 years and over with a positive assessment of their health status (vs the incidence of mental disorders 2014 by Autonomous Communities)
7. Diabetes incidence
8. Incidence of hospitalization for acute myocardial infarction
9. Reported prevalence of COPD in adult population

Figure 4. Relation between Pharmacy expense rate 2014 and PC Income of the A.C. 2015

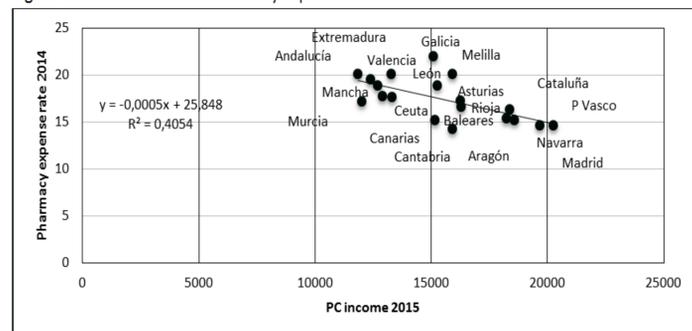


Figure 5. Relation between Rate of hospital visits 2014 and All-cause morbidity per 100,000 inhabitants and Autonomous Region 2014

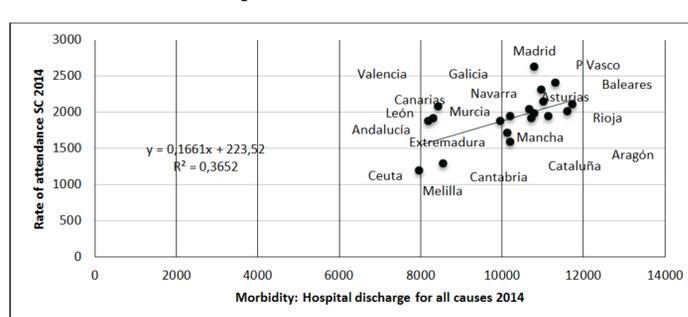


Figure 6. Relation between percentage of the population aged 65 years and over with a positive assessment of their health status and Incidence of mental disorders by A.C. 2014

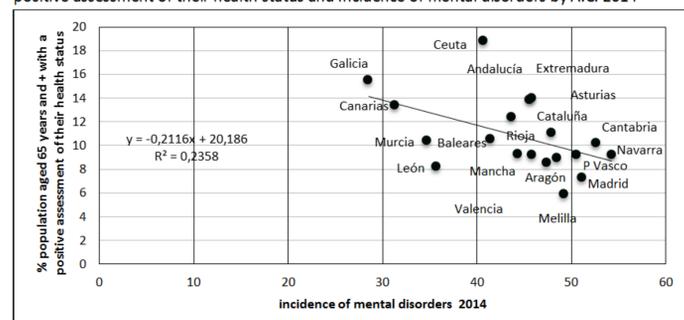
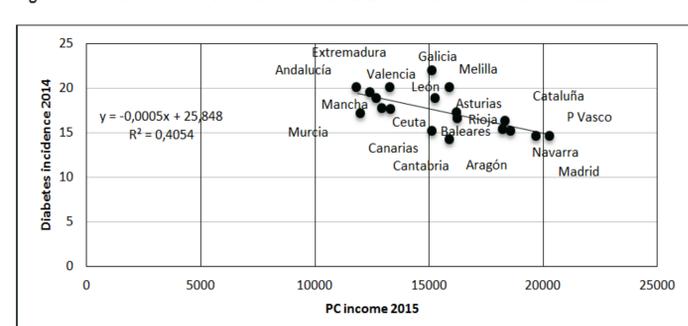


Figure 7. Relation between Diabetes incidence 2014 and PC Income of the A.C. 2015



All previous figures and similar ones that could be elaborated show three distinct areas in Spain in terms of morbidity and income level:

1. **The most disadvantaged**, formed by Andalusia, Murcia, Castilla La Mancha, Extremadura, Canary Islands and Ceuta.
2. **The intermediate**, formed by the Valencian Community, Baleares, Galicia, Castile and Leon, Cantabria, Asturias, Melilla and La Rioja.
3. **The most favored**, formed by Catalonia, Madrid, Aragon, Navarre and the Basque Country.

CONCLUSION

The system has resisted with dignity the consequences of the crisis in the post-decree period, although it is still far from being overcome. The population has been attended with fewer resources and workforce. In addition, factors such as the decrease in population, the progressive aging of the population, the lower birth rate and the increase of pathologies associated with the elderly and dependency, are increasingly complicating certain areas of attention, which need a certain restructuring to effectively address these changes. The reality is that the economic crisis has led to a shift in priorities. The short-term has prevailed over the long term. In other words, the immediate solvency has prevailed over future sustainability.