

DESDE 1902

SANITATEM
QUAERENS
IN·TROPICOS



Anais

INSTITUTO DE HIGIENE E
MEDICINA TROPICAL

**Contributions to the International Seminar
Healthcare and the crisis**

A case study in the struggle for a capable welfare state

Lisbon, 22nd of November 2018



ARCHIVOS
DE
Hygiene
e
Pathologia Exoticas

PUBLICAÇÃO DIRIGIDA PELA
Escola de Medicina Tropical
DE
LISBOA



1905

ARQUIVOS
DE
HIGIENE
e
PATOLOGIA EXÓTICAS

1926



ANAIS
DO
INSTITUTO
DE
MEDICINA TROPICAL

1943



ANAIS
DA
ESCOLA NACIONAL
DE SAÚDE PÚBLICA
E DE
MEDICINA TROPICAL

1966



ANAIS
DO
INSTITUTO DE HIGIENE
E
MEDICINA TROPICAL

1972



Anais
Instituto
de Higiene
e Medicina
Tropical

1984

Anais
INSTITUTO DE HIGIENE E
MEDICINA TROPICAL
Edição Comemorativa

2012





INSTITUTO DE HIGIENE E
MEDICINA TROPICAL

**Contributions to the International Seminar
Healthcare and the crisis**

A case study in the struggle for a capable welfare state

Lisbon, 22nd of November 2018



UNIVERSIDADE NOVA DE LISBOA
INSTITUTO DE HIGIENE E MEDICINA TROPICAL
Vol. 17 (Suplemento n.º 1), 2018, S1- S73; ISSN 2184-2310

Anais do Instituto de Higiene e Medicina Tropical

Vol. 17 (Suplemento nº 1), 2018

Contributions to the International Seminar **Healthcare and the crisis**

- **A case study in the struggle for a capable welfare state**

Lisbon, 22nd of November 2018

Coordenação

Biblioteca do Instituto de Higiene e Medicina Tropical

Gabinete dos Anais

Design Gráfico e paginação

2aocubo.pt

ISSN 2184-2310

(C) UNIVERSIDADE NOVA DE LISBOA

Instituto de Higiene e Medicina Tropical

Rua da Junqueira, nº 100

1349-008 Lisboa - PORTUGAL

+351213 652 600 (geral)

+351 213 632 105

E-mail: informacao@ihmt.unl.pt

Página web: www.ihmt.unl.pt

Distribuição

Instituto de Higiene e Medicina Tropical

Rua Junqueira, nº 100

1349-008 Lisboa - PORTUGAL

**FRIEDRICH
EBERT 
STIFTUNG**

Editorial

- S05 - **Healthcare under crisis and austerity in five European countries**
Serviços de saúde em tempo de crise e austeridade em cinco países europeus
Reinhard Naumann e Zulmira Hartz

Original article

Case studies from countries with adjustment programmes contracted with the Troika

S07 - **Greece**

- Greece's healthcare system and the crisis: a case study in the struggle for a capable welfare state**
O sistema de saúde grego e a crise: um estudo de caso na luta pela capacidade do Estado Social
– Charalampos Economou

S27 - **Ireland**

- Ireland's health care system and the crisis: a case study in the struggle for a capable welfare state**
O sistema de saúde irlandês e a crise: um estudo de caso na luta pela capacidade do Estado Social
– Steve Thomas, Sarah Barry, Bridget Johnston, Sara Burke

S37 - **Portugal**

- Looking back at the Portuguese crisis: what legacy for the Portuguese NHS?**
Um olhar sobre a crise portuguesa: qual o legado para o SNS?
– Inês Fronteira, Jorge Simões, Gonçalo Figueiredo Augusto

Case studies from countries with autonomous adjustment programmes

S47 - **Italy**

- Italy's health care system and the crisis: overview of policy actions and their implementation**
O sistema de saúde italiano e a crise: uma visão geral das políticas e sua implementação
– Francesca Ferrè, Guido Noto, Federico Vola

S59 - **Spain**

- Spain's health care system and the crisis: a case study in the struggle for a capable welfare state**
O sistema de saúde espanhol e a crise: um estudo de caso na luta pela capacidade do Estado Social
– José Ramón Repullo

- S71 - **Leading Authors**

International Seminar
Healthcare and the crisis

A case study in the struggle for a capable welfare state

Lisbon, 22nd of November 2018

IHMT-UNL (Sala Fraga de Azevedo), Rua da Junqueira 100

Since the 1980s, the institutions of the welfare state have been under growing pressure from adverse political and economic trends. In the context of the Eurocrisis this pressure achieved a new peak and resulted in far going restructuring and cost cutting, particularly in those countries submitted to adjustment programmes under the Troika. Healthcare as one of the main pillars of the welfare state was a central target of this development. This Seminar aims to analyse the type and depth of austerity measures in the healthcare systems, to review the performance of the systems under austerity rule and to identify the principle lines of political reorientation after the end of the acute crisis.

Program

15h00 Opening

Zulmira Hartz (IHMT / New University of Lisbon)

Reinhard Naumann (Friedrich Ebert Foundation, Lisbon)

Case studies from countries with adjustment programmes contracted with the Troika

15h15 Greece: Charalampos Economou (Panteion University Athens)

15h35 Ireland: Stephen Thomas (Trinity College Dublin)

15h55 Portugal: Inês Fronteira (IHMT / New University of Lisbon)

16h15 Comments and responses

Julian Perelman (Portuguese National School of Public Health, Lisbon)

16h25 Debate

17h00 Coffee break

Case studies from countries with autonomous adjustment programmes

Facilitator: Válder Fonseca (Directorate-General of Health, Lisbon)

17h20 Italy: Francesca Ferré (Laboratorio Management e Sanità, Scuola Sant'Anna Pisa, via Skype)

17h40 Spain: José Ramón Repullo (Instituto de Salud Carlos III, Madrid)

18h00 Comments and responses

Sofia Crisóstomo (CIES-IUL - Centre for Research and Studies in Sociology, Lisbon)

18h10 Debate

18h45 Final remarks

Reinhard Naumann (Friedrich Ebert Foundation, Lisbon)

Jorge Simões (IHMT / New University of Lisbon)

The Seminar will be held in English language.



Healthcare under crisis and austerity in five European countries

Serviços de saúde em tempo de crise e austeridade em cinco países europeus

Reinhard Naumann

Fundação Friedrich Ebert, representação em Portugal

Zulmira M. A. Hartz

Editora executiva, ANAIS do IHMT

*National policies - and in particular those of countries with scarce economic importance, such as ours - cannot be more than microsystems. The shock waves reflected on those microsystems have their epicentre far beyond our reach. We can limit their effects, but we will not escape from them unless we get out of the macrosystem. Which is not easy.*¹

*As políticas nacionais — e em particular, a dos países de escasso relevo económico, como o nosso — não podem ser mais do que microssistemas. As ondas de choque que nelas se refletem têm o seu epicentro longe e fora do nosso alcance. Podemos limitar-lhes os efeitos mas não nos subtrairmos a eles, a menos que saíamos do macrosistema. O que não é fácil.*¹

Eduardo Lourenço

This supplement to ANAIS of the Portuguese Institute of Hygiene and Tropical Medicine (IHMT) summarises the findings of the International Seminar on “Healthcare and the crisis - A case study in the struggle for a capable welfare state” organised by this Institute in cooperation with the Friedrich Ebert Foundation in Portugal.

The speakers were asked to produce written contributions on the seminar’s subject that are published in this supplement. The basic idea was to make a differentiated assessment of the effects of the Eurocrisis on the healthcare systems in five countries: Portugal, Spain, Italy, Greece and Ireland, in order to draw some evidence-based conclusions about the political measures that may be needed for the preservation of accessible healthcare as a central element of a capable welfare state.

The outline suggested to the authors followed the structure of the article by Jorge Simões and César Carneiro “The crisis and health in Portugal” published in the book “Austerity cures? Austerity kills?” coordinated by Eduardo Paz Ferreira.² The article by Simões and Carneiro, written in 2013 at the peak of the Eurocrisis, presented an analytical approach that seemed to be most appropriate for an ex-post analysis carried out five years later.

Este suplemento dos ANAIS do Instituto de Higiene e Medicina Tropical (IHMT) resume as conclusões do seminário internacional “Healthcare and the crisis - A case study in the struggle for a capable welfare state” organizado pelo Instituto em cooperação com o Friedrich Ebert Foundation em Portugal.

Os oradores foram convidados a produzir contributos escritos sobre o tema do seminário, os quais são agora publicados neste suplemento. A ideia base foi apresentar uma abordagem diferente aos efeitos da crise da Zona Euro nos sistemas de saúde, em cinco países: Portugal, Espanha, Itália, Grécia e Irlanda, de forma a desenhar um conjunto de conclusões com base em evidência sobre as medidas políticas que poderão ser necessárias para a preservação da acessibilidade a cuidados de saúde como um elemento central de um Estado Social (Estado-Providência).

O modelo sugerido aos autores seguiu a estrutura do artigo de Jorge Simões e César Carneiro “A crise e a saúde em Portugal” publicado no livro “A austeridade cura? A austeridade mata?” coordenado por Eduardo Paz Ferreira.² O artigo de Simões e Carneiro, escrito em 2013, no pico máximo da crise da Zona Euro, apresentava uma abordagem analítica que parece ser muito apropriada para uma análise *à posteriori*, levada a cabo cinco anos mais tarde.

1 - See Eduardo Lourenço “A esquerda e a ‘austeridade’” in *Jornal de Letras*, 21th November (pp. 34).

2 - See Jorge Simões and César Carneiro “A crise e a saúde em Portugal”, in: “A austeridade cura? A austeridade mata?”, coordinated by Eduardo Paz Ferreira, Lisbon Law School Editions 2014, 2nd edition (pp. 673-706).

1 - Ver Eduardo Lourenço “A esquerda e a ‘austeridade’” em *Jornal de Letras*, 21 de novembro de 2018 (p. 34).

2 - Ver Jorge Simões e César Carneiro “A crise e a saúde em Portugal”, em: “A austeridade cura? A austeridade mata?”, coordenado por Eduardo Paz Ferreira, AA-FDL, 2014, 2ª edição (pp. 673-706).

The authors were asked (1) to describe the central elements of the national adjustment policies in the healthcare sector and to assess their inherent risks and opportunities, (2) to analyse the performance of the healthcare systems under aggravated austerity rule, and (3) to assess and to comment on the national health policies after the end of the acute crisis. Finally, they were asked (4) to identify and characterize forces in politics and society who actively promote a viable public healthcare system as part of a capable welfare state, as an alternative to a mere crisis-management without a strategic perspective or even a policy of deliberate weakening of public healthcare.

The organisers of the seminar and of this publication understand that the academic debate about the future of healthcare is part of a broader discussion on our societies and the role the state should play. Since the 1980s, the institutions of the welfare state have been under increasing pressure from adverse political and economic trends. In the context of the Eurocrisis this pressure achieved a new peak and the problems of decades were magnified like under a burning glass. Healthcare, as one of the main pillars of the welfare state, was a central target of this development.

We hope that this publication may be a useful contribution to the debate on the future of healthcare in Europe and also to the primary goal of the preservation of a capable welfare state. This purpose is of the utmost importance today since the traditional “welfare society”³, as it existed until some decades ago in countries like Portugal, has largely disappeared and people really depend on the existence of essential social services.

Aos autores foi pedido (1) que descrevessem os elementos centrais das políticas nacionais de reajustamento no setor da saúde para avaliar os riscos e oportunidades que lhes eram inerentes, (2) que analisassem o desempenho dos sistemas de saúde enquanto sujeitos a severas regras de austeridade, e (3) para analisarem e comentarem as políticas de saúde nacionais implementadas após o fim da grave crise. Por fim, foi-lhes pedido (4) que identificassem e caracterizassem as forças políticas e sociais que ativamente promovam um sistema público de saúde viável como parte integrante do Estado Social, por oposição à mera gestão da crise sem uma perspetiva estratégica ou mesmo às políticas deliberadamente enfraquecedoras do sistema público de saúde.

Os organizadores do seminário e deste suplemento consideram o debate académico sobre o futuro dos sistemas de saúde como uma parte de uma discussão mais alargada sobre as nossas sociedades e o papel que o Estado deve assumir. Desde a década de 80 do século passado, as instituições do Estado Social têm sido sujeitas a uma pressão crescente de tendências políticas e económicas que lhes são adversas. No contexto da crise da Zona Euro esta pressão atingiu um nível mais elevado e os problemas de décadas foram ampliados como se estivessem sob uma lupa. O sistema de saúde, como um dos pilares do Estado Social, foi um dos alvos principais dessa pressão.

Esperamos que esta publicação possa ser um contributo útil para o debate sobre o futuro dos sistemas de saúde na Europa e também para o objetivo principal de preservação de um Estado Social. Este propósito é da maior relevância hoje, já que a tradicional “sociedade-providência”³, como existia até há umas décadas em países como Portugal, desapareceu em grande medida e as pessoas dependem realmente da existência de serviços sociais essenciais.



3 - The Portuguese sociologist Boaventura Sousa Santos defines “welfare-society” as networks of “mutual recognition and mutual aid based on ties in kinship and neighbourhood through which small social groups exchange goods and services on a non-mercantile base and following a logic of reciprocity”. See Boaventura Sousa Santos, *Sociedade-Providência ou Autoritarismo Social?*, in: *Revista Crítica de Ciências Sociais* N.º42 Maio 19, p. i.

3 - O sociólogo português Boaventura Sousa Santos define a “sociedade-providência” como uma rede de “relações de interconhecimento, de reconhecimento mútuo e de entajuda baseadas em laços de parentesco e de vizinhança, através das quais pequenos grupos sociais trocam bens e serviços numa base não mercantil e com uma lógica de reciprocidade...”. Ver Boaventura Sousa Santos, *Sociedade-Providência ou Autoritarismo Social?*, em: *Revista Crítica de Ciências Sociais* N.º42 Maio 19, p. i.

Greece's healthcare system and the crisis: a case study in the struggle for a capable welfare state

*O sistema de saúde grego e a crise:
um estudo de caso na luta pela capacidade do Estado Social*

Charalampos Economou

Professor, Panteion University, Department of Sociology



Abstract

The present paper discusses the impact of restrictive policies dictated by Troika on Greece's health care system. The majority of the measures introduced during the first wave of reforms (2010-2014), were fiscal consolidation measures resulting in increasing barriers to access to health services and a deterioration of the health of the population. Policies likely to promote health care system goals such as universal coverage, strategic purchasing, Health Technology Assessment, public health measures, shifting from inpatient to ambulatory care, and integration and coordination of primary and secondary care, were neglected, while some other, e.g. the National Organization for the Provision of Health Services, the National Primary Health Care Network and Diagnosis Related Group-Greek Version, were not well planned and implemented, due to extremely strict reform targets and schedules imposed by the Memoranda. Although after 2015 these neglected issues came to the forefront of the health policy agenda, issues for further consideration remain in relation to the scope and depth of social health insurance, the adequacy of public health funding, the development of a resource allocation mechanism, the reorganization of the hospital sector, the development of physical rehabilitation, long-term and palliative care and the strengthening of public health services. Using the health system as a case study, we argue that "hard" Europeanization mechanisms characterized by fiscal austerity and internal devaluation resulted to the retrenchment of the Greek welfare state.

Key Words:

Economic crisis, economic adjustment program, health care reform, welfare state, Greece.

Resumo

Este artigo analisa o impacto das políticas restritivas ditadas pela Troika no sistema de saúde grego. A maioria das medidas introduzidas durante a primeira fase das reformas (2010-2014) foram medidas de consolidação fiscal resultantes do aumento das barreiras ao acesso aos serviços de saúde e uma deterioração da saúde da população. Políticas que tendencialmente promoveriam as metas do sistema de saúde tais como cobertura universal, aquisição estratégica, avaliação da inovação tecnológica, medidas de saúde pública, mudança de internamento para cuidados em ambulatório, integração e coordenação de cuidados de saúde primários e secundários foram negligenciadas, enquanto que outras, por exemplo, a Organização Nacional para a Prestação dos Serviços de Saúde, a Rede Nacional de Cuidados Primários de Saúde e grupos de diagnóstico homogêneos (GDH) na versão grega, não foram bem planeadas nem implementadas devido aos exigentes objetivos reformistas e aos prazos impostos pelos memorandos. Embora depois de 2015 estes assuntos negligenciados tenham passado a constar como prioridades da agenda da política de saúde, outros continuam a necessitar de uma melhor abordagem em relação à abrangência do seguro social de saúde, a adequação do financiamento público da saúde, o desenvolvimento de um mecanismo de alocação de recursos, a reorganização do setor hospitalar, o desenvolvimento da medicina física e de reabilitação, os cuidados continuados e paliativos e o reforço dos serviços públicos de saúde. Usando o sistema de saúde como um estudo de caso, defendemos que "fortes" mecanismos de europeização caracterizados por austeridade fiscal e desvalorização interna resultam na retração do sistema público de saúde grego.

Palavras Chave:

Crise económica, programa de ajuste económico, reforma do sistema de saúde, sistema público de saúde, Grécia.

1. Organization and provision of health services in Greece¹

Greece's health care system is a mixed system comprising elements from both the public and private sectors. In the public sector, a national health service type of system coexists with a social health insurance (SHI) model. Several employment-related SHI funds covered the entire population prior to the economic crisis. After 2011, population coverage for health care was undertaken by a single entity, the National Organization for the Provision of Health Services (EOPYY), which covers the insured and their dependents and acts as the sole purchaser of health care services provided by the publicly financed National Health System (known as ESY). At the same time, the benefit packages of the various SHI funds were standardized to provide a common benefits package under EOPYY. The private sector includes profit-making hospitals, diagnostic clinics and independent practices. A large part of the private sector enters into contracts with EOPYY, providing mainly primary/ambulatory care. After 2010, the role of voluntary initiatives, non-governmental organizations and informal healthcare networks increased significantly. This was mainly a response to meeting the needs of the large portion of the population that lost insurance coverage and access to public health care, primarily through prolonged unemployment or other inability to pay contributions. Coverage was restored through remedial legislation in 2016.

The Ministry of Health is responsible for the planning and regulation of the ESY and EOPYY. Despite the establishment of regional health and welfare authorities as far back as 2001, and their renaming as Regional Health Authorities (known as YPEs) in 2004, these entities, which were intended to carry out extensive health care planning, organization and provision, have exercised only limited powers to date. This may change with the implementation of more recent primary care reforms. In 2014, legislation formally transferred all public primary care facilities, health care sites and rural surgeries to the YPEs jurisdiction. These are expected to take up their primary care coordination roles more fully under the implementation of further reforms being rolled out from 2017 to 2020, to create a more integrated, two-tier primary care system with a gatekeeping role.

The health system is highly centralized and regulated, and there is extensive legislation controlling the activities of third-party payers and providers of services, the purchasing process and the levels of prices and reimbursement within the ESY. The training and licensing of health professionals are also highly regulated. However, there are few mechanisms that allow adequate planning and allocation of physical and human resources in Greece, with a lack of priority-setting processes, effective needs assessment and investment strategies, among others. Resources are unevenly distributed across the country, with a much higher concentration of health services and medical equipment in large cities compared with rural areas; private facilities are also largely located in urban areas.

Financing is through a mix of public and private resources, SHI and tax. Health expenditure in 2016 was 8.45% of the gross domestic product (GDP); however, in the context of drastically reduced GDP since the onset of the economic crisis, expenditure has fallen substantially since 2010. This spending translates to €1,660 purchasing power standard (PPS) per capita, which is roughly two thirds of the average for the 28 Member States. Public expenditure on health constituted 5.2% of GDP in 2016. A public expenditure cap of 6% of GDP, set in the country's first economic adjustment programme (EAP), continues to be applied in 2018. The share of public expenditure on health was 61.3% in 2016, with the remaining 38.7% being funded from private payments. The share of private financing in Greece is one of the highest in the European Union (EU) and is mainly in the form of out-of-pocket (OOP) payments. These payments are made up of co-insurance for medicines, direct payments for services not covered by SHI as well as payments for services covered by SHI but bought outside the public system to enhance access and quality. In addition, informal payments are widely practiced, partly because of underfunding of the system and partly through lack of control mechanisms. Voluntary health insurance makes up only a small proportion of health expenditure (3.9% of current health expenditure in 2016).

Providers' reimbursement mechanisms are to a large extent retrospective. Health professionals (e.g. doctors

1 - This section is based on [1].



and nurses) working in ESY primary care facilities and hospitals are paid salaries while providers contracted with EOPYY are paid on a fee-for-service basis. Previously, hospitals were paid on a per diem basis but since 2012 public hospitals as well as contracted private hospitals are mostly compensated under a diagnosis-related group (DRG) scheme, which aims to rationalize the use of resources.

2. The adjustment programme and the health care system

2.1 Overview

The health policy responses to the crisis and their effects in Greece should be seen from two perspectives. The first perspective relates to implementing much-needed operational and structural reforms, designed to address weaknesses in the health care system that predated the crisis. When the global financial and economic crisis started, the health system in Greece functioned within an outdated organizational structure dominated by clinical medicine and hospital services, without the support of an adequate planning unit or sufficient accessible information on health status, utilization of health services or health costs, and without being progressive and proactive in addressing the health needs of the population through actions in public health and primary health care. As a result, Greece's health care system was suffering from several inefficiencies, which can be summarized as follows [2], [3]: a high degree of centralization in decision-making and administrative processes; suboptimal managerial structures that lacked adequate information management systems and were often staffed by personnel without adequate managerial skills; lack of planning and coordination, and limited managerial and administrative capacity; unequal and inefficient allocation of human and economic resources; fragmented population coverage; an absence of a referral system and effective gatekeeping mechanisms; inequalities in access to services; oversupply of services fueled by the high number of physicians; high OOP payments; uneven regional distribution of human resources and health infrastructure; underdevelopment of needs assessment and priority-setting mechanisms; regressive and fragmented funding mechanisms; an anachronistic retrospective reimbursement system creating incentives for supplier-induced demand since physicians could be contracted by many insurance funds and be reimbursed on a fee-for-service basis; and absence

of a health technology assessment (HTA) system. The old social health insurance system suffered from a large number of funds and providers with varying organizational and administrative structures offering services that were not coordinated. This resulted in different population coverage and contribution rates, different benefit packages and inefficient operation; all leading to large accumulated debts. Furthermore, the pharmaceutical industry created incentives for supplier-induced demand by influencing physicians to prescribe more pharmaceuticals than needed. Past reform attempts in areas such as primary care, the organization and provision of health services by hospitals and the enhanced cooperation of social insurance funds failed to deliver the expected results or were not fully implemented. Consequently, the need for reforms in the health care system was clear and has dominated the agenda of policy responses instigated by the crisis, particularly the attempt at large-scale cost-containment.

This brings us to the second perspective, which is particularly important when considering the effects of changes, and relates to the measures stipulated in the three successive EAPs. The Greek economy entered a deep, structural and multifaceted crisis in 2010, the main features of which were a large fiscal deficit and public debt, as well as continuous erosion of the country's competitive position. In order to address the problem, the Greek Government accepted a bailout from the EU, the European Central Bank and the International Monetary Fund (all three known as the "Troika"), signing up for an initial EAP starting from May 2010. Greece was until August 2018 under its third EAP, with financial assistance for all programmes amounting to €290 billion [4]. EAPs, based on neoliberal economic assumptions, aim at reducing the public deficit and debt, and they are implemented under stringent conditions to deliver a set of reforms to fiscal policy, state ownership and market liberalization. This has required implementation of severe austerity measures, including funding cuts to health care, social welfare and education, achieving savings through reductions in the salaries and the number of public sector staff, reductions in pensions, increases in direct and indirect taxation, privatization of state-owned enterprises and introducing deregulation of the labour market and flexibility in industrial relations. In the context of the wider economic situation, the Greek health care system came under pressure and reforming it was clearly a priority imposed by the Troika. Table 1 gives an overview of the demands of the Memoranda that are related with the health care system.

Table 1 - Measures in the MoUs for the health systemGREECE - MEMORANDA OF UNDERSTANDING (MoU) ON SPECIFIC ECONOMIC POLICY CONDITIONALITY
(May 2010, February 2012, August 2015)

<i>Expenditure and Financing</i>
Separate the financing of health care and pension systems.
Merge the funds to simplify the overly fragmented system.
Increase health taxes (alcohol and tobacco).
Ensure greater budgetary and operational oversight of health care spending by the Finance Minister.
Public health care expenditure not to exceed 6% of GDP.
Public pharmaceutical expenditure not to exceed 1% of GDP.
Increase co-payments of outpatient and diagnostic services.
Revision of the pharmaceutical co-payment system in order to exempt from co-payment only a restricted number of medicines related to specific therapeutic treatments
Review fees for medical services outsourced to private providers with the aim of reducing related costs by at least 15 percent in 2011, and by an additional 15 percent in 2012.
Limit the prices of diagnostic tests.
Increase health insurance contributions.
<i>Pricing and reimbursement of pharmaceuticals</i>
Reduce prices of generics and off-patent medicines.
Use a new pricing mechanism based on the three EU countries with the lowest prices. The list will be updated on a quarterly basis.
Reduce the price of all off-patent drugs to 50% and all generics to 32.5% of the patent price
Introduce rebates and clawbacks received from pharmaceutical companies and pharmacies.
Make use of a negotiating committee to develop price volume and risk agreements, in line with other EU countries standards and international expertise, especially for innovative and high cost drugs.
<i>Prescription and monitoring of prescription</i>
Increase the share of outpatient generic medicines by volume to 60% and of inpatient generic medicines to 60%.
Compulsory electronic monitoring of doctors' prescriptions for medicines, diagnostics, referrals and surgery in both NHS facilities and providers contracted with National Organization for the Provision of Health Services (EOPYY).
Compulsory prescription by active substance or less expensive generics when available.
Introduce binding prescription guidelines for physicians.
Mandatory generic substitution by pharmacies.
Monitor doctors' prescription behaviour and their compliance with binding prescription guidelines. Enforce sanctions and penalties as a follow-up to the assessment and reporting of misconduct and conflict of interest in prescription behavior and non-compliance with the prescription guidelines.
Introduce positive and negative list of reimbursed medicines.
Increase the share of procurement by hospitals of pharmaceutical products by active substance to $\frac{3}{4}$ of the total.
Set-up an health technology assessment centre that will inform the inclusion of medicines in the positive list.
<i>Pharmacies sector</i>
Abolish the 0.4 percent contribution of wholesale sales prices in favour of the Panhellenic Pharmaceutical Association.
Starting from 2012, the pharmacies' profit margins are calculated as a flat amount or flat fee combined with a small profit margin with the aim of reducing the overall profit margin to no more than 15 percent.
Readjust the pharmacies' profit margins and introduce a regressive margin is introduced - i.e. a decreasing percentage combined with flat fee of EUR 30 on the most expensive medicines (above EUR 200) – with the aim of reducing the overall profit margin to below 15 percent.
Introduce a contribution in the form of an average rebate
Reduce the wholesalers' profit margins to converge to 5% upper limit
<i>Centralised purchasing and procurement</i>
Set up the legislative and administrative framework for a centralised procurement system.
Increase the proportion of centralized procurement to 80%.
Use a consistent coding system for medical supplies and pharmaceuticals.
Use capitation payments of physicians to all contracts with EOPYY in order to reduce the overall compensation cost (wages and fees) of physicians by at least 10 percent in 2011, and an additional 15 percent in 2012, as compared to the previous year.



Primary care services
Develop an integrated primary health care network based on compulsory patient registration with a family doctor and a referral system to specialists.
Develop a system of electronic referrals to secondary care.
Hospital services
Implement double-entry accrual accounting.
Regular publication of audited accounts.
Complete the programme of hospital computerization and ensure full interoperability of information technology systems.
Upgrade hospital budgeting systems.
Reform the financing system and improve pricing and costing mechanisms. Introduce DRGs and develop clinical guidelines.
Accelerate payments, close budget loopholes and force arrears to be reported to Parliament as they develop.
Speed up the rationalization of the hospital network and adjust public hospital provision within and between hospitals within the same district and health region.
Revise the activity of small hospitals towards specialisation in areas such as rehabilitation, cancer treatment or terminal care where relevant.
Reduce operational costs.
Set up a system for comparing hospital performance (benchmarking) on the basis of a comprehensive set of indicators.
Assign internal controllers to all major hospitals.
Reduce hospital costs by at least 10 percent in 2011 and by an additional 5 percent in 2012 in addition to the previous year.
Develop clinical guidelines and set in place an auditing system of their implementation
Revise emergency and on-call structures.
Optimize and balance the resource allocation of heavy medical equipment (e.g. scanners, radiotherapy facilities, etc.) on the basis of need.
Improve hospital management and adopt selection criteria and measures to ensure a more transparent selection of the chairs and members of hospital boards
Cross services
Finalise the set-up of a system of patient electronic medical records.
Develop therapeutic protocols for the patient care pathways (primary and secondary care).
Reduce waiting times (including for elective surgery).
Human Resources
Reduce EOPYY's administrative staff by at least 50% and EOPYY's contracted doctors by 25%.
Increase the mobility of health care staff (including doctors) within and across health facilities and health regions.
Annually updated reports on human resources presenting the staff structure according to specialty, to be used as a human resource planning instrument.
Reduce public health sector wages and increase taxation of wages.
Reduce public health sector employment.

The following sections aim to describe and assess the health system reforms implemented in Greece after the economic crisis and until today.

2.2 Reforms in financing and payment mechanisms

According to the Memoranda of Understanding (MoUs), Greece is obliged to keep public health expenditures below 6% of the GDP and public pharmaceutical expenditures below 1% of GDP. The imposition of public health spending restrictions and the simultaneous decline in GDP observed since 2009, means that the public health sector is called upon to meet the increasing needs of the population with decreasing financial resources. Between 2010 and 2014, total current health expenditure in Greece decreased by 34.3%, public current health expenditure fell by 44.3% and private expenditure decreased by 11.9%, while an upwards trend has been recorded since (Figure 1). At the same time, the demand for public health services increased as visits to outpatient departments and the number of hospitalizations in public hospitals were increased between 2010 and 2015 by 2.3% and 10.5% respectively [5].

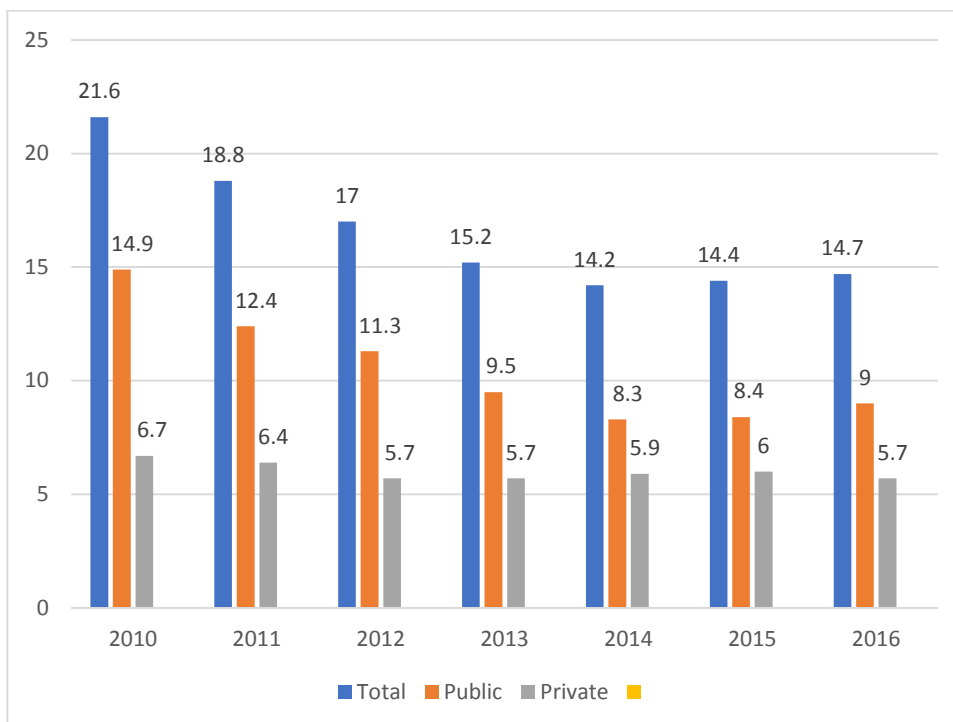


Figure 1 - Current health expenditures, 2010-2016 (in billion euro)

Source: Hellenic Statistical Authority [6], [7].

Until the start of the economic crisis, SHI covered around 40% of current health expenditure. Its share declined to reach 30.1% in 2016, which represents about half of total public health expenditure (Figure 2). Factors contributed to the substantial hit taken by SHI revenues in the context of the crisis are: GDP contraction, severe unemployment, diminishing wages and a decrease in the population of working age, in part due to outward migration.

On the other hand, private current health expenditures as a percentage of total health expenditures increased from 31% in 2010 to 38.8% in 2016 (Figure 2). It is worth mentioning that almost 90% of private expenditure is out-of-pocket payments. An explanatory factor of this trend is the increase in user charges and co-payments introduced in the Greek health care system after 2010 with the aim to increase revenues and limit the demand for health services. In 2011, an increase in user charges from €3 to €5 was imposed on outpatient services provided in public hospitals and health centres (abolished in 2015), and in 2012 a €25 patient fee for admission to a public hospital (revoked in 2014), together with an extra €1 for each prescription issued under the ESY were introduced (in 2016, exemptions were introduced regarding the €1 prescription charge

to relieve former welfare beneficiaries, the uninsured on low income and those belonging to vulnerable groups). In 2011 increases in medication co-payments were also introduced. For many medicines, the co-payment increased from 0% to 10% and for others from 0% to 25%; the aim was to eliminate co-payments for only a limited number of medicines and to increase them for the rest. Furthermore, the patient is charged the difference between the retail price and the reference price reimbursed by health insurance. Despite the continuous price reductions in

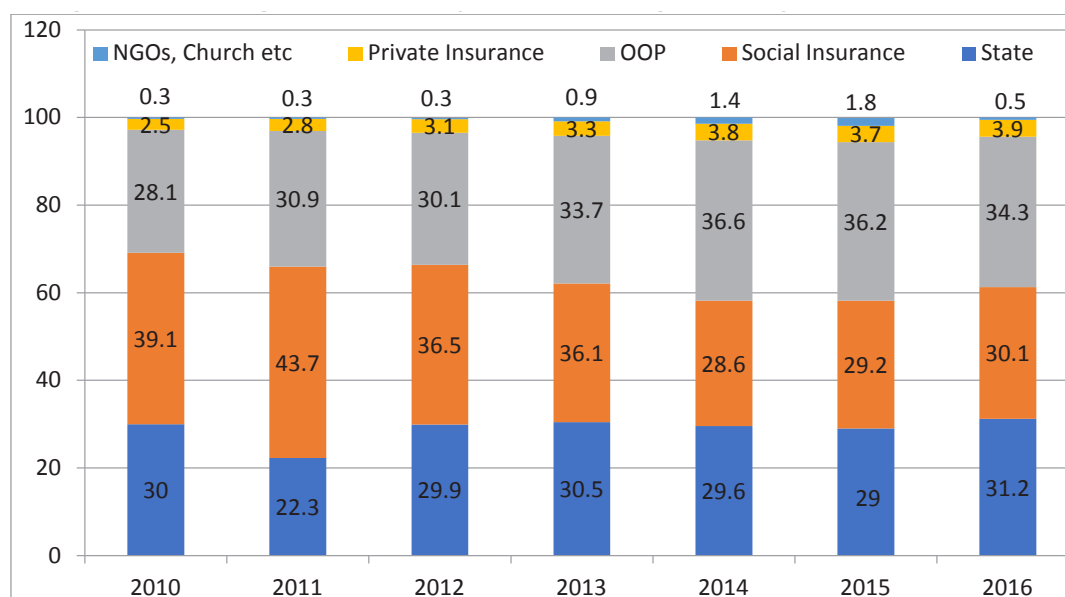


Figure 2 - Percentage contribution by sector in funding health expenditures, 2010-2016

NGO – nongovernmental organization; OOP – out of pocket payment.

Source: Hellenic Statistical Authority [6], [7].

pharmaceuticals and although there are exemptions in user charges for those with low income, those suffering from a chronic disease, children under 18 years hosted in social care and some other population groups, the result of the so far implemented policy is an increase of the average monthly household pharmaceutical expenditure as well as of the average proportion of patients' co-payment for pharmaceuticals from 9% in 2009 to 30% in 2016 [1], [5], [8], [9]. In addition, in April 2014, calls to make an appointment with any doctor under the National Primary Health Care Network (PEDY) scheme were outsourced to private telephone companies, with charges ranging from €0.95 to €1.65 per minute, thus increasing the financial burden of the patients. From this point of view, a positive evolution is the development by the Social Insurance E-Governance Center (IDIKA) of the e-RDV application launched in January 2017, enabling patients to make an appointment free of charge. Another issue to be considered is co-payments introduced for EOPYY insurees in 2012 with the amendment of the EOPYY's Integrated Health Care Regulation (EKPY). According to the provisions of the EKPY, while treatment in public hospitals is free of charge, treatment in private clinics contracted with EOPYY presupposes user charges ranging from 30% to 50% of the DRG-KEN and 100% of the doctor's payment. Similarly, for clinical tests provided free of charge in public facilities, the

patient is obliged to pay a 15% co-payment in case of visiting a private laboratory contracted with EOPYY. This undermines equity of access, particularly in regions where due to the inability of public facilities to provide the necessary services, patients are forced to use contracted with EOPYY providers [1], [5], [8], [9]. Furthermore, despite publicly funded dental services being part of the EOPYY benefits package, the lack of adequate funding and the absence of contractual arrangements with private sector dentists, means that most services are not covered and patients must pay out of pocket.

The pharmaceutical sector has seen a number of measures aimed at containing costs and enhancing efficiency. Overall, reductions in pharmaceutical expenditure are being pursued through price reductions, increased rebates and clawbacks imposed on private pharmacies and pharmaceutical companies for both inpatient and outpatient drugs, promotion of the wider use of generics and, to some extent, control of the volume of consumption via methods such as prescription control mechanisms and e-prescribing (see section 2.4). Pharmaceutical expenditure has also been tackled in ESY hospitals through more efficient purchasing strategies, including the reduction of drug procurement prices through the implementation of price caps for approved drugs, the establishment of tenders to supply medicines based on the active

substance and the development of an (extended) list of medicines for which the Coordination Committee for Procurement issues unified tenders for supply contracts. Some innovative measures have been also introduced to lower outpatient pharmaceutical expenses; for example, expensive medicines for chronically ill patients are distributed through state pharmacies as prices are lower than in private pharmacies [1].

Concerning health care providers' payment mechanisms, the EAP impelled Greece to replace the per diem financing method of hospitals with a DRG-based one in a very short time period (one year) in order to increase efficiency and rationalize allocation of resources. As a consequence, the new system called DRG-KEN, which was implemented in January 2013, has encountered a number of problems. The pricing is based not on actual costs and clinical protocols but on a combination of activity-based costing with data from selected public hospitals, and so-called imported cost weights. Furthermore, the salary cost of those employed in hospitals is not included as they are paid directly through the state budget. So far, four revisions of the system have been made and at the time of writing a total reformulation of it is in process. In relation to health care personnel, in the drive to reduce health system input costs, salary cuts were applied after 2010 to all public health care staff, including administrative personnel, doctors, nurses, pharmacists and paramedical staff. Additionally, almost all subsidies to health care staff were abolished. In practice, three types of salary cuts actually took place: horizontal cuts from tax increases and a special solidarity levy, cuts through the introduction of a new unified salary system for all public sector employees and cuts through reductions in the "special salary system" for doctors. Indicatively, the average annual salary of specialists decreased from €58 000 in 2009 to €42 000 in 2015, while the average nurse's salary decreased from €29 000 to €21 000 in the same period. Moreover, planned performance-based productivity bonuses were not implemented as no targets were set, nor did any staff evaluations take place. Other workforce measures aimed at reducing costs include the non-renewal of contracts for temporary staff employed under fixed-term contracts and a reduction in the replacement levels of retiring staff (for every five people retiring only one will be appointed) [1], [9].

2.3 Reforms in health insurance coverage

One of the major reforms of the health system was introduced in March 2011 with the unification of the large number of health branches of the social insurance funds and the formation of the EOPYY, supposed to function as unique purchaser of health services. The benefit packages of the merged in EOPYY funds were standardized and unified to provide the same reimbursable services based on EOPYY's EKPY, although there are still differences in arrangements, for example variations in size of contribution. The EKPY has been amended twice and, at the time of writing, a new amendment is under consideration. Although a common benefit package was introduced by the EKPY, the criteria used for deciding what services are included in it have not been formally stated, and a reduction in covered benefits took place and ceilings were imposed on the activities of doctors contracted with EOPYY. For example, some expensive examinations (including PCR tests and tests for thrombophilia) that had previously been covered by insurance funds – even partially, on an outpatient basis – were removed from the EOPYY benefit package. Entitlement restrictions were introduced for childbirth, air therapy, balneotherapy, logotherapy and services for thalassaemia and nephropathy. Moreover, the introduction of a negative list for medicines in 2012 resulted in the withdrawal of reimbursement status for various drugs. Furthermore, since 2014, a system of monthly caps has operated on physician activity. Every doctor contracted with EOPYY has a limit of 200 visits per month and there are also a monthly ceiling on the value of pharmaceutical prescriptions as well as prescribing diagnostic and laboratory tests. The latter varies according to specialization, number of patients prescribed for, the prefecture and the month of the year (seasonality). This means that those insured with EOPYY who are in need of a doctor's visit or a prescription must either find a physician who has not reached his or her ceiling or they will have to pay OOP. A systematic HTA process is not yet in place and there is no systematic assessment of the effectiveness of the services included in the benefits package. To some extent the implementation of a single-payer system has managed to combat fragmentation and limit waste and administrative costs of the system, to constrain expenditure growth and to allocate resources more rationally. However, the creation of EOPYY has not been adequately supported at the operational level, as it has remained understaffed and underfunded, leading to delays in paying providers.



The economic crisis – and total deregulation of the labour market via flexible industrial relations policies and redundancies dictated by the MoUs – increased unemployment in Greece and resulted, according to the National Social Insurance Registry (ATLAS), in more than 2.5 million people losing their social health insurance rights. Action to address this development was delayed, and the measures implemented were uncoordinated, insufficient and stigmatizing for the beneficiaries. Initially, a Health Voucher programme was launched in September 2013 and targeted people who had lost their coverage, allowing them to access primary care only, and only a set number of times over the duration of four months. The measure was abandoned as ineffective because of the very low uptake rates and the limited coverage that it offered. Additional measures came into force in 2014 that were aimed at allowing people who were not insured with any public or private fund to access primary care and inpatient services, as well as pharmaceutical care. However, prescribed medicines were still subject to the same reimbursement conditions and charges as for patients ensured by EOPYY, leaving in place cost-related obstacles to accessing drugs. Moreover, access to hospital services was subject to means-testing procedures that were overly bureaucratic, were implemented differently among providers and which many perceived to be stigmatizing. Therefore, new legislation came into effect in August 2016 that provided access to care for the uninsured and vulnerable, including those without health coverage, migrants who are legal residents in Greece, children, pregnant women and people with chronic conditions, irrespective of their insurance status. These groups are now all entitled to the same level of access as those insured by EOPYY, subject to having a social insurance number or a health care migrant card. Furthermore, persons and families whose real annual income, total taxable value of the real property, total deposits with all credit institutions in the country or abroad and the current value of shares, bonds, etc. do not exceed certain amounts are eligible to obtain medication free of charge. Undoubtedly this legislation is of key importance in improving equity and access to health care for vulnerable groups. Nevertheless, there remain some reservations regarding equity issues, given that the uninsured can only access services supplied by public facilities and not those provided by privately-contracted providers (e.g. diagnostic imaging laboratories). In particular, problems are encountered in regions where public health care services are understaffed or where there is a shortage of imaging scanners in public facilities [1], [5], [9], [10].

2.4 Reforms in the provision of health services

In February 2014, a structural reform was undertaken to upgrade the provision of publicly funded primary care through improved co-ordination of the various providers. A legislation passed in 2014 aiming to develop a nationwide primary health care service (PEDY), consisting of health centres, social health insurance outpatient clinics and contracted health professionals. According to Law 4238/2014 all public primary health care facilities passed under the jurisdiction of the YPEs. Based on that reform these facilities were supposed to function 24 hours a day, seven days a week. In addition, the law introduced a referral system based on general practitioners (GPs). However, the staffing of PEDY units remained oriented towards specialized doctors and a gate-keeping system didn't come into effect. In general the implementation of the reform was quite slow due to human and economic restraints and a rather fiscal-driven managerial approach [1], [5]. As a result, a new primary health care reform was introduced in August 2017. Under the new legislation, primary care is free of charge, and it operates on a 12 hour a day basis in areas where there is adequate hospital coverage and on a 24 hour a day basis where such hospital services are lacking. Primary health care services are provided at the first level by local health units (TOMYs) and by health professionals who have private practices and contract with EOPYY. At the second level, primary health care services are provided by health centres. In addition, central diagnostic laboratories will be established in each YPE providing laboratory tests and imaging diagnostic services to the population. Specialized care centres should also be established in each YPE to provide specialized care, special education, physiotherapy and rehabilitation services. TOMYs operate as family medicine units and they are staffed by health teams consisting of GPs, internal medicine specialists, paediatricians, nurses, community nurses, social workers and administrative staff. As the second tier of the new system, the purpose of health centres is to provide specialized ambulatory care for all patients who are referred by the local health units. Patient registration with a local health unit, gatekeeping mechanisms and a referral system form part of the new delivery framework. An e-health record is also expected to be developed. Systematic monitoring to ensure quality and improve outcomes is expected to be achieved through the introduction of clinical protocols, clinical audit and electronic clinical information systems [1], [5].

The public hospital sector has been targeted as part of major restructuring efforts under the country's EAP. In July 2011 the government announced a plan to cut the current number of public hospital beds and reduce the number of clinics and specialist units. Public hospital management boards were replaced by a total of 83 councils responsible for the administration of all hospitals. The total number of beds in ESY hospitals decreased from 38,115 in 2009 to 29,550 in 2016. The number of medical departments and units declined by 600 and 15,000 hospital personnel were cut. Furthermore, 500 public hospital beds were set aside for priority use by private insurance companies for their clients. Additionally, changes were to be made to the use of eight small hospitals, which were supposed to be turned into urban health centres, support and palliative care units and hospitals for short-term hospitalization and rehabilitation. However, so far, progress in implementing the restructuring of these 8 hospitals has been limited [11], [12].

In relation to pharmaceuticals, there is a positive list of reimbursed medicines with an average price based on the Anatomical Therapeutic Chemical Classification System plus a negative list of non-reimbursed medicines, introduced in 2011 and 2012, respectively. An over-the-counter drug list was also introduced in 2012, which contained many medicines that until then had been reimbursed (e.g. some pain relief medication) but now required purchasing OOP. Finally, very expensive drugs are provided only through EOPYY and public hospital pharmacies. Apart from the establishment of positive and negative lists for reimbursement purposes and the introduction of reference pricing (which has resulted in price reductions for some medicines), an e-prescription system for doctors became compulsory in 2012, enabling monitoring of their prescribing behaviour as well as the dispensing patterns of pharmacists. At the same time, prescription guidelines following international standards were issued in 2012, and prescribing budgets for individual physicians have been set since 2014. The use of generic drugs has been promoted by a number of measures: physicians are required to prescribe drugs by the international nonproprietary name, allowing the use of brand names only in specific circumstances; there is a policy that 50% of medicines prescribed/used in public hospitals should be generics; and there is a policy of mandatory generic substitution in pharmacies [1], [9].

Concerning dental care, theoretically, the EOPYY scheme for publicly provided dental services should have begun in January 2014. This scheme required EOPYY to define what dental services would be covered and their reimbursement rates, as well as entering into contracts with a range of dental services providers. Insured people were to be eligible to receive treatment and compensation for both preventive and clinical treatment, plus prosthetics, with the freedom to choose a dentist from the network of contracted providers. However, because of budgetary constraints and cuts in public health expenditure, this scheme has yet to start [13]. This represents a deterioration of dental health insured provision as, prior to the establishment of the EOPYY, those insured under individual health funds had access to salaried and/or contracted dentists, albeit for a limited range of services. In practice, EOPYY members who are unable to pay OOP for private dental services can visit ESY units. Dentists working in public hospitals provide mainly secondary dental treatment for patients with medically complex conditions. Dentists working in health centres provide dental treatment for children up to 18 years of age, and emergency treatment for all ages. Data show a decreased number of dentists working in the public sector, because of the economic crisis, the merging of hospitals and the large-scale retirement of dental professionals in hospitals and health centres. Therefore, in addition to the limited range of dental services provided, there is also understaffing of public hospitals and health centres [13].

3. The performance of the health care system under the adjustment programme

3.1 Health care system impact on population health

Assessing the effects of the health care system reforms introduced in Greece in the context of the economic crisis on the health status of the population is a difficult task. This is largely due to the fact that it is difficult to estimate whether (and to what extent) an observed health effect is attributable to structural and procedural changes in the health system per se or to changes in the social determinants of health brought about by the economic crisis. Furthermore, the impact of any given change on health takes time to become apparent. Finally,

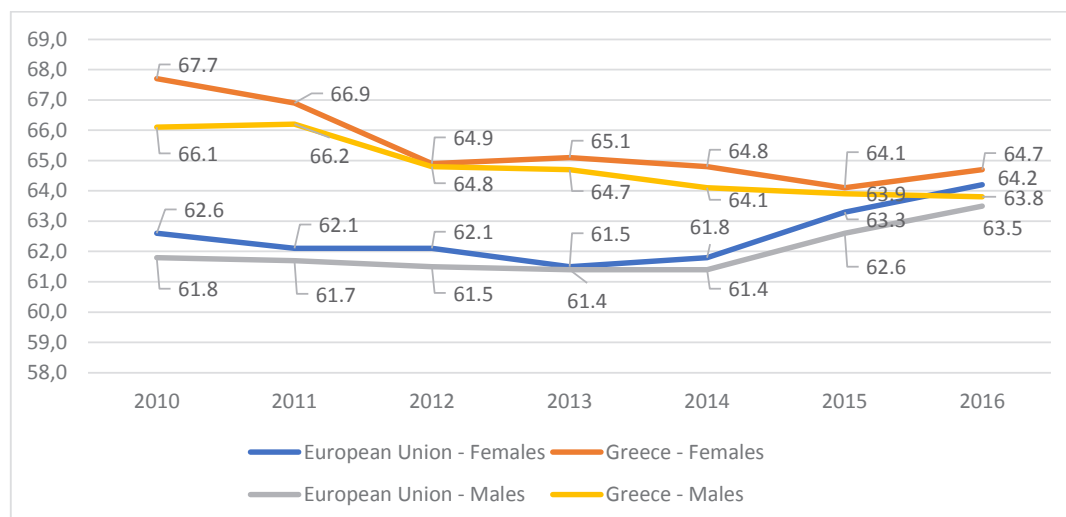


Figure 3 - Healthy life years in absolute value at birth, women and men, Greece and EU28

Source: Eurostat [14]

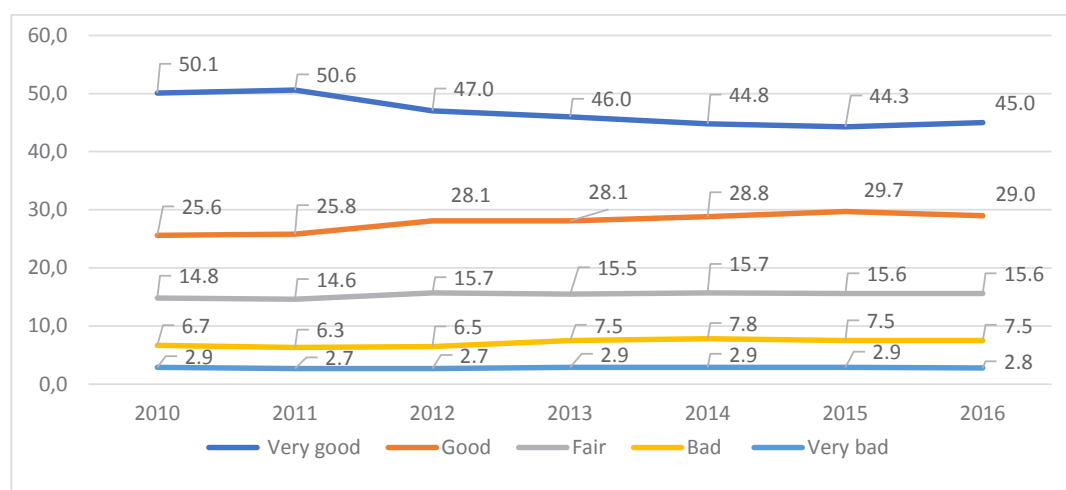


Figure 4 - Self-perceived health (% of the population) in Greece, 2010-2016

Source: Eurostat [15]

in Greece there is still a lack of timely and relevant data. Considering these restrictions, the following section shows the trends of some health indicators after 2010 and presents a summary of targeted studies concerning self-reported health, mental health, suicides, infectious diseases, infant health and cardiovascular diseases.

From 2010 to 2016, healthy life expectancy in Greece decreased by 2.3 years for men and by 3 years for women (Figure 3). In contrast, the average healthy life expectancy in the EU28 increased by 1.7 years for men and by 1.6 years for women.

Data also show changes in the self-perceived health of the

Greek population (Figure 4). Although the percentage of those declaring very bad, bad or fair health status is almost stable, there is a decrease in those perceiving their health as very good by 5.1 percentage points.

The infant mortality rate in Greece was on the decline for decades and was constantly below the EU-28 average. However, this trend was reversed after 2014 and in 2016 infant mortality reached 4.2 per 1000 live births, 0.6 percentage points above the EU28 average (Figure 5).

Preventable mortality, that is deaths which could have been avoided by health care of good quality and

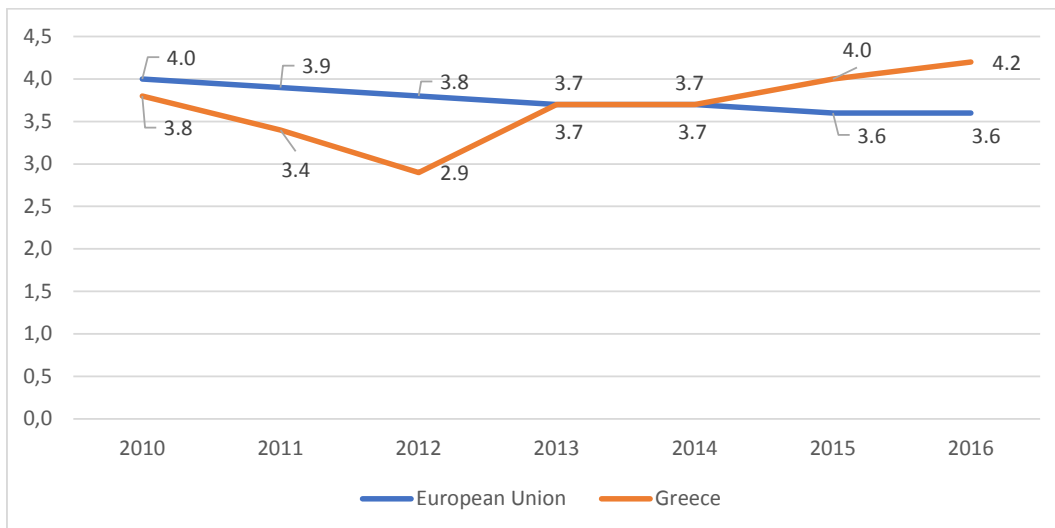


Figure 5 - Infant mortality per 1000 live births, Greece and EU28, 2010-2016

Source: Eurostat [16]

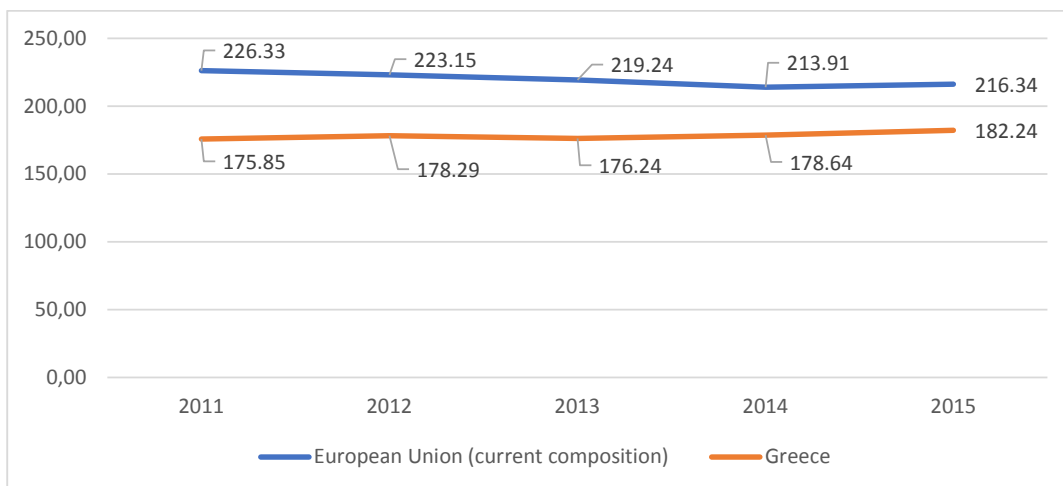


Figure 6 - Preventable deaths, Greece and EU28, 2011-2015

Source: Eurostat [19]

public health interventions focusing on wider determinants of public health, such as behaviour and lifestyle factors, socioeconomic status and environmental factors, also increased slightly between 2011 and 2015 but remain below the EU28 average (Figure 6). Concerns have been raised regarding deteriorating standards of medical care because of the severe cuts, and the impact this could have on population health. A recent study has shown that amenable mortality in Greece experienced a small but significant increase in the years after the economic crisis [17]. Another major study found a significant increase in mortality from adverse events during medical treatment and estimated that there

was an increase of more than 200 deaths per month after the onset of the crisis [18].

All-cause mortality decreased in the period 2010-2014, but increased again in 2015 (Figure 7). Diseases of the circulatory system, which remain the leading cause of death in Greece (accounting for 37.1% of all deaths) decreased by 19.9% between 2010 and 2015. In contrast, the other two main causes of death in the Greek population, i.e. neoplasms and diseases of the respiratory system (accounting for 26.1% and 11.5% of all deaths, respectively) showed an upward trend in the same period. It is also worth mentioning two other substantial increases in cause-specific mortality: deaths from infec-

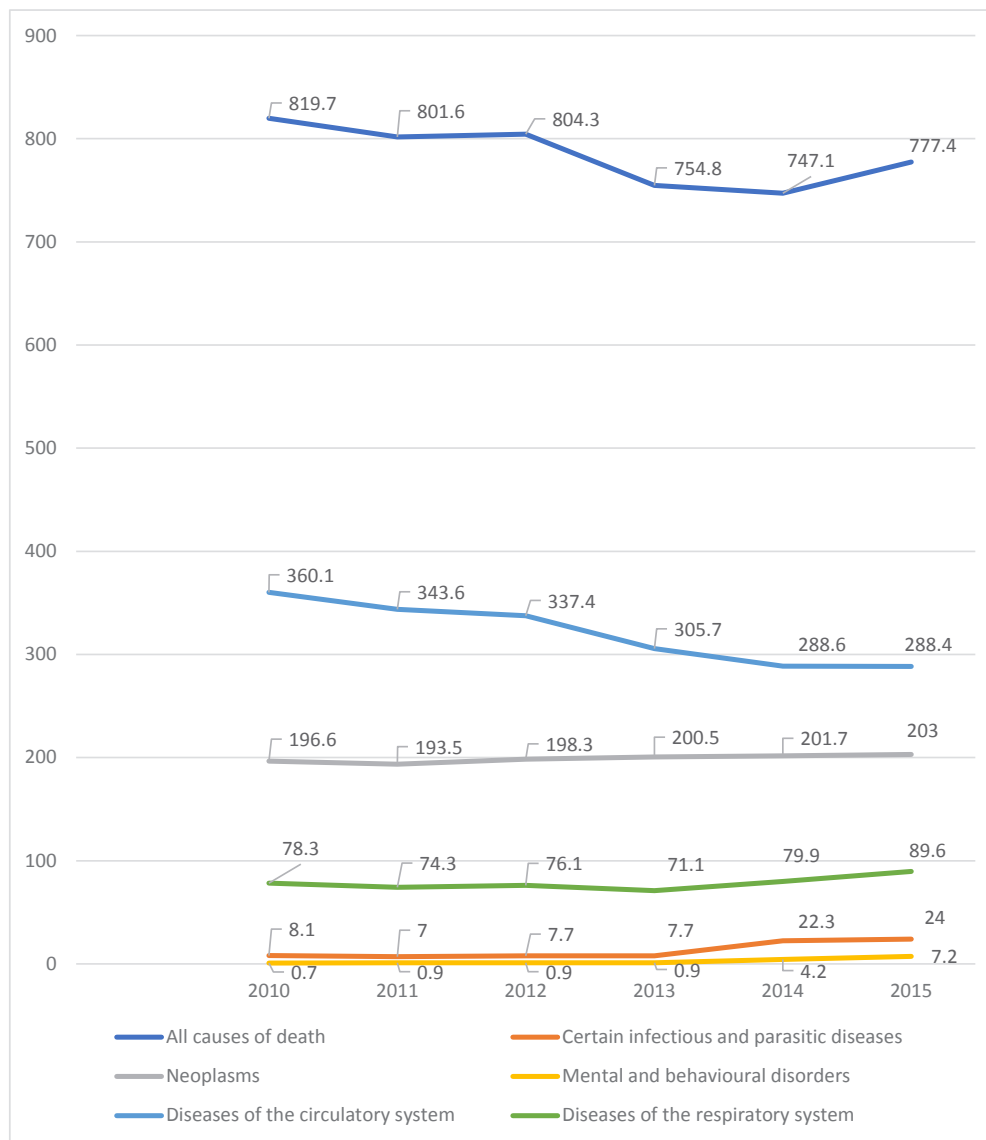


Figure 7 - Deaths per 100 000 population (standardized rates) in Greece, 2010-2015
Source: OECD [20]

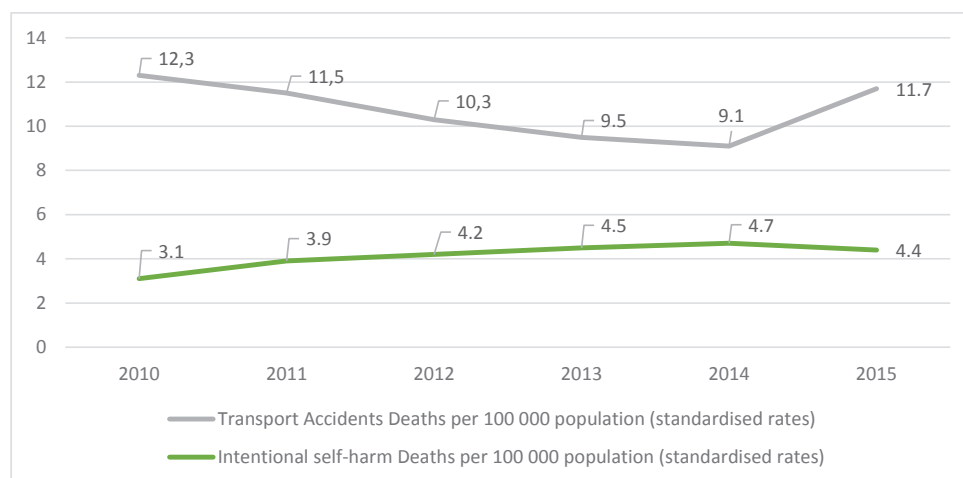


Figure 8 - Deaths from accidents and suicides per 100 000 population (standardized rates)
Source: OECD [20]

tious and parasitic diseases as well as from mental and behavioural disorders.

Although the suicide mortality rate in Greece is among the lowest in the EU28, an increasing trend was observed for the period 2010-2014, with a slight decrease in 2015 (Figure 8). The opposite trend was recorded for motor vehicle accidents, for which a decrease during the period 2010-2014 was followed by an increase in 2015.

Recent insights on Greece from the Global Burden of Disease Study exploring the period 2000-2016 show that, many of the causes of death that increased in the period following the onset of the crisis are potentially responsive to care (e.g. HIV, neoplasms, cirrhosis, neurological disorders, chronic kidney disease, and most types of cardiovascular disease) [21]. Substantial changes in health loss indicators since 2010 support the interpretation that austerity measures compounded the country's pre-existing health burden. The study highlights that "steep quantitative changes in mortality trends and qualitative changes in mortality causes with a rise in communicable, maternal, neonatal, and nutritional diseases since 2010 suggest that an effect of the abruptly reduced government health expenditure on population health is likely".

3.2 Access and financial protection

Greece's health care system has been characterized in the past as inequitable in terms of access and coverage [2], [3]. It is now clear that the economic crisis has exacerbated existing problems. One study found serious gaps in the availability, accessibility and acceptability of existing services [8]. Across-the-board health budget cuts, and increased user charges led to a marked increase in the economic burden on patients. This was coupled with unemployment-related loss of coverage, affecting approximately 2.5 million people or a quarter of the population, and reduced household incomes due to cuts in salaries and pensions and increases in taxation. It is indicative that between 2007 and 2016 Greece recorded the largest tax-to-GDP ratio (7.4 percentage points) among the OECD countries, in an effort to meet the requirements under its bailout agreement [22]. As a result, there was a substantial rise in unmet need for medical examination in the period 2010-2016 (Figure 9). The latest data from EU-SILC indicate a decrease in unmet need in Greece of 3.1 percentage points between 2016 and 2017, possibly attributable to introduced measures for the coverage of the uninsured described in section 2.3, above.

As it was mentioned in Section 2.2, above, OOP share of total spending on health in Greece is high and as a consequence financial hardship is increased. According to the results of a study on financial pro-

tection in Europe conducted by the WHO Barcelona Office for Health Systems Strengthening, the incidence of catastrophic spending on health grew markedly during the crisis [24]. In 2010, 7.2% of households experienced catastrophic out-of-pocket payments, but by 2015 this had risen to 10.5% of households, falling to 9.7% in 2016. They are heavily concentrated among the poorest consumption quintile. In 2016, nearly a third of Greek households in the poorest quintile experienced catastrophic spending on health; these poor households spent 1 in every 7 euros on health care. Medicines play an important and growing role in driving catastrophic spending. In 2016, 44% of out-of-pocket payments among households who experienced catastrophic health spending were for medicines. Spending on inpatient care was also an important driver, but to a lesser extent. Inpatient care is the main driver of catastrophic spending among the richest quintile, while medicines are the main driver among the poorer quintiles. Similar conclusions come from another study, finding an increasing share of OOP for health in households' budget between 2008-2015, driven by significant increases in medical products (20.2%) and inpatient care (63%) [25]. The catastrophic and impoverishing impact of OOP appears to have been aggravated during the economic crisis, induced by the simultaneous effect of households' diminishing capacity to pay and the increased OOP burden, which ensued from the implemented reforms as part of the EAP. Myopic budget cuts and cost-shifting rather than focusing on health system's efficiency and effectiveness worsened barriers to health care access and, presumably, morbidity in the Greek population.

More than 25% of OOP health expenditure in Greece concerns informal, under-the-table or side payments, constituting a black or hidden economy inside the health system and raising serious concerns about access barriers to health care services. One of the main reasons for their scale and existence is the lack of a rational pricing and remuneration policy within the health care system. Surveys have shown that almost one in

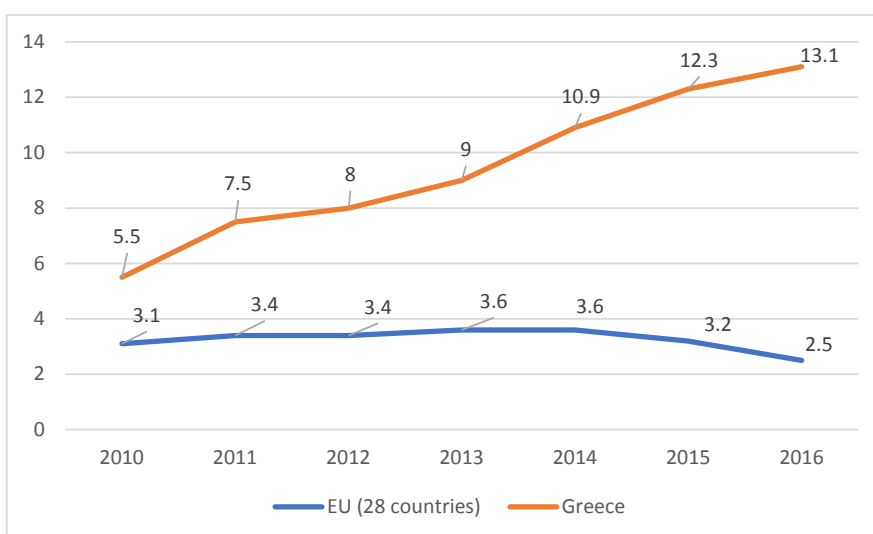


Figure 9 - Unmet needs due to cost, distance or waiting time 2010-2016
Source: Eurostat [23]



three respondents who consumed health services over the past 12 months reported making at least one informal payment; these were mainly for the provision of hospital services or payments to physicians, primarily surgeons, so that patients can bypass waiting lists or ensure better quality of service and more attention from doctors [26]. Additionally, new types of informal payments have emerged recently, as patients seeking treatment have to pay an additional fee under the table to EOPYY contracted doctors, ranging from €10 to €20 for a service that is supposed to be free of user charges. This is the result of the low per visit remuneration of €10, but mainly of ceilings imposed in 2014 on the activities of doctors contracted with EOPYY, including monthly patient visits, monthly amount prescribed pharmaceuticals and monthly amount diagnostic and laboratory tests prescriptions. Patients, with the aim to avoid referring to several doctors in order to find one who has not reached his/her visits and prescription limits, are forced to informal payments [1], [5], [8].

Patients with chronic illnesses have been particularly vulnerable as they are adversely affected by a lack of adherence to prescribed medication, reduced access to diagnostic services, poor monitoring of complications and increased risks of catastrophic expenditure. Studies show that many patients with diabetes refuse more expensive treatments or decrease the frequency of taking prescribed medication [27], [28]. Among the 288 patients participating in a study conducted in Crete, the majority lowered the doses of several medications as they were unable to afford the cost; all patients using insulin had lowered their dosages; nearly half of patients with chronic obstructive pulmonary disease or asthma had stopped all medications, decreased dosages or used cheaper alternatives; only half of patients with dyslipidaemia took their medications as required; and a quarter of patients with cardiovascular disease stopped medication or skipped dosages [29], [30]. These findings are supported by surveys of health care personnel: physicians reported that almost a quarter of their patients with type two diabetes had to stop or modify their treatment plan, while a similar proportion switched to poorer diets during the previous year because of higher co-payments, loss of coverage and inability to access a doctor to obtain a prescription [31].

Patients with cancer are another group that have faced

serious problems in accessing appropriate medicines [32]. Patient organizations have reported delays and disruption with drug supplies. All expensive cancer medicines are, in theory, available through hospital and EOPYY pharmacies, but in practice public hospitals are indebted to pharmaceutical companies and these, in turn, have discontinued supplies. Patients can order medicines through their local pharmacy, paying cash that they may then reclaim from EOPYY. However, this is not a common choice as many cancer medicines are very expensive and EOPYY reimbursement can take many months. Previously, this issue was even more critical for patients with cancer who had no health insurance as, if they did not pay for their treatment the cost of medication provided through hospital pharmacies was recovered through their income tax liabilities. However, after the implementation of legislation which provided coverage to the uninsured in 2016 those barriers were removed. In addition, unequal distribution of oncological resources created two tiers of patients, based on their ability to pay for travel/accommodation [33].

The risk of catastrophic health expenditure among patients with chronic conditions has increased since the implementation of austerity measures. One survey indicates that the proportion of households with at least one person with a chronic disease and subject to catastrophic expenditure has more than doubled, from 3.2% in 2010 to 7.8% in 2013, with the key reasons being high OOP payments followed by the cost of medicines [34].

3.3 Health system efficiency

In the early 2000s, Greece suffered from serious inefficiencies in the hospital sector, such as low bed occupancy rates, long length of hospital stay, high number of readmissions and an unbalanced distribution of resources. Since 2010, several response measures have been introduced or are being attempted, including mergers of hospitals, reducing the number of beds, clinics and specialist units; changes to the hospital payment system, with the introduction of DRGs; and reductions in the cost of hospital supplies such as pharmaceuticals, medical supplies, orthopaedic supplies and chemical reagents. However, available evidence shows that while public hospitals in Greece succeeded in reducing their budgets this was

not consistent with demonstrating efficiency gains. Assessing the performance of 117 public hospitals during 2009–2011, Polyzos found that only around one fifth utilized resources in the best possible way, with technical efficiency increasing in small and medium hospitals and falling in large hospitals over the three-year period [35]. Another study examining the performance of 90 general public hospitals in 2010 and 2011 found that the number of efficient hospitals increased by 15–20%, although two models estimated contrasting results in terms of the change in average efficiency scores [36]. Expenditure was indeed reduced by approximately €680 million in 2011 compared with 2009, but mostly as a result of cuts to easily identified supplies such as pharmaceutical, orthopaedic or medical supplies, rather than through policies promoting better resource allocation, such as control of overheads and administrative services, rational distribution of human resources, medical audit and adherence to clinical guidelines. A third study examined public hospital mergers for potential efficiency gains and showed that, in addition to structural changes, there was still substantial room for efficiency improvement because of persisting technical inefficiencies within individual hospitals [37]. Despite the initial difficulties in implementation, the introduction of a DRG payment system put pressure on providers to reduce costs. However, several other factors impede the aim of rationalizing resources. These include the lack of performance measurement and hospital benchmarking in terms of clinical efficacy and patients' satisfaction; the lack of incentives to optimize the utilization of the available human and technical resources; and the failure to link quality of service to hospital budgets.

Inefficiencies are also observed within primary/ambulatory care. Oikonomou et al., measured the efficiency of rural health centres and their regional surgeries in southern and western Greece, finding that 16 out of 42 facilities were efficient, while the mean technical efficiency level was under 60% [38]. The authors suggested that the health centres could theoretically produce 33% more output, on average, using their current production factors. Similarly, Mitropoulos et al. found inefficiencies in primary care centres attributed mainly to size, density and the mortality rate of the catchment population; the location of the health centre; and the number of competing health care facilities in the area (e.g. out-

patients departments of hospitals or private clinics) [39]. Thanassoulis et al., in their attempt to identify benchmark cost-efficient GP units and to estimate potential cost savings, suggested that the largest efficiency gains (more than 80%) could be made through control and use of drugs, followed by appropriateness of referrals [40].

In this context, it is noteworthy that reductions in government health spending between 2010 and 2014 show that budget cuts (as a share of the total expenditure on health) have occurred across the board in both inpatient and outpatient care as well as pharmaceuticals. While focused on short-term goals of budget retrenchment, such strategies also affect the areas that need long-term investment (e.g. ambulatory care), particularly in such a hospital-centred health system as in Greece.

3.4 Assessment of the impact of the EAP on the health sector in Greece

The health policy responses to the crisis and their effects should be considered with four realities in mind [9]. First, the Greek health care system was not well prepared to cope with the challenges imposed by the economic crisis, given its multidimensional structural problems. These structural weaknesses created a health system that was vulnerable to economic fluctuations and unable to meet the increasing needs of the population. Secondly, implementing operational and structural reforms, designed to address the weaknesses in the health care system was urgently needed. Thirdly, and perhaps most importantly for understanding the effects of changes, the measures stipulated in Greece's EAP were by and large fiscal consolidation measures. Cost-containing policies implemented after 2010 in the Greek health system have generally taken the form of cuts across the board. Finally, when looking at individual reform initiatives it is important to remember that the Greek health care system has undergone a massive amount of changes in a very short period of time. As a consequence, reform steps that were a prerequisite for further changes had no time to mature before new efforts had to be initiated.

The reforms that have been taking place in the Greek health care system since 2010 and especially in the



period 2010-2015, have focused mainly on operational, financial and organizational dimensions. This might be considered reasonable as the reforms attempt to tackle serious long-term structural problems. However, this perspective ignored the citizen/patient side of the equation in that the formulation of a patient-centred health system was out of the scope of the reform package. Furthermore, carrying out major changes coupled with extensive financial cuts has proved to be very challenging in terms of both the ability to conduct meaningful reforms and the consequences for service delivery. Overall, the content and the process of reforms have been mainly technocratic/managerial in nature, with insufficient consideration for the broader functioning of the health system and the health needs of the population.

Another important issue is that the general approach of cost-containment measures has taken the form of horizontal cuts rather than a more sophisticated and strategic approach targeting resource allocation, partially because of the pressure exerted by the EAP to achieve immediate results in health expenditure cuts. Tellingly, after budget reductions were made, the shares of government spending by health care function (inpatient services, outpatient services, pharmaceuticals, etc.) remained largely unchanged with the exception of pharmaceuticals, indicating that cuts were made across the board in order to achieve targets rather than to increase efficiency in the long term. Even within the hospital sector, cuts to supplies with a significant therapeutic impact in health care (e.g. pharmaceuticals and orthopaedics) have not been accompanied by either containment of expenditure on overheads and other supportive services (which actually recorded an increase in most hospitals, e.g. more than 60% of public hospitals increased their expenditures for cleaning and 45% increased security expenditures) or efforts to rationalize the distribution of existing resources.

A third point to consider is that the side-effects of certain measures have not been taken into account adequately. Reform processes may trigger unintended consequences. Examples in Greece include worsening access to care and pharmaceuticals; increasing demands for informal payments due to cuts to the already low salaries of health professionals working in the public system, particularly doctors; migration of many young and well-qualified physicians and other

health care professionals to other countries as a result of the worsening of reimbursement rates as well as working conditions.

In conclusion, the EAP directly affected the Greek health system [41]. First, austerity measures stipulated the reduction of public health expenditure with negative impacts on the volume and quality of services provided. Second, health insurance coverage and access to services were reduced via increases in user fees and co-payments, reductions in covered benefits and the imposition of ceilings in the use of services. Third, human resources for health have been affected via hiring freezes, salary cuts and brain drain. Fourth, the above mentioned impacts of EAP on the country's health system had negative follow-on effects on population health and unmet medical needs.

4. After the end of the acute crisis: Has health policy changed?

The majority of the reform measures introduced during the first wave of reforms (2010-2014) undermined the health system goals described in the typology adopted by WHO/EURO (health status, financial protection, efficiency, equity, quality, responsiveness, transparency and accountability) [42]. These included the reduction of the scope of essential services covered, the reduction of population coverage and increases in user charges for essential services (i.e. changes in all three dimensions of coverage), increases in waiting times for needed services, horizontal cuts in public health expenditure and attrition of health workers caused by cuts in salaries, reductions in the replacement levels of retiring staff and migration to foreign labour markets. On the other hand, introduced measures likely to promote health system goals were limited and, in many cases, not well planned and implemented. This category encompasses the establishment of the EOPYY as a single payer to strengthen risk pooling, the introduction of the DRG-KEN (Diagnosis Related Group-Greek Version) system for hospital payment and price reductions for pharmaceuticals combined with e-prescribing. Finally, a range of essential policy options were neglected, such as strategic purchasing combining contracts with accountability mechanisms, HTA transparently embedded in

decision-making processes, monitoring and transparency measures, public health measures to reduce the burden of disease, shifting from inpatient to day-case or ambulatory care, integration and coordination of primary care and secondary care, and of health and social care, the reduction of administrative costs while maintaining capacity to manage the health system and fiscal policies to expand the public revenue. In addition, the citizen-patient dimension as the basis for shaping a patient-centered health system appeared beyond the scope of the first wave reform package. Furthermore, the effects, intended or unintended, of the measures introduced were not monitored or adequately considered to further shape policy [1], [9].

After 2015, and the election of a new left-wing government, these neglected issues came to the forefront of the health policy agenda, building on increasing concerns about achieving universal health coverage (UHC) and reducing of barriers in access to health services [43]. The 2016 legislation providing free access to care for uninsured Greeks and immigrants and the abolishment of some kinds of cost-sharing, resulted in a slight decrease of OOP payments (Figure 2) and of self-reported unmet need for health care due to cost, distance or waiting time. The new PHC system introduced in 2017 embodies the fundamental principles of WHO and it is expected to result in better access to quality health care and a more rational and efficient use of existing services and recourses as a result of a decrease in the unnecessary hospital admittance through well-organized referral processes. A Committee for the Evaluation and Reimbursement of Medicinal Products for Human Use (Evaluation Committee) was established in 2018 as an early HTA mechanism, paving the way for the institutionalization of HTA. The legislation passed in 2017 strengthens the role of the patients and stipulates that social control should be carried out, inter alia, through surveys by which citizens evaluate the services they have received, and that the results of those surveys should be taken into account in the process of decision making on the provision of services, as part of the people-centered approach. The commitment to empowering the patient voice is also reflected in a 2016 legislation which foresees an Office for the Protection of Health Services Recipients' Rights to be established in every hospital. Furthermore, national evidence-based strategic plans are being prepared for addressing human resources for health (HRH) imbalances and the reor-

ganization and development of public health services. Towards this direction, technical assistance provided by the World Health Organization (WHO) played a catalyst role², including, among other things, the conduct of assessments and making recommendations to address issues such as re-profiling the emergency medical services [44] or rationalizing distribution and utilization of high value capital medical equipment [45].

However, issues for further consideration remain, such as the structure of co-payments for pharmaceuticals and other health services, ceiling on doctors' treatment activities, the absence of real dental coverage and the excessive reliance on indirect taxes and high OOP payments, formal and informal, making the overall funding of the health sector regressive and inequitable. The substantial pressures on both components of public financing in the Greek system (SHI and state budget) create justified concerns over the mid- and long-term adequacy of funding in the health system. However, fruitful reform efforts and sustainable gains, for example in the context of UHC, require a sound financing base to materialize. Bringing public spending on health care up to at least 6% of GDP (compared to its current 5.2%) in the immediate future is a stated goal of the government. To ensure that this is achieved in a sustainable and predictable manner, both SHI and tax-based funds requires further focus on improving collection and pooling. There is a need to rethink and to promote a public debate on the health budget, which must be viewed not as a financial burden but as a developmental tool, with a focus on addressing not only economic dimensions but also the welfare of citizens. In relation to the health status of the population it is necessary to not only develop and implement health in all policies, surveillance and monitoring systems and disease registries but also to reach beyond the health system

2 - In January 2016, an initiative entitled "Strengthening capacity for universal coverage" (SCUC) was launched, aiming to support Greece's mid-term reform priorities for the health sector. The initiative, which is a collaboration between the Greek Ministry of Health and the WHO's Regional Office for Europe and is funded by the European Union, has as a general objective to contribute to improving health and health equity in Greece, especially for the most vulnerable population groups, by helping the Greek authorities in their move towards universal coverage and in strengthening the effectiveness, efficiency and resilience of the Greek health system. The initiative focuses on three reform axes: a) enhancing universal access to quality care; b) improving transparency, inclusiveness and modernization of health governance; and c) improving financial sustainability of the health system. A "100 Actions" Plan was developed to guide reform efforts along those lines. A number of reform measures introduced in the past three years have taken knowledge generated by the SCUC initiative into account.



and strengthen research in order to better clarify the causal mechanisms connecting socioeconomic factors with mortality and morbidity of specific diseases [43].

5. Lessons to be learn

Greece serves as a potent example that top-down, big-bang approaches to reforming the health system may not be the optimal way forward. Although many of the reforms attempted since 2010 were necessary goals, in Greece's case, they were too much and too fast and in many cases towards the wrong direction, distorting the principle of equity. No estimates on social and health impact of the MoUs conditionalities were made, there was no preparedness towards the impact of the measures adopted on health and health system, and timely response to these effects was absent. Furthermore, there was no evaluation of calendar, sequencing and implementation of health policy measures. This situation of implementing the neoliberal "shock doctrine" under the strict reform targets and timetables imposed by the international creditors, risked health policy becoming an ideological warfare generated by EAP instead of evidence-based welfare responding to the needs of the population. The economic crisis, EAP implementation and the restrictions stemming from the overall rule of austerity in the EU have coincided with notable negative social effects, raising concerns in relation to the impact of austerity measures on social welfare and health, as well as on the economic and social rights of people living in poverty and social exclusion [46].

Prior to 2009, lack of political will and consistency led to delays in much-needed and important reforms. Once the implementation of changes began as part of the requirements of the EAP, the context was much more unfavourable in terms of lack of funding, time and other resources, as a consequence of the austerity measures, and this has adversely affected both process and outcomes. Managing change in the context of economic crisis requires a steady commitment to key health system goals, such as sustaining universal population coverage, a focus on population needs, a goal to improve the quality of care and a strategic reliance on evidence-informed policymaking to find appropriate responses. It also requires the building of strong supportive coalitions with stakeholders. Given the medico-centric character of the ESY, there is a dominance of the medical profession across health care system reforms, being able to re-

sist any change that might affect their dominant position [47], [48]. This is once again evident in the recent (2017) PHC reform. Although most stakeholders are supportive to this reform, the Pan-Hellenic Medical Association (PIS), argues that it may not be sustainable and if fully implemented, it will undermine the quality of the health care services provided and the medical profession.³ The question is to what extent the opposition expressed by PIS can raise barriers to the full implementation of the reform. The answer is related to the more general concern about forces in politics and society who actively promote a viable public health care system as part of a capable welfare state, considering the strict and binding fiscal coordination in the context of the EU economic governance (e.g. Two Pack, Six Pack, Fiscal Compact, MoUs etc).

It can be argued that in the pre-crisis period, EU's intrusiveness in shaping the Greek welfare state reforms was weak as it was based on "soft", voluntary policy mechanisms, such as the "Open Method of Coordination", with the aim to converge towards the so called "European Social Model", and the role of domestic stakeholders (Greek parliament, social partners, veto players etc) was high [51]. The situation changed during the post-crisis period and EU intrusiveness in shaping the Greek welfare reforms became very high, characterized by "hard" Europeanization mechanisms (e.g. MoUs), where compliance with the EU requirements is conditional upon receipt of the "Troika" loans. The new EU reform recipe imposed aim at fiscal austerity, internal devaluation and structural reforms, resulting to the retrenchment of the Greek welfare state. In this context, the role of the national stakeholders has been diminished, while national government became the main domestic player in policy reforms [52].

3 - PIS has stated its opposition to the implementation of the referral system by the family doctor to specialized doctors and hospitals (gate keeping) and to the call of EEOPY for recruiting family doctors (GPs, Internists and Pediatricians), as it is considered to be degrading for the medical profession and risking the quality of the care provided to the target population. Additionally, several reservations have been reported by the local medical associations regarding the foreseen low wages and the job insecurity that the job description entails in the Local Health Units - TOMYs (funding is guaranteed under the ESPA Partnership Agreement 2014-2020 for 2 plus 2 years in total) leading to the attraction of relatively young and inexperienced GPs. Ultimately, concerns were expressed that the TOMYs may not attract the foreseen numbers of patients (and as a result demand will shift towards the contracted with EOPYY physicians) or the quality of the health care services provided may be undermined. PIS also expressed its opposition regarding the right of midwives to prescribe certain examinations and pharmaceuticals [49], [50].

References

- Economou C, Kaitelidou D, Karanikolos M, Maresso A. Greece: Health system review. *Health Systems in Transition*. 2017;19(5):1–192.
- Economou C, Giorno C. Improving the performance of the public health care system in Greece. Paris: OECD Economics Department Working Paper No. 722; 2009.
- Economou C. Greece: Health system review. *Health Systems in Transition*. 2010;12(7):1–180.
- European Commission. Financial assistance to Greece. Luxembourg: Publications Office of the European Union; 2016.
- Economou C, Kaitelidou D, Siskou O. A health system in the era of economic crisis and memoranda: Bearing patiently the consequences or grabbing the chance for introducing reforms? In: Saridi M, Souliotis K, editors. The impact and implications of crisis. A comprehensive approach combining elements of health and society. New York: Nova Science Publishers; 2018. p. 257–267.
- Hellenic Statistical Authority. System of Health Accounts (SHA) of year 2015. Athens: Hellenic Statistical Authority; 2017.
- Hellenic Statistical Authority. System of Health Accounts (SHA) of year 2016. Athens: Hellenic Statistical Authority; 2018.
- Economou C. Barriers and facilitating factors in access to health services in Greece. Copenhagen: WHO Regional Office for Europe; 2015.
- Economou C, Kaitelidou D, Kentikelenis A, Maresso A, Sissouras A. The impact of the financial crisis on the health system and health in Greece. In: Maresso A et al., editors. Economic crisis, health systems and health in Europe: Country experience. Copenhagen: WHO Regional Office for Europe, on behalf of the European Observatory on Health Systems and Policies; 2015. p. 103–142.
- Economou C, Kaitelidou D, Katsikas D, Siskou O. Impacts of the economic crisis on access to healthcare services in Greece with a focus on the vulnerable groups of the population. *Social Cohesion and Development*. 2014;9(2):99–115.
- Economou C. The performance of the Greek healthcare system and the economic adjustment programme: economic crisis versus system-specific deficits driven reform. *Social Theory*. 2012;2(2):33–69.
- Liaropoulos L, Siskou O, Kontodimopoulos N, Kaitelidou D, Lazarou P, Spithouri M, Tsavalias K. Restructuring the hospital sector in Greece in order to improve effectiveness and efficiency. *Social Cohesion and Development*. 2012;7(1):53–68.
- Damaskinos P, Koletsis-Kounari H, Economou C, Eaton KA, Widstrom E. The healthcare system and provision of oral healthcare in European Union member states. Part 4: Greece. *British Dental Journal*. 2016;220(5):253–260.
- Eurostat. Healthy life years. Available from: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_hlye&lang=en. Accessed 2018 July 15.
- Eurostat Self-perceived health status. Available from: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>. Accessed 2018 July 15.
- Eurostat. Infant mortality per 1000 live births. Available from: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_minfind&lang=en. Accessed 2018 July 15.
- Karanikolos M, Machenbach J, Nolte E, Stuckler D, McKee M. Amenable mortality in the EU – has crisis changed its course? *European Journal of Public Health*. 2018;cky116. Available from: <https://doi.org/10.1093/eurpub/cky116>.
- Laliotis I, Ioannidis JPA, Stavropoulou C. Total and cause-specific mortality before and after the onset of the Greek economic crisis: an interrupted time-series analysis. *Lancet*. 2016;1(2):e56–e65.
- Eurostat. Preventable deaths. Available from: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_cd_apr&lang=en. Accessed 2018 July 15.
- OECD. Health statistics database. Available from: <https://data.oecd.org/>. Accessed 2018 July 10.
- GBD Greece. The burden of disease in Greece, health loss, risk factors, and health financing, 2000–16: an analysis of the Global Burden of Disease Study 2016. *Lancet Public Health*. 2018;3(8):e395–e406.
- OECD. Tax policy reforms 2018. Paris: OECD; 2018.
- Eurostat. Unmet health care needs statistics. Available from: http://ec.europa.eu/eurostat/statistics-explained/index.php/Unmet_health_care_needs_statistics. Accessed 2018 July 15.
- SCUC. Improving access and financial protection in the Greek health system. Policy brief No 22. Athens; 2018.
- Chantzaras A, Yfantopoulos J. Financial protection of households against health shocks in Greece during the economic crisis. *Social Science and Medicine*. 2018;211:338–351.
- WHO Regional Office for Europe. Addressing informal payments in the Greek health system. Copenhagen: WHO Regional Office for Europe; 2018.
- Polyzos SA, Kountouras J. Trying to treat diabetes in Greek crisis. *International Journal of Clinical Practice*. 2012;66(5):515.
- Aloumanis K, Papanas N. Greek financial crisis: consequences in the health-care of diabetes and its complications. *Hippokratia*. 2014;18(1):4–6.
- Tsiligianni I, et al. Greek rural GPs' opinions on how financial crisis influences health, quality of care and health equity. *Rural Remote Health*. 2013;13(2):2528.
- Tsiligianni I, et al. Impact of the financial crisis on adherence to treatment of a rural population in Crete, Greece. *Quality in Primary Care*. 2014;22(5):238–244.
- Tsiantou V, et al. Physicians' estimation regarding the impact of recession on patient adherence to treatment in diabetes type 2 in Greece. *Value in Health*. 2014;17(7):A357.
- Apostolidis K. Access to medicines in Greece. A patient view from Greece. *Patient View Quarterly*. 2013 June;6–13.
- Athanasakis K, et al. Inequalities in access to cancer treatment: an analysis of cross-regional patient mobility in Greece. *Support Care Cancer*. 2012;20:455–460.
- Skroumpelos A, et al. Catastrophic health expenditures and chronic condition patients in Greece. *Value in Health*. 2014;17(7):A501–A502.
- Polyzos N. A three-year performance evaluation of the NHS hospitals in Greece. *Hippokratia*. 2012;16(4):350–355.
- Kaitelidou D, Katharaki M, Kalogeropoulou M, Economou C, Siskou O, Souliotis K, Tsavalias K, Liaropoulos L. The impact of economic crisis to hospital sector and the efficiency of Greek public hospitals. *European Journal of Business and Social Sciences*. 2016;4(10):111–125.
- Flokou A, Aletas V, Niakas D. Decomposition of potential efficiency gains from hospital mergers in Greece. *Health Care Management Science*. 2017;20(4):467–484.
- Oikonomou N, et al. Measuring the efficiency of the Greek rural primary healthcare using a restricted DEA model; the case of southern and western Greece. *Health Care Management and Science*. 2016;19(4):313–322.
- Mitropoulos P, Kounetas K, Mitropoulos I. Factors affecting primary health care centers' economic and production efficiency. *Annals of Operations Research*. 2016;247(2):807–822.
- Thanassoulis E, Silva Portela MA, Graveney M. Using DEA to estimate potential savings at GP units at medical specialty level. *Socioeconomic Sciences*. 2014;48(1):38–48.
- Kentikelenis A. Structural adjustment and health: A conceptual framework and evidence on pathways. *Social Science and Medicine*. 2017;187:296–305.
- Mladovsky P, et al. Health policy responses to the financial crisis in Europe. Copenhagen: WHO Regional Office for Europe, on behalf of the European Observatory on Health Systems and Policies; 2012.
- Economou C, Panteli D. Monitoring and documenting the systemic and health effects of health reforms in Greece. Copenhagen: WHO Regional Office for Europe. Forthcoming 2018.
- WHO Regional Office for Europe. Re-profiling emergency medical services in Greece. Assessment Report. Copenhagen: WHO Regional Office for Europe; 2017.
- WHO Regional Office for Europe. Rationalizing distribution and utilization of high value capital medical equipment in Greece. Assessment report. Copenhagen: WHO Regional Office for Europe; 2018.
- United Nations Human Rights Council. Report of the Independent Expert on the effects of foreign debt and other related international financial obligations of States on the full enjoyment of all human rights, particularly economic, social and cultural rights on his mission to Greece. New York: United Nations Human Rights Council; 2016. 31st session, A/HRC/31/60/Add.2.
- Mossialos E, Allin S. Interest groups and health system reform in Greece. *West European Politics*. 2005;28(2):420–444.
- Nikolentzos A, Mays N. Explaining the persistent dominance of the Greek medical profession across successive health care system reforms from 1983 to the present. *Health Systems & Reform*. 2016;2(2):135–146.
- PIS (2018). Press Release: PIS is opposed to gatekeeping. Available from: https://www.pis.gr/Αντιθετος%20με%20το%20gatekeeping%20ο%20ΠΙΣ%20-%20Μιχαήλ%20Βλασταράκος%20Ουδεμία%20συζήτηση%20προηγήθηκε%20της%20εφαρμογής.N_N0000000100_N0000002124_N0000002004_S0000002267. Accessed 2018 April 16. Greek.
- PIS (2018). Press Release: PIS is opposed to the call of EEOPY for recruiting family doctors. Available from: <https://www.pis.gr/Αντιθετος%20ο%20Π.Ι.Σ.%20με%20την%20πρόσκληση%20ενδιαφέροντος%20του%20ΕΟΠΥ%20για%20τους%20Οικογενειακούς%20ατμούς>. Accessed 2018 April 16. Greek.
- Sotiropoulos D. The EU's impact on the Greek welfare state: Europeanization on paper? *Journal of European Social Policy*. 2004;14(3):267–284.
- Feronas A. The “new face” of Europeanization in times of crisis: Imposing the EU “recipe” on the Greek welfare state reforms. In: Saridi M, Souliotis K., editors. The impact and implications of crisis. A comprehensive approach combining elements of health and society. New York: Nova Science Publishers; 2018. p. 169–190.

Ireland's health care system and the crisis: a case study in the struggle for a capable welfare state

*O sistema de saúde irlandês e a crise:
um estudo de caso na luta pela capacidade do Estado Social*

Steve Thomas

Centre for Health Policy and Management, Trinity College
Dublin

Sarah Barry

Centre for Health Policy and Management, Trinity College Dublin

Bridget Johnston

Centre for Health Policy and Management, Trinity College Dublin

Sara Burke

Centre for Health Policy and Management, Trinity College Dublin



Abstract

Ireland's health care system is a weak Beveridgean system with no entitlement to free care and substantial acute waiting lists. Just under half the population has voluntary private health insurance and there is a two-tier access to acute care with dual practice consultants. Ireland experienced a multifaceted and severe economic crisis from 2008. From late 2010 until late 2013, the government was forced into a Troika bailout of €85 billion. The health sector was given a fairly free hand in the initial Memorandum of Understanding although there was substantial dialogue between the Irish government and the Troika on overspending, competition, the safety net system and high pharmaceutical costs. Yet, in reality, Ireland imposed its own austerity package cutting on health resources and shifting costs onto families and private households. This caused a negative impact on the financial protection of households, acute hospital waiting lists and the health status of the population, albeit alongside some efficiencies. Nevertheless, there is hope for a better health care system with the cross-party development of the Sláintecare Plan to bring Universal Health care over a ten year period through expanded entitlements and system overhaul. Despite opposition from vested interests this is slowly being implemented.

Key Words:

Austerity, efficiency, cost-shifting, universal healthcare, health policy, Ireland.

Resumo

O sistema de saúde irlandês pode ser caracterizado como um sistema Beveridgeano fraco, sem direito a cuidados de saúde gratuitos e com substanciais listas de espera para casos agudos. Um pouco menos de metade da população tem, de forma voluntária, um seguro de saúde privado havendo dois níveis de acesso para cidadãos com casos agudos a médicos a exercer em vários setores. A Irlanda sofreu uma grave crise económica multifacetada a partir de 2008. O governo foi forçado a um resgate da Troika de €85 mil milhões no final de 2010 do qual saiu no final de 2013. O Memorando de Entendimento inicial tinha uma grande margem de manobra para o setor da saúde, embora tenha havido muito diálogo entre o governo irlandês e a Troika sobre o excesso de despesa, competitividade, sistemas de segurança e os elevados custos com medicamentos. No entanto, na realidade, a Irlanda impôs o seu próprio programa de austeridade, cortando recursos na saúde e mudando os custos para o lado das famílias. Isto teve consequências negativas na proteção social das famílias, agravamento das listas de espera hospitalares e, de uma forma geral, para o estado de saúde da população, embora se verificasse paralelamente alguma melhoria de eficiência. Ainda assim, há esperança num melhor sistema de saúde com o desenvolvimento interpartidário do Plano Sláintecare que tem como objetivo implementar num prazo de dez anos um sistema de saúde universal, através de uma revisão do sistema e do alargamento dos direitos. Apesar da oposição dos poderes instituídos, pouco a pouco, esta reforma tem vindo a ser implementada.

Palavras Chave:

Austeridade, eficiência, transferência de custos, cuidados de saúde universais, política de saúde, Irlanda.

Very brief characterisation of the national health care system

Ireland's health care system may be characterised as a weak Beveridgean system where the majority of funding comes from taxes (around 70%[1]) but there is no associated entitlement to free care. Furthermore, Ireland has only relatively recently adopted any commitment to Universal Health care in 2011[2]. The Irish system is highly unusual in Europe in that most patients pay unsubsidised market prices to access a general practitioner (GP). In addition, Irish patients typically face lengthy waiting time and lists to access acute elective care and even some components of primary and social care. Consequently, according to Eurostat, in 2014 Ireland had the second highest rate of unmet need for health care in the European Union (EU) (at 40.6%) due to cost, distance or waiting lists (compared to an EU average of 26.5%). Costs were the most frequently mentioned factor (35.9%) and this was the highest proportion for any EU country¹.

Thirty percent of overall funding coming from private sources is a mixture of out-of-pocket payments (OOP) and private voluntary health insurance [1]. Interestingly, Ireland has one of the highest shares of, and coverage of population by, voluntary health insurance in Europe, along with France and Slovenia. Nevertheless, unlike the latter two countries voluntary health insurance in Ireland provides much less financial protection from OOP and there are key concerns about its affordability [3]. Nevertheless, those with voluntary health insurance, around 44% of the population, have historically accessed acute elective services much faster. This has created a two-tier system which government actively subsidises through taxation breaks and historic undercharging of hospital beds for private patients.

Most acute care, around 85% in 2015, is provided by publicly funded hospital sector (which includes state hospitals and voluntary not-for-profit hospitals)[4] with typical overcrowding by bed occupation rate. Nevertheless, there has been a steadily growing for-profit private hospital sector with unutilised capacity. Private care is also delivered in public hospitals. Most hospital consultants work dual practice and there have been recent media reports on consultants with long waiting lists failing to meet their public sector commitments and preferentially treating private patients. Long waiting lists for acute care have meant that emergency department (ED) attendance has been a key route to get into hospital (as will be seen.) All GPs are private entrepreneurs but are contracted by the state to provide services, particularly for those below

a certain income level who get a "medical card" which entitles them to largely free GP care², low cost prescription drugs and free hospital care. A growing proportion of the population, by age and means, are eligible for a GP visit card, where the state pays GPs to provide care free of charge). This is significantly cheaper than providing them with medical cards[5]. Other primary and community care is under-resourced, understaffed and very patchy across the country leading to large geographic disparities.

Size and duration of the economic crisis

According to Keegan et al [6], Ireland experienced the third most severe recession in the EU in the initial aftermath of the economic crisis, second only to Latvia and Estonia. Nevertheless, Ireland also experienced one of the longest recession periods, with six austerity budgets, emerging from recession in 2014[7]. Several factors contributed to this.

As a small open economy, Ireland was particularly sensitive to global economic trends. Secondly, Ireland's tax policy focussing on indirect taxes proved disastrous in a recession for government revenues[8]. Moreover, years of access to cheap credit without proper government oversight led to a property market bubble. This in turn contributed to a banking collapse and when the state introduced the bank guarantee system it tied banking debt to sovereign debt causing huge problems for the state's solvency[9]. This bank guarantee was heavily criticised subsequently and was a result of direct lobbying by the Irish banks[10]. Such events also caused a reputational crisis with outside lenders leading to a huge hike in rates for state borrowing. Consequently, in November 2010[10] the government was forced to accept a bailout from the EU, International Monetary Fund (IMF) and European Central Bank (ECB) of €85 billion.

This Programme of Financial Support was to cover the 2010-2013 period. It specified a diverse programme of fiscal measures, financial sector reforms and structural reforms for each quarter between the beginning of 2011 and the end of 2013. Precise and radical targets were set for reduction in public spending, increase in

1 - http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_ehis_un1e&lang=en

2 - Some GPs do charge administrative fees to GMS patients (for warfarin monitoring, social welfare forms, sick notes, etc.)



Table 1 - The evolving dialogue around health sector conditionalities and reforms between the IMF and Irish Government (December 2010 to November 2013)

Covering the original Memorandum of Understanding, nine updates and related statements (in **bold**) with associated Letters of Intent from the Irish State (in *italics*).

Financing
<i>"Improve the charging regime for private patients in public hospitals and increase collection of charges, to fully account for costs" (Letter of Intent, November 2012)</i>
<i>"We are in the process of implementing the remaining key pieces of the budget package: legislating to effect higher charging for private patients in public hospitals. . ." (Letter of Intent March 2013, Point 14)</i>
60. The authorities are committed to the introduction of a prospective case-based payment system for public hospitals, in line with a principle of case based cost recovery for use of public hospitals by public and private patients. This will be implemented on a phased basis beginning with a shadow phase by end-October 2013. (9th update MoU June 2013)
Pricing and reimbursement of pharmaceuticals
<i>"we have recently negotiated a significant multi-year reduction in the price of pharmaceuticals" (Letter of Intent, November 2012)</i>
<i>"we are seeking further durable savings, including through consideration of a range of structural reforms to further reduce drug costs, including by lowering the price of generic drugs and increasing the share of generics in prescriptions, dispensing and usage" (Letter of Intent, November 2012)</i>
"The authorities will conduct a study to compare the cost of drugs, prescription practices and the usage of generics in Ireland with comparable EU jurisdictions" (Point 38.) (7th update MoU January 2013 and repeated in 8th and 9th update)
<i>"We are in the process of implementing the remaining key pieces of the budget package: . . . to mandate greater generic drug use (by end June)" (Letter of Intent March 2013, Point 14)</i>
Health 45. The authorities will set high level annual targets for increasing the share of generic drug usage in the medium-term. Enabling measures – such as compulsory prescription by International non-propriety name (INN) by Year end (in 8th update and end-October 2013 in 9th update), where appropriate – required for the achievement of these targets will be put in place and kept under further review. (8th update MoU April 2013 and repeated in 9th update)
<i>The implementation of generic substitution and reference pricing has been prioritised by the Department, the Health Service Executive and the Irish Medicines Board. Reference pricing is expected to deliver at least 50 million savings in 2014. The Health (Pricing and Supply of Medical Goods) Act 2013 also includes a process for the review of existing prices outside of reference pricing. (Final Letter of Intent 2013)</i>
Prescription and monitoring of prescription
Pharmacies sector
In relation to pharmacies "Ensure recent elimination of the 50% mark-up paid for medicines under the State's Drug Payment Scheme is enforced" (Original MoU December 2010. Pt 28)
Centralised purchasing and procurement
Primary care services
Eliminate restrictions on (i) the number of GPs qualifying, (ii) GPs wishing to treat public patients, (iii) GPs advertising (Original MoU December 2010. Pt 28)
<i>"Better target spending, particularly within the primary care re-imbursement scheme." (Letter of Intent, November 2012)</i>
Hospital services
<i>"Enhance hospital efficiency, by implementing major work practice and rostering reforms, reducing the average length of hospital stays, increasing the share of day treatments, and minimising unnecessary return visits for out-patients;" (Letter of Intent, November 2012)</i>
Entitlements
Comprehensive targeting of spending is needed to deliver immediate reductions combined with reforms to underpin savings in the medium term. Better targeting of medical card spending can generate significant savings while protecting the poor. (Concluding Statement of the IMF Mission July 2012)
Overall Budget Control
<i>"We have identified scope for reducing overtime payments including through smarter rostering for emergency services (such as health and police); rationalising allowances; and boosting public service productivity through changes to sick leave entitlements (p8)" (Letter of Intent, February 2012)</i>
<i>"We are on track to deliver a budget deficit within the 8.6% of GDP target in 2012. . . At the same time we are alert to pressures in health and social protection spending and will continue to manage expenditure to remain within budget (pt 13)." (Letter of Intent, August 2012)</i>
Health sector: Authorities to specify quantified measures to eliminate the spending overrun by year end. (6th update MoU September 2012.)
<i>"We are alert to the overrun in current health spending and are taking measures necessary to unwind it. (Letter of Intent, November 2012)- see other sections for details of response</i>
The authorities will take the measures necessary to unwind the overrun in health spending and will contain health expenditure next year to within the €13.6 billion departmental ceiling for 2013 set in the Comprehensive Expenditure Report 2012-14. (Point 8) (7th update MoU January 2013.)
<i>"We are implementing Budget 2013 in the same prudent manner. The bulk of the measures comprising the €3.5 billion consolidation effort have been enacted. . . Moreover, we have decided that the Health Service Executive and the Department of Health will report to the Cabinet Committee on Health on the implementation of the health sector measures on a monthly basis to actively prevent renewed slippages. (Letter of Intent March 2013)</i>
Cross services
Health sector (Point 38). The authorities will develop an eHealth Strategy in conjunction with the HSE by end Q2 2013. This will serve as a time-bound action plan for the implementation of eHealth systems, including a comprehensive system of ePrescription which uses a unique patient identifier, such as the PPSN—to support and enable the delivery of integrated patient care under the reform agenda. (8th update MoU April 2013 and repeated in 9th update)
Health 58. In line with the eHealth Strategy, the authorities will publish by end-October legislation in conformity with data protection law to enable the introduction of universal and unique health identifiers for patients and service providers as well as to facilitate the introduction of full ePrescription. (9th update MoU June 2013)
59. The authorities will adopt a framework by end-October to streamline and consolidate multiple and fragmented financial management and accounting systems and processes by end-October (9th update MoU June 2013)

public revenues and reduction of public capital spending. Mandated structural reforms included reducing the minimum wage, increasing the pension age, changing the basis for pension payments to average rather than final pay and removing barriers to competition in sheltered sectors, amongst other reforms [10].

Furthermore, the financial aid was only to be released if performance targets were met. This led to high-profile quarterly visits by the IMF to check on progress and approve next tranche of funds' disbursement. The government had to report more frequently, weekly and monthly, on a stack of key indicators around financial performance, cash balances, bank finances, public spending and public sector salary outlays [10].

In essence, Ireland had handed over economic sovereignty during this time period. Some initial attempts to reform the Irish economy had been made in 2008 and 2009 but these proved insufficient to address the diverse problems and weaknesses of the banking sector, public sector financing, the housing crisis and lack of government regulation.

Consequently, over this time, the economy experienced huge restructuring and turbulence. From 2007 to 2012, unemployment rate more than trebled from 4.6% to 14.7%. Over the same period, Government's consolidated gross debt increased from 25% of gross domestic product (GDP) to 120%. The Government deficit which had reached a striking 30.6% of GDP in 2009 was cut back to 7.2% in 2012. Furthermore the economy, as measured by GDP, contracted in 2008, 2009 and 2010 [11]. Public sector wages were cut back in the Croke Park agreement, alongside the structural measures indicated above.

This combination of an initially severe and protracted recession with a subsequent recovery is an important determinant of current health care system trajectory, as it will be seen later.

Demands related to health

Interestingly, health was given a fairly free hand; initially perhaps because of the myriad of challenges being faced (see Table 1). The only focus in the original Memorandum of Understanding (MoU) was the requirement of introduction of more competition in relation to GPs and the removal of mark-ups for pharmaceuticals supplied through community drug schemes. Nevertheless, these were quite small issues for the health sector and were probably more ideo-

logically driven than a substantive reform.

Instead, conditionalities were added into the subsequent MoU updates and most notably in 2012. In some cases these conditionalities were preceded, and responded to formally, by the Government. Hence it appears that rather than a set of conditions from the outset we have a negotiated dance around conditionalities on top of the Irish Government imposing its own set of health reforms. This dialogue can be seen most strikingly in the case of managing the overall health overspend and also bringing in reforms to lower the state's drug payment bill (Table 1).

For the former, the IMF highlighted in particular the high spending on "medical cards". Article IV review of the EU-IMF Programme of Support for Ireland (in July 2012) made explicit reference to concerns over spending on medical cards, but did not specify the nature of the measures required to control such expenditure³. Medical cards provided a safety net system for those in austerity, expanding rapidly to bring free care for those newly unemployed. However, the rapid expansion was a substantial financial burden to the state. The state may well have buckled under pressure to change eligibility criteria for medical cards more radically but a poor political performance for government parties in local elections shelved any potential for such volatile reform.

Nevertheless, the Government set about bringing austerity into the health sector with zeal, even with few specific conditionalities of the bail-out. Between 2009 and 2013 financing of the Health Service Executive, the central state purchaser of and implementer of health care, financing fell by 22% [7]. Staffing also fell sharply by around 8,000 with primary and community services particularly hard hit [12]. It also set about shifting costs of access back onto households through higher charges for inpatients and Emergency Department (ED) attendances, a new levy for all on prescription items, higher drug reimbursement thresholds, and reduced medical card coverage[7] see Table 2 where the section yellow highlights the bail-out era. Interestingly the Government is displaying a growing shift from medical cards to GP visit cards[5] as a means to reduce costs while promoting a shallower version of universal coverage. Such cost-shifting would certainly align with the evolving MoU.

3 - www.imf.org/external/np/ms/2012/071812.htm#P5_83



Table 2 - Changes to statutory entitlement in Ireland, 2009-2018

Year	Population with medical cards	Population without medical cards
2009	Automatic entitlement to medical cards removed from people over 70 years of age and replaced with a means test	Increase in charge for attending emergency department (without a GP referral letter) from €66 to €100; Increase in the public hospital inpatient charge from €66 to €75 per day (maximum per year €750) DPS: Increase in monthly threshold from €90 to €100 Tax relief on unreimbursed medical expenses restricted to the standard rate of tax (20%)
2010	GMS: Introduction of €0.50 charge per prescription item beginning in October (monthly cap €10) DTSS: dental entitlements reduced (beginning in April)	DPS: increase in monthly threshold to €120 TBS: dental and ophthalmic entitlements cut
2011	None	None
2012	None	DPS: Increase in monthly threshold to €132 TBS: aural entitlements cut LTI Scheme: Commitment to extended entitlement to free GP care as phase 1 of the free primary care strategy. Later replaced with alternative plan to extend universal GP care. Later deferred.
2013	GMS: Increase to €1.50 per prescription item (monthly cap €19.50) Lowering of thresholds for medical cards for those over 70 years of age (excluded 40,000 people)	DPS: Increase in monthly threshold to €144 Increase in the public hospital inpatient charge to €80 per day (maximum per year €800) The amount of private health insurance premium qualifying for tax relief limited to €1,000 for adults and €500 for children (including students aged 18–23 years in full-time education)
2014	GMS: Increase to €2.50 per prescription item (monthly cap €25)	Proposed free GP care for children 5 and under (delayed)
2015	None	Free GP care introduced for children aged under 6 years and reintroduced for adults aged over 70 (Summer)
2016	None	Proposed extension of free GP care to all children under 12 years of age (delayed and later withdrawn)
2017	GMS: Reduction of monthly cap on prescription charges from €25 to €20 for those over 70 years of age	TBS: €42 payment towards annual scale and polish; biannual entitlement to free sight test and €42 towards glasses
2018	GMS: Reduction to €2 per prescription item (monthly cap reduced to €20 for those under 70 years of age)	DPS: Monthly threshold reduced to €134 per month

Source: Johnston B, Thomas S, Burke S (2018), Moving towards universal health coverage: new evidence on financial protection in Ireland, Copenhagen: WHO Regional Office for Europe.

Notes: Yellow shading indicates Troika bail-out period. DPS: Drug Payment Scheme; DTSS: Dental Treatment Services Scheme; GMS: General Medical Scheme; LTI: Long-Term Illness; TBS: Treatment Benefit Scheme.

Necessary reforms vs burdens

GP reform to increase competition may have helped increase GP supply though prices remain very high. Drug costs are very high in Ireland and remain stubbornly so, partly because of the importance of the pharmaceutical sector to employment and its strong negotiating power in price-setting. In that area, the IMF stipulations were warranted. Expressed concerns over the medical card bill were not particularly helpful and could well have threatened the financial protection of vulnerable households by further destabilising an important safety net. What they pointed to was the need to universalise care but this is difficult to do within a context of austerity as the subsequent Irish experience has shown.

Instead the bulk of reforms from Government were home-grown, an eclectic mix of producing efficiencies from a bloated system and finding any means to reduce Government spending regardless of the financial burden to households or the inefficiency produced in the system.

Evolution of the population health status under the EAP

Health status key indicators show a definite impact of the austerity era (Figures 1-3). There is a definite drop in

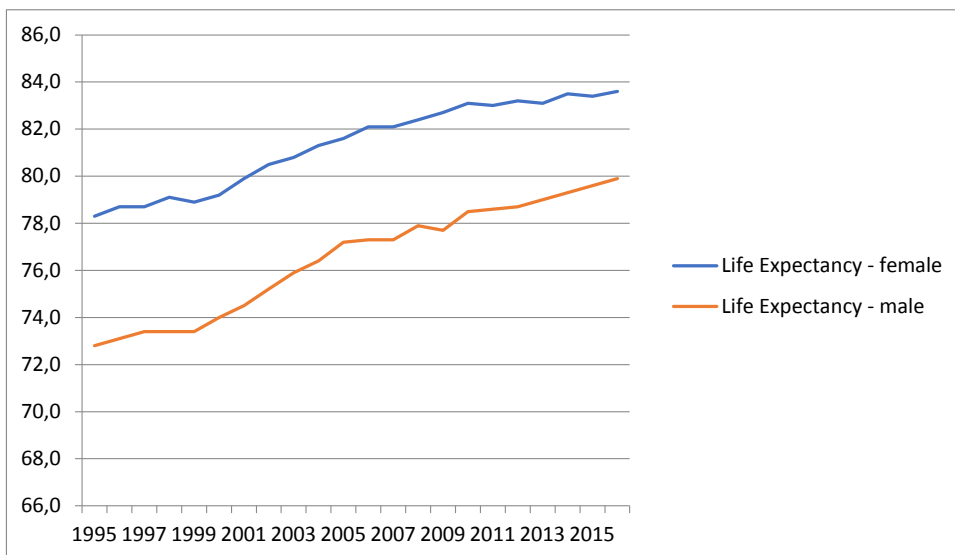


Figure 1 - Life Expectancy, Ireland (1995-2016)

Source: Eurostat

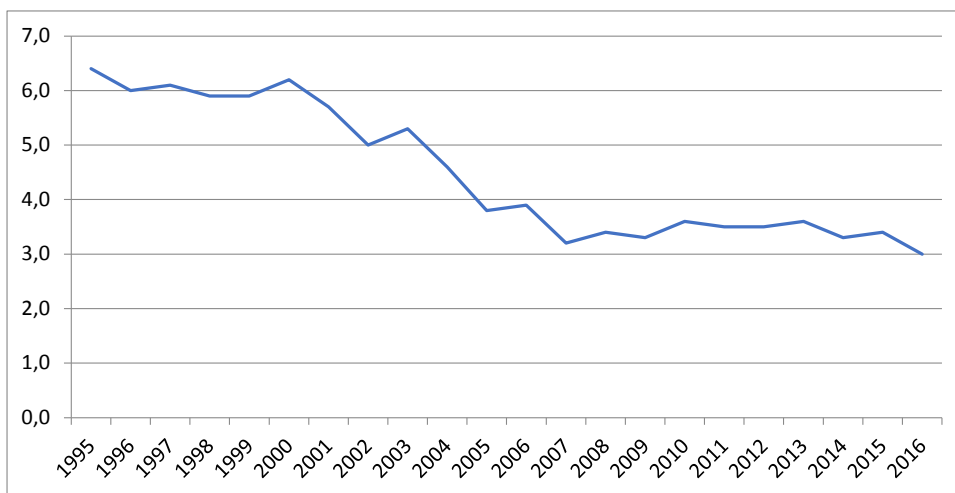


Figure 2 - Infant Mortality rate per 100,000 (1995-2016)

Source: Eurostat

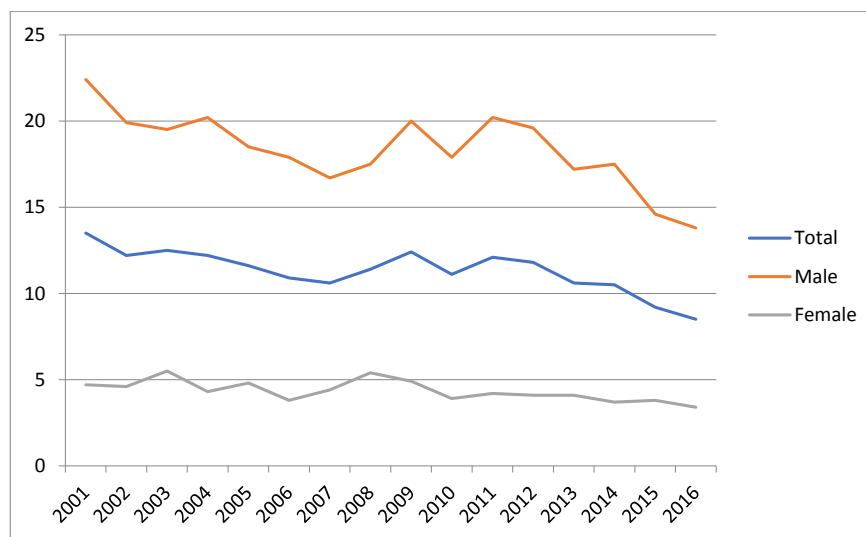


Figure 3 - National Suicide Rates for Ireland per 100,000, (2001-2016)

Source: Central Statistics Office, Ireland

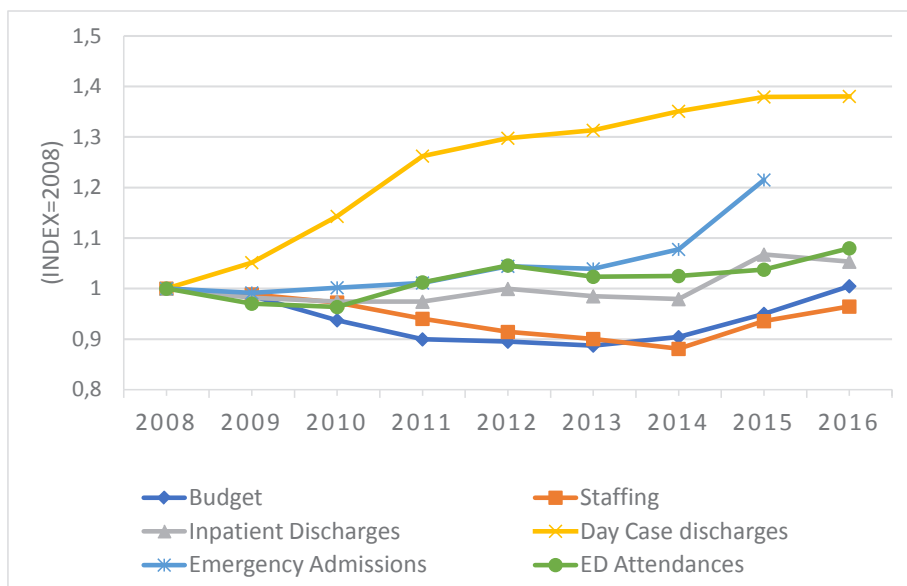


Figure 4 - Changes in Resourcing and acute indicators (2008-2016)
Source: HSE Performance Reports and TCD database

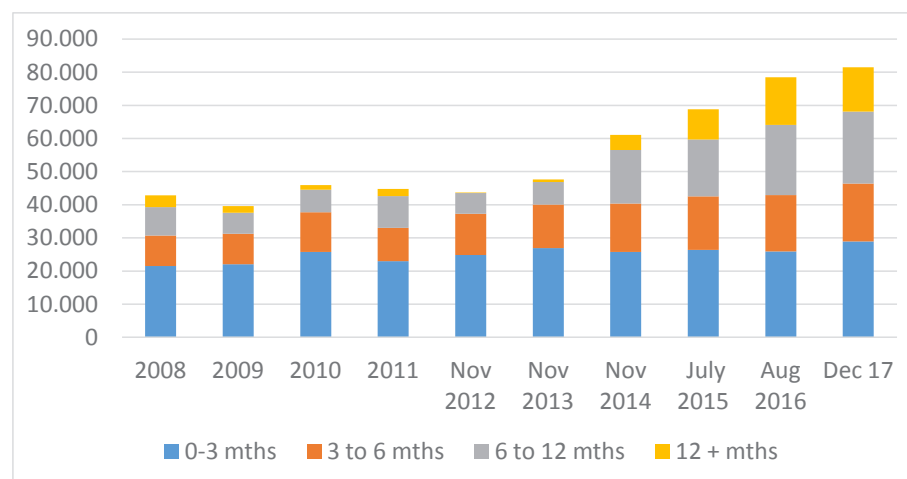


Figure 5 - Number of adults waiting for IP (Inpatient) and day-case hospital treatment (2008-2017)
Source: National Treatment Purchase Fund

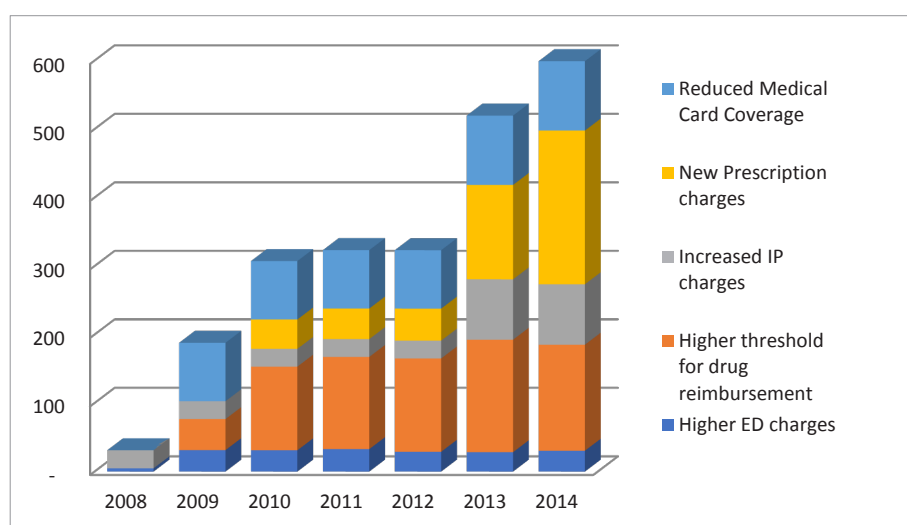


Figure 6 - Cost-shifting from the state to private households in € million (2008 to 2014)
Source: Updated graph from Thomas et al 2013

male life expectancy in 2009 to 77.7 from 77.9 in 2008. There is an alarming flat-lining in infant mortality rates after seven years of reductions, with individual annual increases in 2008, 2010 and 2013. Only in 2016, with the economy well back to recovery, do we see a return to a declining trend in the infant mortality rate. Furthermore, the national suicide rates show a strong upward movement in 2009 and 2011 for men and 2008 for women. Only after 2014 do the rates resume their previous downward trend.

Evolution of the health care system under the EAP

As can be seen from the earlier discussion and Table 1, a key concern for the MoU was to manage the health care overspending because of the hole in government finances. This was translated into quite radical reductions in health budget allocations (Figure 4). Some of this resource reduction was absorbed by providing care in low cost settings. For instance, there was quite a large shift towards treatment of patients in daycare settings with much more constrained activity on inpatient care (see Figure 4). Such a move represents an efficiency borne of austerity.

The resource reduction in the public health care setting was also absorbed by lowering unit costs, such as reducing salary levels for all government staff including public health sector employees. Indeed, given that the public health sector employs

over 100,000 people and is the largest employer in the country, then reducing salary levels will have a strong impact on the Health's budget. Furthermore, from 2009 there was a moratorium on hiring new staff, except for some protected professions, and a programme of voluntary redundancies with, for many, an attractive package for retrenchment (Williams and Thomas 2017) [12].

While Human Resources (HR) levels have now more than fully recovered to their pre-austerity levels (HSE 2018) there is a growing bias toward acute care and away from lower cost primary and social care settings. Hence, while there have been some moves towards efficiency a renewed focus on hospitals may actually produce inefficiency. As shown in Figure 4 there are increasing ED attendances and emergency admissions implying that primary and social care services are not being accessed appropriately and that people are not happy to wait on ever longer waiting lists.

The waiting list data for Ireland make grim reading. Ireland has no formal legislated waiting time guarantee, albeit a commitment to treat people within 15-18 months, poor data and little accountability in regards to wait times. It also has some of the longest waiting time for elective care in Europe. Figure 5 highlights that the situation has recently deteriorated in terms of a huge increase in the number of people waiting over 12 months for elective care in a public hospital setting. Waiting lists got worse with austerity, then came down slightly but have rocketed in recent years. This is partly due to capacity constraints and bed closures in public hospitals during the austerity period. It is also a consequence of an ageing population, increased numbers of frail elderly arriving at in ED and subsequent emergency admissions choking public sector elective capacity.

The impact of squeezing the Health's budget as prescribed by the MoU, is shown in Figure 6, where the extent of cost-shifting from the state to households is highlighted. Between 2008 and 2014 an additional €600 million of costs were incurred by households for accessing services and drugs that had previously been borne by government, equating to an additional €130 per person per year in additional OOP. Recent analysis of financial protection estimates that there was a 50% increase in the number of households experiencing catastrophic spending on health from 2009/10 to 2015/16 (Johnston et al 2018 WHO)

Key elements of the austerity programme need to be reversed to remove some of the financial burden on households, undo some of the cuts in services and restore pay and conditions of publicly employed or contracted staff. Table 2 indicates some small shifts towards this post-aus-

terity and the 2019 Budget also continues this trend in relation to reductions in the prescription charge (now free for some sections of the population and generally reduced by €0.5 per item) and the drug reimbursement thresholds (by €10 per family per month) alongside initiating discussions with GPs to reduce some of the austerity measures around their reimbursement. Nevertheless, the legacy of austerity is still very much in evidence in relation to resourcing.

Changes in health policy after the end of the acute crisis

Interestingly even during the bailout era a new government committed itself to a single tier system which guaranteed access based on need, not income. This was the first time such a commitment had ever been made. This was to be delivered through Universal Health Insurance (UHI), with a 'multi-payer' model of compulsory private health insurance, and free GP and practice nurse care[2]. Nevertheless, very little progress was made on this (see Table 2) over the austerity period and in the immediate aftermath. The only real expansion of entitlements was in July 2015 with the introduction of free GP care for children under 6 and the restoration of free GP care for people over 70. Furthermore, in November 2015, long-awaited costings of the proposed UHI model were published which found that it would cost between €666 million and €2 billion more than the current health spending [13]. The Health Minister concluded that this particular model of universalism is not viable stating it was 'not affordable now nor ever' [14].

This failure to progress towards universalism can be explained by the unrelenting pressure on the health system as a result of budget cuts since 2009 [2], as well as the managerial overload of coping with declining budgets while trying to produce reform[15] and the lack of specifics around design and implementation[2]. Nevertheless, the principle of universalism survived even if the model did not. While there was no commitment to introduce universal health insurance in the Minister of Health's priorities in January 2015, universal health care was prioritized.

The general election of February 2016 precipitated the next key change in health policy. No party had an overall majority and it proved impossible for any party to form a working majority coalition. Instead Fine Gael formed a minority Government with the support of independent parliamentarians, supported by a 'Confidence and Supply' agreement whereby Fianna Fail, the second largest party, agreed not to vote against the government on key

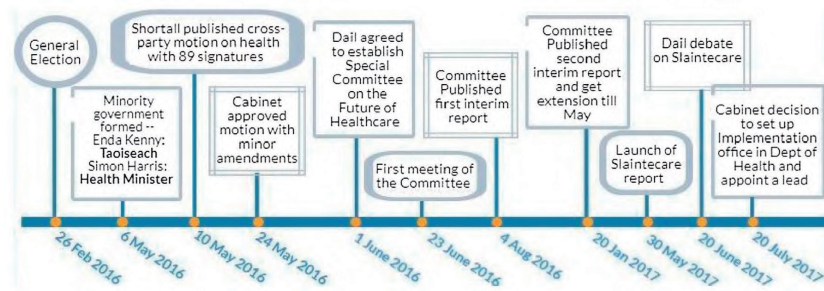


Figure 7
Source: Burke et al 2018

matters[16]. This collaboration between the two largest parties was heralded as ‘new politics’[17]. This unusual context changed the nature of political debate particularly around health care [16].

Indeed an opposition instigated motion to establish an all-party committee with a remit of agreeing a ten-year strategy for health reform, including the delivery of a single-tier universal health service and switching emphasis to primary and social care, gained the support of the majority of TDs. On the 1st of June 2016, a motion to establish an all-party Committee on the Future of Health Care was proposed by the Health’s Minister, which gained all-party support [18]. The Committee for the Future of Health Care was established. It was made up of 14 members from across the political spectrum and included Deputy Roisin Shortall the original author of the motion. The Committee’s work was informed by a public call for submissions, which were analysed thematically. The Committee held 30 public hearings and published two interim reports [19, 20], and received technical support from a team of analysts from Trinity College Dublin. Initially due to report in January 2017, the Committee was given an extension until May 2017 to complete its work [19, 20]

Slaintecare

The vision of the Oireachtas Slaintecare Report is ‘a universal health system accessible to all on the basis of need, free at the point of delivery (or at the lowest possible cost)’[21]. It specified that all residents would be entitled to a full package of services and that this entitlement would be backed by legislation alongside a wait-time guarantee so everyone in Ireland would be entitled to timely and comprehensive care, free or at low cost. It further detailed the phasing and costings required to deliver such care within the ten-year timeframe. The entitlements are to be expanded each year to allow both the necessary funds to be in

place and for the system to adjust to the new capacity which would be needed. Indeed the reports proposed an Integrated Care Approach which concentrates on expanding primary and community care capacity and moving care when appropriate to the lowest level of complexity[16].

The report recommends the creation of a single National Health Fund. This would combine general taxation revenues as well as some earmarked taxes

and levies. Overtime, an increased proportion of the overall health budget would come from public, pooled resources and less from private OOP. This would bring Ireland close to the top performers in the EU in terms of funding healthcare from pooled public resources (moving Ireland from 69% publicly funded to 81%)[16]. The expansion of entitlements are estimated between €385 and € 465 million per year for the first six years of the plan though approximately half of this is switching funding from direct private payments to public taxation. A one-off transition fund, of €3 billion, is also required to make up for historical under-investment in health, and to fund the physical, programme and human resource infrastructure to deliver integrated care to match entitlement expansion. The policy process to develop the cross-party ten-year consensus plan was unusual as it was devised in the political domain and not by the Department of Health. Therefore, a critical aspect of the development of the policy was its formal adoption by the government and its publication of an implementation plan with resource commitments. This was not a foregone conclusion as while there was consensus on the committee not all politicians were as supportive.

More than a year after the publication of Slaintecare, in August 2018 the Government finally published its implementation plan and in September 2018 established an Implementation Unit with a Lead Director. Nevertheless, the implementation plan was weak on some aspects of Slaintecare. In particular, it talked about eligibility to care and not entitlements backed by legislation. Furthermore, it gave no detail on timing, phasing or funding of the expansion of care. It also ignored the need to invest in human resources to facilitate the expanded primary and community care delivery. In some ways the Implementation Plan is a step backward with far less detail about delivery than the original report while retaining a commitment to the overall vision and the principle of integrated and universal care. Furthermore, in the recent October 2018 Budget state-

ment for next year, there are some indications of Sláintecare type policies being promoted though not to the same degree or scale as in the original report. For instance, the Budget has extension of free GP care to 100,000 more people, based on their means, but the Sláintecare target was 500,000 for the same year. Hence there is evidence of a slower pace of implementation than was originally conceived and without some of the elements of system reform required, such as the introduction of a National Health Fund.

Protagonists of a progressive alternative

The Oireachtas Future of Health Care Committee report was unique in the history of Ireland's health policy in terms of creating political consensus on the way forward. This consensus has broadly held outside the committee in terms of the public statements of political parties. Nevertheless, it is obvious that some politicians in the larger centre right parties are less wedded to the principle of universalism. The current Minister for Health, even though from a centre right party does really seem committed to the project. Also virtually all academic and technical analysts in the health sector would be broadly supportive as well as those from international advisory agencies such as the WHO and the European Observatory. Elements of the trade union

movements are also supportive though not the doctors' trade unions. In particular, nurses would support the policy. Civil society would also be keen on Sláintecare[22] although it is recognised that there needs to be more engagement with the population over the issues. Sláintecare is a complex reform programme and people are suspicious of grandiose promises and the health sector is renowned for its intractable problems.

On the other hand there are a variety of vested interests whose reaction ranges from lukewarm to outright hostility. Many GPs have been very suspicious of the extra demands being placed on them and are still hurting after the austerity cuts resulted in reduced payments for service delivery. Consequently, the response of some GPs has been antagonistic. Many consultants would also have lucrative private practice and are horrified at the prospect of their private practice being taken out of public hospitals. The doctors' union, the IMO, is generally suspicious of the programme despite previous interest in universalism, probably because of the legacy of cuts, salary reductions and the perceived risk of change. The Ministry of Finance is also very sceptical about the affordability of Sláintecare and likes to paint the health sector as a black hole for resources. Hence the political picture is quite finely balanced with just enough support to get Sláintecare slowly moving but not enough momentum to guarantee its good health.

References

1. CSO, *Ireland's System of Health Accounts, Annual Results 2015*. 2017, CSO: Dublin.
2. Burke, S., Normand, C, Barry, S, Thomas, S., *From universal health insurance to universal healthcare? The shifting health policy landscape in Ireland since the economic crisis*. Health Policy, 2015.
3. Johnston, B., et al., *Private health expenditure in Ireland: Assessing the affordability and sustainability of private financing of health care*. Social Science and Medicine (submitted), 2018.
4. Mercille, J., *Privatization in the Irish hospital sector since 1980*. Journal of Public Health, 2018.
5. Brophy, S. and D. Lynch, *Government Expenditure on General Practice, in Spending Review 2018*. 2018, Department of Public Expenditure and Reform: Dublin. p. 1-19.
6. Keegan, C., Thomas, S, Normand, C, Portela, C., *Measuring recession severity and its impact on healthcare expenditure*. International Journal of Health Care Finance and Economics, 2012. DOI 10.1007/s10754-012-9121-2.
7. Thomas, S., Burke, S, Barry, S., *The Irish health-care system and austerity: sharing the pain*. The Lancet, 2014. 383 (3 May 2014).
8. Ryan, P., Thomas, S, Normand, C., *Translating Dutch: challenges and opportunities in reforming health financing in Ireland* Irish Journal of Medical Science, 2009. 178 (3): p. 245-248.
9. Thomas, S., Keegan, C, Barry, S, Layte, R, Jowett, M, Normand, C., *A framework for assessing health system resilience in an economic crisis: Ireland as a test case*. BMC Health Services Research, 2013. 13:450 (<http://www.biomedcentral.com/1472-6963/13/450>).
10. Barret, S., *The EU/IMF rescue programme for Ireland: 2010-2013*. Economic Affairs, 2011. 31(2): p. 53-57.
11. Nolan, A., Barry, S, Burke, S, Thomas, S, *Observatory-WHO study on the impact of the financial crisis on health and health systems in Europe. Case Study Ireland*. 2014, WHO European Observatory on Health Systems London.
12. Williams, D. and S. Thomas, *The impact of austerity on the health workforce and the achievement of human resources for health policies in Ireland (2008-2014)*. Human Resources for Health, 2017. 15 (1): p. 62.
13. Wren, M., Connolly, S, Cunningham, N. , *An Examination of the Potential Costs of Universal Health Insurance in Ireland*. 2015, ESRI: Dublin.
14. Department of Health, *Statement by Minister Varadkar following Cabinet discussion on UHI*. 2015, Department of Health: Dublin.
15. Barry, S., et al., *'Is someone going to saw off the plank behind me?' - Healthcare managers priorities, challenges and expectations for service delivery and transformation during economic crisis*. Health Systems, Policy and Research, 2017. 4 (1): p. 1-7.
16. Burke, S., et al., *Sláintecare – A ten-year plan to achieve universal healthcare in Ireland*. Health Policy, 2018.
17. Farrell, D. and S. Suiter, *The Election in Context*, in *How Ireland Voted 2016: the election that nobody won*, M. Gallagher and M. Marsh, Editors. 2016, Palgrave: Cham. p. 277-292.
18. Eireann, I.D., *Committee on the future of healthcare report: motion*. 2016, Houses of the Oireachtas.
19. Houses of the Oireachtas Committee on the Future of Healthcare, *Interim Report on the Future of Healthcare, August 2016*, H.o.t. Oireachtas, Editor. 2016, Houses of the Oireachtas: Dublin.
20. Houses of the Oireachtas Committee on the Future of Healthcare, *Second Interim Report of the Committee on the Future of Healthcare*. 2017, Houses of the Oireachtas: Dublin.
21. Houses of the Oireachtas Committee on the Future of Healthcare, *Houses of the Oireachtas Committee on the Future of Healthcare Sláintecare Report, May 2017*. 2017, Houses of the Oireachtas: Dublin.
22. Darker, C.D., E. Donnelly-Swift, and L. Whiston, *Demographic factors and attitudes that influence the support of the general public for the introduction of universal healthcare in Ireland: A national survey*. Health Policy, 2018. 122 (2): p. 147-156.

Looking back at the Portuguese crisis: what legacy for the Portuguese NHS?

Um olhar sobre a crise portuguesa: qual o legado para o SNS?

Inês Fronteira

Global Health and Tropical Medicine, GHTM, Instituto de Higiene e Medicina Tropical, IHMT, Universidade NOVA de Lisboa, UNL, Lisbon, Portugal

Jorge Simões

Global Health and Tropical Medicine, GHTM, Instituto de Higiene e Medicina Tropical, IHMT, Universidade NOVA de Lisboa, UNL, Lisbon, Portugal

Gonçalo Figueiredo Augusto

Global Health and Tropical Medicine, GHTM, Instituto de Higiene e Medicina Tropical, IHMT, Universidade NOVA de Lisboa, UNL, Lisbon, Portugal



Abstract

In 2011, Portugal signed a financial rescue plan that included a Memorandum of Understanding to reduce the deficit and the public debt, and contain the growth of public spending.

Health sector policies included changes in the financing of the NHS and public sub-systems, pharmaceutical market and pharmacies, prescription and monitoring of prescription, centralization of purchasing and public hiring, primary health care, hospital services and cross-sectional services. Five years have passed and most of the policies are still in force. However, the majority of them are still waiting for an assessment on their ability and suitability to solve structural problems of the NHS.

Despite the crisis, the different players, stakeholders and interests, it is common to all sectors of the Portuguese society that the constitutional right to health ought to be maintained through the NHS, thus guaranteeing universal health coverage. Nevertheless, the provision of care is to continue to be assured by the public, private and social sector and the challenge is to respond to the health needs while guaranteeing the quality and sustainability of the public provision of care, mainly through the NHS.

Key Words:

Health policy, Portugal, financial rescue, quality of healthcare, economic crisis.

Resumo

Em 2011, Portugal assinou um plano de resgate financeiro, que incluía um Memorando de Entendimento, com o objetivo de reduzir o défice e a dívida pública e conter o crescimento da despesa pública. As políticas para o setor da saúde abrangeram o financiamento do SNS e dos subsistemas, o mercado do medicamento e as farmácias, a prescrição e a monitorização da prescrição, a centralização das compras e da contratação pública, os cuidados de saúde primários, os serviços hospitalares e os serviços transversais. Passados cinco anos, a maioria das políticas continua vigente. Contudo, a maior parte aguarda uma avaliação da sua adequação e capacidade para resolver os problemas estruturais do SNS.

Apesar da crise, dos diferentes interesses e atores, é consensual, em todos os sectores da sociedade portuguesa, que o direito constitucional à saúde deve continuar a ser efetivado através do SNS, garantindo, desta forma, a cobertura universal de cuidados. Contudo, a prestação de cuidados deve continuar a ser garantida pelos sectores público, privado e social sendo que o desafio será responder às necessidades de saúde mantendo a qualidade e sustentabilidade da prestação pública de cuidados essencialmente através do SNS.

Palavras Chave:

Política de saúde, Portugal, resgate financeiro, qualidade de cuidados, crise económica.

Introduction

In March, May and September 2010, the Portuguese Government implemented several Stability and Growth Programmes to deal with mounting financial constraints resulting from the financial crisis which began in 2008 [1].

In March 2011, after the inability to approve another package of measures and following a political crisis, the Troika (composed by the International Monetary Fund, the European Commission and the European Central Bank) was called to intervene. This led to an economic adjustment programme with an associated Memorandum of Understanding (MoU) that deeply influenced all aspects of the Portuguese economy and the lives of Portuguese citizens, even though, at the time, there was already some evidences that austerity measures might deeper hamper the economy and influence the health of the Portuguese [2].

The policies on the MoU somewhat continued the line initiated by the previous Stability and Growth Programmes and aimed at reducing the deficit, the public debt/ GDP ratio, containing the growth of public spending and increasing competitiveness of the Portuguese economy through neutral budgetary tax revision, for a predicted time horizon of 3 years [3].

During 2011 and 2013, the deterioration of the macroeconomic indicators was worse than expected [1]. There was an aggravation of the living conditions in Portugal: the unemployment rate increased (in 2012 it picked at 16%), GDP real growth and family income decreased, there was a reduction of around 22% in household expenditure in healthcare and the risk of poverty of Portuguese children increased by 16.5% between 2010 and 2012 [1,4].

The rescue plan included actions on budgetary policy, both in terms of public spending and revenues, regulation and supervision of the financial sector, labour market and education, housing market, framework conditions (e.g., judicial system, public contracts, and public procurement) and structural budgetary measures. These last ones included a set 34 specific measures for the health sector (points 3.50 to 3.83 of the MoU) [3].

In general terms, the MoU established that there was to be a reduction in the provision of public services. Furthermore, public services were to be regularly assessed in terms of value for money, and expenditure should be reduced (including the health sector).

In fact, the country was able reduce the public deficit to -0.5% of GDP in 2017 (in contrast with -9.8% of GDP in 2010) and the GDP grew 2.8% in 2017 (in contrast with -4.0% during the peak of the economic recession in 2012). However, the public debt is still very high (124.8% of GDP in June 2018), the country remains under tight surveillance from international institutions [5] and impacts of the economic crisis are expected to persist for a long period.

The Portuguese health system

The Portuguese health system is characterized by three co-existing systems: the universal National Health Service (NHS); the health subsystems, health insurance schemes for which membership is based on professional/occupational group or company; and private voluntary health insurance [6]. It draws on a mix of public and private financing: the NHS is predominantly financed through general taxation, the health subsystems are financed mainly through employee and employer contributions and private voluntary health insurance has a supplementary role.

Between 2010 and 2017, there was a decrease in the total health expenditure from 10.4% to 9.0% of the GDP. Also in that period, the public health expenditure remains the same (around 67%) which represents an absolute decrease in available funds. In 2010, 38.2% of total expenditure was with hospitals, 32.9% in ambulatory care and 19.5% in pharmacies. In 2017, the expenditure with hospitals had increased (42.2%), expenditure with ambulatory care and pharmacies had decreased (to 27.3% and 15.0%, respectively) [7,8].

Policy measures for the health sector in the MoU

The policy measures for the health sector in the MoU can be roughly divided in indirect and direct. The first ones refer to general public administration measures, the second ones to those specifically targeting the health sector.

Indirect policy measures intended to increase efficiency, reduce costs, reduce expenditure with personnel and reduce public expenditure in health (Table 1).

**Table 1 - Indirect policy measures for the health sector in the MoU (3)**

Policy		Scope
Increase efficiency in public administration through elimination of redundancies, simplification of procedures and reorganization of services	Reduce the number of services while maintaining quality in the provision of public services	efficiency
	Promote shared services	
	Periodically assess the efficiency and efficacy of public services	
	Promote the mobility of workers	
	Review wages and fringe benefits policies	
	Freeze wages in the public sector	
	Limit hiring in the public sector	
Limit promotions in the public sector		
Introduction of a plafond for families' health expenditure deduction in taxes, including voluntary health insurances		Transfer of financial responsibility from State to the individual

As agreed in the MoU, and for all sectors of public administration, including the health sector, promotions and hiring were limited, wages frozen and mobility of workers promoted. This had a profound effect on workers of the NHS [9]. One of the most controversial measures taken during this period was the increase in the number of weekly working hours from 35 to 40 without any effect in salaries. From the public employers' point of view, this meant an "additional worker" per each seven workers, without any additional costs, which allowed services to continue to provide care at the same level as before the memorandum, despite not being able to hire more workers.

Between 2010 and 2015, the salary variation in the NHS was -9% and the variation of the number of professionals -1%. In 2016, there was a growth in the personnel of the NHS and in the expenses with remunerations (1.98% and 6.44% variation, between 2010 and 2016, respectively) [10].

However, these measures had some deleterious effects that prevail even after their revocation, in 2016. Lack of promotions, less hiring, and the increase in the number of weekly working hours of health workers might have led to less motivated and satisfied workers, increase in turnover rates, early retirements and migration [4,11–14].

In 2011, the current expenditure with health care was around 16.8 billion euros. In 2013, a decrease of 8% was observed in relation to 2011, corresponding to 15.5 billion euros. In 2016, the expenditure raised 8% compared to 2013, to 16.8 billion [7].

Another important measure was the reduction of fiscal benefits for health. In 2012, there was a reduction of the total deductible amount to a maximum

of 10% of total personal private expenditure. In 2018, the maximum ceiling increased to 15% [28]. This fiscal benefit is highly regressive with only those with higher income being able to spend in private health care, mainly with medicines and private consultations.

The **specific measures for the health sector** can be categorized in 8 areas: financing, pharmaceuticals, prescription, NHS

expenditure with private providers, primary health care (PHC), hospital services and cross-sectional services (Table 2). Some of these policy measures were, in fact, the continuance of others initiated either during the Stability and Growth Programmes or even before.

Financing

The specific measures for the health sector included financing of the NHS and public sub-systems. From 2005 to 2010, the NHS budget increased steadily, both in absolute value and in proportion of GDP. However, during the Economic and Financial Adjustment Programme, the NHS budget reverted to the level recorded 8 years earlier (from €7.5 billion in 2012 to €7.6 billion in 2005). In 2015 and 2016, the budgetary transfers to the NHS were around €8.6 billion in both years and in 2018, 9.3 billion euros [15]. There was also an increase in user charges and its indexation to inflation and exemptions were reviewed during the crisis period. There was a shift from exemptions based on specific groups (e.g., chronic patients) to exemptions based on the economic condition of individuals. In 2010, user charges represented 0.74% of the NHS total revenue and in 2012 they accounted for 1.7% of the NHS total revenue [6]. User charges were reviewed in 2016 and prices reduced. In that year, user charges accounted for 1.9% of the NHS total revenue [16].

The measures for user charges, among others, meant to shape health services utilization, deriving users from hospitals to primary health care, where user charges were less expensive and always bellow those

Table 2 - Analysis of the direct policy measures for the health sector in the MoU (3)

Policy		Type/ Scope
Increase efficiency and efficacy of the national health system, through a more rational use of services and cost containment	Review and increase users fees trough revision of users fee exemption categories	Financing
	Increase users fees for specific services ensuring that user charges in primary health care are lower than those charged for urgent episodes in hospitals and specialist medical appointments	
	Index user charges of the NHS to inflation	
	Gradually reduce global budgetary cost of health subsystems until reach their self-sufficiency, through reduction of the contributions paid by the employer and adjustment of health benefits.	
	Elaborate a strategic plan for the health sector	
Produce additional savings in the operational costs of the hospitals	Definition the maximum price of the generic medicine as 60% of the price of the brand medicine	Definition of the prices and co-payments of medicines
	Review the system of prices of reference according to the international prices, using as countries of reference the three with the lowest prices or those with comparable GDP per capita.	
	Mandatory electronic prescription for medicines and medical exams covered by public reimbursement systems in the public and private sector	Prescription and monitoring of prescription
	Improve the monitoring system for the prescription of medicines and medical exams and evaluate clinicians for volume and value of medicines and medical exams prescribed	
	Encourage medical doctors to prescribe generic medicines and less expensive brand medicines	
	Establish prescription rules for medicines and medical exams (prescription guidelines for medical doctors)	
	Reduce administrative and legal barriers to introduction of generic medicines	Pharmaceutical sector
	Implementation of legislation to regulate the activity of the pharmacies	
	Change the calculus of margin of return to fix a regressive commercial margin and a fixed amount for distribution companies and pharmacies	
Introduction of 3% reimbursement monthly charged by the State to the pharmacies and distributors over the margin of profit		
Produce additional savings in the operational costs of the hospitals	Establish the legal and administrative framework for a centralized system for purchasing medical equipment and medicines in the NHS to reduce costs and fight waste	Centralization of purchases and provisioning
	Increase competition between private providers of medical exams	
	Implement the centralized provisioning of medical products	
	Introduce a biannual price revision for private providers of medical exams	
	Define a payment scheme for settling health services debts and introduce monitoring mechanisms to avoid new debts	Hospital services
	Present a detailed description of the measures needed to reduce by 200 million euros the operational costs of hospitals (including concentration and rationalization in public hospitals and primary care centres)	
	Continue the publication of clinical guidelines and create an audit system for its implementation	
	Improve the selection criteria for managers and directors in hospitals	
	Create a system for hospital benchmarking based on a wide set of indicators	
	Continue to reorganize and rationalize the network of hospitals trough specialization and concentration of hospital services, emergency departments and joint management and functioning of hospitals	
Implement a more rigorous system for monitoring of working hours and activities of health professionals in the hospitals		
Reduce the utilization of speciality medical appointments and hospital emergency departments and improve coordination between levels of care	Increase the number of Family Health Units (FHU)	primary health care
	Create a mechanism to guarantee the presence of family physicians in underserved areas, increasing equity in the distribution across the country	
	Transfer some of the ambulatory services in the hospitals to family health units	
	Annually review the inventory of all active medical doctors per speciality, age, region, primary care centre and hospital in the private and public sector to forecast current and future needs in medical doctors	
	Prepare annual reports for deployment of qualified and support human resources in the NHS	
	Introduce rules for mobility of health professionals (including doctors) between and within Health Regions	
	Implement an electronic medical records system	
	Reduce costs related with the transportation of patients	

in hospitals. At the time, there were controversies since these measures could affect access to health services, especially among the poorer. However, studies failed to demonstrate a clear link between higher user charges and inequities in the access to health care [17], which might result from around 60% of the Portuguese population being exempt from these fees [6]. Actually, there was a decrease in the number of PHC consultations but only among those exempt from user charges [17]. The possible explanations for this are very complex since social disadvantage in disease (e.g. diabetes or COPD) tend to aggregate. So, those exempted from user charges used less the PHC services probably because they were facing other problems that influenced their health and ability to access services. Exemption of user charges for pharmaceuticals are less than those for health services [6] which might partially explain why some studies report failure to purchase medicines due to financial hardship [18].



Pharmaceuticals

In 2011, a set of policies regarding the pharmaceutical sector were implemented, which included new rules for price setting, reduction in the prices of pharmaceuticals and increasing use of generic drugs in order to produce additional savings by reducing the public expenditure with medicines. In 2011, the public expenditure with medicines was 1.35% of the GDP, 1.30% of GDP in 2012, and 1.25% of the GDP in 2013 [6]. In 2016, it was 1.23 % of the GDP [19].

The introduction of generic drugs led to an increase in the pharmaceutical market. In 2010 there was 3,073 generic drugs in the Portuguese market and in 2013, 4103, which roughly represented 2/3 of the Portuguese drug market [20]. In 2015, the share of generic drugs was approximately 47%. In March 2016, the government and the pharmaceutical industry signed an agreement concerning public spending pharmaceuticals in the NHS, benchmarking public expenditure on pharmaceuticals of €2,000 million with a time horizon until 2018 [6].

Prescription

The MoU foresaw the implementation of mandatory electronic prescription for medicines and medical exams covered by public reimbursement systems in the public and private sector. Additionally a set of guidelines concerning prescription were also to be developed [21,22].

Despite initial resistance, mainly by older medical doctors, electronic prescription came into law in 2012 [23]. Also in 2012, it became mandatory for all medical doctors to prescribe using international common denomination (ICD) and for pharmacies to supply patients with the ICD drug at the lowest price. This measure further contributed to the increase in the volume of prescription and use of generic drugs.

Conversely, the electronic prescription of medical exams is yet to be achieved, despite some pilot projects in place. One of the expected impacts of the MoU was to reduce by at least 10% in 2011 and another 10% in 2012 the global expenditure of the NHS with private providers of medical exams. Between 2011 and 2012 there was a reduction of roughly 10% (from 587 to 534 million euros, respectively) and in 2013 this reduction was only of about 5% (to 507 million euros) [7].

Hospital services

The MoU foresaw, for hospital services three major policies aiming at regularizing the debt to the hospital suppliers, reducing operational costs of the hospitals and reorganizing and rationalizing the network of hospitals.

Even before the MoU, debt to suppliers was a problem and several programs were put into place to try to solve the issue [24]. During and after the MoU these programs continued with several “injections” of money in the system to regularize the debt. None was actually effective. In January 2014, the total amount due by hospitals to suppliers was 1006 million euros. In July 2018 it was 1254 million [25]. Alongside these programs, a series of mechanisms were implemented to control a growing debt. For instance, purchase of equipment was limited: with a total cost above 100 000 euros it became necessary to obtain previous authorization from the Ministry of Health [6].

To increase efficiency, there was a reduction in the number of services and sharing of services within the NHS was promoted. Actually, before the crisis, SPMS (Shared Services – Ministry of Health) had been created to provide shared services in purchasing, logistics, financial services, human resources, information and communication systems, and technologies to centralize, optimize and rationalize the acquisition of goods and services in the National Health Service [26–30]. Nevertheless, to our knowledge, the effectiveness of this measure was not assessed.

The reorganization of the network of hospitals started before the period of the MoU with the clustering of several hospitals into Hospital Centres. However, no evidence exists on the effectiveness of this measure [31]. In 2016, after the introduction of freedom of choice for hospital outpatient care [32], a new hospital referencing system was created. The intention was, among others, to promote, implement and streamline the internal organization and hospital management model to facilitate access and better plan hospital human resources within the NHS.

A study on the impact of the economic crisis in hospital care use showed that the crisis was associated with more hospital episodes (i.e., non-elective surgeries, complicated pregnancies and myocardial infarctions). However the length of stay decreased during the crisis [33].

Intra-hospital mortality is considered an indicator of the quality of acute hospital care [34,35] and waiting

times a measure of the access to specialized care. During the crisis period there were important variations in these two indicators.

Overall, in Portugal, 30-day mortality after hospital admission for Acute Myocardial Infarction (AMI), haemorrhagic stroke and ischemic stroke have been steadily decreasing since the beginning of the 2000's, with slight variations between the years. In 2008, the first year of the economic crisis, the age-sex standardized mortality rate per 100 patients for AMI was 15.6, for ischemic stroke 13.8 and for haemorrhagic stroke 25.3. During

the crisis period, all mortality rates continued to decrease but at a slower pace than before. However, in 2013, the last year of validity of the MoU, there was an increase in all rates under analysis, when compared to 2010. In the case of 30-day mortality after hospital admission due to AMI, the rate was well above the 2008 values (26.9 per 100 patients) (FIG 1).

In OECD European countries, the same downward trend has been observed, for all three indicators, since 2008. Since this year and up until now, Portugal is among the countries with the highest AMI, haemorrhagic stroke, and ischaemic stroke 30-day mortality after hospital admission [36].

Waiting times for elective surgeries (i.e., cataracts, coronary bypass, prostatectomy, hysterectomy, hip replacement and knee replacement) have also been decreasing since 2006, in Portugal. Between 2006 and 2010, for all types of surgery under analysis (FIG 2), there was a reduction in mean waiting days (-110 days for hysterectomy, -119 days for hip replacement, -131 days for knee replacement, -148 days for cataracts, -164 days for coronary bypass and -180 for prostatectomy).

However, between 2010 and 2013 there was a very small increase in waiting times for cataract surgery (+17 days), coronary bypass (+4 days), and hip

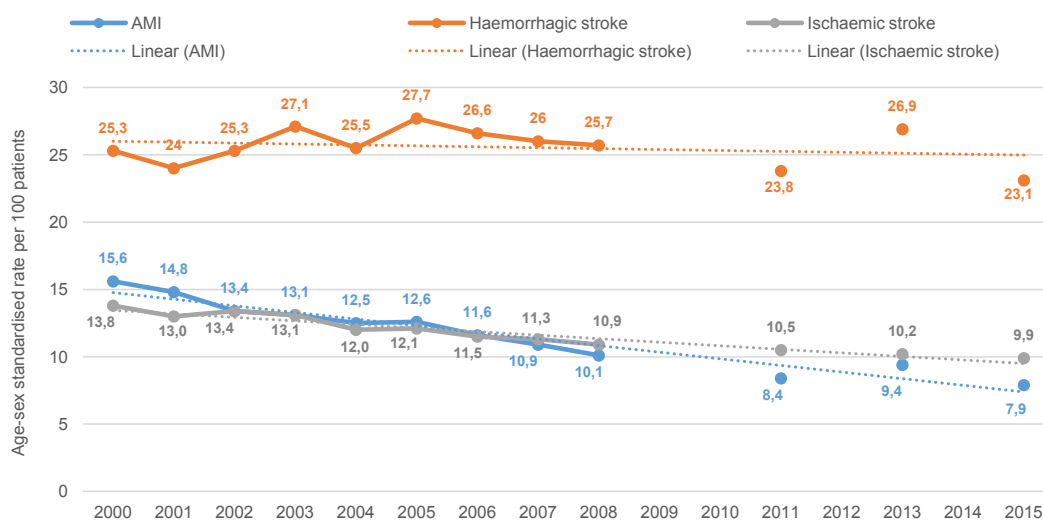


Figure 1 - 30-day mortality after hospital admission for AMI, haemorrhagic and ischemic stroke, Portugal, 2000-2015.

Source: OECD, 2018

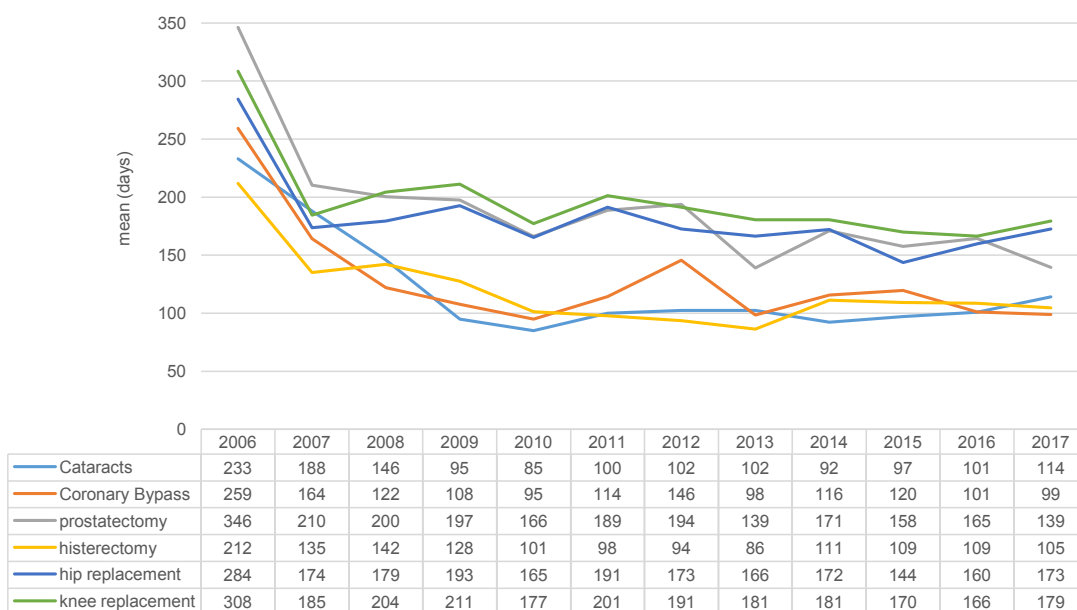


Figure 2 - Waiting times for elective surgeries, Portugal, 2006-2017.

Source: OECD, 2018



and knee replacement surgeries (+1 and +3 days, respectively). All other types of surgeries continued to have a decrease in mean waiting days but much slower. In 2017, all mean days of waiting for all elective surgery, except prostatectomy, were slightly above those registered in 2010. A patient had to wait almost one month more to undergo cataract surgery and patients for prostatectomy could expect to have their surgery one month before that they would have it in 2010.

When compared to other countries, in 2008, Portugal was among those with the highest waiting times for elective surgery for all types considered. After the crisis, the situation remained the same.

Primary health care

Primary health care was elected as a priority in the MoU, although the measures were not too ambitious [1]. There was to be a reinforcement of PHC services with more and better distribution of family doctors throughout the country in order to reduce inequities. Between 2010 and 2012, the number of patients with a family doctor increased from 82.1% to 85.1%, respectively. In 2017 the percentage was 92.7% [37]. However, it is unclear if this increase in coverage resulted in a reduction in mal-distribution.

Additionally, the number of family health units (FHU) created in 2006, increased from 277 in 2010 to 357 in 2012 (18% increase). In 2017 there were 495 FHU

and in June 2018, 505 [38]. FHU are small teams of three to eight GPs, the same number of family nurses and a variable number of administrative professionals covering a population between 4000 and 14 000 individuals, that have functional and technical autonomy and a payment system sensitive to per-

formance that rewards productivity, accessibility and quality [6].

Avoidable hospital admissions for conditions amenable to PHC are considered a quality indicator for PHC. For chronic conditions like asthma, COPD, diabetes, hypertension or congestive heart failure, whenever there is a hospital admission due to the disease, it is considered a failure in the follow-up of the patient. Patients who are well controlled do not need to use hospital services. The follow-up of these patients is done in PHC units and admission to the hospital can have several reasons among which failure to access services or to provide good quality healthcare services.

In Portugal, since 2007, avoidable hospital admissions for diabetes, chronic obstructive pulmonary disease, hypertension and asthma have been decreasing (FIG. 3). Even during the crisis, the downward trend continued and in 2015, the country was among the 25% countries with the lowest incidence of hospital admissions due to the above-mentioned causes (36). Nonetheless, between 2011 and 2013 the number of hospital admissions due to congestive heart failure (CHF) reach 194.8 per 100 000 population, a number above that of 2007. Yet, even during that period, the country was below the median incidence rate when compared to other countries and in 2015 it was again among the 25% countries with lower hospital admissions for CHF [36].

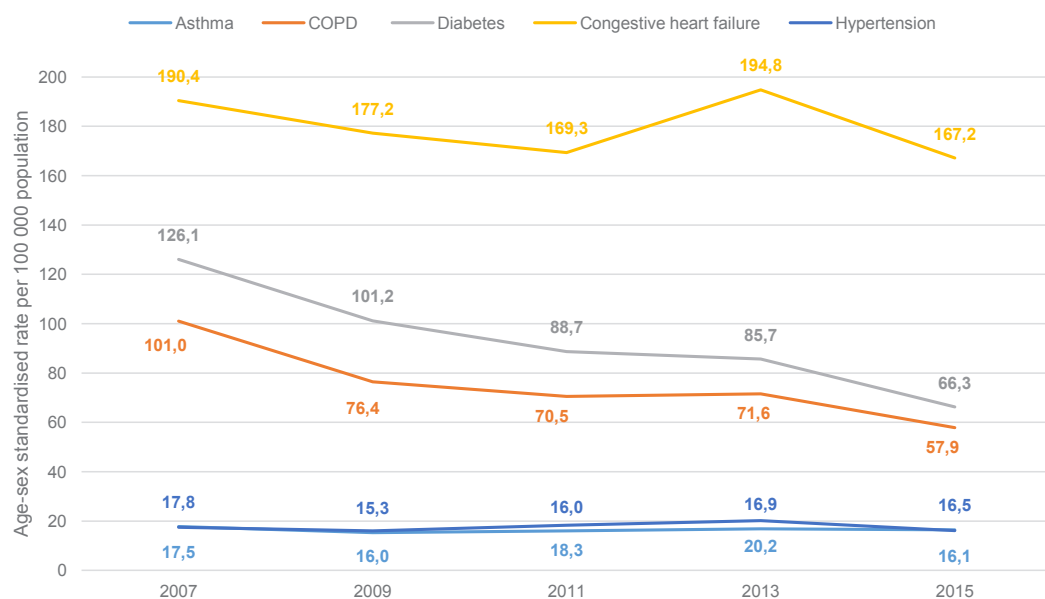


Figure 3 - Avoidable hospital admissions for selected causes (15 years and over), Portugal, 2007-2015.

Source: OECD, 2018

The legacy of the crisis

The implementation of austerity measures to deal with growing financial constraints has been controversial and largely based on political and philosophical beliefs. In 2011, Portugal asked for the intervention of the Troika after failing to approve the fourth Stability and Growth program with a resulting political crisis.

The financial rescue plan included a MoU that aimed at reducing the deficit and the public debt, and contain the growth of public spending. At the time, the macroeconomic indicators worsen with increasing unemployment rates, loss of wealth of family and serious impacts in the health of Portuguese (e.g., rise in suicides rates) [4,39]. However, the full impact of the financial hardship faced by the country is yet to be entirely understood and quantified and some of its effects might only become evident in the coming years.

Overall, the impact of the rescue plan and of the MoU in the health sector resulted from policies and measures specifically for the sector and broader, general public sector measures.

Health sector policies included changes in the financing of the NHS and public sub-systems, pharmaceutical market and pharmacies, prescription and monitoring of prescription, centralization of purchasing and public hiring, primary health care, hospital services and cross-sectional services.

Most of the measures had already started before the MoU and there was a general agreement in society and among political parties that they were needed, which somehow led to a “greening” of the political arena for further implement the policies. Policies concerning prescription are a good example. The volume of prescription in the NHS had been identified has a problem to tackle. During the crisis and as agreed upon in the MoU a series of measures were implemented to reduce the volume of prescription. These measures were generally accepted by medical doctors, patients and other stakeholders and gains were obtained.

The rational use of pharmaceuticals and a more rational prescription became evident with the implementation of the electronic prescription, the use of ICD and promotion of use of generic drugs but further investment is needed to extend electronic prescription to medical exams and develop guidelines to promote a more efficient use of medical exams.

Five years have passed over the MoU. Most of the policies are still in force while others were revoked. In both cases, an assessment of their impact and efficiency is practically inexistent. The vast majority of the 34 measures concerning the health sector are still waiting an effectiveness and efficiency assessment on their ability and suitability to solve structural problems of the NHS.

For instance, despite all efforts to control the debt to suppliers, even after several payment programs have been developed by quite a few Governments, and by the MoU, this problem still prevails and no evidence exists on the effectiveness of implementing payment schemes to prevent a fire instead of ending it. Meanwhile the NHS budget has increased again. However, this increase is mostly due to revocation of salary cuts than to an increase in investment in the NHS. The lack of investment in the NHS might hampered the ability of the system to continue to address and respond to health needs of the Portuguese in an effective and timely manner and with high quality standards. The increase in the waiting times observed during the crisis is a clear example of this. During the crisis, direct and indirect reduction in the level of health care workers’ salaries, budgetary cuts and aggravation of working conditions for health professionals which might have led to a poorer performance of the system.

During the crisis, 30-day mortality indicators as well as waiting times for elective surgery suffered an aggravation and some of them were performing worse after the crisis. The changes that occurred during the crisis period in Portugal could have resulted not only from the reduction in NHS budget and in hospital funding but also from indirect effects of the crisis (e.g., unemployment, larger inequities, and impoverishment) [40]. A study conducted in Portugal showed that during the crisis self-reported unmet medical need grew between 2010 and 2012, being financial barriers, waiting times and inability to take time off work or family responsibilities the more frequent explanations [40].

In 2017, in Portugal, the waiting times for all elective surgery, except prostatectomy, were slightly above those registered in 2010. Between 2010 and 2015, there was a decrease in the number of health professionals in the Portuguese NHS, a decrease in salaries expenditure in the NHS, a reduction in the NHS budget and a decrease in the NHS expenditure with public hospitals [7]. The reduced investment in



hospitals in terms of either financing or allocation of human resources might explain higher values for 30-day mortality for the selected conditions, as well as for mean waiting times for elective surgery. In May 2016, a new law was put into force that facilitates the referral of NHS users from primary healthcare units to outpatient consultations in NHS hospitals outside of the referral area. However, the percentage of outpatient referrals from NHS primary health care units made to an NHS hospital out of the referral area was still low in 2017 (approximately 11%) [32].

Conversely, during the crisis period, the private sector grew, filling the gaps left by the NHS, sometimes competing with it, contracting the provision of care with the subsystems, as it is the example of elective surgeries, and “using” demotivated health professionals that abandoned the public sector. One of the major winners, if there is to be a winner, of the economic crisis was the private for-profit sector.

One of the main policies of the MoU concerning the health sector was to strengthen the provision of PHC, deriving patients from hospitals to PHC centres. The incentives for extending the number of FHU (18% increase between 2010 and 2012) and the increase of coverage of family doctors might have contributed to the good performance of the country in terms of quality indicators for PHC [41]. Nevertheless, inequities in access to PHC might subsist, especially at regional level and should be carefully analysed in further studies.

What does the future holds for the health sector?

Since its inception, the Portuguese Health system has known three important institutional players: the State, the social sector and the private sector. These players have different responsibilities, typologies and interventions.

Despite the crisis, the different players, stakeholders and interests, it is common to all sectors of the Portuguese society that the constitutional right to health ought to be maintain through the NHS, thus guaranteeing universal health coverage, tendentiously free at the delivery point and funded through general

taxation. Nevertheless, the provision of care is to continue to be assured by the public, private and social sector and the challenge is to respond the health needs guaranteeing the quality and sustainability of the public provision of care, mainly through the NHS. During the past 40 years, the relationship of the NHS with the private and social sectors has gone through several changes related with the political, economic and social context that have affected the provision of care. During the crisis, this was particularly evident with the private sector contracting with the NHS in areas where public provision was not possible or desirable.

Some characteristics of the Portuguese health system have been determinant for the growth of private delivery of care and, in some cases, for the weakening of the public response to health needs. Relevant examples are the mobility of health professionals between public and private sectors or contracts celebrated between the NHS and private providers. The impaired access and coverage of several public services, the modernization of the inpatient services in private hospitals and a new pattern of private health care delivery (shift from small doctor cabinets to aggregation in larger clinics or hospitals), the growing role of some health subsystems as funding agents of the private sector, the development of the public private partnerships as well as fiscal deduction for out-of-pocket expenditure in health have also contributed to the growth of the private sector.

In recent years, including the period of economic crisis, the social sector also saw its role in the health system reinforced, namely with the creation of the national network for integrated care.

The regulatory role of the State concerning health care delivery, pharmaceuticals and medical devices, and professions has evolved in order to respond to a progressive representativeness of the private sector. Despite the existence of good examples of the relationship between the three sectors, in a near future the role of the public sector in the provision of care is ought to be discussed as well as the solution for problems for which no sustainable and long-term solution has been found. The proposals presented in the new Basic Law on Health are a good example of this.

References

1. Simões J, Carneiro C. A crise e a saúde em Portugal. In: Paz Ferreira E, editor. *A austeridade cura? A austeridade mata?* Lisboa: AAFDL; 2013.
2. McKee M, Karanikolos M, Belcher P, Stuckler D. Austerity: a failed experiment on the people of Europe. *Clin Med Lond Engl*. 2012 Aug;12(4):346–50.
3. Memorandum of Understanding (MoU). Portugal - Memorandum of understanding on specific economic policy conditionality. [Internet]. Government of Portugal. European Central Bank, European Commission, International Monetary Fund; 2011. Available from: http://ec.europa.eu/economy_finance/eu_borrower/mou/2011-05-18-mou-portugal_en.pdf
4. Sakellariades C, Castelo-Branco L, Barbosa P, Azevedo H. The impact of the financial crisis on the health system and health in Portugal. :56.
5. Portal do Instituto Nacional de Estatística [Internet]. [cited 2018 Sep 21]. Available from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=316103298&DESTAQUESsmodo=2
6. de Almeida Simoes J, Figueiredo Augusto G, Fronteira I, Hernandez-Quevedo C. Portugal: Health System Review. *Health Syst Transit*. 2017 Mar;19(2):1–18+.
7. INE. Conta Satélite da Saúde, 2015-2017 [Internet]. A despesa corrente em saúde aumentou 3,0% - 2017. 2018 [cited 2018 Sep 5]. Available from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=314608243&DESTAQUESsmodo=2
8. Portal do Instituto Nacional de Estatística [Internet]. [cited 2018 Oct 19]. Available from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=133582105&DESTAQUESsmodo=2
9. Correia T, Dussault G, Pontes C. The impact of the financial crisis on human resources for health policies in three southern-Europe countries. *Health Policy Amst Neth*. 2015 Dec;119(12):1600–5.
10. Observatório Português dos Sistemas de Saúde. Meio caminho andado: relatório Primavera 2018 [Internet]. Lisboa; 2018. Available from: <http://opss.pt/wp-content/uploads/2018/06/relatorio-primavera-2018.pdf>
11. Russo G, Rego I, Perelman J, Barros PP. A tale of loss of privilege, resilience and change: the impact of the economic crisis on physicians and medical services in Portugal. *Health Policy Amst Neth*. 2016 Sep;120(9):1079–86.
12. Russo G, Pires CA, Perelman J, Gonçalves L, Barros PP. Exploring public sector physicians' resilience, reactions and coping strategies in times of economic crisis; findings from a survey in Portugal's capital city area. *BMC Health Serv Res*. 2017 15;17(1):207.
13. Ramos P, Alves H. Migration intentions among Portuguese junior doctors: Results from a survey. *Health Policy Amst Neth*. 2017 Dec;121(12):1208–14.
14. Rego I, Russo G, Gonçalves L, Perelman J, Pita Barros P. [Economic Crisis and Portuguese National Health Service Physicians: Findings from a Descriptive Study of Their Perceptions and Reactions from Health Care Units in the Greater Lisbon Area]. *Acta Med Port*. 2017 Apr 28;30(4):263–72.
15. Conta do Serviço Nacional de Saúde [Internet]. [cited 2018 Sep 20]. Available from: <https://transparencia.sns.gov.pt/explore/dataset/conta-do-servico-nacional-de-saude/>
16. Síntese da Execução Orçamental Mensal [Internet]. [cited 2018 Oct 24]. Available from: <https://www.dgo.pt/execucaoorcamental/Paginas/Sintese-da-Execucao-Orcamental-Mensal.aspx?Ano=2017&Mes=Dezembro>
17. ERS J. O novo regime jurídico das taxas moderadoras [Internet]. ERS; 2013 [cited 2018 Sep 7] p. 149. Available from: https://www.ers.pt/uploads/writer_file/document/892/Estudo_Taxas_Moderadoras.pdf
18. da Costa FA, Pedro AR, Teixeira I, Bragança F, da Silva JA, Cabrita J. Primary non-adherence in Portugal: findings and implications. *Int J Clin Pharm*. 2015 Aug;37(4):626–35.
19. Simões J, Augusto GF, Fronteira I. The Portuguese Health System In the Aftermath of Austerity. *EuroHealth*. 2017;23(4):30–3.
20. Pereira MC, Vilares H. A review of the pharmaceutical market in Portugal. *Econ Bull*. 2014;14.
21. INFARMED. Normas relativas à prescrição de medicamentos e produtos de saúde [Internet]. 2012 [cited 2018 Oct 22]. Available from: http://www.infarmed.pt/documents/15786/17838/Normas_Prescri%C3%A7%C3%A3o/bcd0b378-3b00-4ee0-9104-28d0db0b7872
22. Prescrição e dispensa [Internet]. [cited 2018 Oct 22]. Available from: <http://www.infarmed.pt/web/infarmed/profissionais-de-saude/prescricao-e-dispensa>
23. Decreto-Lei 11/2012, 2012-01-20 [Internet]. Diário da República Eletrónico. [cited 2018 Oct 22]. Available from: <https://dre.pt>
24. Resolução do Conselho de Ministros 191-A/2008, 2008-11-27 [Internet]. Diário da República Eletrónico. [cited 2018 Oct 22]. Available from: <https://dre.pt>
25. Dívida Total, Vencida e Pagamentos em Atraso [Internet]. [cited 2018 Oct 22]. Available from: <https://transparencia.sns.gov.pt>
26. Decreto-Lei 19/2010, 2010-03-22 [Internet]. Diário da República Eletrónico. [cited 2018 Sep 6]. Available from: <https://dre.pt>
27. Decreto-Lei 108/2011, 2011-11-17 [Internet]. Diário da República Eletrónico. [cited 2018 Sep 6]. Available from: <https://dre.pt>
28. Decreto-Lei 209/2015, 2015-09-25 [Internet]. Diário da República Eletrónico. [cited 2018 Sep 6]. Available from: <https://dre.pt>
29. Decreto-Lei 32/2016, 2016-06-28 [Internet]. Diário da República Eletrónico. [cited 2018 Sep 6]. Available from: <https://dre.pt>
30. Decreto-Lei 69/2017, 2017-06-16 [Internet]. Diário da República Eletrónico. [cited 2018 Sep 6]. Available from: <https://dre.pt>
31. Entidade Reguladora da Saúde. Estudo de avaliação dos Centros Hospitalares. 2012 Feb;162.
32. Simões J, Augusto GF, Fronteira I. Introduction of freedom of choice for hospital outpatient care in Portugal: Implications and results of the 2016 reform. *Health Policy [Internet]*. [cited 2017 Oct 8]; Available from: <http://dx.doi.org/10.1016/j.healthpol.2017.09.010>
33. Perelman J, Felix S, Santana R. The Great Recession in Portugal: impact on hospital care use. *Health Policy Amst Neth*. 2015 Mar;119(3):307–15.
34. Kelly E, Hurst J. Health Care Quality Indicators Project: Conceptual Framework Paper. OECD Health Work Pap. 2006;(23).
35. OECD. Definitions for Health Care Quality Indicators 2016 - 2017 HCQI Data Collection [Internet]. nd [cited 2018 Sep 16]. Available from: <http://www.oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf>
36. OECD Statistics [Internet]. [cited 2018 Oct 22]. Available from: <https://stats.oecd.org/>
37. República portuguesa, Serviço Nacional de Saúde. Relatório Anual: acesso a cuidados de saúde nos estabelecimentos do SNS e entidades convencionadas [Internet]. Serviço Nacional de Saúde; 2018 [cited 2018 Sep 7]. Available from: https://www.sns.gov.pt/wp-content/uploads/2018/06/Relatorio_Acesso_SNS_2017_v_final_.pdf
38. Unidades de Saúde Familiar [Internet]. [cited 2018 Sep 20]. Available from: <https://transparencia.sns.gov.pt/explore/dataset/evolucao-do-numero-de-unidades-de-saude-familiar/map/>
39. Santana P, Costa C, Cardoso G, Loureiro A, Ferrão J. Suicide in Portugal: Spatial determinants in a context of economic crisis. *Health Place*. 2015 Sep 1;35:85–94.
40. Legido-Quigley H, Karanikolos M, Hernandez-Plaza S, de Freitas C, Bernardo L, Padilla B, et al. Effects of the financial crisis and Troika austerity measures on health and health care access in Portugal. *Health Policy Amst Neth*. 2016 Jul;120(7):833–9.
41. Entidade Reguladora da Saúde. Estudo sobre as unidades de saúde familiar e as unidades de cuidados de saúde personalizados. https://www.ers.pt/uploads/writer_file/document/1793/ERS_-_Estudo_USF_e_UCSP_-_final_v2_.pdf. 2016 Feb;123.

Italy's health care system and the crisis: overview of policy actions and their implementation

O sistema de saúde italiano e a crise: uma visão geral das políticas e sua implementação

Francesca Ferrè

Laboratorio Management e Sanità, Institute of Management, Scuola Superiore Sant'Anna, 56127 Pisa, Italy.

Guido Noto

Laboratorio Management e Sanità, Institute of Management, Scuola Superiore Sant'Anna, 56127 Pisa, Italy.

Federico Vola

Laboratorio Management e Sanità, Institute of Management, Scuola Superiore Sant'Anna, 56127 Pisa, Italy.



Abstract

Economic and fiscal crisis and political instability has put the Italian health system under strain during the 2010-2014 period that saw accelerated ongoing political changes. Government interventions in the Italian NHS have taken the form of either urgent decrees or measures in the annual state budget law rather than systematic reforms and have mostly consisted in caps on specific spending areas [1]. At the same time, higher co-payments for outpatient care and drugs have been introduced, adding to private spending on health. On the other hand, the 2015-2017 policy period provided more room for designing and developing long-term policy reform tackling macro-system aspects (appropriateness and quality of hospital care or national chronic care plan).

However, performance in terms of health protection and quality of care has showed large variation across regions, mainly (but not exclusively) between the northern and southern regions. The worsening economic conditions had a negative effect on access to health care services for the most vulnerable groups of the population and the short-term effect on health showed an increase in psychiatric disorders and quality of nutrition, posing major challenges in the long run.

The political challenge ahead is the reconfiguration of powers between the national and regional governments, where more wealthy regions are calling for greater (full) fiscal decentralization.

Key Words:

Italy, financial crisis, health care, policy actions.

Resumo

Em Itália, a crise económica e fiscal e a instabilidade política colocaram o sistema de saúde sob tensão durante o período de 2010-2014, durante o qual ocorreram diversas mudanças políticas. A intervenção governamental no sistema de nacional de saúde italiano assumiu a forma de decretos urgentes ou itens na lei do orçamento anual em vez de se terem realizado reformas sistemáticas e consistiu essencialmente em cortes em áreas específicas de despesas (recursos humanos, bens e serviços, medicamentos). Ao mesmo tempo, aumentaram as comparticipações dos doentes nos copagamentos das taxas moderadoras e medicamentos, aumentando a despesa privada com saúde. Por outro lado, o período político de 2015-2017 deixou mais espaço de manobra para o desenvolvimento de políticas reformistas de longo prazo, abordando aspetos do macrosistema (adequação e qualidade dos cuidados hospitalares e plano nacional contra a dor).

Contudo, o desempenho em termos da proteção da saúde e qualidade dos cuidados mostrou uma grande variabilidade regional, especialmente (mas não exclusivamente) entre as regiões do norte e sul. A degradação das condições económicas teve um efeito negativo no acesso aos serviços de saúde para os grupos mais vulneráveis da população e os efeitos a curto prazo na saúde mostram um aumento dos distúrbios psiquiátricos e na malnutrição, trazendo maiores desafios a longo prazo.

O desafio político futuro será a reconfiguração dos equilíbrios de poder entre o governo nacional e os regionais, pois as regiões mais ricas exigem maior (ou total) descentralização fiscal.

Palavras Chave:

Itália, crise financeira, cuidados de saúde, políticas de saúde.

The Italian National Health System (INHS)

The INHS was established in 1978 by replacing a system based on multiple social health insurance funds and was modelled after the British NHS with provision of universal coverage largely free of charge at the point of service. It is mainly financed through general taxation (Beveridge model) and regional taxes, supplemented by co-payments for pharmaceuticals and outpatient care¹. It is a comprehensive health care system, providing the full range of prevention, treatment and rehabilitation services. Since the early 1990s, legislative reforms have gradually transferred political, administrative, fiscal and financial responsibilities regarding the provision of health care from the national government to the twenty regions. The major 2001 Constitutional reform (Constitutional Law No. 3/2001), which redistributed legislative competences between the national government and regional governments – paving the way to the fiscal devolution (Law No. 42/2009) – framed a quasi-federal arrangement for the Italian state. Devolution was aimed at increasing regions' competencies and responsibilities over health care organization/planning and delivery.

The system is currently organized and governed at three levels: national, regional and local.

The central government has a stewardship role. The Ministry of Health and the Ministry of Economics and Finance – in agreement with the regions – determine the core health benefits to be uniformly granted across Italy (“Essential Levels of Care” - ELCs) and allocate to the regions the financial resources collected through general taxation. Since the early 2000s, the health care budget has been allocated to the regions based on capitation, partially adjusted by the age distribution of the population. The Italian Parliament defines the legal framework and other national agencies are in charge of contracting with key stakeholders². The Ministry of Finance and the Ministry of Health may also intervene in the event of persistent financial deficit and take over regional health care management.

The regions oversee organizing and delivering primary, secondary and tertiary health care services, as well as preventive and health promotion services. They define their own regional health plans, coordinate the strategies of the regional Health Authorities, allocate the budget within their systems and monitor quality, appropriateness and efficiency of the services provided. Because of the devolution policy, Italian regional health

systems differ from one another, in relation to the quality of care they provide, the level of health care expenditure and their financial performance.

At the local level, the Italian public health care system includes three main providers:

- *local health authorities* (geographically based organizations, which are responsible for delivering public health, community health services and primary care directly, and secondary and specialist care through directly managed facilities, or by commissioning services to public hospital institutions or private accredited providers);
- *public hospital institutions* (which often cooperate with Medical Schools and work as Teaching Hospitals);
- *private accredited providers*

In general, doctors and nurses employed by the INHS are salaried and have civil servant status. An exemption is represented by general practitioners and paediatricians, who are independent professionals, paid via a combination of capitation and fee-for-services for some interventions.

The Italian government's adjustment programme and the health care system

Coherently with its three layer-institutional architecture, Italy responded to the global economic crisis through: a) plans and other interventions devised by the central government; b) actions jointly taken by the national and regional levels of government; and c) initiatives autonomously endorsed by regions [1]. Starting from the economic, financial and fiscal crisis of 2008-2009, the central government has proposed cost-containment measures in different areas of health care expenditures. During the crisis up to 2016, the government adopted pro-cyclical approaches to the global crisis advocating reduced public spending and increased efficiency savings.

Indeed, numerous legislative initiatives addressing

1 - Public financing accounts for 74% of total health spending in Italy, while 26% is privately financed, through out-of-pocket (OOP) payments (23.6%) - especially for pharmaceuticals, outpatient care and dental services -, voluntary health insurance coverage and non-profit institutions serving households (2.4%) (2017 data - OECD Health Statistics; <http://www.oecd.org/els/health-systems/health-data.htm>).

2 -Such as the National Drug Agency (AIFA) with pharmaceutical industries and the National Agency for Collective Agreements (ARAN) with trade unions representatives.



spending review and cost-containment measures have been put forward (for example, Decree Law 98/2011; Decree Law 95/2012 and Stability Pact 2013) albeit no adjustment program was signed under the Troika. Different cutback management strategies were envisaged [2], from proportional cuts across the board (linear cuts) such as cut on volume/value of procurement contracts for goods and services, to adoption of targeted cost-containment policies such as pharmaceuticals spending thresholds or reference pricing or measures seeking productivity and efficiency gains. In addition, policies targeting financial contributions to the health system were included (i.e., changes to publicly defined health budgets and changes in user fees) complemented with fiscal policy to earmark taxes for health³ in situation of regional financial unbalance (see below). More recently, policies targeting benefits and quality of care were also promoted, such as changes to the range of publicly financed benefits available (redefinition of the benefits package), reduction of hospital sector overcapacity and standards of hospital care and chronic care model, among others.

Before presenting in detail the health policy responses to the crisis, it is important to mention that Italy implemented mechanisms to control public health-care expenditure already before the crisis broke out. Consequently, it is claimed that the main effects of the crisis on Italian health care policy accelerated ongoing policy changes rather than triggering the introduction of radically new ones [1].

After the devolution of power from national to regional level (Constitutional Law No.3 of 2001) public health-care expenditure was highly variable across the regions and generated over 38 billion Euros of cumulative deficit between 2001 and 2010 [3]. Therefore, the central government re-assumed an increasing steering role and oversight of regional financial performance and in 2006 introduced formal financial recovery plans (*Piani di Rientro*) after partial bail-out periods (2001-2005) to finance the past health deficits of regions.

Financial recovery plans were conceived as a debt-restructuring tool aimed at making regions accountable for their economic and financial deficit under the scrutiny of the Ministry of Health and the Ministry of Economics and Finance⁴. During the first recovery plan period (2006-2010) ten regions⁵ negotiated and implemented deficit management measures using resources derived from: new regional prescription charges, savings on purchasing of goods and services, limiting the expenditures on health care providers, reclassifying

drugs charged to the INHS, imposing mark-ups to the regional tax rates, and/or selling properties [3]. The overall effect of this was a decrease in the yearly level of overspending; In 2010, the total deficit of the public health care sector was 2.33 billion Euros, which is approximately one-third of the peak in 2004 [1].

During the crisis, recovery plans remained in place and from 2010 they became compulsory for all regions with a deficit higher or equal to 5% of the allocated funds. More recently, in 2016, hospital-level recovery plans were also mandated for either financial distress or standards of care below national targets (Law 208/2015).

Overall, the expenditure control measures implemented between 2006 and 2010 in deficit regions were extended well-after 2011 and were extended to all regions, especially through policies aimed at increasing the efficiency of public spending through improved accountability of the regions for the provision of essential services and respect for financial constraints [1].

EFFORTS TARGETING COST-CONTAINMENT AND MEASURE SEEKING EFFICIENCY GAINS

Cost-containment measures targeted mostly personnel and pharmaceutical costs and the purchase of goods and services.

Personnel costs

The expenditure reduction was achieved mainly by restricting medical doctors and other health care-professionals turnover, especially for the regions under a recovery plan, and by freezing salaries. In some Italian regions, incentives for early retirement were also introduced (from 2008 onwards). The same kind of measures were also applied to GPs.

Specifically, a threshold was introduced at national level in 2006 to limit expenditure on health-care

3 - Examples include additional mark-ups to the regional tax rates, such as the business tax (IRAP); surtax on the national personal income tax (IRPEF) and vehicle tax.

4 - Nevertheless, a full turnaround process was expected from financially distressed regions, including replacement of key members of top management positions, retrenchment or short-term actions to stabilize the regional performance and repositioning or long-term actions to re-establish strategic direction to successful performance [7].

5 - Abruzzo, Puglia, Calabria, Campania, Lazio, Liguria, Molise, Piemonte, Sardegna and Sicilia.

personnel. The expenditure threshold was fixed at the 2004 level reduced by 1.4%. As a result, the restrictions on workforce turnover caused a reduction of about 35,000 working units in five years (2010-2015) [4].

Pharmaceutical expenditure

As in other developed countries, drug expenditure levels were governed through reduction of expenses for non-innovative drugs (whose patents have progressively expired) and policies aimed at steering pharmaceutical governance at national and regional level, jointly leveraging appropriateness and efficiency. Regarding the regional level, policies have been differently devised and implemented across regions, but they generally entailed: strengthening the direct distribution of pharmaceutical products; centralizing the procurement process; and leveraging managerial tools (such as budgeting and pay for performance), in order to orient prescription towards off-patent and/or lower cost medicines.

At national level, three main tools have been envisaged to support appropriateness:

- *expenditure caps*: first set on indirectly distributed drugs (Decree Law 1st of October 2007, N.159, art.5, c. 2, letter d, and subsequent Law 222/2007) and later on directly distributed drugs. The National Drug Agency (AIFA) is in charge of monitoring potential deficits: in this case, pharmaceutical manufacturers are bound for paying back to the regions 50% of the amount that go over the set ceiling;
- *web-based "clinical registries"*: first introduced in 2007, they aim at granting prescription appropriateness and timely monitoring by supporting authorized prescribers along the prescription process;
- *managed entry agreements (MEAs)*: are conditional agreements AIFA signs with pharmaceutical manufacturers, in order to subordinate the payment of the drugs to their real-life efficacy (also known as performance-based risk sharing agreements).

Purchasing of goods and services

Cost containment was achieved through specific regulations at the national level⁶ which called for the renegotiation of procurement contracts for goods and services (including contracts for hospital medicinal products, vaccines, blood products and medical

equipment) in order to reduce the value of all active contracts by 5%. Only unit prices and/or purchase volumes were renegotiated, length of contract or other terms and conditions remained unchanged.

Moreover, central government placed increased attention on reducing expenditures on medical devices (MDs) and enhancing their monitoring through the introduction of national expenditure caps and payback mechanisms in case of expenditures that go over the set ceiling. In addition, the agreement reinforces the role and effort of the Ministry of Health (through the newly appointed HTA Steering Committee for MDs) to adopt new technologies following HTA approach. To increase purchasing efficiency (or in search for savings), a structural policy reform was put forward which ask for the concentration of purchasing activities in regional or supra-regional entities. This resulted in the adoption of new organizational models using central purchasing agencies⁷ at the regional level.

POLICIES TARGETING BENEFITS AND QUALITY OF CARE (PRODUCTIVITY)

The redefinition of the benefits package

The list of the publicly financed health benefits (ELCs) agreed in 2001 (DPCM 29th of November 2001)⁸ details the services that had to be uniformly granted across Italy, ranging from prevention to primary and secondary care to rehabilitation. ELCs were slightly updated over the years but a major revision occurred in January 2017 (DPCM 12th January 2017)⁹.

The revision extended the range of publicly funded services:

- the list of outpatient publicly-funded services was updated, including new technologies such as particle therapy and optical coherence tomography;
- the list of publicly-funded prosthetic and assistive equipment was updated;

6 - National regulation include the National Healthcare Plan (*Patto per la Salute 2014-2016*), the 2013 Stability Pact and Decree Law 95/2012.

7 - Voluntary and compulsory consortia to centralize technical and administrative activities between health providers (called *centrali d'acquisto*).

8 - http://www.salute.gov.it/imgs/C_17_normativa_1479_allegato.pdf

9 - <http://www.trovanorme.salute.gov.it/norme/dettaglioAtto?id=58669>



- the list of chronic and rare diseases that are covered by the NHS was extended, by granting an increased range of services to people suffering from autism or endometriosis, for instance;
- new vaccines and neonatal screening were included among the publicly-financed services.

No significant delisting was performed. The revision was a negotiation that involved the main stakeholder of the INHS (the Ministry of Health, the regions, the scientific societies, some trade unions, some national health supporting agencies, such as the National Institute for Health and the National Agency for Regional Health Services), however, the lack of transparency in decision making process raised questions [5]. Also, there are concerns over the financial coverage for this extended benefits package. The 2016 Stability Law allocated 800 million Euros to the ELCs revision, however, regions suspect they may not fully cover their increased financial needs¹⁰.

Productivity and quality standards for hospital care

Efforts oriented at re-designing the role of the hospital setting especially with reference to their relations with territory services occurred well before the crisis. Indeed, the demographic and epidemiological trends – e.g. ageing population, increased incidence of chronic diseases – have pressured the national government to reduce hospital overcapacity in favour of non-acute services. To reduce overcapacity, national Law 135/2012 have gradually required regions to reduce: (i) the number hospital beds (3.7 beds per 1000 population including 0.7 beds for long-term care); (ii) the hospital admissions (hospitalization rate lower than 160 over a thousand inhabitants) by increasing the use of appropriateness criteria to avoid unnecessary admissions; and (iii) the average length of stay. It is noteworthy that the regions with the highest debt (under recovery plan) were required to issue their implementation plans earlier than the other regions.

Also, policies towards increasing efficiency and effectiveness of care through increased appropriateness and quality of care have been introduced (Ministerial Decree N.70 of 2015). Indeed, the Decree reaffirmed the need of increasing hospital efficiency by acting on the beds occupancy rate and length of stay. The former was set at 90%, while average length of stay should be lower than 7 days for ordinary admissions. However, the overall aim of the Decree is to ensure that

each regional health system guarantees the delivery of the ELC according to the principles of effectiveness, quality, safety, efficiency and patient centeredness. For selected clinical procedures (i.e., deliveries, oncological surgery, vascular surgery, femur fracture surgery, laparoscopic cholecystectomy) - for which there is evidence of an inverse relation between volumes and clinical outcomes (i.e., morality) - national quality standards have been applied at hospital level. For example, for breast cancer, the decree indicates a minimum number of 150 breast surgeries per year.

Effective primary care groups and chronic care plans

Following a common policy trend in primary care, the Italian NHS continued the attempts to reorganize the delivery of primary care, with the objective of moving from the traditional single GP practice to an integrated care model (e.g., GP group practices) that connects different health care services. Targeted policies have been adopted at national and regional level for more integration between hospital and primary assistance. Indeed, in 2012 the Decree Law N.158 reinforced the need that primary care should be reorganized into teams of professionals to provide 24-hour coverage and thus ensure continuity of care. On this development path, some regional health-care systems (Lombardy at the frontline) are developing integrated services for non-acute care involving GP groups as the principal agents to respond to post-acute and territorial chronic care needs.

As for chronic care, at central level, the Ministry of Health issued the National Plan for chronic care conditions in December 2016. The National Plan devised a process for tackling chronic care rooted in a population health management approach, introducing individualized and flexible health care program “*Piani di cura*” (Care Plans) modelled on clinical pathways for a selection of chronic conditions. Regions are redesigning the medical practice of chronic care with expected improvement in the quality of life of chronic patients through enhanced access to primary care, and long-term savings resulting from fewer hospital admissions, visits to hospital emergency departments and specialist

10 - <http://www.sanita24.ilsole24ore.com/art/in-parlamento/2016-11-30/saitta-800-milioni-i-lea-buona-partenza-ma-potrebbero-non-bastare-184827.php?uuid=ADleit4B>

physician consultations. While some Regions, such as Lombardy, have already started radical reforms to address these requirements, others still have to take the first steps. The major challenge and possible obstacle for implementation is funding without any dedicated budget released by the Ministry of Health, regions are being asked to find the necessary resources from existing budgets through re-allocation of funds or efficiency gains. To oversee and monitor the operationalization of the Plan and its implementation at regional level the Ministry recently established a national commission.

MEASURE TARGETING FINANCIAL CONTRIBUTION

Higher co-payments (outpatient, emergency care and drugs)

Reduction in central funding was compensated primarily by higher co-payments and cost-saving measures to reduce pharmaceutical expenditures. In late 2011 new more extensive co-payment system for outpatient/ambulatory care, diagnostics and drugs was introduced by the regions adding to private spending on health. Specifically, beginning in October 2011, regions had to introduce a €10 co-payment for visits to public and private accredited specialists and a €25 charge for visits by patients aged 14 or older to hospital emergency departments that are deemed inappropriate. Exemptions defined by the Ministry of Health for low-income, disabled, aged and chronic patients remain in place; however, these co-payments were added to existing tariffs, placing a significant burden on patients. Notwithstanding the centralised nature of these interventions, the national government allowed regions to decide whether to apply these co-payments in full or to enact regional rules that allow for varying co-payments according to gross family income or service tariffs.

The performance of the health care system under the Italian government's adjustment programme

HEALTH STATUS RESULTS

Despite the crisis, a range of indicators shows that the health of the Italian population has improved over the last decades (Table 1). Average life expectancy at birth

reached 81 years for men and 85.6 years for women in 2016, the second highest in Europe after Spain (OECD Health database) (compared with 78.1 years for men and 83.4 years for women for the OECD as a whole). However, intra-regional differences for both men and women life expectancy exists, reflecting the economic and social imbalance between the north and south of the country. For example, there is a gap of 1.1 years in life expectancy between the longest and shortest lived regions, for both genders¹¹.

Life expectancy at 65 years is increasing at similar trend for both women and men, even though international statistics show a slight decline in the trend between 2014 and 2015 (Table 1).

Infant mortality in Italy is low and the decline has continued during the crisis, from 3.2 infant deaths every 1,000 live births in 2010 to 2.8 in 2016. Biological determinants and skilled assistance at delivery are particularly significant in explaining the trend in neonatal mortality [6]. However, the sharp decline of the total fertility rate over the last 30 years is a matter of concern in Italy, as for other Western countries. From 1995, a reversal has been observed, partially due to the effect of immigration, and fertility rates have gradually increased until 2010 reaching 1.45 births per women (Table 1). From 2010 to 2016 fertility rate decreased again reaching just 1.35 births per woman, far below the replacement level of 2.1¹². The population growth rate is, therefore, very low (-0.13% in 2017), one of the lowest in the European Union (EU), and immigration is the source of most of this growth¹³. Consequently, aging population is on the rise with higher incidence of chronic conditions.

As reported by Rechel et al. [7] and Karanikolos [8] the impact on population health of the financial and economic crisis may lead to an increase in suicide and deaths related to alcohol use and also cause outbreaks of infectious disease especially among vulnerable groups. In Italy, suicide rates over the last 25 years have decreased from 7.6 every 100,000 in 1990 to 5.7 in 2015 ranking among the lowest in Europe; however, from 2010 to 2013 an average yearly increase of 0.5-percentage point was registered followed by a smooth decline the last two years.

11 - ISTAT 2017, http://dati.istat.it/Index.aspx?DataSetCode=DCIS_MORTALITA1

12 - The reasons behind this process are complex and could be explained by the delay in transition to adulthood and the difficulties experienced by Italian women in combining work and raising children (20).

13 - World Bank 2017, <https://data.worldbank.org/indicator/SP.POP.GROW?locations=IT>



Table 1 - Health status of the population (1990; 1995; 2000–2016)

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Life expectancy, Female population at birth, Years	80,3	81,5	82,8	83,2	83,2	82,8	83,7	83,6	84,1	84,2	84,2	84,3	84,7	84,8	84,8	85,2	85,6	84,9	85,6
Life expectancy, Male population at birth, Years	73,8	75,0	76,9	77,2	77,4	77,3	78,0	78,1	78,6	78,8	78,9	79,1	79,5	79,7	79,8	80,3	80,7	80,3	81,0
Life expectancy, Total population at birth, Years	77,1	78,3	79,9	80,2	80,3	80,1	80,9	80,9	81,4	81,5	81,6	81,7	82,1	82,3	82,3	82,8	83,2	82,6	83,3
Life expectancy, Females at age 65, Years	18,9	19,9	20,7	21,0	20,9	20,4	21,3	21,1	21,6	21,7	21,7	21,8	22,1	22,2	22,2	22,6	22,8	22,2	22,9
Life expectancy, Males at age 65, Years	15,2	15,8	16,7	17,0	16,9	16,7	17,3	17,3	17,7	17,9	17,9	18,1	18,3	18,5	18,5	18,9	19,2	18,9	19,4
Infant mortality, Deaths per 1 000 live births	8,1	6,1	4,3	4,4	4,1	3,8	3,4	3,3	3,2	3,1	3,1	3,2	3,0	2,9	2,9	2,9	2,8	2,9	2,8
Fertility rate, total (births per woman)*	1,3	1,2	1,3	1,3	1,3	1,3	1,3	1,3	1,4	1,4	1,5	1,5	1,5	1,4	1,4	1,4	1,4	1,4	1,4
Suicide Deaths per 100 000 population (standardised rates)	7,6	7,7	6,7	6,5	6,5	6,4 ^b	6,2	5,8	5,6	5,7	5,8	5,9	5,8	6,2	6,3	6,3	6,0	5,7	n.a.
Alcohol consumption, Liters per capita (age 15+)	11,0	9,6	9,8	9,7	9,3	9,3	9,0	7,4	7,3	7,2	6,8	6,4	7,0	7,0	7,5	7,4	7,6	7,1	7,1
Obese population, self-reported, % of total population	n.a.	n.a.	8,6	8,5	8,5	9	n.a.	9,9	10,2	9,9	9,9	10,3	10,3	10	10,4	10,3	10,3	9,8	n.a.

Source: OECD Health Statistics 2018 - Frequently Request Data. June 2018.

* Source World Bank / b= Break

As a short-term effect of the crisis Italy registered an increase in prescribing of psychotropic drugs especially in those Italian regions most affected by the crisis [9], as well as a general increase in deaths from mental and behavioural disorders [10]. Among unhealthy practices, consumption of junk food and alcohol abuse increased during the 2010-2014 period. During the same period, self-reported obesity level reached highest peak in 2012 with about 10.3% of the population reporting BMI>30 kg/m² (Table 1) with high level especially among men (11.3%) (OECD Health Database). Obesity trend in Italy are still below OECD average (16.5% in 2016) but posing major challenges as prevalence is increasing.

Over time, prevention policies have been successful in increasing coverage for the most important vaccinations. However, state retrenchment in Italy was found to be significantly associated with declining vaccination rates for Measles, Mumps, and Rubella (MMR) [11] despite the National Immunization Prevention Plan of 2012 that define the optimum vaccine coverage at 95% of the population. The recent introduction of mandatory vaccination for Italian children may help counteract this trend (Law 119/2017)¹⁴.

IMPACT ON ACCESS TO CARE SERVICES

Fiscal pressure and cut to supply of services also affected equity and financial protection of citizens and had an effect on access to care services. Increased rate are registered in the incidence of individuals at risk of increasing of poverty (20.6% from 18.4% in 2009), in the share of those living in severely deprived families (12.1% from 7.3% in 2009), as well as that of the people living in low labour intensity families (12.8%, from 9.2% in 2009). Inequality, as measured by the Gini index, is stable at 0.33 from 2005 to 2009, however from 2009 to 2015 it increased to 0.35 indicating increased inequalities¹⁵.

The worsening economic conditions of the population had an effect on access to health care services. Seven percent of the Italian population reported

14 - Under the new regime, all children under 16 years are required to have proof of vaccination against 10 common infectious diseases, including measles, prior to enrolment in public schools.

15 - <https://data.worldbank.org/indicator/SI.POV.GINI>

some unmet needs for medical care either for financial reasons, geographical distance or waiting times. This is a higher proportion than the EU average (less than 4%) and has grown in recent years. The proportion of people in the lowest income group reporting some unmet needs for medical care is particularly high (over 15.0% in 2015), compared to less than 1.5% among people in the highest income group [12].

Statistics show that household expenditure for health care decreased significantly between 2008 and 2009 and remained stable until 2012 proportionally reflecting the dynamics of income. Again, a sharp decrease was measured in 2013 after which a smooth increase followed till recent data (2016) even though household expenditure for health care have not yet reached the 2008 level [13].

IMPACT ON HEALTHCARE RESOURCES AND ACTIVITIES

Over the last eight years, the huge numbers of financial measures included in the National Economic and Financial Documents (DEF), the annual Stability Pact (budget and allocation rules), and the recurrent changes in contributions to public finances for the regions have had a significant impact on the resources allocated to the INHS. During 2010-2012 annual health care financing registered a modest growth (less than 1%), while negative growth of funding was recorded in 2012-2013 (from 107,961 million to 107,004 million of Euros) and in the period 2014-2015 (from 109,928 million to 109,715 million of Euros). In 2016, the overall INHS financing grew by 1.1% reaching 111,002 million Euros [14]. Overall, expenditure grew at a lower rate than the GDP growth (1.3 per cent on average in the 2013-2017 period) [15]. Currently, all regions are in substantial financial equilibrium once the regional tax revenues to cover health care expenditure have been accounted for; the accounts of the INHS seem to be under control again.

From 2011 to 2017, the percentage of governmental spending on total health-care expenditure decreased by almost 2% in favour of OOP spending. On average per-capita OOP expenditure remained stable in 2008-2010 periods (about US\$ 640) probably reflecting reduced disposable income and, thus, privately paid for demand. Average OOP increased by US\$ 63 in one year (from

2010 to 2011) and again another high-rise occurred from 2014 to 2017 (Table 2) partially because patients may have been forced to pay higher co-payments or to go fully private due to the cost-containment policies in the public sector. In this respect, it is interesting to note the emergence of low-cost initiatives in the private sector (e.g., for dental and eye care).

Another effect of rationing public sector expenditures and introducing or increasing user charges in outpatient care has been the reported increase in waiting times and the delayed provision of important medical care [5]. Indeed, if reducing public funding or freezing personnel and staff turnover is not compensated by efficiency gains, providers may reduce their supply of services or their quality, worsening health outcomes and again shifting care towards private services.

Looking at the different source of health care spending, personnel costs decreased until 2016 (the decline in nominal terms is 6% between 2010 and 2016), showing a slight recovery in the 2017 pending the renewal of public contracts [15]. Despite the measures aiming to reduce expenditure for personnel such as freeze on medical doctor turnover, international statistics show an increase in the ratio of practicing physicians, by 0.2 physicians per 1,000 population during 2009-2016 (Table 3). An increase was also registered in nurses' density even though Italy is far below the OECD average of 9 practicing nurses every 1,000 inhabitants (Table 3). A recent study of nursing workload documented that the nursing shortage together with a range of cost containment measures had negative consequences on increased workload and stress on nurses, mainly because of an increasing number of patients in hospital suffering from social problems [16].

Other expenditure items also showed decreasing trends. For example, drug expenditures (prescribed and over-the-counter medicines) are currently substantially stable (2015-2018) after significant reductions in the 2009-2013 period (Table 2). The same applies as well to services purchased from private accredited providers.

The only significant spending item still growing is related to purchasing of goods and services, which mainly reflects the growth of hospital pharmaceutical and medical devices expenditures [15].

The Italian INHS however, kept reducing or postponing infrastructure and technology investments. In 2010, a €1 billion cut to investments in recovery of hospital buildings and technological turnover was mandated by the central government [1]. The reduction is still on the



Table 2 - Health care expenditures (1990; 1995; 2000-2017)

	1990	1995 ^b	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 ^b	2013	2014	2015	2016	2017 ^a
Current expenditure on health, % GDP	7.0	6.9	7.6	7.8	7.9	7.9	8.2	8.4	8.5	8.2	8.6	9.0	9.0	8.8	9.0	9.0	9.0	9.0	8.9	8.9
Current expenditure on health, million US\$ PPP (current prices, current PPPs)	n.a.	n.a.	84727	92338	96691	98627	106082	112869	123666	125642	138504	143341	145912	146844	147113	148181	149472	149142	154826	158863
Current expenditure on health, per capita, US\$ PPP (current prices, current PPPs)	1302	1531	2048	2172	2261	2284	2412	2513	2736	2775	3031	3098	3138	3211	3245	3235	3250	3292	3429	3542
Government and compulsory health insurance schemes, % of current expenditure on health	81.3	71.3	72.6	74.6	75.0	75.3	76.2	77.5	77.8	77.5	77.7	78.3	78.5	77.0	76.1	76.1	75.6	74.6	74.5	74.0
Government and compulsory health insurance schemes, per capita expenditure, US\$ PPP (current prices, current PPPs)	1058	1091	1488	1621	1695	1721	1839	1947	2127	2150	2354	2426	2462	2473	2471	2460	2459	2456	2554	2622
Out-of-pocket expenditure, % of current expenditure on health	18.0	27.7	26.5	24.5	24.1	23.7	22.8	21.6	21.3	21.5	21.3	20.7	20.5	22.0	21.7	21.8	22.1	23.1	23.1	23.6
Out-of-pocket expenditure, per capita, US\$ PPP (current prices, current PPPs)	235	425	542	532	545	542	551	543	583	597	647	640	645	707	704	704	720	762	792	834
Current expenditure on pharmaceuticals (prescribed and over-the-counter) and other medical non-durables, % of current expenditure on health	21.4	19.5	21.2	21.9	21.9	21.4	21.0	20.4	20.1	20.0	19.2	19.0	18.8	18.5	16.6	17.0	16.9	17.8	17.7	17.7
Current expenditure on pharmaceuticals (prescribed and over-the-counter medicines) and other medical non-durables, per capita, US\$ PPP (current prices, current PPPs)	279	299	433	476	494	488	506	512	550	555	582	587	588	595	538	549	551	585	607	628

b= Break / * = provisional value

Source: OECD Health Statistics 2018 - Frequently Request Data, June 2018.

Table 3 - Health care resources and activities (1990; 1995; 2000-2017)

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 ^a
Physicians, Density per 1 000 population (head counts) ^a	n.a.	n.a.	3.4	3.5	3.6	3.6	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9	3.9	3.9	3.9	3.8	4.0
Nurses, Density per 1 000 population (head counts) ^a	n.a.	n.a.	4.2	4.2	4.3	4.3	4.4	4.4	4.6	4.6	4.7	4.8	4.8	5.1	5.2	5.1	5.3	5.4	5.6	5.5
Medical graduates, Per 100 000 population	18.4	12.0	11.5	11.3	12.3	12.7	11.5	11.1	10.6	11.7	11.6	11.3	11.4	11.3	11.1	11.1	11.5	12.4	n.a.	n.a.
Total hospital beds, Per 1 000 population	7.2	6.3	4.7	4.6	4.4	4.2	4.0	4.0	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.2	n.a.	n.a.
Curative (acute) care beds, Per 1 000 population	7.0	6.1	4.2 ^b	4.1	3.9	3.7	3.5	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	n.a.	n.a.
Medical technology, Magnetic Resonance Imaging units, total, Per million population	n.a.	n.a.	7.8	9.1	10.9	11.9	14.1	15.0	17.0	18.8	20.1	21.6	22.5	24.2	24.6	25.2	26.2	28.2	n.a.	n.a.
Medical technology, Computed Tomography scanners, total, Per million population	n.a.	n.a.	21.1	23.0	24.1	23.9	26.2	27.8	29.3	30.6	31.0	31.9	32.2	32.6	33.3	33.1	32.9	33.3	n.a.	n.a.
Doctors consultations, Number per capita	n.a.	n.a.	6.1	n.a.	n.a.	n.a.	n.a.	6.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.8	n.a.	n.a.
Diagnostic exams, Magnetic Resonance Imaging exams, Per 1 000 population	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	78	79.1	77.6	67.1	n.a.
Diagnostic exams, Computed Tomography exams, Per 1 000 population	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	115.3	115.7	122.7	127.2	126.6	139.1	141.3	140.6	131.3	136.3	n.a.
Inpatient care discharges (all hospitals), Per 100 000 population	15808	16780	17418	17274	16802	16007	15785	15488	15369	14862	14526	14238	13820	13238	12878	12377	12004	11856	11671	11555
Inpatient care average length of stay (all hospitals), Days	11.7	10.1	7.5	7.4	7.3	7.4	7.4	7.4	7.4	7.5	7.6	7.6	7.6	7.7	7.7	7.7	7.8	7.8	7.8	7.8

Data refer to practicing physicians. Practising physicians are defined as those providing care directly
Data refer to practicing nurses. Practising nurses are defined as those providing care directly to

* = provisional value

Source: OECD Health Statistics 2018 - Frequently Request Data, June 2018.

agenda and the average rate of obsolescence of the technologies (Computed Tomography Scan, Magnetic Resonance Imaging and mammography etc.) is increasing [17], with possible negative effects on the quality of diagnostic tests, negative effects in terms of risks for the patient and health workers, as well as being more expensive in terms of maintenance and costs management.

The supply of services has been affected by the different cost containment measures. The activity of the Italian INHS has contracted in all areas of assistance. Hospital admissions decreased, to 8.7 million in 2016, with a reduction of 16% in the period 2010-2016 as expected from the introduction of more stringent appropriateness criteria. Indeed, the declines affected above all hospitalizations of low complexity; however, this decrease does not seem to be supported by an adequate improvement of the outpatient care. The introduction of hospital standards of care (Law 135/2012) led also to a steep decrease in hospital beds in the 2010-2015 period. Total hospital beds declined from 3.6 to 3.2 per 1,000 inhabitants, this reduction was driven by a decrease in acute care beds from 3.0 to 2.6 per 1,000 inhabitants. Hospital average length of stay did not change significantly over time settling at 7.8 days in 2016.

Policy changes after the end of the acute crisis

The recent history of health care expenditure among European countries is marked by attempts to place stricter control over health spending for macroeconomic reasons and towards actions improving efficiency gains. However, the reforms which have achieved savings objectives have not always fitted well with the reforms that would be required to encourage performance improvement. Indeed, too often opportunistic measures to manage austerity and fiscal distress (e.g. linear cuts) are implemented in public health-care sector while efficiency gains requiring structural reform strategy are developed to a lesser extent [18]¹⁶. In general, efficiency gains require deploying a consistent reform strategy, often including a mix of measures, such as setting priorities in services provision and user needs, using non-service approaches, building new relationships and creating alliances, exploiting technological innovation, and others. Another route to savings, perhaps more compatible with performance improvement is the adoption or increasing the use of block-budgeting and the application of strategic or targeted cuts. Here the central

government sets policies and broad ceilings but, within that framework, delegates, responsibility for allocation to particular services, programmes, or projects to local politicians and/or managers. This approach somehow permits the local determination of priorities; in the quasi-federal INHS could allow regions to select actions following the different political options.

However, the Italian case showed centralization of decision making around the political elite and a top-down (planned) approach to regions following different cost-containment strategies. On the one hand, they strengthened control over total expenditure and made use of sanctions to ensure that regions did not overspend (introduction of Recovery Plans at regional and hospital level). On the other, they directly operated on the sources of regional spending (input costs) through measures on the payment of personnel, recruitment, standards for hospital care (e.g. minimum size of hospitals) and expenditure for goods and services [6]. To a certain extent, these policies have been effective as expenditure is now under strict control. But, due to the long period of cost cutbacks, there are signs that the economic crisis has worsened some health outcome indicators, maintained differences among regions in relation to the quality of care provided and increased demand for a variety of services (e.g., waiting times are on the rise and continuity of care and intermediate care for chronic diseases are still inappropriate). Thus, the current largest challenge facing the Italian health system is to achieve budgetary goals without reducing the provision of health services to patients and assure homogeneity of level and quality of service provision across health care providers. Specifically, a critical challenge for the Italian health care system includes ensuring equity across regions, where gaps in service provision and health system performance persist as well as ensuring the quality of professionals managing health care facilities, promoting group practice and other integrated care organizational models in primary care, and ensuring that the concentration of organizational control does not stifle innovation.

Over the last decade, the need for expenditure control strengthens the role of central government with reinte-

16 - In addition, contemporary behaviours are often constrained and structured by the aggregation of past actions and decisions even though past circumstances may no longer be relevant ("the power of past decision"). Thus, selection of cut back policies has multiple explanatory factors and the existing empirical studies point to mixed evidence [21], suggesting that decision-makers tend to cut those parts of the budget that are more controllable and where public opposition are minimized [22].



gration practices reaffirming the role of the state as the main facilitator of solutions. Even before the outbreak of the economic crisis, we assisted to the reconfiguration of powers between the national and regional governments with a greater role allocated to the central Economics and Finance Ministry, which directly monitored health care expenditure and had powers over regions (financial surveillance).

Moreover, it is interesting to note that between 2009 and 2014, under pressure from the international financial crisis and amid increasing political instability, government interventions in the INHS took the form of either urgent decrees or measures in the annual state budget law rather than systematic reforms and have mostly consisted of cuts to public expenditure. The policy period following the outbreak of the crisis provided on the other hand more room for designing and developing long-term national policy reform (e.g., the national chronic care plan, the hospital standard of care, or the implementation of clinical health records) tackling macro-system organizational aspects also with greater attention to European level strategies (e.g., Digital agenda for Europe). Over the crisis, the INHS showed resilience adapting and responding to the instability with reforms to improve health services and quality but with still strong differences in the implementation at regional level.

Protagonists of a progressive alternative

The health care sector was not particularly affected by the recent national election campaign (March 2018) that gave power, for the first time, to a new political coalition between the conservative and regionalist far-right Lega Nord (Northern League) party and the new anti-establishment (radical) Five Star Movement breaking decisively with the previous centrist policies. The policy program adopted by the coalition government identified as main priorities tougher laws on immigration, reform of pensions, a flat income tax and a universal basic income. As for health policies, the populist coalition buoyed the anti-vaccine movement supporting the idea to give to families the possibility to choose whether to vaccinate or not their children despite the mandatory vaccination decree established by the previous government to boost immunization coverage amid a surge in the number of measles cases in the country. Despite the recent national political situation, it is clear that the Italian health care system needs ambitious reforms

in order to remain among the best health care systems worldwide. This is even more urgent at a time when government debt is on the rise, GDP growth is at a minimum, the tight fiscal parameters imposed by the EU are limiting government expenditure and an ageing population is putting strain on the resources. Over the last decade, there have been discussions about the role of public health care and the mix with private sector components, not only in the delivery of services but also in population coverage (i.e., financial protection). Over the last decade, we assisted to the rise of private expenditures (OOP) and services provided from business-like entities, with certainly forces that push towards a quick shift towards Integrated Health Funds (IHF), providing complementary and supplementary voluntary health insurances. Although voluntary health insurances still account for a very small share of total health spending, it has recently attracted high interest in the media and policy discussions. In 2010, the government has called for further development of the IHFs as a strong second pillar of the health system to secure the financial sustainability of the INHS and to promote integration between health and social care – a position influenced by the financial and economic crisis [19]. At the same time, voluntary health insurances have been criticized on a number of grounds mainly because there are concerns about the possible gradual decrease in public investment in health, which may further affect access to care to patients without voluntary health insurances. But, more importantly voluntary health insurances can significantly increase income-related horizontal inequity in access to specialist services and could exacerbate the economic and social disparities between the North and the South of the country, especially since devolution of power and fiscal federalism is still on the government's agenda.

Indeed, fiscal federalism is the big political matter that fuels discussion among regions and national government. Some wealthy regions are demanding greater autonomy, beyond the regional political vision on health care (liberal vs. social) feeding into an ongoing discussion on constitutional reform calling for a more federalised country. The two wealthiest northern Regions (Veneto and Lombardia which are home to around a quarter of Italy's population and account for 30% of its economic output) voted through a referendum in favour of greater autonomy (October 2017) as another example of the powerful centrifugal forces reshaping European policies (e.g., Catalonia push for independence, and Britain's decision to leave the EU). The votes were not binding but they gave the right-wing leaders of the two regions a strong political mandate when they embark on negotiations with the

central government on the devolution of powers and tax revenues from central government, especially on the health care agenda, which account for more than 80% of regional expenses. Indeed, with lower unemployment and welfare costs than the Italian average, the two regions are large contributors to national government coffers. The two regions would like to roughly halve those contributions and ask for more say over infrastructure, the environment, education and health. The same path has been undertaken by Emilia Romagna

region, whose regional council has begun direct negotiations with the central government. Many other regions (i.e., Toscana, Umbria, Marche, Abruzzo, Lazio, Piemonte, Liguria, Molise, Campania) are also examining similar solutions. As a consequence, a new regional paradigm oriented at re-defining the role of the regional administrative level may emerge in the next future, re-establishing autonomy and budgetary discretion of the regions in the healthcare sector.

References

- De Belvis AG, Ferré F, Specchia ML, Valerio L, Fattore G, Ricciardi W. The financial crisis in Italy: Implications for the healthcare sector. *Health Policy (New York)* [Internet]. 2012;106(1):10–6. Available from: <http://dx.doi.org/10.1016/j.healthpol.2012.04.003>
- Ongaro E, Ferré F, Fattore G. The fiscal crisis in the health sector: Patterns of cutback management across Europe. *Health Policy (New York)* [Internet]. 2015;119(7):954–63. Available from: <http://dx.doi.org/10.1016/j.healthpol.2015.04.008>
- Ferré F, Cuccurullo C, Lega F. The challenge and the future of health care turnaround plans: Evidence from the Italian experience. *Health Policy (New York)* [Internet]. 2012;106(1):3–9. Available from: <http://dx.doi.org/10.1016/j.healthpol.2012.03.007>
- Ministero dell'Economia e Finanza. Il monitoraggio della spesa sanitaria. Rapporto n.4. 2017.
- GIMBE. 3° Rapporto sulla sostenibilità del Servizio Sanitario Nazionale. Roma; 2018.
- Ferré F, de Belvis AG, Valerio L, Longhi S, Lazzari A, Fattore G, et al. Italy: Health system review. *Health Syst Transit*. 2014;16(4):1–166.
- Rechel B, Sührcke M, Tsovala S, Suk JE, Desai M, McKee M, et al. Economic crisis and communicable disease control in Europe: A scoping study among national experts. *Health Policy (New York)* [Internet]. 2011;103(2–3):168–75. Available from: <http://dx.doi.org/10.1016/j.healthpol.2011.06.013>
- Karanikolos M, Mladovsky P, Cylus J, Thomson S, Basu S, Stuckler D, et al. Financial crisis, austerity, and health in Europe. *Lancet* [Internet]. 2013;381(9874):1323–31. Available from: [http://dx.doi.org/10.1016/S0140-6736\(13\)60102-6](http://dx.doi.org/10.1016/S0140-6736(13)60102-6)
- Mattei G, Ferrari S, Pingani L, Rigatelli M. Short-term effects of the 2008 Great Recession on the health of the Italian population: an ecological study. 2014;851–8.
- Vogli R De, Vieno A, Lenzi M. Mortality due to mental and behavioral disorders associated with the Great Recession (2008–10) in Italy: a time trend analysis. 2013;24(3):419–21.
- Toffolutti V, McKee M, Melegaro A, Ricciardi W, Stuckler D. Austerity, measles and mandatory vaccination: cross-regional analysis of vaccination in Italy 2000–14. *Eur J Public Health* [Internet]. 2018;0(0):1–5. Available from: <https://academic.oup.com/eurpub/advance-article/doi/10.1093/eurpub/cky178/5090999>
- OECD, European Observatory on Health Systems and Policies. Italy Country Health Profile 2017, State of Health in the EU. Brussels; 2017.
- Del Vecchio M, Fenech L, Rappini V. I consumi privati in sanità. In: EGEA, editor. Rapporto OASI. Milano; 2017. p. 323–58.
- Armeni, Patrizio; Bortolami, Arianna; Costa F. La spesa sanitaria: composizione ed evoluzione. In: EGEA, editor. Rapporto OASI. Milano; 2017. p. 207–55.
- Corte dei Conti. Rapporto 2018 sul coordinamento della finanza pubblica [Internet]. Roma; 2018. Available from: http://www.corteconti.it/export/sites/portalecdc/_documenti/controllo/sezioni_riunite/sezioni_riunite_in_sede_di_controllo/2018/rapporto_coordinamento_fp_2018.pdf
- Palese A, Vianello C, Cassone A, Polonia M, Bortoluzzi G. Financial austerity measures and their effects as perceived in daily practice by Italian nurses from 2010 to 2011: A longitudinal study. *J Contemp nurse*. 2014;48(2):168–80.
- Porri E. Osservatorio parco installato: le apparecchiature di diagnostica per immagini in Italia. 2017.
- Ongaro E, Ferré F, Galli D, Longo F. Italy: set along a Neo-Weberian trajectory of administrative reform? *Public Adm Reforms Eur*. 2016;(2012):185–93.
- Ferré F. Voluntary health insurance in Italy. In: Voluntary Health insurance in Europe Country experience [Internet]. 2016. p. 83–7. Available from: http://www.euro.who.int/__data/assets/pdf_file/0011/310799/Voluntary-health-insurance-Europe-country-experience.pdf
- Rosina A, Caltabiano M. Where, in which way and to what extent can Italian fertility grow in the next 15 years? *J Matern Neonatal Med*. 2012;25(4):37–9.
- Ringa R, Savi R, Randma-Liiv T. LITERATURE REVIEW ON CUTBACK MANAGEMENT [Internet]. 2013. Available from: http://www.cocops.eu/wp-content/uploads/2013/03/COCOPS_Deliverable_7_1.pdf
- Bartle J. Coping with cutbacks: City response to aid cuts in New York State. *State Local Gov Rev*. 1996;1:38–48.

Spain's health care system and the crisis: a case study in the struggle for a capable welfare state

O sistema de saúde espanhol e a crise:

um estudo de caso na luta pela capacidade do Estado Social

José Ramón Repullo

Head of the Department of Health Planning and Economics
National School of Public Health, Institute for Health Carlos III



Abstract

The economic crisis (2009-2014) and the austerity policies (2010-...) have notably affected Spanish society, its public services and the public health system. Unemployment and labor regulation has deteriorated the labor market, creating poverty and inequality, and consolidating low salaries, part-time work and contractual precariousness. No short-term impact on health (morbi-mortality and perceived health) was observed (except perhaps in mental health), but problems are expected in the medium-long term.

The austerity has significantly affected the National Health System (NHS), imposing budget cuts close to 10%, through linear reductions in salaries, hiring and spending; but the NHS has been resilient, although it has accumulated structural tensions, has exhausted its reserves, and has accumulated waiting lists and criticism from patients. The need for reforms is clear, but distrust among all agents prevails. The political change of 2015 (end of bipartisanship), the Catalan conflict since 2017, the change of government in 2018 (PSOE), and the elections of 2019, will influence the next future agenda, oscillating between a liberal-conservative model (public health stagnant with increasing flight from the middle classes to private health care), and a social reformist one (reinvestment in health care, although with controversies in management models).

Key Words:

Austerity, public health system, private health care, need for reform, Spain.

Resumo

A crise económica (2009-2014) e as políticas de austeridade (2010-...) afetaram fortemente a sociedade espanhola, os seus serviços públicos e o sistema de saúde público. O desemprego e as leis de trabalho deterioraram o mercado de trabalho, gerando pobreza e desigualdades, consolidando baixos salários, trabalho a tempo parcial e precariedade do vínculo laboral. O impacto na saúde (morbi-mortalidade e perceção de saúde) não se verificou a curto prazo (exceto talvez na saúde mental), mas esperam-se problemas a médio-longo prazo.

A austeridade afetou significativamente o Sistema Nacional de Saúde (SNS) impondo cortes orçamentais perto dos 10%, através de reduções lineares dos vencimentos, da contratação e da despesa. Contudo, o SNS tem sido resiliente, embora tenha acumulado tensão estrutural, tenha esgotado as suas reservas e tenha acumulado listas de espera e críticas por parte dos doentes. A necessidade de reformas é óbvia, mas a desconfiança de todos os agentes envolvidos prevalece.

A mudança política de 2015 (fim do bipartidarismo), o conflito catalão desde 2017, a mudança para um governo dirigido pelo partido socialista em 2018 (), e as eleições de 2019, marcarão a agenda futura, que oscila entre um modelo liberal-conservador (estagnação da saúde pública com o crescente êxodo da classe média para o setor privado), e um modelo social reformista (com reinvestimento no sistema de saúde, embora com dúvidas quanto aos modelos de gestão).

Palavras Chave:

Austeridade, sistema público de saúde, sistema privado de saúde, necessidade de reformas, Espanha.

VERY BRIEF CHARACTERISATION OF THE NATIONAL HEALTH CARE SYSTEM

1 – From the bismarckian origins to decentralisation and (unfinished) reforms under democracy

Spain, together with other Southern European countries had as a reference the social security model in its origin (1940s). Its process of universalization resulted from a progressive extension of the coverage of Social Security to different groups and layers of workers.

The General Health Law of 1986 is cited as the starting point for changes in the concept of health citizenship, with the creation of a National Health System (NHS), designed with a highly decentralized configuration (according to the institutional framework established by the 1978 democratic Constitution).

The operational changes took place over many years: in 1989, the poor were included in the coverage of the NHS. In 1999 the NHS goes on to finance itself completely by taxes, abandoning the contributions of workers and employers. In 2002, the transfer of all health care competencies and resources to the Autonomous Communities was completed.

The changes observed were incomplete: a small percentage of the population with resources and not related to the labour market was left out of coverage (1%); civil servants of the central administration (including elite, university, teachers, military, judges...) maintained a separate coverage regime with the possibility of using public health or private insurance alternately, and enjoying higher per-capita financing (2.2 million insured).

2 - Counter-reforms vis-à-vis a competent and resilient national health system

During the crisis, the transition from a Bismarckian to a Beveridgean was partially reverted: when in 2012 the Popular Party launched its battery of health austerity measures (Royal Decree Law - RDL 16/2012), the labour insurance origin of the NHS was invoked to allow the National Institute of Social Security to limit and manage the rights of access to the public services of the NHS (limiting, for exam-

ple, the access of undocumented immigrants).

The revitalization of the Social Security regulatory framework also served as an instrument for the recentralization of various functions related to economic control in times of austerity. Central Government retook control over the Autonomous Communities (17 regional governments), on issues such as co-payments, portfolios of benefits entitled to public financing, pharmaceutical management, etc.

The 2018 Spain's HIT Report of WHO's European Observatory on Health Systems and Policies depicts clearly the strengths of the Spanish NHS [1]. Another good reference is the synthetic and graphic report (2017), named Country Health Profile, of the EU-OECD-WHO-Observatory [2].

Health indicators are good; life expectancy at birth (80.5 years in men and 86.3 in women in 2016) is at the top of the European Union (EU), far surpassing the average (78.2 years and 83.6 years respectively). The mortality vulnerable to the action of the health services is also very good, being consistent with the general mortality data. Self-reported unmet need for medical care (2017, 0.1%) shows the great accessibility of health care services [3].

3 - Accessible and competent primary health care and acute care hospitals

The 1982 Primary Health Care (PHC) reform consolidated a highly accessible network of health centres, acting as gatekeepers to hospital specialists, with well-trained doctors and nurses (remuneration based on salary and capitation), good clinical problem resolution and ability to cope and control chronic patients. Nevertheless, the 21st century has not been favourable to PHC: up to 2010 the hospital network benefited more than the health centres network; after the 2010 austerity, the distance between PHC and hospitals increased.

During 1986 the Spanish NHS inherited an excellent network of hospitals from the Social Security network, mainly for acute patients; other public hospitals were added to this core of acute care hospitals, and all of them were devolved to Autonomous Communities for the creation of 17 Regional Health Services. The statutory contract of health personnel (coming from Social Security civil servants' contracts), prevailed as the dominant system of contracting professionals.



There are a relatively small number of hospital beds: 2.42 per 1000 inhabitants, being 1.98 public (most acute -99.4%-) and 0.44 private (year 2016); this low figure is compensated by an intense use of beds, day hospital beds, outpatient care and ambulatory surgery.

In order to expand the hospital network for better accessibility, and to gain degrees of managerial autonomy, between 2000 and 2010, a wave of small-medium size new hospitals was opened or launched, under different institutional models (foundations, public enterprise...). In some regions (Popular Party dominated), the priority become contracting out to PPP (Public-Private-Partnerships). Corruption cases have emerged after 2012 surrounding some of these big-money contracts.

4 - Too much medication, but a cost-efficient system

A traditional feature of the Spanish public health system is the high consumption of medicines, as well as the large proportion of the budget devoted to them (24.4% of Public Health Expenditure in 2017), with the highest expense for prescriptions (10.170 billion euros) rather than hospital expenses (6.354 billion euros), although the latter are growing at a faster rate.[4]

2017 OCDE data shows a volume of compulsory contributions to public health care of US\$ 2,386 per capita representing 6.3% of the GDP and 70.8% of total expenditure on health care. Public health care expenditure is below EU average. The percentage of private health expenditure is high, particularly in out-of-pocket (OOP) expenses (24% of total costs) and in voluntary health insurance (5%).

Good health indicators in the numerator, and low costs in the denominator place the Spanish health system very well in international comparisons. But it is worthy of note that the low costs are partly related to the low coverage for oral health, and the limited development of medium-long-term care and home care (lay care assumed by families). The system of allocation of resources (budget), and payment of personnel (salaries) tends to control the costs, although it tends to generate distortions (undersupply and waiting lists) and discomfort (low wages for doctors and nurses).

5 – Most recent developments

At present, despite limited parliamentary support and funding restrictions (related to the difficult approval of the 2019 budget), the Socialist Party's government and PM Pedro Sanchez (since June 2018) is reversing some of the content of previous health regulations related to universal coverage and economic accessibility.

The Spanish government's national adjustment programme and the health care system

1 - The economic adjustment programme (EAP)

The main objective of the EAP, was to reduce public spending, in order to compensate for the sharp drop in fiscal income that produced since 2009 a huge primary deficit (without taking into account the payment of interest on the debt) and which accumulated a significant public debt.

The austerity policies were implemented in an acute and radical manner, following a collapse in public revenues. The previous overheating of the economy produced from 2000 to 2008 by the so-called "real estate bubble", came from a credit affluence to families and companies, and produced extraordinary revenues to public administration. Sharp changes in revenues happened in one year: from a 2% surplus in 2007 to an 11% deficit in 2009 (in the euro area the deficit was 6.3%).

The financial collapse, the crisis in the banking sector and the paralysis of the real estate sector led to an extraordinary growth of unemployment: from 8.23% in 2007, to 24.79% in 2012. Currently, 2017, the figure is still at 17.26%.[5]

The reduction in revenues (up to 2009) and the increase in spending (up to 2012) led to continued deficit figures, which produced a rapid growth of sovereign debt: from 35.5% of GDP in 2007, to 99.8% of GDP in 2015.

2 - Implementation of general and health austerity measures

In June 2012, the Spanish government asked for a

bailout for its banks and savings banks (up to 100 billion euros, of which 41 have effectively been used). The government argued that this was not a “country rescue” (such as in the cases of Ireland, Greece, Portugal or Cyprus) but an inter-governmental loan to provide a restructuring fund to Spanish banks.

However, in the Memorandum of Understanding signed in 2012 (clauses 30, 33, 34 and 36) there were extra-banking conditions, and in practice they put in place control visits by the “troika”. At present, 16% of the loan has been returned, and only when 75% is recovered will these visits cease.

Although the collapse in tax revenues was observed since 2009, mechanisms for reducing the funds allocated from the State to the Autonomous Communities only became effective from 2010. It is important to remember the 2002 devolution of the health system to the Autonomous Communities, and that their funding is not earmarked, but rather integrated into a package of welfare services for which there are a series of taxes transferred and shared; there are also levelling subsidies to ensure minimum guaranteed spending for fundamental public services.

The measures that were put in place to reduce public spending were structured in two periods, and were channelled directly to health spending, or indirectly to public spending (affected thereafter to health).[6]

Initial phase of health austerity policies: soft, incremental and rationalistic (2009-2010)

In the period 2009-2010 there is already a clear awareness of the seriousness of the economic crisis among health authorities and health agents. The answers sought are incremental (in the sense of promoting evolutionary changes) and not radical. The cut in medicines was a reasonable and more feasible option: reasonable because the increase in spending on pharmaceutical products in the previous decade had been very important; and more feasible, because it could be exercised in the short term, by affecting external agents of an outsourced service. Other measures included: digital clinical records; reference prices and generic drugs; aggregate purchasing procedure; issuance of shadow bills to users and educational actions to influence demand and utilization; common criteria for remuneration of the staff; design systems to recover costs in patients covered by labour; traffic and other European countries health

care; health technology assessment; etc.

Some of these measures targeted savings directly, namely: the reduction of the price of generics (from 15% to 30%), the prohibition of discounts of industry to community pharmacies, the improvement of the system of reference prices, and price reduction at the expiration of the patent of drugs. RDL 9/2011 made compulsory prescription by active pharmaceutical ingredient.

General measures to correct the deficit with impact in health care (2010-2012)

Near the end of the mandate of the Socialist Party (PSOE), the government of the President José Luis Rodríguez Zapatero, launched several policies and regulations in the economic, fiscal and financial fields worthy to mention. The starting point is May 2010: on this date there is a substantial change in the attitude of European and Eurozone authorities, offering access to refinancing the debt on condition of adopting a consolidation plan for the deficit and the debt.

The RDL 8/2010, adopted extraordinary measures to reduce the public deficit, as for instance: reduction of 5% on the wage bill of the public sector, non-revaluation of pensions in 2011, and the 7.5% discount of the on the price of medicines (outside the reference price system).

A very controversial Government measure in September 2011, was the Reform of article n° 135 of the Spanish Constitution that established the primacy of budgetary stability, obliging all administrations to respect the structural deficits indicated by the EU and that the credits to satisfy the interests and the capital of the public debt will enjoy absolute priority in the payment.

This constitutional change was the basis for the intervention of the Government of the Popular Party (elected in December 2011) in the expenditures of the Autonomous Communities and the municipalities and to establish measures to freeze salaries and public contracting of staff, reduce increase of pensions, increase weekly working hours from 35 to 37.5 in the public sector and introduce new taxes (RDL 20/2011), without constraints from other constitutional principles.

The imposition of central government measures on regional and local governments was facilitated by the publication of Organic Law 2/2012, of April 27, on



Budget Stability and Financial Sustainability; it established the new constitutional principle of budgetary stability and regulated preventive, corrective and coercive measures for the control of regional and local administrations.

Other additional regulations were taken on July 2012 (RDL 20/2012): reducing the number of days off and cancelling the extraordinary pay of December for public employees; reducing the amount of benefits for new unemployed; reducing coverage and benefits of the dependency care system; increasing VAT (rise from 18% to 21% in the standard rate and from 8% to 10% in the reduced rate). Moreover, the RDL 21/2012, created The Autonomic Liquidity Fund for credit operations to the Autonomous Communities. An extraordinary financing mechanism for payment to suppliers was also developed.

Finally, in July 2012 the “Agreement For External Financial Assistance For Bank Restructuring And Recapitalization” was signed. The Government, the European Commission, the European Central Bank and the International Monetary Fund agreed on a kind of limited rescue operation of recapitalization and restructuring of the Spanish bank sector (Memorandum of Understanding), with a contribution of the European Financial Stability Facility up to € 100,000 million.

Health austerity policies that reform the NHS (2012-2013)

In the context of this limited rescue, the government passed one regulation that was particularly important for the healthcare: The “Urgent Measures To Guarantee the Sustainability of the National Health System and Improve the Quality and Safety of Its Benefits” (RDL 16/2012) that were complemented by the redefinition of entitlements of citizens to NHS coverage (RDL 1192/2012). The main changes introduced by the RDL 16/2012 were the following:

- **Chapter I:** Altered Law 16/2003 (Cohesion), Organic Law 4/2000 (foreigners) and Law 33/2011 General Public Health (Additional Provision 6 - extension of the right to public health care): determining that the insured and beneficiary status became linked to Social Security, with exclusions to non-legalized residents and people with incomes higher than € 100,000. The Social Security agency assumed the role of certifier of NHS coverage rights.

- **Chapter II:** Reordered the portfolio of common and complementary (supplemental benefits granted by Autonomous Communities) services: common and basic benefits referred to the services provided directly by a health professional to a patient; supplementary benefits (pharmacy, orthoprosthesis, diets and non-urgent sanitary transport) were open to co-payments.

- **Chapter III:** A Welfare Guarantee Fund was established for compensation between regions, to bill patients resident in one Autonomous Community who were treated in another.

- **Chapter IV:** Introduced exclusion criteria for publicly funded drugs and a new system of co-payments with contribution by categories (assets-pensioners, unemployed without subsidy), income brackets (€18,000 / ... / € 100,000) and monthly contribution ceilings for pensioners.

Other regulations established that 417 drugs were excluded from public financing, most of them “because they are indicated in the treatment of minor symptoms” (August 2012). In 2013 another regulation (Law 29/2006) reinforced the role of central government in the pharmaceutical purchasing, limiting the initiatives of Autonomous Communities to make local savings through auctions of certain medicines under prescription.

3 - Health care austerity – opportunities and threats: apparent pragmatism, but ideology under the surface

The main impacts on the health system were generated by general regulations that reduced funding and public system resources, contracting public health expenditure by 11.9% (9,002 billion) between 2013 and 2019 (in current euros per capita it is down from 1,634 to 1,424).

Reduction in contracted staff was estimated in 28,000 persons (10% budget reduction between 2011 and 2013). Cuts in investments were sharp and dangerous: 2013 expenses were only 30% of 2008 ones. In 2015 capital expenses had not yet reached the level of 2008.

The lack of formal systemic reforms and the incrementalism of spending cuts do not mean that there is not a growing ideological bias in the transformation

that has been introduced progressively on the political agenda.

First of all, it is important to consider that the National Health System, with very reasonable operating expenses and good results (see data presented in the first section of this article on the cost efficiency of the system and below in the section “Good health ... in the short term”), became a very attractive sector to apply cuts by the public treasury due to the volume of its total expenditure.

Secondly, in the process of austerity there was a progressive change of narrative by the government: what began as an adjustment of spending became a challenge to all welfare services, under the accusation of “unsustainability”, and what began as a challenge of external sustainability (forced reduction in the allocation of resources), became a narrative of an unmanageable public health care system.

The increasing flight of patients from the middle and upper classes to VIH and utilization of private health care (2.3 of GDP in 2010 and 2.7% in 2014), as well as the increase of co-payments for public health medicines and pay for health care represent a transition from a scenario of great confidence in society as a collective agent of protection of health risks, towards a model where the individual and his family must worry to a large extent to cover a part increasing of such risks and expenses.

Taking 2009 as base 100, the evolution of public health expenditure in current euros fell to 88.1% in 2013, and in the latest available data (2016) the previous level had not yet recovered (95.8%). Private health expenditure has grown steadily, to be at 121.2% of the level of 2009; its main component, direct OOP payment, has grown by 26.2%, reflecting the direct effect of the increase in medication co-payments.[7]

Along with the liberal ideological bias that has been instilled in public and health services, the pragmatic style has meant neglecting reform processes that were on the agenda. It is true that reforming health in Spain is as necessary as it is difficult, since power and authority are widely distributed, and it is easy to organise blocking minorities. It is also true that an acute economic crisis has the effect of legitimizing extraordinary measures, which displace the processes of structural change that require more comprehensive and internally consistent solutions from the agenda. But the effect of reformist paralysis is a remarkable fact and a striking legacy of the past decade, which, moreover, has generated a fatalis-

tic and defeatist attitude regarding rational and planned systemic changes.

In addition to freezing the NHS reform processes, the austerity measures may have entailed risks of worsening social conditions, whose health effects will not be evident in the short term, but which may lead to increases in morbidity in the medium term (such as then it will be commented).

The health care system performance under the Spanish government a djustment programme

1 - Good health... in the short term

There has been much interest in the past few years in demonstrating the effect of the crisis and austerity policies on the health of the population. From a perspective of social activism, it was a highly plausible and expected effect; For governments it was a worrisome perspective that led them to hide the information and minimize the importance of the problems. However, the scientific literature is not conclusive on the immediate effects of the crises on the health of the population, finding contradictory effects, including improvements in some important indicators of perceived health, morbidity, use and lifestyle.

“The evidence available on the impact of previous crises on health reveals different patterns attributable to study designs, the characteristics of each crisis, and other factors related to the socioeconomic and political context. There is greater consensus on the mediating role of government policy responses to financial crises. These responses may magnify or mitigate the adverse effects of crises on population health. Some studies have shown a significant deterioration in some health indicators in the context of the current crisis, mainly in relation to mental health and communicable diseases. [...] In addition, this crisis is being used by some governments to push reforms aimed at privatizing health services, thereby restricting the right to health and health care ... These measures are often arbitrarily implemented and based on ideological decisions rather than on the available evidence. Therefore, adverse consequences are to be expected in terms of financial protection, efficiency, and equity”. [8]



A group of prestigious experts has recently concluded a profound and extensive review on the effects of the crisis and austerity policies on health (not yet published), with the following conclusions:

“The recent economic crisis experienced in Spain [...] does not seem to have affected in a severe way, at least in the short term, the mortality and self-perceived health of the general population. However, there has been a negative impact on mental health, especially among men. Likewise, there are vulnerable population groups whose health has worsened during this period, and social inequalities in health have intensified. Given the alarming evolution observed in the social indicators of income inequality and poverty rates and risk of social exclusion, the identified short-term results should be seen with reservation and the evolution of the health of the population in the medium and long term should be observed with utmost intention. This is of particular importance for the appropriate conclusions on the policies and interventions to be implemented in future crisis situations.”[9]

More specifically: Mortality (general and infant), morbidity, life expectancy, and perceived health, have not worsened after 2009 and in the years of the crisis. The interpretation of data on suicides is controversial and not conclusive.[10] Suicides and mental health have received much attention in the Spanish published literature, with results that suggest a relationship between economic crisis and mental health, but with limitations and caution. The authors of the aforementioned review conclude that:[11]

“There is consistent evidence among studies that mental health worsens during the crisis, particularly among men, that this worsening could be associated with unemployment and deteriorating working conditions, and that social inequalities in mental health have been maintained during the years of crisis or could even have increased.”

The analysis of the health of the population by factors like age, by socio-economic groups (unemployed, and

low educational level), by sex (women), by diseases and risk factors (hypertension, dyslipidaemia), or by habits of life (alcohol, cannabis), suggest that social inequalities in health have played a relevant role in the evolution, but they are far from conclusive in their attribution to the crisis and austerity policies. Nonetheless, evidence regarding the relationship between factors of socio-economic risks and health may appear during the coming years.

2 - Good response of the health care system... But exhausting the reserves

Although between 2009 and 2015 around 10% of budget was drained out of the public health care system, the volume of activity remained quite stable. Hospitalization, surgery, ambulatory care, day care, ambulatory surgery, emergencies, primary care visits, etc. showed the continuation of the level of performance.

Primary care was maintained in the usual high frequencies; 5.57 annual visits to the doctor and 2.51 to the nurse in 2009 (adjusted to age structure); in the years of the crisis, and subsequently, there was a smooth and sustained decrease in utilization: 4.78 visits to the doctor and 2.36 to the nurse in 2014; in 2017, the trend for physicians is maintained (4.70 consultations/year adjusted).[12]

Hospital discharges in public sector (4,047 million in 2010) were reduced by 1% in 2014, although in

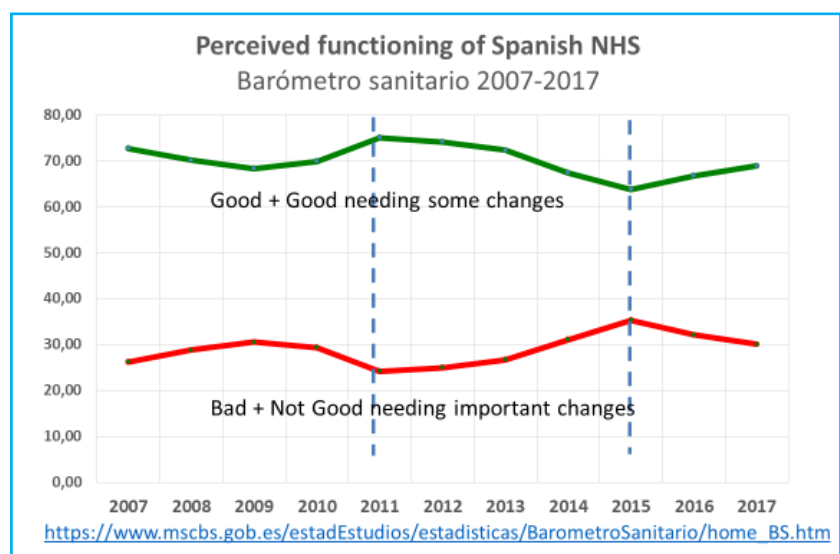


Figure 1

Source: Opinion Survey of the NHS. https://www.msrebs.gob.es/estadEstudios/estadisticas/BarometroSanitario/home_BS.htm

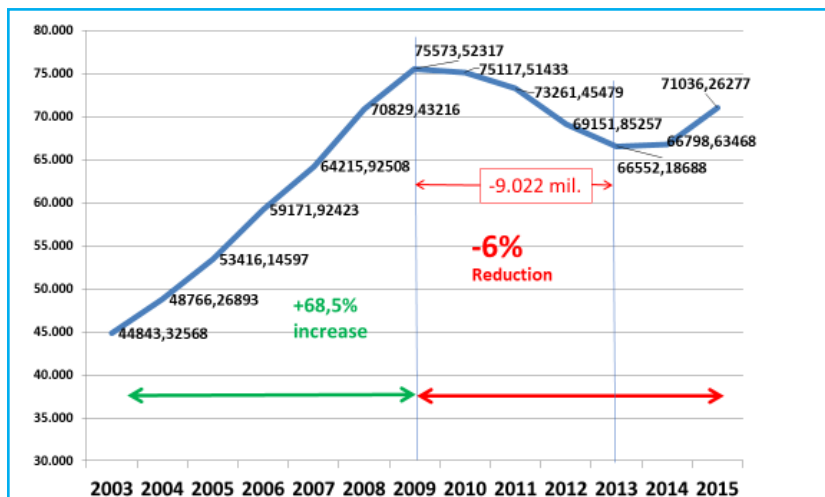


Figure 2 - Public Health Expenditures. Spain, 2003 - 2015 (million €)

Source: Sistema de Cuentas en Salud. Serie histórica 2003-2015. Ministerio de Sanidad.

2016 they have recovered. Hospital discharges in private health care did not increase during the crisis, but, in relation to 2010 (1.19 million discharges), production increased by 3% in 2014, and by 6% in 2016.

Surgical interventions in public hospitals maintained the same level (one million programmed and 400,000 urgent), but ambulatory surgery grew continuously in the period, increasing by more than 6 percentage points (from 39.8% of total surgical operations in 2010 to 45.94 in 2016).

There were no variations in the frequency of outpatient visits to the public hospital (and its associated outpatient specialty centres), with figures of 1.6 consultations per inhabitant per year. Hospital emergencies remained at the usual high level of attendance (0.46 per inhabitant per year), with slight decreases in the worst years of the crisis (0.45 in 2014) and a rebound in the post-crisis (0.48 in 2016).

According to the public hospital statistics, the health staff does not suffer significant reductions (only in the ancillary staff with a 6% reduction), but in contrast to these data the Active Population Survey for the whole of the public health sector registered a decrease of 3.5% (20,700 jobs) between 2012 and 2013.[13]

Waiting lists did not worsen alongside the years of the most acute crisis.[14]

The perception of users, as assessed in the yearly survey called "Health Barometer", shows a clear negative impact, easily attributable to crisis and austerity.[15] In the following image the effects of budget cuts on perceived quality are clearly visible.

The statistically detectable trends presented above occurred against the background of a significant reduction in public health system funding. The graph below shows a remarkable contrast between a time of rapid growth (until 2009) and a period of acute reduction (2010-2013).

3 - Impact of austerity policies in the NHS: did the cuts affect fat, muscle or bone?

Although the National Health System has been "resilient", its reserves are getting smaller, patients notice that the service is worsening (more than improving) and they have to endure longer waiting periods.

The growth of VIH spending is indicative of the deterioration of the perceived quality and accessibility. The higher co-payments are an additional effect of the RDL 16/2012 that require an increase in private health expenditure.[16]

The contraction of expenses and the maintenance of a broad and competent health have not been the result of a virtuous model of good governance. Public healthcare has undoubtedly used reserves (in the language of austerity "accumulated fat") that had been created in the period of rapid growth (2003-2009). But the model of linear budget cuts has not been able to distinguish between "fat" and "muscle". One striking example is the rule that retired employees could not be substituted. This norm affected the centres and units in an unequal way depending on the age of their staff, creating multiple functional and operational problems. This type of cuts frequently failed to reduce "fat" and harmed instead "muscles" or even with "bones".

Despite this lack of specificity of the austerity measures, wage cuts and worsening working conditions, the NHS managed to overcome the tough times without the population suffering damage to their healthcare. This speaks well of its organizational architecture, more solid than expected, and of the effort made by its staff and professionals, as well as their commitment to maintain the standard of quality and accessibility of public services. Health workers and many patients are convinced that the militant response of health personnel has contrasted with the negligent attitudes of many political, economic and health authorities.

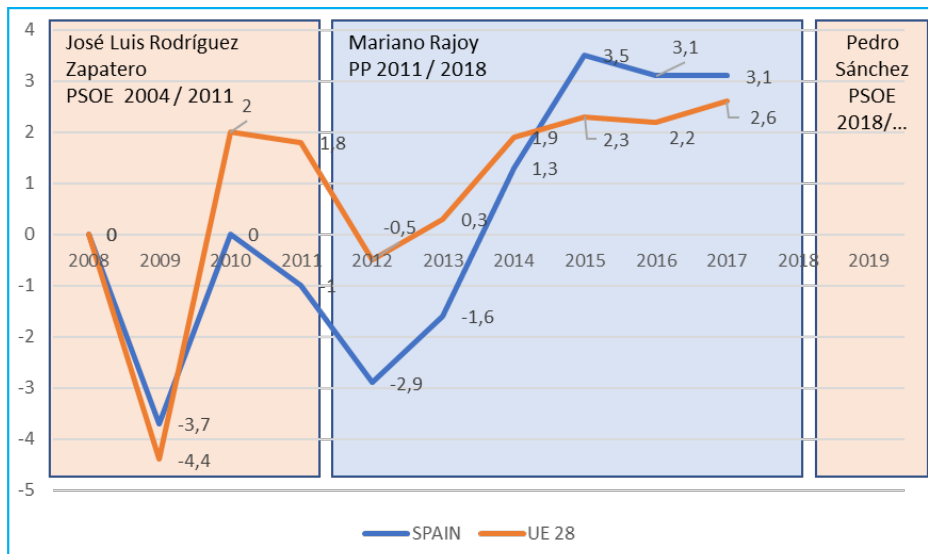


Figure 3 - GDP Variation 2008-2017 Spain/UE-28

Source: Eurostat, <https://ec.europa.eu/eurostat/web/national-accounts/data/database>, complemented with political terms.

The institutional architecture of the NHS had important problems and imbalances before the crisis. Its “skeleton” was originally created in the 1950s based on the Bismarck model and evolved in the 1980s towards a decentralized and bureaucratized Beveridge model. This gradual transition produced growing tensions that worsened after the crisis. Many experts believe that the time has come for structural reforms that redefine the NHS and establish a set of explicit and internally consistent rules and structures. The crisis and the austerity policies have delayed these necessary reforms and have sowed mistrust among all relevant actors. Fat, muscle and bone have been affected in this period. Getting out of the crisis will be much more difficult because it is not possible to go back to the starting point. The forces that might promote the needed reforms of the NHS are not easily identified.

4 - Government policies and the trends in inequality and poverty

In the following graph we can see the of variation of the Spanish and European GDP, and the chronology of governments in Spain.

The Socialist Party managed the first part of the crisis with a half-hearted response, based on a Keynesian public spending strategy, but it was not able to resolve the problem of the credit financed speculative real estate bubble that generated economic overheating.

The Popular Party managed the second part of the crisis and the post-crisis, and progressively incorporated its ideological perspective into what could initially be explained as exceptional measures of adjustment in spending.

The bank rescue was basically financed by cuts in public spending, with a net transfer of welfare from citizens to financial institutions. Unemployment surpassed the 20%-mark, more unemployed lost eligibility of subsidies, social protection and the support for families and dependent persons was reduced. The crisis and these measures led to a progressive impoverishment of the less prosperous parts of the population and reduced the families’ disposable income.

The pressure of unemployment, and the deregulation of the labour market by Law 3/2012 (precarious work relations, wage devaluation, weakening of collective bargaining, and increased inequality), produced a reduction in salaries, tightening of working conditions, and extending working hours, often without extra payment.

“Since the beginning of the crisis in 2008, the Gini index has barely experienced a variation of 0.1 points in the EU-27 as a whole, while in Spain has increased by 2.2 points, well above countries like Portugal, Greece or Italy, countries who have suffered the crisis with a similar intensity, or even higher, to the Spanish, which shows that the increase in inequalities is not an inevitable consequence of a crisis situation, but the result of the policies that are applied to management it.”[17]

5 - The need for a change

The growth of the economy after the crisis is not correcting the increased inequalities and maintains the risk of poverty and social exclusion. The three main ideas of the recent OECD-report on Spain raises three major challenges: [18]

- The recovery is underway but making growth more inclusive remains a challenge

Function	Código COFOG	2016	2017	2018	2019	2020	2021
		% del PIB					
1. General public services	1	6,09	5,58	5,34	5,23	5,13	5,05
2. Defence	2	0,97	0,89	0,87	0,87	0,87	0,85
3. Public order and safety	3	1,90	1,83	1,81	1,77	1,74	1,72
4. Economic affairs	4	3,94	3,83	3,87	3,59	3,52	3,47
5. Environmental protection	5	0,82	0,85	0,84	0,83	0,81	0,80
6. Housing and community amenities	6	0,48	0,48	0,47	0,46	0,46	0,45
7. Health	7	6,04	5,95	5,87	5,77	5,66	5,59
8. Recreation, culture and religion	8	1,11	1,09	1,08	1,06	1,04	1,03
9. Education	9	4,02	3,95	3,89	3,82	3,75	3,70
10. Social protection	10	16,83	16,57	16,47	16,43	16,15	15,88
11. Total Expenditure	TE	42,20	41,02	40,51	39,84	39,13	38,55

Sources: National Institute of Statistics, Ministry of Economy, Industry and Competitiveness and Ministry of Finance and Civil Service.

Figure 4 - Update of Spain's stability plan 2018–2021. Change in General Government expenditure by function

Source: Actualización del programa de estabilidad reino de España 2012-2015; Página 49;

http://www.thespainiseconomy.com/stfls/tse/ficheros/2013/noviembre/Stability_Programme_2018_2021_es_1.pdf

- *Fostering innovative business investment is crucial to unlock productivity growth*
- *Reducing unemployment and improving job quality can make growth more inclusive*

The purposes of the government at the beginning of 2018 were very similar to previous years in relation to the path of containment of the growth in health spending (and in the rest of functions) with a clear logic of reducing the size of the State and the public economy. In the following table we can see the expected reduction in the percentage of GDP for health until 2021. The general elections of December 2015 and June 2016 did not result in the fall of the conservative government under PM Mariano Rajoy, but they marked the beginning of a new era with four major parties in the Parliament, in contrast to the previous decades of alternation between only two major political forces (PP and PSOE). In 2017, the crisis in Cataluña aggravated the precarious situation of the conservative government.

Health policy changes after the end of the crisis

1 - Turbulent politics

In June 2018, the conservative government of PM Mariano Rajoy was ousted by the Parliament, and a new Socialist minority government under PM Pedro Sánchez was elected. This new cabinet is supported by a

small and unstable parliamentary majority (Podemos and nationalist parties) and tries to change the course of economic, labour and public services policies. A major factor in this effort is the 2019 budget that is designed to raise the ceiling on expenditure by between 5 and 6 billion.

The outcome of the negotiations between the different forces in the national Parliament and between the EU-institutions and the Spanish government about will be decisive for the immediate future of healthcare policies. The first legislative initiative of the new government has been the extension of the access to public health to irregular immigrants (RDL 7/2018), thus revoking the limitation introduced in 2012 by the previous government (RDL 16/2012). Before, several governments of Autonomous Communities had already created mechanisms to expand the coverage of the immigrant population up to levels similar to those of the resident population. [19] The central question for the future of healthcare in Spain is whether the general political conditions do allow structural reforms and what will be the outcome of the current power struggle at national level.

In relation to the general conditions, it is important that the NHS enjoys great support from the public, as shown by the studies of the Centre for Sociological Research [20]. In a review of micro-data regarding attitudes to Welfare State, Gómez-Franco found that:

“We have seen so far that neither political ideology nor social statuses are sociologically relevant, beyond their statistical significance, to explain differences in the massive support for public health in our country.” [21]



As a demonstration, we see the scarce differentiation of voters of the Popular Party and the Socialist Party in their support for public health.

Protagonists of a progressive alternative

In addition to the negative effects of the austerity-policies during the crisis (in particular the lack of confidence of all agents) there are some major structural obstacles for reforms in healthcare, namely the great fragmentation of administrative power and the strong influence of economic authorities which weakens the health authorities' capability to take reformist initiatives.

The broad popular support of the public healthcare system referred in the previous section and the structural constraints mentioned above limit the range of prospects for healthcare reforms.

In the possible case of early elections in 2019, a victory of the political right would consolidate the moderate trend towards disinvestment in public health. The slow and silent migration of patients from the middle and upper classes to the private sector would produce benefits for private companies in the sector. Simultaneously, public healthcare would suffer further deterioration. However, such a policy might have significant costs, as it was demonstrated by the so-called White Tide-Movement (Marea Blanca) against privatizations in Spanish healthcare (2012-2014). This could be a strong disincentive for a possible coalition between the Popular Party and the "Ciudadanos" (and possibly the Basque nationalists) to take the risks of this kind of privatization strategy.

A possible majority of the left, on the other hand, would try to improve the financing of welfare services, but the different perception of PSOE and PODEMOS with regard to the acceptable margins of deficit and indebtedness would be a factor of instability. Furthermore, there are significant differences between both parties' ideas of welfare reform. PODEMOS defends a more traditional conception of the organization of public services, with a preference for administrative man-

	2008 remind of vote	
	PSOE	PP
Must be public, and financed by taxation	90,1	82,1
Must be public, with mixed financing, taxes and cost sharing of patients	5,6	9,7
Must be publicly financed with private provision of health care services	2,2	4,2
Must be total or partially privatised, and payed directly by citizens when they use services.	0,5	1,6
N.S.	1,3	2
N.C.	0,4	0,4
(N)	787	497

Figure 5 - Opinion on the Public/Private nature of Health care System

Source: Estudio CIS n° 2765 sobre Actitudes ante el Estado de Bienestar.

agement and contracting and a refusal of outsourcing. In contrast, the PSOE has a different approach towards modernisation with strong elements of entrepreneurial public management. Many proposals have been made to address a set of reforms that facilitate the governance of the NHS and its 17 health services in the Autonomous Communities. The hostility of the economic and civil service authorities, the distrust of the Unions, and the conservatism of the key agents, are making it difficult for an institutional project of structural changes to mature. [22 e 23]

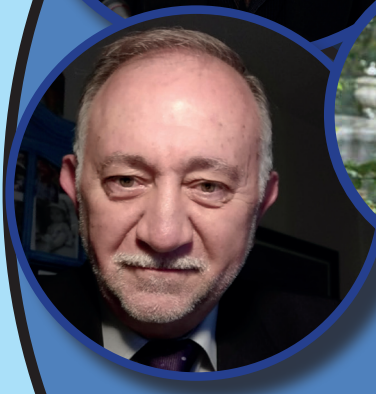
A practical alternative to the political difficulties to conceive, design and implement reforms may be the development of "Good Government" methods that may help to improve the conditions to manage the health centres and services with an umbrella of Governing Boards. In addition, the accountability based on the budget, the transparency of the management contracts, and the monitoring and publicity of the performance indicators can contribute to create dynamics for improvement based on comparative results. Some ongoing experiences (regulatory design of good governance bodies in Madrid) could be promising in the medium term.

The five principles of good governance (transparency, accountability, participation, integrity and capacity), can make the difference between clumsy and thoughtless austerity on the one hand and wise sustainability that helps to improve performance and increase efficiency. [24]

References

- 1 - Bernal-Delgado E, García-Armesto S, Oliva J, Sánchez Martínez FI, Repullo JR, Peña-Longobardo LM, Ridao-López M, Hernández-Quevedo C. Spain: Health system review. *Health Systems in Transition*, 2018 [cited 2018 Nov 12];20(2):1–179. Available from: <http://www.euro.who.int/en/about-us/partners/observatory/publications/health-system-reviews-hits/full-list-of-country-hits/spain-hit-2018>http://www.euro.who.int/__data/assets/pdf_file/0011/355997/Health-Profile-Spain-Eng.pdf.
- 2 - State of Health in the EU: Spain 2017, Country Health Profile. EU-OECD-European Observatory on Health Systems and Policies; 2018 [cited 2018 Nov 12]. Available from: https://ec.europa.eu/health/sites/health/files/state/docs/chp_es_english.pdf
- 3 - INCLAS SNS. Portal Estadístico del Ministerio de Sanidad, Consumo y Bienestar Social. 2018 [cited 2018 Nov 12]. Available from: <http://inclas.msbs.es>
- 4 - Expenditure data on prescriptions and hospital pharmaceuticals. Ministerio de Hacienda [Ministry of Treasury]. 2018 [cited 2018 Nov 12]. Available from: <http://www.hacienda.gob.es/es-ES/CDI/Paginas/EstabilidadPresupuestaria/InformacionAAPPs/Indicadores-sobre-Gasto-Farmac%C3%A9utico-y-Sanitario.aspx>
- 5 - Yearly averages: source, Active Population Survey, National Institute of Statistics. https://www.ine.es/prensa/epa_tabla.htm
- 6 - Repullo JR. Changes in the regulation and government of the health system. *SESPAS Report 2014*. *Gac Sanit*. 2014 [cited 2018 Nov 12]; 28(S1): 62-68. Available from: <http://gacetasanitaria.org/es/cambios-regulacion-gobierno-sanidad-informe/articulo/S021391114000910/>
- 7 - Sistema de Cuentas de Salud. Portal Estadístico del Ministerio de Sanidad, Consumo y Bienestar Social. 2018 [cited 2018 Nov 12]. Available from: <https://www.msbs.gob.es/estadEstudios/estadisticas/sisInfSanSNS/pdf/SCSdatosEstadisticos.xls>
- 8 - Rivadeneyra-Sicilia, Minué-Lorenzo S, Artundo-Purroy C, Márquez-Calderón S. Lessons from abroad. Current and previous crisis in other countries. *SESPAS Report 2014*. *Gac Sanit*. 2014 [cited 2018 Nov 12]; 28(S1): 12-17. Available from: <http://www.gacetasanitaria.org/es-lecciones-desde-fuera-otros-paises-articulo-S021391114000879>
- 9 - Oliva J, González-López-Varcárcel B, Barber-Pérez P, Peña-Longobardo M, Zozaya-González N. Crisis económica y salud: lecciones aprendidas y recomendaciones para el futuro [Economic crisis and health: lessons learned and future recommendations]. *Crisis y salud Revista Cuadernos Económicos ICE (Forthcoming)*. Will be available from: <http://www.revistasice.com/es-ES/CICE/Paginas/UltimoCuaderno.aspx>
- 10 - Alvarez-Galvez J, Salinas-Perez JA, Rodero-Cosano ML, Salvador-Carulla L. Methodological barriers to studying the association between the economic crisis and suicide in Spain. *BMC Public Health*. 2017 [cited 2018 Nov 12]; 17: 694. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4702-0>
- 11 - Opus cit nº 10:19-21
- 12 - Portal Estadístico del Ministerio de Sanidad, Consumo y Bienestar Social. Database. 2018 [cited 2018 Nov 12]. Available from: <https://www.msbs.gob.es/estadEstudios/estadisticas/sisInfSanSNS/aplicacionesConsulta/home.htm>
- 13 - Study on employment in the health sector. CCOO FSS. 2017 [cited 2018 Nov 12]. Available from: http://www.sanidad.ccoo.es/comunes/recursos/30/2221585-Estudio_sobre_empleo_sanitario_de_la_FSS-CCOO.pdf
- 14 - Portal Estadístico del Ministerio de Sanidad, Consumo y Bienestar Social. Database. Waiting times reports. 2018 [cited 2018 Nov 12]. Available from: <https://www.msbs.gob.es/estadEstudios/estadisticas/inforRecopilaciones/listaEspera.htm>
- 15 - Portal Estadístico del Ministerio de Sanidad, Consumo y Bienestar Social. Report “Barómetro Sanitario”. 2018 [cited 2018 Nov 12]. Available from: https://www.msbs.gob.es/estadEstudios/estadisticas/BarometroSanitario/home_BS.htm
- 16 - Repullo JR. Austerity, bad-governance, innovation and the future of the Spanish National Health Service. *Med Clin*. 2017 [cited 2018 Nov 12]. Available from: <https://doi.org/10.1016/j.medcli.2018.05.028>
- 17 - Alós R, Beneyto PJ, Jódar P. Labour Reform and Deregulation Of The Labour Market. *Anuario IET de Trabajo y Relaciones Laborales. Desigualdades en el Mercado de Trabajo después de la Gran Recesión*. 2017 [cited 2018 Nov 12]; 4: 73-86. Available from: <https://www.raco.cat/index.php/anuarioiet/article/view-File/331313/422096>
- 18 - Spain: OECD Economic Surveys. 2017 (March) [cited 2018 Nov 12]; 9. Available from: <http://www.oecd.org/eco/surveys/Spain-2017-OECD-economic-survey-overview.pdf>
- 19 - Real Decreto-ley 7/2018, de 27 de julio, sobre el acceso universal al Sistema Nacional de Salud [cited 2018 Nov 12]. Available from: <https://www.boe.es/buscar/act.php?id=BOE-A-2018-10752>
- 20 - CIS [Centre for Sociological Research]: Encuesta 2765, “*Actitudes hacia el Estado de Bienestar*”. 2008 [cited 2018 Nov 12]. Available from: http://www.cis.es/cis/opencm/ES/1_encuestas/estudios/ver.jsp?estudio=8860
- 21 - Gómez-Franco T, Repullo JR. La legitimidad social de la sanidad pública en España [The social legitimacy of the public health system in Spain]. *Sistema: Revista de Ciencias Sociales*. 2015 [cited 2018 Nov 12]; 237: 19-48.
- 22 - Bernal E, Campillo C, González López-Valcárcel B, Meneu R, Puig-Junoy J, Repullo JR, Urbanos R. La Sanidad Pública ante la crisis. Recomendaciones para una actuación pública sensata y responsable. Documento de Debate de la Asociación de Economía de la Salud. 2011 [cited 2018 Nov 12]. Available from: http://www.aes.es/Publicaciones/DOCUMENTO_DEBATE_SNS_AES.pdf
- 23 - Repullo JR, Freire JM. Implementando estrategias para mejorar el gobierno institucional del Sistema Nacional de Salud. *Gac Sanit*. 2016 [cited 2018 Nov 12];30(S1):3–8. Available from: <http://www.gacetasanitaria.org/es/implementando-estrategias-mejorar-el-gobierno/articulo/S021391116300620/>
- 24 - Repullo JR. Austerity: reforming systems under financial pressure. In: Greer SL, Wismar M, Figueras J. *Strengthening Health System Governance. Better policies, stronger performance*. Berkshire: Open University Press - Mc Graw Hill. 2016 [cited 2018 Nov 12]: 208-22. Available from: http://www.euro.who.int/__data/assets/pdf_file/0004/307939/Strengthening-health-system-governance-better-policies-stronger-performance.pdf?ua=1

Leading Authors



Charalampos Economou



Professor in Health Policy and Sociology of Health, Panteion University

Charalampos Economou was born in Athens and studied sociology in Panteion University of Social and Political Sciences. He obtained his MSc from National School of Public Health, Athens, in health services management and his PhD from Panteion University, in social policy and health policy.

He has worked for many years as a researcher in the Department of Health Services Management and the Department of Health Economics National School of Public Health Athens. Since 2018 is Professor of Health Policy and Sociology of Health in the Department of Sociology of Panteion University.

His teaching and research activities concern Social Policy Supranational Social Policies European Social Policy Health Policy Social Exclusion and Sociology of Health. Besides he lectures in graduate courses and in the National School of Public Administration Athens. He has published on health policy health systems European social policy welfare states comparative analysis poverty and social exclusion. He has participated in many international and national research projects and he has collaborated with international organizations (OECD/WHO) and research centres (European Observatory on Health Care Systems LSE Centre for Civil Society etc).

Stephen Thomas



Associate Professor, Public Health & Primary Care Director Centre for Health Policy & Mgmt, School Office – Medicine

Steve is the Director of the Centre for Health Policy and Management, Associate Professor and a codirector of the HRB-funded national SPHERE Programme in Population Health and Health Services Research. He is also the Director of Health Policy and Engagement for the School of Medicine.

He has a wealth of international experience in policy oriented research and post-graduate teaching and education in government and academia over the last 23 years. His research interests include health systems evaluation, health financing, health economics and health policy analysis, and workforce planning and motivation. His track record in policy influence is outstanding. Most recently he led the Trinity team in support of the Oireachtas Committee for the Future of Healthcare and its production of Slaintecare. He coordinates the Health Economics and the Health Policy and Systems teaching on various post-graduate programmes. He is responsible for the design and evaluation of the SPHERE PhD programme which has successfully trained over 40 PhD candidates. He collaborates widely with national and international stakeholders in research, policy and education.

Inês Fronteira



Assistant Professor in Public Health and Epidemiology, at the Institute of Hygiene and Tropical Medicine, Universidade Nova de Lisboa (IHMT/UNL), since 2011.

She has a Nursing degree from Escola Superior de Enfermagem de Francisco Gentil; MSc Public Health, National School of Public Health, Universidade Nova de Lisboa and PhD in International Health, Institute of Hygiene and Tropical Medicine, Universidade Nova de Lisboa.

Inês is researcher and teacher in International Public Health and Biostatistics and Coordinator of the MSc in Public Health and Development of the IHMT/UNL. She has been invited as teacher in Universidade dos Açores, Escola Superior de Enfermagem de Santarém, Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo and Faculdade Ciências e Tecnologia/ UNL.

Her main areas of interest are human resources for health policies, medical and nursing education, work related issues in health personnel, migration of human resources for health and observational epidemiology.

She has led various research projects in those areas, supervised several postgraduate degrees, and acted as a consultant for the Portuguese National Directorate of Health. She is a member of EHMA management Board and associate editor of Human Resources for Health (BMC). She is a consultant in epidemiology for Acta Medica Portuguesa.

Inês Fronteira is author/coauthor of over 20 peer reviewed publications and several book/ book chapters.

Francesca Ferré



Post-doc Fellow in Management, Laboratorio Management e Sanità, Scuola Sant'Anna Pisa

Graduated in December 2009 in Economics and Commerce at the L. Bocconi University with a Double Degree course in Public Administration at the State University of New York (USA). PhD in Business Economics at the University of Parma (XVII cycle) and Master in Research Science at the ESADE Business School (Barcelona).

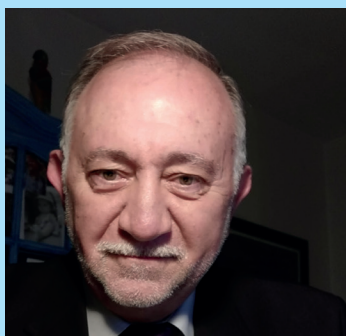
She is a research fellow at the Management and Health Laboratory (MeS) Scuola Sant'Anna since March 2016 - area of sustainability and quality of care in public health systems.

Previously she was Market Access and Health Economics Senior Consultant at Quintiles Italia; from 2010 to 2014 she was a Research Fellow at the Bocconi University CERGIS where she carried out research in the field of health management and economic evaluations. She studied the institutional set-ups that characterize the regional health systems, the quasi-market forms, the government and the clients of private providers, the economic dimension of health mobility, the management models for the introduction and diffusion of pharmaceutical innovation and the approaches to the economic evaluation of health and nutrition programs.

At international level, Francesca Ferré has been collaborating since 2010 with the European Observatory on Health Systems and Policies in the monitoring and study of the choices of health systems in the face of the financial crisis.

Since 2014, she is a member of the Academy of Management (AOM) Healthcare Management Division; since 2016, she participates in the European Health Policy Group (EHPG).

José Ramón Repullo Labrador



Head of the Department of Health Planning and Economics National School of Public Health, Institute for Health Carlos III

Since 2017 José Ramón Repullo is the technical director of the Fundación para la Formación de la Organización Médica Colegial (FFOMC).

PhD in Medicine and Surgery at the Universidad Autónoma de Madrid and Professor of Health Planning and Economics at the National School of Public Health, Institute for Health Carlos III - Madrid. After several management positions at several hospitals, José Ramón Repullo was also director of the Hospital General de Móstoles.

Author of 220 scientific publications.





INSTITUTO DE HIGIENE E
MEDICINA TROPICAL



UNIVERSIDADE NOVA DE LISBOA
INSTITUTO DE HIGIENE E MEDICINA TROPICAL
Vol. 17 (Suplemento nº 1), 2018, S1- S73; ISSN 2184-2310