OECD Reviews of Health Care Quality

PORTUGAL
RAISING STANDARDS
EXECUTIVE SUMMARY, ASSESSMENT AND RECOMMENDATIONS

27 May 2015
OECD Reviews of Health Care Quality: Portugal 2015

RAISING STANDARDS
Foreword

This report is part of a series of publications reviewing the quality of health care across selected OECD countries. As health costs continue to climb, policy makers increasingly face the challenge of ensuring that spending on health delivers value for money. At the same time, concerns about poor quality health care have led to demands for greater transparency and accountability. Despite this, there is still considerable uncertainty over which policies work best in delivering health care that is safe, effective and provides a positive patient experience, as well as which quality-improvement strategies can help deliver the best care at the least cost. OECD Reviews of Health Care Quality seek to highlight and support the development of better policies to improve quality in health care, to help ensure that the substantial resources devoted to health are being used effectively in supporting people to live healthier lives.

This report reviews the quality of health care in Portugal. It highlights good practices, and provides targeted assessments and recommendations for further quality gains in primary and secondary care. The Portuguese approach to quality monitoring and improvement is particularly sophisticated. Over recent years, Portugal has introduced a wide set of structural reforms and quality initiatives aiming to improve efficiency and achieve better quality of care. Avoidable hospital admissions for asthma, COPD and diabetes are amongst the lowest in the OECD. The country has also demonstrated one of the steepest reductions in ischemic heart disease (IHD) mortality rates in the OECD since 1990. Despite these advances, several challenges lie ahead. The next stages of reform should in large part be about broadening, deepening and standardising the quality initiatives already in place. In primary care, strategic reflection around the direction of the primary care system, and the balance between Primary Health Care Units (PHCU) and Family Health Units (FHU) is needed, to ensure that high quality care can be accessed by the whole Portuguese population. In the hospital sector, ensuring adherence to agreed standards of care and clinical guidelines, shifting more care away from hospitals and into the community, as well as further quality improvement tools such as accreditation, are priorities.
ACKNOWLEDGEMENTS

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# Table of contents

**Acronyms and abbreviations** ................................................................. 9

**Executive summary** ................................................................................ 13

**Assessment and recommendations** ......................................................... 17

**Chapter 1. Quality of care policies in Portugal** ........................................ 39

1.1. Introduction ................................................................................................ 40
1.2. The Portuguese context ............................................................................. 42
1.3. Profiling policies on quality of health care and their impact ......................... 49
1.4. Overview of key quality of care policies and the legal framework for the quality of care ........................................................................... 49
1.5. Assuring the quality of inputs into the Portuguese health care system .......... 53
1.6. Policies to promote and assure patient safety ............................................. 61
1.7. Health system monitoring: Information infrastructure and public reporting .... 62
1.8. Development and use of practice guidelines .............................................. 64
1.9 Patient and public involvement in improving health care quality ................. 67
1.10. Conclusion .................................................................................................. 71
References ...................................................................................................... 73

**Chapter 2. Primary care provision in Portugal** ......................................... 75

2.1. Introduction ................................................................................................ 76
2.2. The Portuguese primary care system ........................................................ 76
2.3. Quality and outcomes of primary care in Portugal .................................... 86
2.4. Challenges facing the Portuguese primary care system ............................. 92
2.5. Maximising the dividend from primary care in Portugal .......................... 100
2.6. Conclusion .................................................................................................. 105
References ...................................................................................................... 106

**Chapter 3. Improving the quality of hospital care in Portugal** ..................... 109

3.1. Introduction ................................................................................................ 110
3.2. The supply of hospital services in Portugal ............................................. 111
3.3. An ambitious programme of reform has been undertaken over recent years ........................................................................................................... 116
3.4. Performance of the hospital sector on indicators of quality of care .......... 124
3.5. A number of quality assurance mechanisms have been recently instituted to assure minimum standard of acute care, promote patient safety and encourage hospital benchmarking .......................................................... 128
3.6. Challenges in the hospital sector ..................................................................... 135
3.7. Improving quality of care while conducting the current hospital reform ...... 139
3.8. Conclusion ....................................................................................................... 147
References .............................................................................................................. 149
Annex 3.A1. Hospital reform implementation towards the eight strategic initiatives ................................................................. 151

Chapter 4. Quality and efficiency in Portuguese health care ............................... 153

4.1. Introduction ..................................................................................................... 154
4.2. Spending and revenue raising in the Portuguese health system ...................... 155
4.3. Mechanisms to control spending in a fiscally constrained environment ......... 159
4.4. Persistent challenges in delivering quality and efficiency ............................... 167
4.5. Opportunities to strengthen quality and efficiency in the Portuguese health system ........................................................................................................ 172
4.6. Conclusion ....................................................................................................... 180
Notes ...................................................................................................................... 182
References .............................................................................................................. 183

Tables

Table 1.1. A typology of health care policies that influence health care quality ..... 49
Table 2.1. Organisation of primary care at the end of 2013, by Regional Health Administration (RHA) ................................................................. 81
Table 2.2. Rate of retirement of general practitioners in Portugal, and impact on shortage of GPs (number of patients left without a GP) ......................... 84
Table 2.3. Select indicators collected under the Identity card of indicators used in the contracting of primary health care, 2014 ........................................ 91
Table 3.1. Comparison between NHS and private hospitals, 2010 ............... 113
Table 3.2. List of indicators used for pay-for-performance purpose for EPE and SPA hospitals .......................................................................................... 122
Table 3.3. The Hospital Survey on Patient Safety Culture: Results from four OECD countries .......................................................................................... 131
Figures

Figure 1.1. Life expectancy at birth, 1970 and 2012 .......................................................... 42
Figure 1.2. Health expenditure per capita, 2011 (or nearest year) ................................. 43
Figure 1.3. Obstetric trauma, vaginal delivery with instrument, 2011
(or nearest year) ................................................................................................................ 45
Figure 1.4. Obstetric trauma, vaginal delivery without instrument, 2011
(or nearest year) ................................................................................................................ 45
Figure 1.5. Post-operative pulmonary embolism or deep vein thrombosis in adults, 2011 (left) and post-operative sepsis in adults (right), 2011
(or nearest year) ................................................................................................................ 46
Figure 1.6. Reduction in admission-based (same hospital) case fatality in adults aged 45 and over within 30 days after admission for AMI, 2001-11
(or nearest year) ................................................................................................................ 48
Figure 1.7. Reduction in admission-based (same hospital) case fatality in adults aged 45 and over within 30 days after admission for ischemic stroke, 2001-11
(or nearest year) ................................................................................................................ 48
Figure 1.8. Patient rating and feedback in NHS England ................................................. 71
Figure 2.1. Generalists and specialists as a share of all doctors, 2011
(or nearest year) ................................................................................................................ 83
Figure 2.2. Physician density, by territorial level 2 regions, 2012 (or nearest year) ..... 85
Figure 2.3. Asthma hospital admission in adults, 2006 and 2011 (or nearest year) ....... 86
Figure 2.4. COPD hospital admission in adults, 2006 and 2011 (or nearest year) .......... 87
Figure 2.5. Diabetes hospital admission in adults, 2006 and 2011 (or nearest year) ..... 87
Figure 2.6. Cephalosporins and quinolones as a proportion of all antibiotics prescribed, 2010 (or nearest year) .......................................................... 88
Figure 2.7. Population aged 65 years and over reporting to be in good health, 2011 (or nearest year) ......................................................................................................... 93
Figure 2.8. Estimated prevalence of diabetes, adults aged 20-79 years, 2011 .......... 95
Figure 2.9. Hypertensive patients with blood pressure measured each semester ..... 97
Figure 2.10. Diabetics (18-75 years) with nurse supervision last 12 months .......... 98
Figure 3.1. Hospital beds per 1 000 population, 2000 and 2012 (or nearest year) .... 114
Figure 3.2. Hospitals per million population, 2012 or latest year available .......... 115
Figure 3.3. Average length of stay in hospital for all causes, 2000 and 2012
(or nearest year) ................................................................................................................ 116
Figure 3.4. The 2011 hospital reform measures: Eight strategic initiatives .......... 124
Figure 3.5. Cerebrovascular disease mortality, 2011 and change 1990-2011
(or nearest year) ................................................................................................................ 125
Figure 3.6. Case-fatality in adults aged 45 and over within 30 days after admission for ischemic stroke, 2011 (or nearest year) .................................................. 126
Figure 3.7. Caesarean-section rates, 2011 (or nearest year) ........................................... 127
Figure 3.8. Foreign body left in during procedure in adults, 2011 (or nearest year) . 128
Figure 3.9. Hospital discharge for circulatory diseases and cancers ..................... 136
Figure 3.10. Hip fracture surgery initiated within 48 hours, population aged 65 or more, 2011 ............................................................ 138
Figure 4.1. Health expenditure as a share of GDP in selected OECD countries .... 156
Figure 4.2. Change in out-of-pocket expenditure as share of total expenditure on health in OECD countries, 2000-11 (or nearest year) ................................. 158
Figure 4.3. Optimising the quality-efficiency trade-off in health systems .......... 160
Figure 4.4. Average annual growth in pharmaceutical expenditure per capita in OECD countries in real terms, 2000-11 (or nearest year) .............................. 162
Figure 4.5. Share of cataract surgeries carried out as day cases, 2000 and 2011 (or nearest year) ................................................................. 164
Figure 4.6. Trend in share of generics in the pharmaceutical market, selected countries, 2000 to 2013 ................................................................. 168
Figure 4.7. Cephalosporins and quinolones as a proportion of all antibiotics prescribed, 2010 (or nearest year) ............................................................ 169
Figure 4.8. Knee replacement per 100 000 population (standardised rates), by geographic regions, Portugal, 2002 and 2009 ................................. 172
Acronyms and abbreviations

ACES  Groups of primary health centres
ACSA  *Agencia de Calidad Sanitaria de Andalucía* (Andaluzia Accreditation Model)
ACSQHC  Australian Commission on Safety and Quality in Health Care
ACSS  *Administraçao Central de Sistema de Saúde* (Central Administration of the Health System)
AHRQ  Agency for Healthcare Research and Quality
ALOS  Average length of stay
AMI  Acute myocardial infarction
CABG  Coronary artery bypass graft
CCU  Community Care Unit
CME  Continuing medical education
CNS  National Health Council
COPD  Chronic obstructive pulmonary disease
CPD  Continuous professional development
CQC  Care Quality Commission
CS  Primary care referral teams
DAMD  Danish General Practice Database
DGS  *Direcção-Geral da Saúde* (Directorate General of Health)
DQS  *Departamento da Qualidade na Saúde*
DRG  Diagnosis related group
ECCI  Integrated home care teams
ED  Emergency department
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>EGA</td>
<td>Hospital discharge teams</td>
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<tr>
<td>EPE</td>
<td>Public Enterprises Hospital</td>
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<tr>
<td>ERS</td>
<td><em>Entidade Reguladora da Saúde</em> (Health Regulation Authority)</td>
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<tr>
<td>FHU</td>
<td>Family Health Unit</td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
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<td>GMC</td>
<td>General Medical Council</td>
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<tr>
<td>GP</td>
<td>General practitioner</td>
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<tr>
<td>HC</td>
<td>Hospital centres and groups</td>
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<td>HCAI</td>
<td>Health care associated infection</td>
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<td>IGAS</td>
<td>General Inspectorate of Health-related Activities</td>
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<td>IHD</td>
<td>Ischemic heart disease</td>
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<td>INFARMED</td>
<td>National Authority of Medicines and Health Products</td>
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<tr>
<td>MDC</td>
<td>Major Diagnostic Category</td>
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<tr>
<td>MHAC</td>
<td>Maryland Hospital Acquired Conditions Programme</td>
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<tr>
<td>MRI</td>
<td>Magnetic resonance imaging</td>
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<tr>
<td>NHS</td>
<td>National Health System</td>
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<tr>
<td>NOTIFIC</td>
<td>National System of Notification of Incidents</td>
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<tr>
<td>P4P</td>
<td>Pay-for-Performance</td>
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<td>PDS</td>
<td>Portuguese Health Data Platform</td>
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<tr>
<td>PEM</td>
<td><em>Prescrição Electrónica Médica</em></td>
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<tr>
<td>PHCC</td>
<td>Primary Health Care Centre</td>
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<tr>
<td>PHCU</td>
<td>Primary Health Care Unit</td>
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<tr>
<td>PHU</td>
<td>Public Health Unit</td>
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<tr>
<td>PPCIRA</td>
<td>Portuguese Programme on Prevention and Control of Infection and Antimicrobial Resistance</td>
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<td>PPP</td>
<td>Public-private partnerships</td>
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<td>PPP</td>
<td>Purchasing power parity</td>
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<td>QOF</td>
<td>UK Quality and Outcomes Framework</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
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<tr>
<td>RHA</td>
<td>Administração Regional de Saúde (Regional Health Authorities)</td>
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<td>RNCCI</td>
<td>Rede Nacional de Cuidados Continuados Integrados (National Network of Integrated Continuous Care)</td>
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<tr>
<td>SA</td>
<td>Incorporated Public Hospitals</td>
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<tr>
<td>SIARS</td>
<td>Regional Health Administrations</td>
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<tr>
<td>SINAS</td>
<td>Sistema Nacional de Avaliação em Saúde (National System of Health Quality Assessment)</td>
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<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
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<tr>
<td>SPA</td>
<td>Public hospital (under the direct administration of the government)</td>
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<tr>
<td>ULS</td>
<td>Unidade Local de Saúde (Local Health Units)</td>
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<td>VHI</td>
<td>Voluntary Health Insurance</td>
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Executive summary

This report reviews the quality of health care in Portugal. It begins by providing an overview of policies and practices aimed at supporting quality of care in Portugal (Chapter 1). The report then focuses on three areas that are of particular importance for Portugal’s health system at present: the organisation of primary care (Chapter 2), hospital care (Chapter 3), and optimising quality and efficiency across the system as a whole (Chapter 4). In examining these areas, this report assesses the quality of care currently provided, seeks to highlight good practice, and provides a series of targeted assessments and recommendations for further improvements to quality of care.

The Portuguese National Health System (NHS) is organised nationally, with the Ministry of Health responsible for planning and regulation of the health system, providing overall leadership for the NHS and issuing the National Health Plan and the National Strategy for Quality in Health. The five Regional Health Authorities are responsible for the implementation of national health objectives and have financial responsibility for primary and hospital care. Although quality monitoring and improvement work is very much led by national authorities in Portugal, models of care on the ground are diverse and innovative, suggesting that a good balance has been achieved between the central and regional responsibilities. In response to recent fiscal pressure, Portugal has implemented a comprehensive set of structural reforms and introduced an extensive range of quality initiatives aimed at providing fiscal sustainability, improving efficiency and achieving better quality across the health care system. There are nevertheless further opportunities to secure continuously improving care. The next steps for Portugal will in large part be about broadening, deepening and standardising reform efforts already started.

Portugal possesses an impressive array of quality monitoring and improvement initiatives. It has a robust quality architecture which, unlike in many OECD countries, covers almost the whole health care system. Data systems range from setting-specific information structures, disease-specific registers and electronic patient records, which are actively used together to drive quality improvements in the Portuguese health system. The Integrated
Care Pathways, which have been developed in the context of population ageing and in response to the increasing prevalence of chronic illnesses, are another impressive part of Portugal’s quality governance architecture. These Pathways require effective coordination across medical and nursing directorates of hospital services, as well as primary health care and long term care. Opportunities for further quality gains exist. More could be done to strengthen the role of the patient in assuring and improving the quality of care, and to collect and publically report patient feedback. Other areas, including continuing medical education and development, as well as supporting adherence in the accreditation process will also need to be scaled up to secure high performance of health providers in the years to come.

The primary care system in Portugal performs well, with rates of avoidable hospitalisation amongst the best in the OECD for asthma and COPD. Recent primary care reforms have been successful in improving accessibility, efficiency, quality and continuity of care, as well as increasing the satisfaction of both professionals and citizens. The 2007 Primary Health Care Reform led to the establishment of the innovative Family Health Unit, aimed at encouraging more multidisciplinary team working and at achieving greater co-ordination between providers. Portugal has also an impressive depth of available primary care information, with systematised collection of a large number of indicators linked to the payment system. Together, these sophisticated approaches to delivery, organisation and payment suggest that Portuguese primary care is well advanced in measuring, assuring and improving quality. Strategic reflection around the balance between traditional Primary Health Care Units and the innovative Family Health Units is now needed to ensure that high quality care can be accessed by the whole Portuguese population. Efforts are also needed to ensure optimal use of the primary care workforce, to fully exploit available data in quality monitoring and improvement, and to ensure that primary care takes the lead in preventing and managing chronic diseases.

Portugal has committed significant efforts to reorganising its hospital sector and improving the quality of hospital care in recent years. Rationalisation of the hospital sector started in the early 1990s and is an ongoing process characterised by the concentration of services into fewer, larger hospital centers and hospitals groups. Quality governance also has been strengthened by the introduction of new models of management and payment systems, the development of quality and safety standards, and extension of hospitals’ information infrastructure. Overall these efforts have been successful at both improving quality and increasing efficiency. Some challenges do remain, however, particularly around standardizing clinical processes. Ensuring adherence to agreed standards of care and clinical guidelines as well as further deepening quality improvement tools such as
accreditation are priorities. There are also opportunities to shift more care away from hospitals into the community and to maximise the contribution of the hospital information infrastructure by strengthening the link between quality and hospital revenue, and by monitoring the impact of the hospital reform.

Portugal has made sustained progress in containing spending whilst maintaining efforts to continuously improve care quality. Reforms around the purchasing and use of pharmaceuticals and medical devices have been particularly successful. Portugal has also innovated extensively in how it uses public funds to pay providers, increasingly basing payments on the quality and efficiency of the care provided. Implementation of these initiatives across the Portuguese health system has not, however, been uniformly successful. Long average lengths of stay after a heart attack, high volumes of non-generic and inappropriate prescribing, and significant variation in medical practice across regions are specific areas that remain to be addressed in Portugal. To go forward and meet the twin aims of increasing value for money whilst improving quality, it will be important to maintain and go further on the performance regimes in both acute and community care. Further structural reform to where and how care is delivered is also needed, with an emphasis on shifting care out of hospitals into less-expensive community settings. Lastly and perhaps most importantly, Portugal’s next priority will be to shift lens and focus on clinical processes and pathways, as well as to use more effectively the Portuguese health care workforce.
Assessment and recommendations

The Portuguese health system has responded well to financial pressures over recent years, successfully balancing the twin priorities of financial consolidation and continuous quality improvement. Even in the post-financial crisis years (during which GDP fell from USD PPP 23 860 in 2008 to USD PPP 20 188 in 2012, with health spending falling by 6.7%), ambitious quality improvement efforts were sustained. Avoidable hospital admissions for asthma, COPD and diabetes are amongst the lowest in the OECD and Portugal experienced one of the steepest reduction of ischemic heart disease (IHD) mortality rates in the OECD, more than halving from 116.1 deaths per 100 000 population in 1990 to 51.7 in 2011.

Portugal has used a diverse set of tools and approaches to realise these gains. In primary care, ambitious reforms to develop internationally innovative new service and payment models began in 2007. Significant efforts have also been committed to rationalising the hospital sector. Nevertheless, urgent priorities for further work remain.

Case fatality after an ischaemic stroke is higher in Portugal than the OECD average, at 10.5 per 100 admissions in Portugal, compared to 8.5 across the OECD (2013 data). Health care associated infections appear more common in Portugal than elsewhere (with a reported prevalence of 10.7% of in-patients in 2011/12, compared to 6.0% EU average), and the caesarean section rate is the fifth highest rates in the OECD. Ensuring adherence to agreed standards of care and clinical guidelines, shifting more care away from hospitals and into the community, as well as further quality improvement tools such as accreditation are priorities for the hospital sector. In the area of primary care, strategic reflection around the direction of the primary care system, and the balance between traditional Primary Health Care Units and Family Health Units is needed, to ensure that high quality care can be accessed by the whole Portuguese population. And to ensure increasing value for money whilst improving quality, Portugal’s major challenge will be to shift lens and focus on clinical processes and pathways, whilst keeping structural reforms in play.
Although health spending showed sharp declines following the 2008 global financial crisis, Portugal still spends more on health as a percentage of GDP than most OECD countries, committing 9.5% in 2012. Per capita spending, however, is below the OECD average at USD PPP 2,619, compared to 3,322 OECD average (2013 data). The Portuguese National Health System (NHS) is organised nationally, with the Ministry of Health responsible for planning and regulation of the health system, providing overall leadership for the NHS and issuing the National Health Plan and the National Strategy for Quality in Health. The five Regional Health Authorities (RHA, called Administrações Regionais de Saúde) are responsible for the implementation of national health objectives and have financial responsibility for primary and hospital care. Although quality monitoring and improvement work is very much led by national authorities in Portugal, models of care on the ground are diverse and innovative which suggests that a successful balance has been achieved between the central and regional responsibilities. In acute care for example, each hospital (with the help of RHAs) must establish a three-year action plan to comply with the ministry’s plans for hospital reform.

Portugal has implemented a comprehensive set of structural reforms to work towards fiscal sustainability, improved efficiency and better quality in the health care system. The pharmaceutical sector in particular has seen significant changes following shifts towards the generic market and strengthening of procurement processes. As a result, pharmaceutical spending per capita decreased by 5.9% in real terms in both 2010 and 2011. Other major structural reforms have been undertaken in the hospital and primary care settings. In acute care, Portugal has pursued a number of reforms to rationalise its hospital sector through specialisation and concentration of hospitals services. New management models and payment systems have been introduced, with the development of Public and Private Partnerships (PPP) and the transformation of public hospitals (SPA) into public enterprises (EPE). In these, Portugal demonstrates a willingness to use the private sector to leverage efficiency gains and improve responsiveness to patient needs. In primary care, reforms have focused on developing new models of care, primarily the development of Family Health Units (FHU). These give GPs and primary care nurses greater flexibility in managing their practice and promote more integrated working. The FHU model includes a number of financial incentives, some of which are linked to quality indicators. Additionally, Portugal has seen real progress in delivering more co-ordinated care, in contrast to many other OECD countries. The introduction in 2007 of the Rede Nacional de Cuidados Continuados Integrados (RNCCI – National Network of Integrated Continuous Care) for example is an innovative approach to better integrate health and social services for the elderly in need of long-term care services.
Co-ordination of care has been promoted with the establishment of integrated disease management programmes for major chronic diseases including obesity, chronic renal disease or pulmonary hypertension. Structural reforms such as these have almost always been backed-up with sophisticated monitoring capabilities and a careful balance between incentives and sanctions to improve quality of care.

At service-level, an equally extensive range of quality initiatives have been introduced over recent years, ranging from standardisation of clinical practice, better use of technology such as electronic medical prescription and shared medical information, and the establishment of a national accreditation model. Stronger tools for monitoring the quality and outcomes of care have been developed, including a quality-benchmarking project that publishes facility-level quality and efficiency indicators on a monthly basis.

Despite these advances, a number of challenges remain in order to improve the quality of care in Portugal:

- The Portuguese health care system is still over-reliant on the hospital sector. Although the reorganisation of the hospital system is an ongoing process implying specialisation and concentration of hospital service, Portugal may wish to expand capacity at community level to provide rehabilitation, post-acute care and emergency care. This would relieve pressure on hospital sector, with potential to improve quality of care and curb health expenditure.

- Despite strong commitment toward better integrated and co-ordinated care (notably with the establishment of the Portuguese National Network for Integrated Care in 2007), the Portuguese health care system needs to evolve toward a more comprehensive approach of health care delivery involving greater partnership between health and social care providers.

- Even though Portugal has made good progress in developing its primary care sector, some strategic direction around the appropriate balance between traditional Primary Health Care Units and Family Health Units needs to be taken at system-level. Setting a limit by which all Primary Health Care Units must have transformed to Family Health Units is one possible option for consideration, so too would be introducing some of the incentives associated with FHU to other primary health care units.

- While targeted performance related payments have been set-up to seek continuous quality improvement in Family Health Units and the hospital system, the use of quality-based payment could be extended with a view to meeting reforms targets, particularly around care co-ordination and patient safety.
Having established a comprehensive and standardised information infrastructure at all system-levels, Portugal should now ensure that the ongoing reforms in the acute and primary care settings are monitored and evaluated. It is becoming critical for Portugal to evaluate the impact of the various reforms and quality initiative on quality of care.

The rest of this chapter makes a more detailed assessment of, and set of recommendations for, the Portuguese health care system. The chapter starts with an overview of the strengths and opportunities for improvements in Portugal’s health care quality architecture. Three topics are then considered in detail: primary health care provision, quality of hospital care, and optimising quality and efficiency across the system as a whole.

**Promoting excellence across Portugal’s health care system**

Overall, the Portuguese health system appears to be delivering high quality care at a low cost. Outcomes across primary and hospital care are in many cases good, and expenditure on health is below the OECD average for per capita spending. Quality of care is a priority for the Portuguese health system, and this is reflected in core policy addressing quality, as well as a dedicated Department of Quality in Health which sits under the Directorate-General of Health.

*Portugal has a well-developed quality infrastructure, with the health data system and use of clinical guidelines standing out as areas of excellence*

The Portuguese health system has a particularly rich information infrastructure which, unlike in the significant majority of OECD countries, covers almost the whole system. This data is actively used to drive quality improvements. Data sources include setting-specific information structures, and disease-specific registers and data sources, electronic patient records, and unique patient identifiers. Electronic patient records and unique patient identifiers go towards creating the Portuguese Health Data Platform, which consists of a patient portal, a professional portal, and an institutional portal which is currently being tested. The different portals hold different information, to be used in different ways. For instance, the professional portal provides health professionals with patient clinical data and records stored from different institutions and central repositories (Portugal does not yet, though, have fully portable patient records). The institutional portal, when operational, should provide statistics from anonymised clinical data to central institutions.
There are also some mandatory minimal datasets, including for hospital discharge teams and primary care referral teams: medical, nursing and social evaluations; evaluation of physical autonomy; pressure ulcers; pain evaluation; for integrated home care teams; and for inpatient facilities (falls, diabetes, pressure ulcers, etc.). The primary care information architecture, SClinico, covers more than 350 facilities. Information available includes demographic data (name, gender, date of birth etc) and clinical data (health problems, allergies, personal and family history, medical history, medication and prescriptions, appointments, referrals, etc.). In hospitals data is nationally standardised across aspects such as discharge summaries, reports of allergies or the use of surgical checklists, all under national clinical guidelines, facilitating high-level planning and quality monitoring, for all NHS hospitals in Portugal. Performance indicators, which go far beyond the typical process- and activity-based hospital indicators, are collected across four dimensions – access, quality, productivity and financing.

Another impressive part of Portugal’s quality governance architecture is the development of clinical guidelines into more complex care pathways, which reflect increasingly complex patient needs, through developing Integrated Care Pathway models. Portugal’s disease model was designed to address the development of some chronic diseases, and established in 2008. Developed in compliance with the National Strategy for Quality in Health and the National Health Plan 2012-2016, the publication of Integrated Care Pathways started in 2013.

The Integrated Care Pathways are addressed to the different specific levels of care, and cover both chronic and acute disease phases. The pathways require effective co-ordination of medical and nursing directorates within hospital services, primary health care and long term care units. Pathway development starts with a pilot-team, and is then up-scaled through peer-to-peer training, clinical and organisational briefings, inter-level care meetings, and resource allocation strategies. It is too early to assess the impact of the Integrated Care Pathways, although it is expected that patient-centered care processes will improve, along with co-ordination of care and population risk stratification. There is also an expectation that the pathways will support greater synergy between funding, clinical practices, quality and safety.

**Attention to quality at the clinical level is needed**

The OECD health care quality indicators nevertheless show a mixed picture of health outcomes and care delivery in Portugal: avoidable admissions and obstetric trauma are low; while mortality following acute myocardial infarction (AMI) and after admission for ischemic stroke are higher and more worrying. For case fatality after admission for AMI,
Portugal has a marginally higher rate than the OECD average, at 8.4 per 100 admissions (over 45) compared to 7.9 for the OECD (2013 data). Case fatality after admission for ischemic stroke is higher in Portugal than is typical across the OECD; in 2011, case fatality per 100 admissions was 10.5 in Portugal, compared to 8.5 across the OECD. Low rates of obstetric trauma reflect positively on care quality in Portugal, but rates of surgical complication show a mixed picture; for two adverse events associated with surgery – post-operative pulmonary embolism or deep vein thrombosis in adults, and post-operative sepsis –Portugal shows good performance on the former, and rather poor performance compared to the OECD average on the latter.

This mixed picture suggests that no one area of the health system is particularly under-performing, but that closer attention to the quality of clinical care in some areas is needed, and additional drivers towards excellence may be called for. Given that there are some signs of variation in performance and clinical process, both between care domains and also between some regions for hospital-based care, efforts ought to be made to drive excellence system-wide. Two models for consideration are the development of sufficiently ambitious standards for all care providers, with support for weaker performers, or encouragement and support for those regions where outcomes are weaker to engage more fully in the accreditation process.

Promoting patient involvement and learning from patient feedback need to be a priority

Portugal has had a Patient’s Charter (Carta dos Direitos e Deveres dos Doentes) since 1997, which provides official protection of patients in the NHS, and covers the main legal provisions around patient rights and obligations. The charter also sets the patient’s responsibility to look after their own health, to comply with health system norms and requirements and avoid unnecessary expense for the NHS. In practice, though, patient involvement in health system decision making appears relatively weak. Strengthening the role of the patient in assuring and improving the quality of care should be a priority. This is in part because patients need to be better engaged with their health status, but also because satisfaction with the Portuguese health system has historically been low. In 2002 around 80% of the Portuguese population indicated they felt the system required either fundamental change or should be completely rebuilt, compared to an average 51% EU-wide. In 2015 however, the proportion of people reporting this sentiment was much lower, at around 54%.
The main way that patient feedback is facilitated in Portugal is through the SIM-Cidadão system, which collects complaints, suggestions and comments on the NHS. Patient associations also participate in working meetings with technical bodies of the Ministry of Health and political groups of the Parliament, to identify needs and strategies to improve access and quality in health care. Current mechanisms, though, appear weak. Collecting patient feedback is important, but such feedback is less effective if not regularly and publically reported. There is scope to move to provider- and doctor-level feedback. Reporting at this much more localised level can push providers and physicians to become more accountable to patient needs, and reflect on patients’ perceptions of their strengths, weaknesses and unmet needs. In England, an online platform through which patients can rate and comment on the doctors they see has been set up. This platform – accessible through the NHS website NHS Choices (http://www.nhs.uk) – allows individuals to rate and comment on individual service providers, for example GP practices or hospitals, and is a model that Portugal could consider.

Another possible model can be found in Denmark, with the Sundhed.dk the Danish e-health portal, which includes the collection and distribution of information among citizens and health care professionals. This includes information on waiting times at all public hospitals and ratings of hospitals in terms of patient experienced quality. One of the other strengths of this platform is that it groups all patient-relevant information together, helping patient participation. In Portugal a “one stop shop” portal for patients, where they can have a maximum of their needs met and give provider feedback, is an initiative to strive for.

Improving the quality of primary care in Portugal

The fact that the Portuguese primary health system is already squarely turned towards measuring, assuring and improving quality will give Portugal a major head start in assuring high quality of care going forward. Looking to the future, Portugal’s main priorities for the primary care sector will be, firstly, supporting and expanding areas of excellence and innovation, and, secondly, filling in some key gaps, notably around primary care-led prevention and co-ordination with other levels of care.

The Portuguese primary care system appears to be delivering high quality care

The primary care system in Portugal appears to be performing well, based on OECD indicators, with some examples of excellence and innovation backed up by a comprehensive national indicator system.
Avoidable admissions are well below the OECD average, in the best four countries for asthma and COPD, and the best eight for diabetes. Avoidable admissions fell between 2006 and 2011 across all indicators. Of more concern are antibiotic prescribing practices – Portugal prescribes a higher volume of antibiotics than is typical across the OECD, and of those a high proportion of cephalosporins and quinolones. Antimicrobial resistance and hospital infections are important concerns in Portugal, and various programmes to reduce antibiotic prescribing have been set-up, and seem to be having an impact.

Unlike almost all other OECD primary care systems, Portugal has almost an excess of available information in primary care, with widespread collection of a large number of indicators. It is increasingly possible to consult patient records from hospital in primary care settings and vice-versa. Based on population demographics and burden of chronic disease, for example diabetes, there is reason to expect that health needs will increase, that pressure on primary care will increase, and that budgetary constraints will continue.

Recent primary care system reforms have been innovative and successful

From 2007, the Primary Health Care Reform, which aimed to improve primary health care accessibility, efficiency, quality and continuity of care and increase the satisfaction of professionals and citizens, and an accompanying implementation plan – the Primary Health Care Mission – led to the establishment of a number of pilot Family Health Units (FHU). FHU are primary health care units made up of 3-8 GPs, the same number of family nurses, and a variable number of administrative staff, who were invited to volunteer to form self-selecting groups who would deliver primary care together. These teams have functional and technical autonomy and a payment system sensitive to performance that is designed to reward accessibility and quality, and a particularly comprehensive indicator set which measures performance and is tied to the payment system. FHU sit alongside old-style Primary Health Care Units (PHCU) are essentially clinic settings which group together varying numbers of GPs, paid through a fixed salary, who provide care to their patient list. FHU numbers have increased year-on-year, and the primary care system in Portugal is now split roughly 50-50 between the two models.

Family Health Units can be organised according to two different models – A, B – with a third model (C) which is in the process of being established. All FHU start as Model A, and can transition to Model B, gaining organisational independence, and increasing scope to be paid for additional
services and on performance components. In addition to the different levels of autonomy and payment systems between PHCU and FHU, there are some organisational differences. In some PHCU acute cases are treated in separate facilities, staffed by the GPs of the PHCC, with opening hours varying between three and 24 hours, depending on the location of the PHCU; in FHU acute cases are treated by GPs during their normal working hours. In most PHCU only medical consultations are scheduled; in FHU regular nursing appointments must also be scheduled. PHCU are also obliged to accept patients not registered with them, while FHU only accept patients from their registered patient list.

**Strategic reflection on the balance of PHCU and FHU is now needed**

Despite Portugal’s generally high-performing system, in which sophisticated approaches to innovative delivery, organisation and payment appear to be delivering good returns, some challenges do remain. The disparity between the performance of PHCU and FHU on key quality indicators could be a cause for concern. The primary and community care sector in Portugal will – especially going forward – play a significant and growing role in providing health care for an ageing population characterised by a growing burden of chronic illnesses. Now is the time to make sure that excellent assurances of quality are in place across the primary care system, and that whole primary care is ready and moving towards its expanding role and responsibility for the health of the Portuguese population.

Portugal is arguably unusual in that it is effectively a two-model system, with quite different payment and measurement mechanisms across two different ways or organising primary care. While this is the result of significant innovation and bold – and apparently quite successful – reform in establishing the FHU, they appear to be outperforming PHCU consistently. This effectively means that half the population have access to care of a better quality than the other half. From the point of view of equity, but also for setting the strategic direction of the increasingly important primary care sector, a decision on the direction of FHU and PHCU needs to be taken. Portugal could consider two possible options: setting a date for the transformation of all PHCU to FHU, and/or introducing some of the quality/performance incentives included in FHU, to PHCU. It would seem that many aspects of the FHU payment structure – scope to negotiate for the provision of services, and to agree a certain set of objectives the achievement of which leads to additional financial incentives – could be introduced to PHCU without necessitating a total transformation to the multidisciplinary self-formed FHU model. This introduction would also give Portuguese authorities more leverage to push PHCU to achieve certain quality targets, and to push for the introduction of particular service
provision in line with the strategic direction for primary care, for example more prevention activities.

**Maximise the contribution of primary care by fully exploiting available data and the primary care workforce, and promoting prevention**

Beyond the need for broader strategic reflection on the direction of the primary care system as a whole, there are three areas to which further attention could be given: the use of the primary care workforce, fully exploiting available data, and making sure that primary care contributes to prevention and management of chronic diseases.

At present, concerns about the primary care workforce in Portugal have been primarily focused on GPs, of a shortage has been anticipated, which is expected to worsening as more GPs retire. Action has already been taken in this respect, with efforts to increase available training places for GPs, but a closer look at the contribution of nurses working in primary care is needed. Portugal has a low number of practicing nurses (6.1 to OECD average of 8.8) and a low ratio of nurses to physicians (1.5 compared to OECD ratio of 2.8). In primary care nurses appear to be under-supplied and under-utilised also, despite Portugal training and exporting large numbers of nurses each year. A fuller application of nurses’ skills and competencies, and moves towards a good balance of nurses and GPs, seems to have already started in FHU, where an equal number of nurses and physicians are required, and appointments can be scheduled with nurses directly. Additionally, a family nurse qualification has already been established in Portuguese law – which would give nurses a patient list, and would involve developing some further activities alongside physicians – but is not yet in operation. There are potentially significant gains to be had from Portugal moving ahead with the development of this family nurse role, which could bring cost-saving benefits and could strengthen the capacity and quality of primary care provision if family nurse responsibilities are developed appropriately. As Portugal looks to establish what services family nurses should deliver, and the tasks they should be allowed to perform, there are real opportunities to look to the success of other OECD countries – England, Denmark, Sweden – in the development of similar nursing roles.

Second, although Portugal is extremely advanced in collecting quality information from primary care, to build on this impressive based, improving data linkage, and increasing the use of quality data in self-evaluation by health professionals, are two key areas for Portugal to consider. The better linkage of data is one of the steps Portugal should take to get the maximum utility out of its already very rich data source for primary care. The quality information for primary care collected in Portugal is already actively
exploited to track improvements, and for the FHU to check progress against set indicators and for Model B to set financial incentives. This data usage is very positive, but could go further, with more embedding of data usage by practitioners to track care quality and their own performance and outcomes. There are different ways that this could be approached, for example through benchmarking in the style of the Danish DAMD system, or physician-level quality reports.

The third challenge for Portuguese primary care will be contributing to a wider and more robust prevention effort. A number of worrying indicators suggest an urgent need for better prevention: diabetes prevalence is high (9.8% compared to OECD average of 6.9%), child obesity is lower but also rising, female smoking rates are reportedly increasing after a period of decline. The Portuguese government is clearly aware of this challenge, and of the weakness of current prevention approaches, and going has committed 10% of the health budget to prevention, particularly impressive at a time when other countries appear to be cutting prevention spending. However, primary care-led prevention efforts at present appear patchy, and effective interventions should be embedded in primary care practice – led by GPs or family nurses – systematically and across both PHCU and FHU. Incentives for primary care providers to deliver more prevention activities could likely be introduced through existing contracting and performance reward structures, at least for FHU. The scope to incentivise a more robust prevention role from PHCU should be carefully considered by the Portuguese authority; it may be that this more rigid model of care delivery means that there is less possibility of incentivising changing services based on changing population needs.

**Improving the quality of hospital care in Portugal**

Portugal has committed significant efforts to reorganising the hospital sector and improving quality of acute care across in recent years. These efforts – specialisation and concentration of hospital services, new models of hospital management and payment systems, developing quality and safety standards as well as supporting hospital benchmarking – demonstrate that Portugal is moving toward a more streamlined and efficient hospital system. Despite this, some challenges do remain, particularly around the need to implement more efficient clinical processes, to better exploit the capacity of primary and community care in delivering non-acute care outside of hospitals, a need to review the incentives system linked to hospital performance, and to evaluate the impact of hospital reforms on clinical outcomes and care standards.
An ambitious programme of reforms has been undertaken in the hospital sector

Over the past decades, Portugal has pursued a number of reforms to rationalise its hospital sector through promoting greater specialisation and concentration of hospital services. Consolidation across the hospital sector started from the early 1990s and is an ongoing process characterised by the concentration of hospital services into fewer, larger hospital centers and groups. As a result, the number of hospitals in Portugal has dropped from 634 in 1970 to 67 in 2008 and the per capita bed density fell by 16.5% between 1990 and 2011. Alongside this horizontal integration, Portugal started vertical integration from 1999 with the creation of Local Health Units (Unidade Local de Saúde, ULS). ULS constitute groups of NHS health care providers that should integrate hospitals and primary care centers in the same geographical area. By improving multi-disciplinary cooperation, ULS are seen as central to meeting the challenge of providing effective and co-ordinated care for patients with multiple needs. In 2014 there were eight ULS in Portugal.

At the same time, new models of hospitals management have been introduced with the development of Public Private Partnerships (PPP) and the transformation of NHS hospitals (also known as SPA hospitals) into Incorporated Public Hospitals (also called SA hospitals), later transformed into Public Enterprises (called EPE hospitals). Starting from 2002, the creation of PPP hospitals and the transformation of public hospitals into public enterprises gave more managerial and financial autonomy to hospitals. The overarching aim of the reform was to improve hospital management and increase quality of hospital services to increase accountability to hospitals boards to improve quality of hospital services. A new payment system for hospitals has also been introduced through the setting-up of a contracting programme (the so-called Contratos Programa), which provides an explicit separation between the purchaser and the provider of hospital services. Prospective global budgets based on these negotiated contracts are allocated to NHS public hospitals. The global budget is made up of an activity-based prospective payment model involving systematic DRG grouping and case-mix adjustment for inpatient and ambulatory surgery (the DRG component accounts for nearly 50% of hospitals financing), while the remaining hospital revenue comes from fee-for services (for outpatient and emergency visits), bundled payments (for some chronic conditions), and some quality-based payments.

The reorganisation and rationalisation of the hospital sector is an ongoing process, on the agenda until at least 2015 as part of the National Targets for Hospitals Reorganisation. As part of this, eight initiatives have been set-up,
including financing policy, governance models, reinforcement of the citizen’s role, and improving quality and integration of care. From 2011, each hospital must establish a three-year action plan for hospital reorganisation with the Regional Health Authority so that reform implementation can be continuously monitored by regional authorities. Overall, the results of the past and ongoing hospital reforms have been found to be positive, with successes both at exploiting quality, and at increasing efficiency. Based on available evidence, good progress has been made through reducing average lengths of stay, increasing day-case surgery, reducing waiting times and readmission rates. At present for example, almost 100% of Portuguese patients have their cataracts replaced as day cases.

**Portugal displays a mixed picture on indicators of quality of care in hospitals compared with other OECD countries**

Portugal reports impressive improvements in cardiovascular health, including a two-thirds reduction in stroke deaths, with mortality falling from 330.1 deaths per 100 000 population in 1990 to 97.2 in 2011, the third largest fall in the OECD. Similarly, mortality rates from ischemic heart disease are the fourth lowest among OECD countries (after Japan, Korea and France) with 52 deaths per 100 000 population. Although much of this success can be ascribed to public health initiatives, some of these gains will come from improvements in acute clinical care. Other acute care indicators however suggest concerns in the quality of hospital care. Portugal’s in-hospital case fatality rates within 30 days after admission for ischemic stroke is one of the highest among all OECD countries, with an age-sex standardised rate of 10.5 per 100 admissions compared to 8.5 per 100 admissions across OECD countries, for example. Portugal also displays a poorer performance than other OECD countries with regard to delays before surgery and patient safety events such as high rate of health-care associated infection (HCAI). In 2012, the HCAI prevalence was about 11% of in-patients, well above the EU average of 6%. And although Portugal has successfully reduced the number of caesarean sections (C-section), Portugal had in 2013 the fifth highest rates of C-section deliveries amongst OECD countries with more than a third of live births delivered using this clinical procedure (at present C-section rates in Portuguese public hospitals are at 28%).

**Quality governance has been strengthened in the hospital system through a number of initiatives**

Over the past years, Portugal has instituted an impressive number of quality initiatives to strengthen quality governance in the hospital system. The Department of Health Care Quality (Departamento da Qualidade na Saúde, DQS) at the Directorate-General of Health (Direcção-Geral da
Saudê, DGS) has developed and implemented quality standards and accreditation (e.g. the ACSA accreditation programme), introduced several programmes around patient safety and adverse events (e.g. the National System of Notification of Incidents and Adverse Events, or the Project Safe Surgery Safe Lives), and hospital performance has also been linked to payment system by means of an impressive information infrastructure developed in 2013 by the Administração Central de Sistema de Saúde (ACSS). The architecture of the hospital information infrastructure is nationally standardised, enabling the monitoring of hospitals outcomes on an ongoing basis for all NHS hospitals, by hospital and by region. Clinical outcomes of hospital services, and economic and financial performance of hospitals, are available on a monthly basis to hospitals providers and users. The richness of the data infrastructure makes possible to explore areas that may require improvement with respect to both quality and efficiency. The system encourages regular dialogue between hospitals at regional or more local level, which proactively support the diffusion of best practice processes from the top to the least performing hospitals or regions.

Given concerns over performance on some acute care quality indicators, Portugal’s priorities must be to develop these quality initiatives further. First, there is scope to expand the coverage of the ACSA accreditation model more widely across the country, since at present only 22% of hospitals are involved in the programme. To this end, Portuguese authorities and its regional agencies might consider establishing strategies to support and guide regions or hospitals in the implementation of the clinical standards and the accreditation scheme. As seen in Australia, support strategies can include accreditation workbooks, implementation guides for each standard, a telephone and e-mail advice centre and mediation service for health services.

Second, Portugal should encourage the adherence to agreed standards of care and recommended the use of core clinical guidelines in the hospital system to optimise clinical outcome and resource use, and to further reduce variability in clinical practice. To push forward the implementation of recommended clinical practice guidelines at a micro level, audits conducted by the DGS should be backed up with feedback to hospital providers, and also linked to well-designed financial incentives or sanctions. Progress in this direction is, encouragingly, underway: the DGS plans to introduce economic incentives and sanctions for good or poor adherence to clinical practice guideline in the coming year. At the same time, the network of Quality and Safety Commissions in each hospital or hospital centre is a commendable development that will surely help to ensure that more effective and efficient clinical processes are being implemented.
Going further on the rationalisation of the hospital sector by shifting more care away from hospitals and into the community

Despite many efforts to rationalise its hospital system, Portugal still needs to reduce its dependency on the hospital sector for the provision of certain medical services. Based on available evidence, 42% of in-hospital emergency visits could have been dealt in the community or in primary care settings. In a similar vein, patients often face unnecessarily prolonged hospital stays; and hospital discharge for chronic and long term conditions (such as cardiovascular disease or cancer) are well below the OECD average. At 6.9 days in 2011 for example, Portugal reports long average length of stay in hospitals for AMI compared to the OECD average of 7.9 days. The hospital discharge rates for cardiovascular disease were at 13.2 per 1 000 population which is well below the OECD average of 19.6.

Taken together, these figures may signal poor capacity in the community to provide rehabilitative or other non-acute care services to patients upon discharge from hospital. There is therefore a strong argument to be made to develop capacity at primary and community levels to better promote effective, safe and patient centered care while continuing the rationalisation of the hospital system. The National Network of Integrated Continuous Care (Rede Nacional de Cuidados Continuados Integrados), which has been primarily developed to deliver more co-ordinated care for the elderly in need of long-term care could play a larger role in such a process, and should be further developed to promote community-based facilities for rehabilitative and post-acute care. The development of “intermediate care facilities” in Norway could be a model for Portugal to consider as part of shifting non-acute care away from the hospital sector. These new facilities have a key responsibility in taking care of patients upon discharge from hospital, or where there is a risk of admission to hospitals when the condition could be appropriately managed at a lower intensity care setting. New models of emergency care should, lastly, be encouraged, especially for complaints that could be managed in primary or community care. Developing primary care models of emergency care (as seen in England, New Zealand, Iceland, or Canada), as well as developing fast-track system (as seen in France, United Kingdom, the United States or Canada), are possible avenues for reducing emergency department attendances and more efficiently managing the demand for emergency care.

There are opportunities to better use the hospital information infrastructure

While Portugal has rich data on hospital activities and hospital outcome of care, financial incentives linked to the quality of hospital services remains
relatively modest in Portugal: 5% of the hospital revenue is related to hospital quality or performance indicators such as readmission rates, discharge rates, use of day-case surgery or rates of hip surgeries performed within 48 hours. Although this arrangement represents a successful reform to increase accountability and to drive quality improvement in the hospital system, there is room to better link payment to the desired hospital outcomes of care. First, the proportion of hospital revenue linked to quality of acute care might be increased beyond the 5% level. Second, there might be scope to extend the number of incentivised activities to target areas of poor performance (such as care for AMI, surgical complications as well as care co-ordination between hospital and community-based facilities). The experience from other OECD countries (including Japan, Korea and the United States) should inform development of candidate indicators to be linked to hospital revenue. Collecting and reporting indicators around AMI 30-day case fatality, timeliness of percutaneous coronary intervention (PCI) upon arrival at hospital, as well as around potentially preventable conditions such as foreign body left during a procedure or the use of post-discharge protocols between levels of care; and linking hospital revenue to these indicators is worth considering as an option to encourage continuous improvement in the hospital system.

There is also room to better use the extensive hospital information infrastructure to evaluate the success of the current hospitals reform on quality of acute care. While Portugal has undergone a series of structural changes in the delivery of hospital services over the past two decades, few studies have been carried out to evaluate the effect of the specialisation reform and the impact of the new models of hospitals management. Having established a comprehensive and standardised information infrastructure for hospitals, central government and regional authorities should now ensure that the ongoing reform is monitored and evaluated across all regions. Evaluation of hospital reforms would be critical at central and local levels to drive improvement in quality of care, and learning from successes and failures. At local level, monitoring and evaluating hospital reforms would inform future decisions regarding the establishment of the detailed strategic 3-year plans for each hospital; while at central level evaluation would provide valuable information to revise clinical processes or models of care where necessary.

**Increasing value for money whilst improving quality**

The suite of initiatives described in earlier sections that aim to deliver quality and efficiency gains is well-designed and should be maintained. Certain areas have been slower to deliver results than others however. Above average lengths of stay for some episodes of care (such as after a
heart attack) and high volumes of non-generic and inappropriate prescribing (such as second line antibiotics) are good examples of areas that remain to be addressed. It will be important to maintain and go further on the performance regimes in both acute and community care. Further structural reform to where and how care is delivered is needed, with an emphasis on shifting care out of hospitals into less-expensive community settings.

Whilst keeping these structural reforms in play, however, Portugal’s next challenge will be to shift lens and simultaneously focus on clinical processes and pathways. Achieving more efficient use of the workforce will be particularly critical, since this is where the biggest spend is. The challenge should not be underestimated – changing practices and behaviours at the bedside may well prove more difficult than earlier structural reforms.

Attempts to influence clinical processes have had uneven results and need to go further

As described in earlier sections, a comprehensive and sophisticated set of measures has led to Portugal demonstrating quality and efficiency gains in many areas of its health system. Reforms around payment systems, performance management, concentration and differentiation of functions have been introduced in the hospital sector. Primary and community care has seen the introduction of Family Health Units and the introduction of the Rede Nacional de Cuidados Continuados Integrados.

A particularly comprehensive and sophisticated set of measures has led to Portugal exhibiting one of the sharpest declines in pharmaceutical expenditure in recent years, of 5.9% between 2009 and 2011, compared to a 0.9% reduction across OECD countries on average. The Ministry of Health exercises its monopsony powers by setting an annual limit on total pharmaceutical spend (as a percentage of GDP), and uses countries with the lowest purchase prices for each drug (such as Spain, France or the Slovak Republic) as the reference point from which to begin negotiations. In addition, the Ministry settled several agreements with the pharmaceutical industry in order to contain public expenditure on medicines and is currently negotiating a new tax on pharmaceutical sales – in effect, a fiscal claw-back.

Use of pharmaceuticals, however, illustrates an area where valuable structural reforms have not always been matched by changes in practice at the bedside. Substantial scope for further efficiency gains in prescribing exists. Portugal still falls behind other OECD countries such as Germany or the United Kingdom with respect to the share of generics in the pharmaceutical market, for example.
Portugal should ensure that the gains realised through centralised purchasing are not lost at the point of prescribing by backing up guidelines with regular audits of adherence. Use of antibiotics in ambulatory care would be one example of an area to target, given that Portugal exhibits high overall prescribing volumes – and high relative volumes of second-line antibiotics – compared to other OECD countries. Audits should be backed up with individualised feedback to clinicians and managers, matched with appropriate incentives and sanctions. Guidelines also need to be accompanied by clinical information and decision aids oriented toward patients. Currently, there are few decision aids for patients, and patient empowerment is still in its infancy in Portugal. A promising initiative to help patients better understanding evidence-based recommendations, and support them in demanding high-quality and good value care, is the Choosing Wisely initiative.

**Further structural reform to where and how care is delivered is needed**

Similarly, although Portugal displays some impressive figures in terms of expanded day case surgery, average length of stay (ALOS) in other clinical areas is longer than in most other OECD countries. In Portugal, ALOS after a heart attack is 7.3 days; in Denmark it is 3.9 days. ALOS after a hip fracture is 14.0 days in Portugal (2013 data); in Denmark, Sweden and Norway equivalent figures were less than ten days. Overall, it has been estimated that 30% of hospital activity in Portugal could be done in the community, and around EUR 20 million save a year by transferring more nursing care out of hospitals.

Portugal has the opportunity to use the community and long-term care sector differently, relieving pressure on hospital sector. Closer co-ordination between the acute and non-acute sectors is required, particularly across acute and long-term care services. The recommendations recently published by the National Commission on Co-ordinated Care, address this issue. Work should proceed to prioritise and cost these recommendations and implement the most immediately feasible. One promising line of activity early on would be to support early discharge after hip fracture or stroke, given possibly long lengths of stay for these episodes of care. Sweden has pioneered the early discharge model of care which is associated with improved recovery, reduced odds of death or dependency and increased patient satisfaction.

There is also potential to further differentiate and concentrate hospital services. There is, for example, no up-to-date national cardiology network at present. Addressing this will reduce slack around technically demanding and expensive procedures such as CABG. The large geographic variation across Portugal in rates of CABG underlines the importance of rationalising
activity in this area. Comprehensive consolidation plan covering all hospital specialties and procedures should be pursued, along the lines of reforms in Denmark. Some initiatives are underway in this area, such as updating clinical service networks. It will be important to ensure initiatives to concentrate services should be led by the relevant professional groups – with full public consultation – to allay concerns of worse access. In Denmark, clinicians’ leadership was felt to be critical to the success of plans to concentrate services into fewer centres.

**Portugal’s health care workforce could be used in a more efficient manner, and deliver better care**

Key to shifting care, and indeed to securing quality and efficiency gains more widely, will be to use the Portuguese health care workforce more effectively. In the first instance, nurses will also have to move to work in the community if more care is to be delivered outside of the acute care setting. 75% of Portugal’s nurses work in hospitals. This may be too many if the broader system ambition is to reduce dependence on the hospital sector. Within the Portuguese system, an expanded nursing and midwifery role could be expected to lead to gains in reduced rates of caesarean section or health care associated infections, two quality and efficiency issues that were identified earlier. Nurses may also be in a better position to co-ordinate the early discharge of patients (after stroke, heart attack or falls, for example) and thereby reduce length of hospital stay.

Portugal should look to define a case-manager role within its health system. Rigid definition of the professional to fill that role is less important, as long as they have, or can be trained in, the appropriate knowledge and skills. In several OECD countries, nurses take on this role and case-manage patients with dementia, COPD, diabetes or other complex long-term conditions in close liaison with the patient’s medical team. Portugal already has operates a similar model which could be replicated more widely – most patients with diabetes have a named primary care nurse who is responsible for annual checks, patient education and other aspects of case management. It would make sense, then, to start exploring the potential of case managers with this group of patients, particularly given the complexity and burden of diabetes in Portugal.

Extensive international evidence is available to support the sharing or transfer of roles traditionally performed by doctors to nurses. Germany’s AGnES programme is a successful illustration of supporting nurses to take on a wider range of roles in the community. There, nurses have been given additional training to visit patients with reduced mobility at home and carry out checks and other aspects of chronic disease management. A key feature
is that video-conferences with a supervising doctor are enabled for more complex cases.

Reforms to the governance and regulation of care would also offer efficiency gains

There are also opportunities to introduce new reforms around the governance of health care in Portugal. A clear opportunity exists to use the Portuguese regions more effectively. They currently have few functions, some of which are to some extent replicated centrally. In a small country such as Portugal, these functions could be managed entirely from the centre. Instead, the Regions should devote their energies to “hands-on” quality improvement activities that central authorities might find difficult to perform. These would include identifying and spreading excellence, as well as supporting underperforming units to do better. In particular, regions could play a valuable role in learning from complaints. Portugal has a good national system for reporting and learning from major adverse events, but gathering learning from near misses and complaints is less robust. Regions could help improve reporting and learning here, in a bottom-up approach.

A better understanding of regional variation is needed

Finally, there are opportunities to achieve a better understanding of regional variation in clinical processes and outcomes, such as health care associated infection (HCAI) rates, or fatality after heart attack or timeliness to hip fracture surgery. It would be instructive to identify service and contextual characteristics that are associated with variation, in order to identify where targeted quality improvement initiatives are needed. Portugal has undertaken this type of analysis to explore determinants of geographic variation in caesarean section rates, but it could be done more extensively across a wider range of clinical areas.

Analysis is also needed on extent to which observed variation reflects lapses of quality. In particular, the costs associated with these potential lapses in quality have not been estimated. These figures need to be estimated more precisely, ideally at local level. That would give health service managers the information they need to plan and manage local services, building a business case for more infection control staff, for example. As a cross-cutting recommendation, Portugal should ensure that data are made accessible to patients so that they have the quality-related information they need to be able to exercise choice.
Recommendations for improving health care quality in Portugal

The Portuguese health system has shown a high-level commitment to continuously improve quality and maintain a universal public system, despite recent financial strains. An ambitious programme of structural reforms and a well-designed suite of quality initiatives have been implemented to bring both quality and efficiency gains. For Portugal, the next steps will in large part be about broadening, deepening and standardising reform efforts already started. In particular, Portugal should:

1. Strengthening the quality governance in the Portuguese health care system:
   - Give further attention at a micro level to the quality of care, reflecting on identified areas of weakness such as some surgical adverse events and case fatality after stroke, to ensure that every clinical encounter in all care setting embodies international best practice.
   - Consider ways to push care providers towards higher standards of care, and support engagement of weaker performers in quality improvement activities such as hospital accreditation processes.
   - Gather, and make better use of, patient feedback, considering ways to move to more provider- and doctor-level feedback to improve patient involvement, increase accountability to patients, and as a central quality improvement model.

2. Improving the provision of primary care service:
   - Strategically reflect on the balance of PHCU and FHU, and the direction of the primary care system as a whole, as a priority. High performance by FHU has created a quality disparity within the system, and to correct this all primary care providers should be pushed to deliver higher quality care.
   - Consider, as a way of moving the primary care system forward, either setting a date for the transformation of all PHCU to FHU, and/or introducing some of the quality and performance incentives included in FHU, to PHCU.
   - Ensure that the potential of the valuable contribution of nurses to the primary care sector is fully harnessed, and that a good balance between nurses – possibly with enhanced competencies – and GPs, and other primary care staff, is struck.
   - Maximise the dividends of the sophisticated data system, through improving data linkage, and promoting the use of data by physicians to evaluate the quality of their own care, as demonstrated by the Danish DAMD system for example.
   - Strengthen primary care-led prevention efforts, ensuring that effective prevention programmes are embedded across PHCU and FHU, using existing contracting and performance reward structures for FHU to encourage prevention activities.

3. Improving the quality of hospital care in Portugal:
   - Expand the coverage of the ACSA accreditation model and of the other accreditation processes across Portugal by providing more support to regions and hospitals. Support might include accreditation workbooks, implementation guides for each standard, a telephone and e-mail advice centre, or mediation service for health services.
Recommendations for improving health care quality in Portugal (cont.)

- Encourage the adherence to agreed standard of care and recommended clinical guidelines. Audits conducted by the DGS should be backed up with feedback to hospital providers, and linked to well-designed financial incentives or sanctions.

- Better exploit capacity at primary and community care level to provide rehabilitative or other non-acute care services to patients upon hospital discharge. Further development of the National Network of Integrated Continuous Care should be encouraged, as well as considered of intermediate care facilities, following Norway’s example.

- Reduce non-appropriate emergency department visits and manage the demand for emergency care more efficiently by experimenting with models of emergency care delivered in primary care settings.

- Extend quality-linked payments in the hospital system by i) increasing the proportion of hospital revenue linked to performance and quality beyond the 5% level, and ii) extending payments to priority areas such as in-hospital care for AMI, surgical complications, and care co-ordination between hospital and community care.

- Better use the extensive hospital information infrastructure to evaluate the success of the current hospitals reform and monitor its impact on quality of acute care over time.

4. Increasing value for money whilst improving quality:

- Ensure that the gains realised through smarter purchasing of pharmaceuticals are not lost at the point of prescribing by backing up guidelines with regular audits of adherence. Guidelines also need to be accompanied by clinical information and decision aids oriented toward patients.

- Further differentiate and concentrate key hospital services such as cardiology. Addressing this will reduce slack around technically demanding and expensive procedures such as CABG.

- Use the regions more effectively. Regions should devote their energies to “hands-on” quality improvement activities such as identifying and spreading excellence, supporting under-performing units, and learning from near misses and complaints in a bottom-up approach.

- Resolve the contractual and training obstacles to nurses adopting an extended scope of practice. Priorities would be to seek reduced rates of caesarean section or health care associated infections, two important quality and efficiency issues for Portugal at the current time.

- Define a case manager role within its health system. It would make sense, to start exploring the potential of case managers with these diabetic patients, given that these individuals are already allocated a named primary care nurse.

- Better understand regional variation in clinical processes and outcomes, such as health care associated infection (HCAI) rates, in order to identify the contextual characteristics associated with better or worse performance, and where targeted quality improvement initiatives are needed.
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Contents
Chapter 1. Quality of care policies in Portugal
Chapter 2. Primary care provision in Portugal
Chapter 3. Improving the quality of hospital care in Portugal
Chapter 4. Quality and efficiency in Portuguese health care

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