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POLICY SUMMARY 12

Economic crisis, health systems and health in Europe: impact and implications for policy

Sarah Thomson, Josep Figueras, Tamás Evetovits, Matthew Jowett, Philipa Mladovsky, Anna Maresso, Jonathan Cylus, Marina Karanikolos and Hans Kluge





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DELIVERY OF HEALTHCARE ECONOMIC RECESSION HEALTH POLICY HEALTH SYSTEMS PLANS HEALTHCARE FINANCING

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This policy summary is one of a new series to meet the needs of policy-makers and health system managers. The aim is to develop key messages to support evidence-informed policy-making and the editors will continue to strengthen the series by working with authors to improve the consideration given to policy options and implementation.

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# List of abbreviations

| DRG  | diagnosis-related group                                   |
|------|---|
| EAP  | economic adjustment programme                             |
| EU   | European Union  |
| GDP  | gross domestic product                                    |
| GP   | general practitioner                                      |
| HTA  | health technology assessment                              |
| IMF  | International Monetary Fund                               |
| INN  | international non-proprietary name                        |
| NCU  | national currency unit                                    |
| OECD | Organisation for Economic Co-operation<br>and Development |
| PPP  | purchasing power parity                                   |
| PPP  | public-private partnership                                |
| UK   | United Kingdom  |
| US   | United States   |
| VAT  | value-added tax   |
| VHI  | voluntary health insurance                                |
| WHO  | World Health Organization                                 |

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# 1 About the study

The crisis has given substance to an old and often hypothetical debate about the financial sustainability of health systems in Europe. For years it was the spectre of ageing populations, cost-increasing developments in technology and changing public expectations that haunted European policy-makers troubled by growth in health sector spending levels. The real threat, however, came in the shape of a different triumvirate: financial crisis, sovereign debt crisis and economic crisis. After 2008 the focus of concern turned from the future to the present, from worrying about how to pay for health care in thirty years' time to how to pay for it in the next three months.

Not all European countries were affected by the crisis. Among those that were, the degree to which the health budget suffered varied. Some countries experienced substantial and sustained falls in public spending on health; others did not. These changes and comparative differences provide a unique opportunity to observe how policy-makers respond to the challenge of meeting health care needs when money is even tighter than usual. The magnitude of the crisis – its size, duration and geographical spread – makes the endeavour all the more relevant.

We know from the experience of previous crises that economic shocks pose a threat to health and health system performance. They increase people's need for health care and make it more difficult for them to access the care they need. They affect health systems by heightening fiscal pressure, stretching government resources at the same time as people rely more heavily on publicly financed health services. We also know that negative effects on health tend to be concentrated among specific groups of people – especially those who experience unemployment – and that they can be mitigated by public policy action. While many important policy levers lie outside the health sector, in the hands of those responsible for fiscal policy and social protection, the health system response is nonetheless critical.

#### 1.1 Aims, methods and overview

**This study addresses three questions**. How have health systems in Europe<sup>1</sup> responded to the crisis? How have these responses affected health system performance and population health? And what are the implications of this experience for health systems facing economic and other forms of shock in the future? The study's contribution is to map and analyse policy responses across Europe from late 2008 to the middle of 2013. It is part of a wider initiative to monitor the effects of the crisis on health systems and health, to identify those policies most likely to sustain the performance of health systems facing fiscal pressure and to gain insight into the political economy of implementing reforms in a crisis.<sup>2</sup>

# The study draws on three main sources of information:

 A survey of countries in WHO's European Region carried out in two waves. The first wave involved 45 key informants in 45 countries and covered health system responses up to the end of March 2011 (Mladovsky et al., 2012). The second wave involved 92 key informants in 47 countries and covered health system responses up to the end of January 2013.

<sup>&</sup>lt;sup>1</sup> Throughout this summary the term 'Europe' refers to the 53 countries in WHO's European Region, which includes Israel and the central Asian republics.

<sup>&</sup>lt;sup>2</sup> Key elements of this initiative are the WHO high-level meeting on 'Health in times of global economic crisis: the situation in the WHO European Region' held in Oslo in April 2013 and the Health and Financial Crisis Monitor of the European Observatory and the Andalusian School of Public Health, available at http://www.hfcm.eu/.

- Detailed case studies of health system responses to the crisis in Estonia, Greece, Ireland, Latvia, Lithuania and Portugal (Maresso et al., 2014). These countries were selected from a group of countries identified as being heavily affected by the crisis in different ways. Each case study was written by national experts and academic researchers based on a standard template.
- Analysis of statistical data from international databases.

**Section 2** of this summary briefly outlines the implications of the crisis in Europe for government and household finances.

**Section 3** summarizes trends in spending on health between 2007 and 2012 (the latest year for which international data are available).

**Sections 4–6** review health system responses to the crisis. Faced with heightened fiscal pressure – a growing imbalance between public revenue and expenditure or increased demand for public funding – the approaches available to policy-makers are to:

- get more out of available resources through efficiency gains;
- cut spending on the health sector by restricting budgets, inputs or coverage of health services; and
- mobilize additional revenue for the health sector.

These approaches are not mutually exclusive. A general principle is that actions should be in line with policy goals for the health system to avoid undermining performance. The need to achieve fiscal balance in the health sector does not exist independently of, or supersede, other goals (Thomson et al., 2009). It matters if fiscal balance is achieved at the expense of financial protection, access, efficiency, quality, health outcomes and equity. It is also useful to remember that a health system can be both fiscally balanced and inefficient. Depending on the size of the imbalance, efficiency gains may not be sufficient to bridge the gap between revenue and expenditure and it will be necessary to cut spending or mobilize additional revenue. Cuts may help to restore fiscal balance but undermine performance.

The study analyses health system responses in the following policy areas: public funding for the health system; health coverage (population entitlement, the benefits package and user charges); and health service planning, purchasing and delivery.

Note that tables summarizing health system responses distinguish between 'direct' and 'partial' responses to the crisis. Throughout the document, country names in italics signify a change that was either partially a response to the crisis (planned before the crisis but implemented after with greater/less speed/intensity than planned) or possibly a response to the crisis (planned and implemented since the start of the crisis, but not defined by the relevant authorities as a response to the crisis).

**Section 7** considers the implications of health system responses to the crisis for key dimensions of performance: stability, adequacy and equity in funding the health system; financial protection and equitable access to care; and efficiency and quality of care.

**Section 8** summarizes the impact of the crisis on population health.

**Section 9** summarizes the study's main findings and policy lessons.

# 1.2 Limitations

The study's approach faces a number of (largely unavoidable) challenges, notably:

- difficulties in attributing health system responses to the crisis;
- difficulties in measuring impact on health systems and health due to the absence of analysis and evaluation, time lags in international data availability and time lags in effects;
- difficulties in disentangling the impact of the crisis itself from the impact of health system responses to the crisis; and
- overlap between the three approaches to addressing fiscal pressure; for example, some spending cuts and coverage restrictions could enhance efficiency, while efficiency gains are one way of mobilizing additional revenue.

# 2 Impact on government and household finances

The crisis in Europe was multifaceted, varied in the way it played out across countries and did not affect all countries equally.

# 2.1 Falling GDP

Across the European Region the shock of the global financial crisis of 2007-2008 led to a decline of 3.3% in gross domestic product (GDP) per person<sup>1</sup> in 2009 (WHO, 2014). Some countries barely felt its effects, mainly those in the easternmost part of the region (Figure 1a). Others, such as Estonia, Latvia and Lithuania, experienced a sharp decline in GDP in 2009 and returned rapidly to strong growth (Figure 1b), but continue to suffer from high levels of unemployment. A handful of countries experienced far-reaching changes in GDP and unemployment and will feel the effects of the crisis for years to come (Figure 1c). The countries most affected by sustained declines in GDP - three or more years of negative growth between 2008 and 2013 – are all in the European Union (EU) and mainly in the Eurozone: Croatia, Cyprus, the Czech Republic, Greece, Italy, Portugal, Slovenia and Spain (Eurostat, 2014).

# 2.2 Rising unemployment

As a result of the crisis, many households faced growing financial pressure and insecurity. Unemployment rates rocketed in the EU, rising from 7% in 2008 to 11% in 2013 (*Figure 2*) (Eurostat, 2014). Youth and long-term unemployment were particularly heavily affected. In 2013 total unemployment levels were highest in Spain and Greece (close to 25%) and very high in Portugal, Croatia, Latvia, Ireland, Slovakia and Lithuania (close to or over 15%).

EU data indicate that the incomes of people in the poorest quarter of the population fell between 2009 and 2011 in Bulgaria, Croatia, Estonia, Greece, Iceland, Latvia, Lithuania, Portugal, Romania and Spain. Since 2007 the share of people in the second-poorest quarter at risk of poverty or social exclusion has increased on average across the EU and has risen sharply in Greece, Ireland, Italy, Lithuania, Malta, Spain and the United Kingdom. Income inequality has grown at a faster rate, since the crisis, than in the previous decade (Rawdanowicz, Wurzel & Christensen, 2013). Because of the crisis, many people in Europe may be more vulnerable to economic shocks in the future.

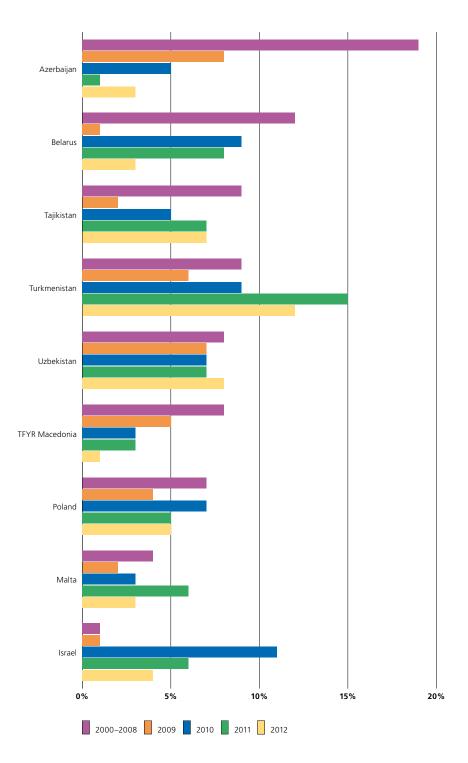
Adjusted for purchasing power parity (PPP).

## Figure 1

Real GDP per capita growth (PPP NCU per US\$): comparison of average annual growth, 2000–2008 and growth in 2009, 2010, 2011 and 2012, European Region

### Figure 1a

Countries that did not experience negative GDP growth between 2008 and 2012

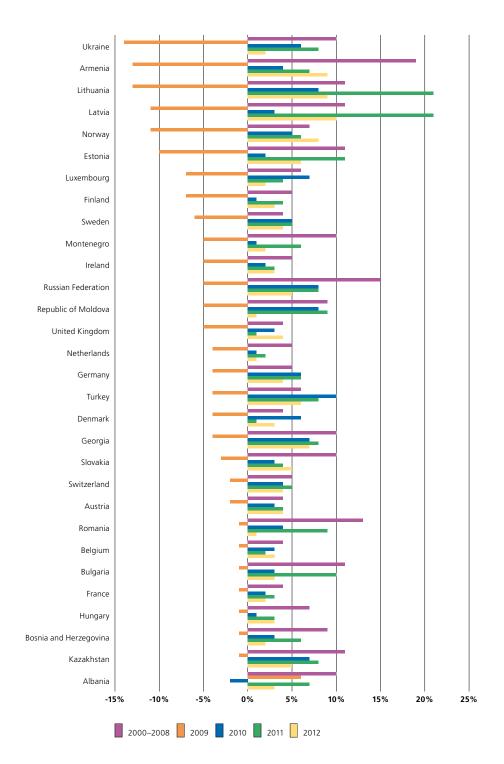


Source: Thomson et al. (2014) based on WHO (2014).

Note: Countries ranked from high to low by largest growth in GDP between 2000 and 2008; PPP = purchasing power parity; NCU = national currency unit.



Countries that experienced only one year of negative GDP growth between 2008 and 2012

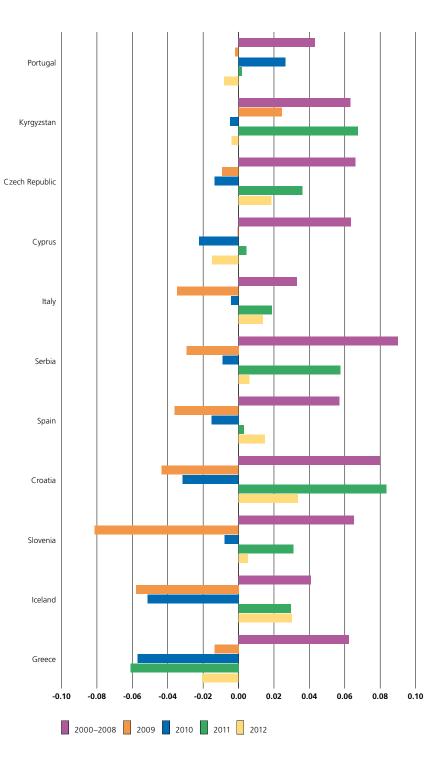


Source: Thomson et al. (2014) based on WHO (2014).

Note: Countries ranked from high to low by largest decline in GDP in 2009.

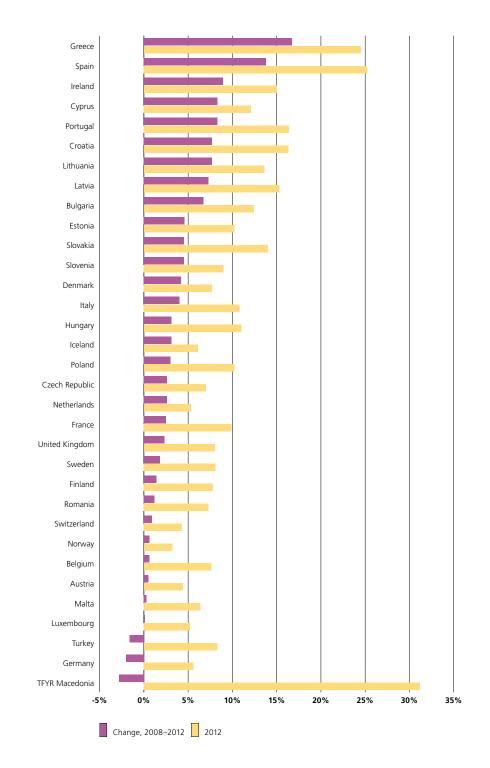
# Figure 1c

Countries that experienced two or more years of negative GDP growth between 2008 and 2012



Source: Thomson et al. (2014) based on WHO (2014).

Note: Countries ranked from low to high by largest overall decline in GDP between 2008 and 2012.



# Figure 2 Unemployment rates (%) among 15–64 year olds, 2008–2012, selected European countries

Source: Thomson et al. (2014) based on Eurostat (2014).

Note: Countries ranked by largest increase between 2008 and 2012.

# 2.3 Growing fiscal pressure

Some governments experienced severe fiscal pressure due to high levels of public debt prior to the crisis, the bursting of housing market bubbles, public bailouts of financial-sector companies, rapid increases in borrowing costs and declining resources as a result of higher unemployment, falling household incomes and lower household consumption. Governments in Cyprus, Greece, Ireland, Portugal and Spain were forced to seek international financial assistance. In all except Spain, this assistance was accompanied by EU-IMF-determined economic adjustment programmes (EAPs) requiring substantial reductions in public spending.

# 2.4 Countercyclical government spending

Public spending patterns were often countercyclical remaining stable or even increasing as GDP declined – as governments tried to maintain demand in the economy and protect households through the provision of unemployment, health and other benefits. However, a handful of countries deviated from this trend. Between 2008 and 2012 per capita public spending declined in nominal terms in Cyprus, the Czech Republic, Greece, Hungary, Iceland, Ireland, Romania and the United Kingdom. To address fiscal pressure, many governments reallocated public resources, but reallocations were generally small. Half of the countries for which data are available took money from the health sector to finance spending in other areas, with the largest reallocations between 2007 and 2010 occurring in Iceland, Ireland, Latvia and Slovakia.

# 3 Impact on spending on health

This section summarizes trends in spending on health between 2007 and 2012 (the latest year for which international data are available).

#### **3.1 Falling public spending on health per person**

Public spending on health per person fell or slowed in many countries between 2007 and 2012. Table 1 lists the countries in which it fell relative to the previous year. As it is not necessarily straightforward to determine the extent to which slowdowns in health spending are related to the crisis, or are a matter of concern, Table 2 identifies countries in which changes in per capita public spending on health differed from historical patterns by more than two standard deviations.

Overall, while most reductions in per capita levels were small, a few countries experienced large or sustained reductions, so that public spending on health was lower in 2012 than it had been in 2007 in Croatia, Greece, Ireland, Latvia and Portugal (*Figure 3*).

#### Table 1

| Countries in which | per capita | public spendi | ng on health fe | ell (NCUs), 2008- | –2012, European Region |
|--------------------|------------|---------------|-----------------|-------------------|------------------------|
|                    |            |               |                 |                   |                        |

| 2008       | 2009           | 2010           | 2011       | 2012        |
|------------|----------------|----------------|------------|-------------|
| Andorra    | Andorra        | Albania        | Andorra    | Albania     |
| Armenia    | Bulgaria       | Croatia        | Croatia    | Cyprus      |
| Malta      | Croatia        | Cyprus         | Denmark    | Greece      |
| San Marino | Estonia        | Czech Republic | Georgia    | Hungary     |
|            | Hungary        | Estonia        | Greece     | Ireland     |
|            | Ireland        | Greece         | Ireland    | Italy       |
|            | Montenegro     | Iceland        | Italy      | Norway      |
|            | Latvia         | Ireland        | Luxembourg | Portugal    |
|            | Lithuania      | Latvia         | Portugal   | Romania     |
|            | Romania        | Lithuania      | Romania    | Slovenia    |
|            | San Marino     | Luxembourg     | Spain      | Switzerland |
|            | TFYR Macedonia | San Marino     |            |             |
|            |                | Slovenia       |            |             |
|            |                | Spain          |            |             |

Source: Thomson et al. (2014) based on WHO (2014).

Note: NCU = national currency unit.

#### Table 2

# Countries in which changes in per capita public spending on health (NCUs) were greater than historical rates, 2009–2012, European Region

| 2009    | 2010           | 2011     | 2012     |
|---------|----------------|----------|----------|
| Ireland | Ireland        | Ireland  | Ireland  |
| Latvia  | Greece         | Greece   | Greece   |
|         | Slovenia       | Slovenia | Slovenia |
|         | Spain          | Spain    | Slovakia |
|         | Czech Republic | Portugal | Portugal |
|         | Iceland        | Italy    | Italy    |
|         | Finland        | UK       | UK       |
|         |                |          | Norway   |

Source: Thomson et al. (2014) based on WHO (2014).

Note: Lower than historical average growth rates between 1995 and 2008 by more than two standard deviations; NCU = national currency unit; UK = United Kingdom; the list is not exhaustive and may exclude countries that made cuts in response to the crisis, but either did so to a small degree relative to previous spending patterns or have historically had a high degree of annual variation in public spending on health.

# **3.2 Decreasing government commitment to health**

In 2007, on average, health comprised 13% of total public (government) spending in the European Region, the second most substantial area of public spending after non-health social protection. Between 2007 and 2011 the health share of public spending fell at some point in 44 countries. It was lower in 2011 than it had been in 2007 in 24 countries, by a margin of over two percentage points in Ireland, Armenia, Latvia, Iceland, Luxembourg, Croatia, Kyrgyzstan and Montenegro (*Figure 4*).

# 3.3 Declining public share of total spending on health

The public share of total spending on health declined in 24 countries between 2007 and 2012. The decline was largest in Ireland, where it fell to well below the EU average.

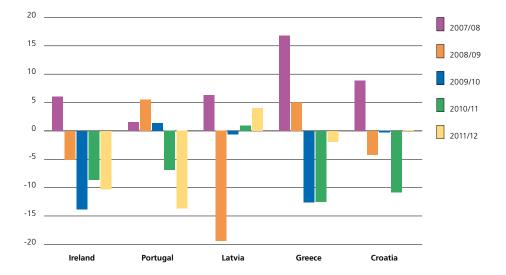
Overall, changes in public spending on health were not always commensurate with the magnitude of the crisis. Some countries that did not experience significant economic contraction had greater slowdowns in public spending on health than countries that experienced a significant fall in GDP.

# 3.4 Mixed trends in private spending on health

Private spending on health fell substantially in a handful of countries, especially in Greece, but increased in many others. Most of the increase in private spending came from out-of-pocket payments rather than voluntary health insurance (VHI). Between 2007 and 2012 out-ofpocket spending fell as a share of total health spending in 31 out of 53 countries. The largest changes in the share of out-of-pocket spending occurred in countries most affected by the crisis. For example, during this period the out-of-pocket share fell by around 15% in Greece and Estonia but grew in Latvia, Lithuania and the Czech Republic (by around 7%), in Ireland and Croatia (by around 10%), in Iceland (by around 15%) and in Portugal (by almost 25%).

### Figure 3

Annual change (%) in per capita public spending on health (NCUs), 2007–2012, European Region countries in which the 2012 level was lower than the 2007 level in absolute terms

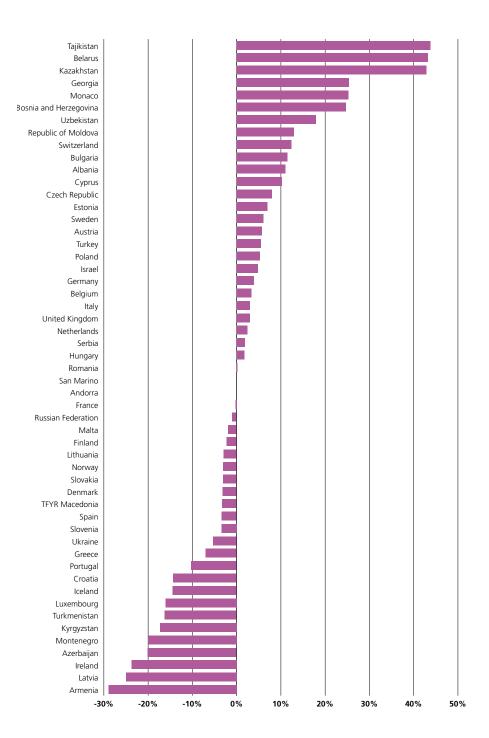


Source: Thomson et al. (2014) based on WHO (2014).

Note: Countries ranked from high (Ireland) to low (Croatia) by extent of reduction between 2007 and 2012; NCU = national currency unit.

#### Figure 4

Change (%) in public spending on health as a share of total public (government) spending, 2007–2011, European Region



Source: Thomson et al. (2014) based on WHO (2014).

Note: Countries ranked by largest increase between 2007 and 2011.

# 4 Health system responses: public funding

Ensuring that levels of public funding for the health system are adequate, public revenue flows are predictable and revenue is raised in a way that does not unfairly burden households is essential to promoting financial protection, equitable access to effective health services and equity in financing (Kutzin, 2008; WHO, 2010). It is also desirable for public funding to be raised and allocated as efficiently and transparently as possible.

In response to fiscal pressure, policy-makers may attempt to limit public spending through cuts to the health budget. However, health systems generally need more, not fewer, resources in an economic crisis and there is good evidence underlining the importance of countercyclical public spending, especially on social sectors (Velényi & Smitz, 2014). A country's ability to mobilize public revenue for health is therefore critical to maintaining health system performance.

The extent to which having a lower level of public funding for the health system is problematic depends on a range of factors. Countries may be able to cope with budget freezes or reductions for a limited period of time, even if demand for health care is growing, where the following conditions are met:

- the health system is adequately publicly funded for example, the health share of public spending is high, reflecting strong government commitment to health in decisions about the allocation of public resources;<sup>1</sup>
- out-of-pocket payments are low as a share of total spending on health<sup>2</sup> and households are able to absorb a small increase in private spending without undue financial hardship;

- there is political will to address waste in the health system, it is possible to reduce input costs without undermining performance and the gap between revenue and expenditure is small enough to be bridged through efficiency gains; and
- robust social policies are in place to support those who are experiencing or at risk of poverty, unemployment and social exclusion.

If these conditions are not met, health budget cuts could have long-lasting damaging consequences for health system performance, with knock-on effects on individuals, society and the economy.

Half of the countries in our survey reported making changes to public funding for the health system in direct response to the crisis (*Table 3*). Although several introduced explicit cuts to the health budget (19), many of these same countries (12), and others (12), tried to mobilize revenue using a range of strategies. A few countries adopted targeted policies to protect poorer people or to prevent adverse effects on employment.

Cuts were evenly divided between countries mainly financed through general government revenues and countries mainly financed through contributions managed by a health insurance fund. Revenuemobilizing efforts tended to be concentrated in contribution-based systems; this may reflect a greater immediate need to compensate for falling employmentbased revenue, the availability of policy levers not present in other systems (contribution rates, for example) or a stronger political imperative to maintain the provision of benefits to contributing populations.

<sup>&</sup>lt;sup>1</sup> In the European Region in 2011 this share ranged from 3.7% to 21.3%, with an average of 12.9% (WHO, 2014).

<sup>&</sup>lt;sup>2</sup> In the European Region in 2012 this share ranged from 5.6% to 69.0%, with an average of 27.6% (WHO, 2014).

#### Table 3

Summary of reported changes to public funding for the health system, 2008–2013, European Region

| Policy area   | Number of countries reporting: |                   |
|---|--------------------------------|-------------------|
|   | direct responses               | partial responses |
| Reducing (or slowing the growth of) health budgets  |                                |                   |
| Cutting ministry of health budgets  | 18                             | 1                 |
| Reducing government budget transfers to the health sector                                 | 4                              | 0                 |
| Introducing or tightening controls on public spending on health                           | 4                              | 1                 |
| Introducing or tightening controls on public spending in general                          | 5                              | 1                 |
| Mobilizing revenue  |                                |                   |
| Deficit financing   | 3                              | 1                 |
| Increasing government budget transfers  | 12                             | 8                 |
| Drawing down reserves   | 7                              | 0                 |
| Introducing countercyclical formulas for government budget transfers to the health sector | 0                              | 1                 |
| Increasing social insurance contribution rates  | 9                              | 3                 |
| Raising or abolishing ceilings on contributions   | 3                              | 1                 |
| Applying contributions to non-wage income   | 4                              | 1                 |
| Enforcing collection  | 1                              | 1                 |
| Centralizing collection   | 1                              | 0                 |
| Introducing new taxes/earmarking for the health system                                    | 2                              | 3                 |
| Targeting   |                                |                   |
| Abolishing tax subsidies and exemptions   | 2                              | 1                 |
| Reducing contribution rates to protect poorer people                                      | 2                              | 0                 |
| Reducing contribution rates to protect employment   | 5                              | 0                 |

Source: Thomson et al. (2014).

# 4.1 Reducing health budgets

Several countries reported automatic reductions in mandatory health insurance revenue as a result of unemployment and falling wages (Bosnia and Herzegovina, Bulgaria, Estonia, Hungary, Lithuania, Montenegro, Poland, Republic of Moldova, Romania, Serbia, Slovakia, Slovenia and Switzerland).

Many countries responded to fiscal pressure using the following measures:

- cutting ministry of health budgets (Bulgaria, Cyprus, Czech Republic, Estonia, Finland, France, *Georgia*, Greece, Iceland, Ireland, Italy, Latvia, Portugal, Romania, Serbia, Slovenia, Spain, TFYR Macedonia, UK)
- reducing or freezing government budget transfers to health insurance schemes (Czech Republic, Finland, Greece, Portugal)
- introducing or tightening controls on growth rates of public spending on health (*Austria*, Belgium, France, Portugal, Spain)
- introducing or tightening controls on growth rates of public spending in general (Croatia, Czech Republic, *Denmark*, Montenegro, Slovenia, Spain).

# 4.2 Efforts to mobilize public revenue

Countries used a wide range of strategies to try to sustain public spending on health.

#### Deficit financing

A handful of countries reported increases in government borrowing (Czech Republic, France, Portugal) or debt write-offs (*Austria*) to maintain public spending on health.

#### Increasing government budget transfers

Some countries maintained or increased the level of government budget transfers to the health insurance scheme (Austria, *Georgia*, Germany, Hungary, Lithuania, *Kazakhstan*, *Kyrgyzstan*, *Malta*, Montenegro, *Norway*, Poland, Republic of Moldova, Romania, *Russian Federation*, Slovakia, Sweden, *Switzerland*, Tajikistan, TFYR Macedonia, Turkey).

# Automatic stabilizers: drawing down reserves, introducing countercyclical formulas

Some countries were able to use built-in mechanisms that address fluctuation by smoothing health sector revenue across the economic cycle, including:

- drawing on health insurance fund reserves (Belgium, Bulgaria, Czech Republic, Estonia, Lithuania, Republic of Moldova, Slovenia)
- using existing formulas for government budget transfers (Lithuania, Slovakia)
- introducing a formula for government budget transfers (*Russian Federation*).

#### Raising contributions or contribution ceilings, extending the contribution levy base to non-wage income, enforcing collection

Several countries reported trying to mobilize revenue for the health insurance system by:

- increasing contribution rates for health insurance (Bulgaria, Greece, Ireland, Montenegro, *Netherlands*, Portugal, Russian Federation, *Slovakia*)
- raising the ceiling on contributions (Bulgaria, *Netherlands*, Slovakia)
- abolishing the ceiling on contributions (Czech Republic)
- extending the levy base for contributions to nonwage income (Hungary), such as dividends (Slovakia), part-time contracts (Slovakia, Slovenia), self-employed people (Slovenia), redundancy payments (France) and pensions (Croatia, Romania)
- enforcing contribution collection (*Lithuania*, Slovenia)
- centralizing contribution collection (Czech Republic)
- increasing overall social security contribution rates (France, Latvia, Lithuania, Montenegro).

However, to avoid adding to labour costs some countries reported:

- reducing contributions (Croatia, Germany, TFYR Macedonia)
- selectively reducing employer contributions (Hungary, Montenegro).

# Introducing new taxes, earmarking existing taxes or increasing taxes earmarked for health

A few countries adapted fiscal policy by:

- introducing new taxes earmarked for health (Croatia, France, *Hungary*)
- increasing the share of earmarking for health (*Belgium*, France, *Hungary*)
- introducing new earmarking for health (*Croatia*).

# 4.3 Targeting to protect poorer people

When attempting to mobilize revenue, several countries took steps to protect people with low incomes by:

- selectively reducing contributions for people with low incomes (pensioners in Montenegro, self-insured people in Republic of Moldova)
- selectively increasing contributions for wealthier people (self-employed people with very high incomes in France, wealthier pensioners in Romania)
- reducing employer contributions for public sector workers (Portugal, for schemes that disproportionately benefit wealthier workers and pensioners)
- abolishing or reducing tax subsidies that predominantly benefit wealthier households such as for VHI (*Denmark*, Ireland) or out-of-pocket payments (Ireland, Portugal).

# 5 Health system responses: health coverage

Health coverage has three dimensions, as shown in Figure 5: the share of the population entitled to publicly financed health services, the range of services covered and the extent to which people have to pay for these services at the point of use. Where coverage is effective, people should be able to access the care they need without facing financial hardship – in other words, out-of-pocket spending on health care should not push them into poverty or take up such a large share of their income that they do not have enough for food, shelter and essential goods.

In response to fiscal pressure, policy-makers may attempt to cut public spending on health by restricting one or more dimensions of coverage, which could potentially mobilize additional private revenue for the health system. At the same time, they may try to enhance efficiency (and potentially mobilize additional public revenue) by selectively discouraging the use of non-cost-effective services.

Reductions in coverage shift responsibility for paying for health services on to individuals and will usually increase the role of out-of-pocket payments in the health system (direct payments for non-covered services and user charges for covered services). Cost shifting is likely to delay care seeking, increase financial hardship and unmet need, exacerbate inequalities in access to care, lower equity in financing and make the health system less transparent. It can also promote inefficiencies – for example, by skewing resources away from need or encouraging people to use resource-intensive emergency services instead of cost-effective primary care. As a result, coverage restrictions may provide a degree of short-term fiscal relief but could add to health system costs in the longer term. Some of these negative outcomes can be mitigated if policies aiming to restrict coverage take a selective approach and are informed by evidence so that they systematically prioritize non-cost-effective services or patterns of use for de-listing (disinvestment) and do not adversely affect people who are already vulnerable in terms of health status and access to care.

Almost all of the countries in our survey reported making changes to coverage in response to the crisis (Table 4). Many introduced a mix of policies intended to expand and restrict coverage. The most common direct responses were to reduce benefits (18 countries, mainly on an ad hoc basis), increase user charges (13) and reduce user charges or improve protection from user charges (14). A smaller number of countries expanded (8) or restricted (6) population entitlement or added items to the benefits package (4). The countries that introduced two or more measures intended to restrict coverage tended to be among those that were relatively heavily affected by the crisis, all in the EU\*. Policies were occasionally introduced but subsequently overturned or not fully implemented. A few countries postponed planned coverage expansions.

<sup>\*</sup> At least two policies (out of three): Bulgaria, Cyprus, Czech Republic, Estonia, Greece, Ireland, Italy, Latvia, Netherlands, Portugal, Romania, Slovenia, Spain. Three policies: Czech Republic, Ireland, Latvia, Slovenia, Spain.

#### Table 4

Summary of reported changes to health coverage, 2008–2013, European Region

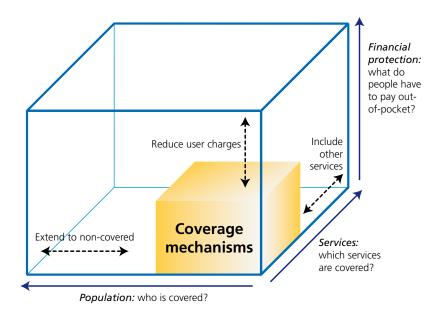
| Policy area                                   | Number of cour   | ntries reporting: |
|---|------------------|-------------------|
|   | direct responses | partial responses |
| Population entitlement                        |                  |                   |
| Expanded entitlement                          | 8                | 7                 |
| Restricted entitlement                        | 6                | 0                 |
| Benefits package                              |                  |                   |
| Added new benefits                            | 4                | 9                 |
| HTA-informed reduction in benefits            | 4                | 9                 |
| Ad hoc reduction in benefits                  | 14               | 3                 |
| User charges                                  |                  |                   |
| Reduced user charges (or improved protection) | 14               | 10                |
| Increased user charges                        | 13               | 11                |

Source: Thomson et al. (2014).

*Note:* HTA = health technology assessment.

# Figure 5

### Coverage dimensions: population entitlement, the benefits package and user charges



Source: WHO (2010).

# **5.1 Population entitlement**

Restricting entitlement poses risks for health system performance, as well as obvious political risks. Following the logic of being selective, (high) income would be the most sensible criterion for excluding people, since richer people are in a better position to pay for health care out-of-pocket or through VHI. International experience, however, strongly suggests that income-based exclusions do not relieve fiscal pressure (Smith, 2010; Smith & Normand, 2009; Thomson & Mossialos, 2006). The health system loses public revenue by forgoing the higher-than-average contributions of richer people or by having to compensate richer people through tax relief on private spending. As a result, it may have a smaller per capita amount of money to spend on a group of people with an above-average risk profile.

Health systems in which access to health care is meanstested are likely to have to increase public spending in response to an economic shock, as incomes fall and more people become eligible for free or subsidized services. Means-tested thresholds can be raised to alleviate fiscal pressure, but this will increase financial hardship because those who lose entitlement are relatively poor.

### Extending entitlement

Several countries reported extending entitlement to groups not covered prior to the crisis or taking steps to increase protection for specific people (Austria, Belgium, Bosnia and Herzegovina, Estonia, *France*, Greece, Iceland, Lithuania, *Montenegro*, *Republic of Moldova*, Russian Federation, Serbia, Spain, *Sweden*, TFYR Macedonia). Around half of these policy changes were planned prior to the crisis and went ahead in spite of it. The most common targets for expanded entitlement were poorer people and children. At the onset of the crisis, Estonia extended coverage of primary care services to the longterm unemployed.

### Restricting entitlement

In contrast to the expansions listed above, restrictions to entitlement targeted relatively vulnerable groups of people.

Countries with universal entitlement reported:

- restricting entitlement for people without permanent resident status (Czech Republic), undocumented migrants and non-EU citizens (adults in Spain)
- restricting entitlement to free publicly financed coverage by raising the means-test threshold (changing it from the minimum wage to receipt of social benefits in Slovenia)
- changing the basis for entitlement from residence to insurance status (Latvia, planned change).

Countries without universal entitlement reported:

• restricting entitlement by raising the means-test threshold (Cyprus, Ireland)

- abolishing entitlement to free primary care for wealthier older people (Ireland)
- delaying implementation of planned coverage expansions (Cyprus, Ireland).

# 5.2 The benefits package

The crisis presented countries with an opportunity to focus on disinvestment: the systematic withdrawal from coverage of services known to be of low value (non-cost-effective). In contrast to ad hoc reductions in benefits, reductions informed by health technology assessment (HTA) offer the dual advantage of enhancing efficiency in public spending on health services and minimizing concerns about negative effects on population health. A caveat, however, is that people may continue to use de-listed services if doctors continue to prescribe them, resulting in out-of-pocket payments. To avoid this, benefit exclusions should be accompanied by good information for patients and providers.

Making greater use of HTA to inform coverage decisions requires investment, capacity and political will. However, even though disinvestment does not usually generate substantial savings in the short term, it offers policymakers the chance to enhance efficiency and may make coverage restrictions more politically feasible, especially when accompanied by public consultation and communication.

### HTA-informed benefit reductions

Several countries reported restricting benefits in a systematic way, using explicit criteria, mainly for drugs (*Belgium*, *Croatia*, *Denmark*, *France*, *Germany*, *Hungary*, *Italy*, Lithuania, *Poland*, Romania, Spain, *Switzerland*). The actual number may in fact be higher because several countries reported introducing new minimum benefits packages or positive lists but did not always specify whether these steps were informed by HTA. Systematic changes were often reported as having been planned before the crisis.

Some of the countries relatively heavily affected by the crisis reported the introduction of a new minimum benefits package (Greece, Spain) or plans to introduce minimum benefits (Cyprus, Portugal). Cyprus and Spain reported attempting to do so using systematic criteria, including cost-effectiveness.

### Ad hoc benefit reductions

Coverage exclusions that were not reported as being based on systematic criteria most commonly involved drugs (*Bosnia*, Greece, Lithuania, Netherlands, Republic of Moldova, Serbia, Slovenia, Spain), cash benefits for temporary sickness leave (Bosnia and Herzegovina, *Estonia*, Hungary, Lithuania, Slovenia) and dental care (Czech Republic, *Estonia*, Ireland, Netherlands). A few countries reported restricting access to primary care (Romania) and preventive services (Bulgaria, Netherlands). Some countries reported introducing and reversing benefit exclusions following opposition from the public (Switzerland removed eyeglasses for the whole population but reintroduced them for children; the Netherlands dropped plans to reduce coverage of mental health services).

#### Adding new benefits

Thirteen countries reported expanding the benefits package, but not usually in direct response to the crisis. Many of these additions appeared to be the result of attempts to strengthen financial protection for specific groups of people (mainly children). Some countries expanded coverage of preventive services (TFYR Macedonia, UK-Northern Ireland). In Croatia and Serbia policies to improve drug pricing and coverage enabled new drugs to be added to the positive list of drugs.

#### 5.3 User charges

Countries often introduce user charges to moderate demand for health services in the expectation that this will control costs. However, there is little evidence to suggest user charges lead to more appropriate use or contain public spending on health care. A large and generally consistent body of evidence (for a synthesis, see Swartz, 2010) shows user charges are likely to undermine health system performance because they:

- have little selective effect, reducing appropriate and inappropriate use in almost equal measure;
- deter people from appropriate and cost-effective care (especially preventive and patient-initiated services), even when charges are low;
- can negatively affect health, particularly among poorer people; and
- can result in cost-increasing substitution.

User charges may contribute to enhancing efficiency if they are applied selectively to reflect the relative value (cost–effectiveness) of different health services (Chernew, Rosen & Fendrick, 2007). Such an approach is not a panacea, however, and is most likely to be useful when user charges are already widely used, there is clear evidence of value and it is politically less feasible to target providers (Thomson, Schang & Chernew, 2013). To avoid unfairly penalizing patients for treatment decisions made by providers, it is essential for valuebased user charges to be accompanied by measures to ensure appropriate care delivery. In many cases targeting providers is likely to be more effective than targeting patients.

Where user charges are applied, research underlines the importance of putting in place adequate protection mechanisms (exemptions and caps on out-of-pocket spending) so that the financial burden weighs least heavily on people with low incomes and those who regularly use health care. Value-based user charges and protection mechanisms often involve significant transaction costs.

#### Increasing user charges

Twenty-four countries reported introducing or increasing user charges, most commonly for:

- outpatient prescription drugs (*Belarus*, *Croatia*, Cyprus, Czech Republic, Finland, *France*, Greece, Ireland, Italy, Portugal, Slovenia, Spain, *Sweden – reduced protection*, *Turkey*)
- inpatient care (*Armenia*, Bulgaria, Czech Republic, *Estonia*, France, Greece, Ireland, Latvia, Portugal, *Romania*, Slovenia)
- outpatient specialist care (Bulgaria, *Denmark*, *Estonia*, Greece, Iceland, Italy, Latvia, Netherlands, Slovenia, *Tajikistan*)
- primary care (*Croatia*, Cyprus, France, Greece, Iceland, Latvia, Portugal, Slovenia)
- emergency departments (all use: *Armenia*, Cyprus; non-urgent use: Italy, Portugal)
- long-term care (Estonia, Portugal).

In Cyprus, Greece and Portugal, user charges were increased to fulfil EU-IMF economic adjustment programme (EAP) requirements. France was the only country to report greater use of value-based user charges.

Eight countries reported measures to reduce protection from user charges by:

- increasing caps (Finland, Ireland planned, Latvia, Portugal, Sweden)
- applying user charges to people previously exempt (Belarus, Bulgaria later reversed, Greece).

A planned measure to expand the number of chronic conditions exempt from outpatient prescription charges was dropped in the UK (England).

#### Lower user charges or improved protection

Fourteen countries reported abolishing or reducing user charges for:

- primary care visits (Finland, Germany, Hungary, Turkey)
- ambulatory or outpatient specialist care (Belgium, Denmark, Germany, Hungary, Italy – later reversed, Netherlands, Turkey)
- outpatient prescription drugs (Czech Republic, Latvia, Tajikistan, *Turkey*, UK-Northern Ireland)
- diagnostic tests in public hospitals (Greece, Italy)
- inpatient care (Czech Republic, Hungary)
- undocumented migrants (Denmark, France)
- dental care (Hungary).

Occasionally this was to reverse a recent policy change (Czech Republic, Denmark, France).

Fifteen countries reported measures to strengthen protection from user charges through reduced charges, exemptions or caps (*Austria*, Belarus, *Belgium*, Bulgaria, Estonia, Finland, Greece, *Kazakhstan*, Latvia, Lithuania, Portugal, *Romania*, Slovakia, Spain, Tajikistan), most commonly targeting outpatient prescription drugs, poorer people or groups described as vulnerable. Austria, Belgium, Portugal and Spain strengthened protection in three or more areas. In over half of these countries greater protection was directly linked to an increase in user charges. Calls to introduce or increase user charges were rejected in Denmark, Serbia, Romania and the UK-Scotland.

# 5.4 Voluntary health insurance

Voluntary (private) health insurance (VHI) can protect people from having to pay out-of-pocket but it does not effectively fill gaps in publicly financed health coverage in most European health systems, particularly in countries with high levels of out-of-pocket spending on health care (Thomson & Mossialos, 2009; Thomson, 2010). Its ability to relieve fiscal pressure is limited and countries have found it difficult to achieve greater takeup of VHI without providing tax subsidies. As a result, we would not generally expect VHI to play a greater role in response to an economic shock.

France reported making VHI covering user charges more accessible to poorer people. A handful of countries reported proposing or changing legislation to enable the development of VHI covering excluded services (Italy, Lithuania, Montenegro, Poland, TFYR Macedonia, Turkey). The Lithuanian initiative failed due to negative public opinion and the Polish option was not implemented. Denmark reported abolishing tax subsidies for corporate purchase of VHI and Portugal abolished tax subsidies for private spending on health for people in the top two income brackets and reduced it from 30% to 10% of total personal private expenditure for everyone else.

Between 2007 and 2012 VHI's share of total and private spending on health increased in around two-thirds of the countries for which data are available, often in countries very heavily affected by the crisis. However, in many instances this is likely to reflect reductions in total and private spending rather than increases in VHI takeup. In Ireland, for example, the share of the population covered by VHI fell by six percentage points<sup>1</sup> during the crisis (Health Insurance Authority, 2013), yet the VHI share of total and private spending rose substantially. Across the European Region most of the increase in private spending seen during the crisis came from outof-pocket payments rather than VHI.

#### From 51% in 2008 to 45% in 2013.

### 6 Health system responses: planning, purchasing and delivery

The way in which health services are planned, purchased and delivered has a direct impact on key dimensions of health system performance, notably efficiency, quality and access (WHO, 2000; Figueras, Robinson & Jakubowski, 2005). Because the supply side is also the primary driver of health system costs, it should be the focus of efforts to control spending (Hsiao & Heller, 2007). This involves paying close attention to how resources are allocated and to the mix of financial and non-financial incentives purchasers and providers face, beginning with the areas suggested in Table 5.

In response to fiscal pressure, policy-makers may look for immediate savings by cutting spending on administration, staff and services or by limiting investment in infrastructure, equipment and training. The question is whether spending cuts can achieve savings without undermining efficiency, quality and access, especially if they are made in response to an economic shock, when decisions may have to be made rapidly, with restricted capacity, and when maintaining access is important.

An economic shock also presents an opportunity to strengthen the health system if it makes change more feasible and if policy actions systematically address underlying weaknesses in health system performance, based on two principles: ensuring that spending cuts and coverage restrictions are selective, so that shortterm savings do not end up costing the system more in the longer term, and linking spending to value (not just price or volume) to identify areas in which cuts can lower spending without adversely affecting outcomes.

Following these principles, it would be possible to improve efficiency by addressing excess capacity and inflated service prices, including salaries; applying substitution policies to drugs, health workers and care settings to achieve the same outcomes at lower cost; restricting the coverage of non-cost-effective health services or patterns of use; merging bodies to minimize duplication of tasks; and reducing fragmentation in pooling and purchasing. Understandably, financial, time and capacity constraints may lead policy-makers to opt for policies that are relatively simple to design and implement (reducing prices, introducing volume controls) over more complex reforms requiring additional investment (changes to the health worker skill mix, moving care away from hospitals, greater use of health technology assessment to inform coverage decisions and care delivery, and eHealth). In a severe or prolonged crisis, however, efficiency gains from price and volume controls may not be enough to bridge the revenue–expenditure gap. Policy-makers will therefore need to try to mobilize additional resources not only to 'carry on as normal' but also to facilitate the sorts of deeper changes that will enhance efficiency, quality and access in the longer term.

Almost all of the countries surveyed reported changes to health service planning, purchasing and delivery (*Table 6*). Measures to reduce spending on the hospital sector were most frequently reported as a direct response to the crisis, followed by measures to lower system administrative costs, drug prices and health worker numbers and pay.

### 6.1 Planning and purchasing organizations

To reduce overhead costs, twenty-two countries reported restructuring health ministries, public health bodies or purchasing organizations in direct response to the crisis (Austria, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, France, Greece, Iceland, Ireland, Latvia, Lithuania, Netherlands, Portugal, Romania, Slovakia, Spain, Switzerland, Tajikistan, Ukraine, UK). The largest reported reductions were in Latvia, where staff numbers at the Ministry of Health and its agencies were cut by 55% between 2009 and 2012.

Notable efforts to minimize duplication and strengthen purchasing include a proposal to create a single Health Insurance Office in the Czech Republic and the creation of a new purchasing agency in Greece, through the merger of health insurance funds.

### Table 5

Ten leading causes of inefficiency in health systems

### Medicines

- underuse of generics and higher than necessary prices for medicines
- use of sub-standard and counterfeit medicines
- inappropriate or ineffective use of medicines

#### **Products and services**

• oversupply and overuse of equipment, investigations and procedures

#### Health sector workers

• inappropriate or costly staff mix, unmotivated workers

#### Services

- inappropriate hospital admissions and length of stay
- inappropriate hospital size (low use of infrastructure)
- medical errors and sub-optimal quality of care

### Leakages

• waste, corruption, fraud

#### Interventions

• inefficient mix or inappropriate level of strategies

Source: WHO (2010).

### 6.2 Public health services

Cuts to public health budgets may help countries to meet short-term cost-containment goals but are likely to lead to cost increases and lower population health gains in the longer term (Martin-Moreno et al., 2012). Growing evidence of the economic benefits of prevention suggests investment in this area may be central to slowing longer-term health expenditure growth (McDaid, Sassi & Merkur, 2014). Cost-effective measures include systematic screening for hypertension, cholesterol and some cancers; regulation; counselling on diet, alcohol and smoking in primary care; and public health taxes, particularly alcohol and tobacco taxes (Chaloupka & Warner, 2000; Sassi, 2010; McDaid & Suhrcke, 2012).

### Cutting public health budgets

Five countries reported making cuts to public health budgets (Czech Republic, Denmark, Estonia, Netherlands, TFYR Macedonia), in addition to the five that reported closing or merging public health bodies (Bulgaria, Iceland, Latvia, Lithuania, Ukraine).

### Strengthening health promotion and prevention

Twenty-seven countries reported steps to improve population health but, with the exception of public health taxes, most of these policies were not reported as being direct responses to the crisis; rather, they represent general policy trends in this area. Reported policies included:

 increasing funding for public health programmes (Austria, Bulgaria, Czech Republic, Denmark, Lithuania)

- introducing new or enhanced policies, screening programmes or targets (Austria, Belgium, Bosnia and Herzegovina, Croatia, Greece, Hungary, Latvia, Lithuania, Malta, Portugal, Republic of Moldova, Romania, Serbia, Tajikistan, TFYR Macedonia, Ukraine, UK-Northern Ireland)
- introducing or extending smoking bans in public places (Belgium, Bulgaria, Greece, Hungary, Ukraine)
- introducing or increasing taxes on:
  - alcohol (Belarus, Cyprus, *Denmark*, *Estonia*, France, Hungary, Montenegro, Romania, *Russian Federation*, Slovenia, Ukraine)
  - tobacco (*Belarus*, *Bulgaria*, Cyprus, *Denmark*, *Estonia*, France, *Hungary*, Montenegro, Portugal, Romania, *Russian Federation*, Slovenia, Spain, Ukraine)
  - unhealthy foods (France, Hungary, Slovenia).

### 6.3 Primary care

Health systems with strong primary care are associated with improved performance (Kringos et al. 2013). Ensuring that people have easy access to the wide range of vital services primary care provides – including prevention, timely detection of disease and disease management – enhances quality and efficiency. This is particularly important for people with chronic conditions. Evidence shows how better disease management and patient empowerment can improve outcomes and reduce costs by preventing or delaying complications and use of acute care. The crisis has provided impetus for some of the changes needed to strengthen chronic care delivery, but real improvement may be difficult to achieve without leadership and additional investment, including in eHealth (see below).

### Table 6

Summary of reported changes to health service planning, purchasing and delivery, 2008–2013, European Region

| Policy area   | Number of countries reporting: |                   |
|---|--------------------------------|-------------------|
|   | direct responses               | partial responses |
| Health system planning and purchasing organizations |                                |                   |
| Measures to lower administrative costs              | 22                             | 9                 |
| Public health services                              |                                |                   |
| Cuts to public health budgets                       | 6                              | 0                 |
| Measures to strengthen promotion and prevention     | 12                             | 18                |
| Primary care and ambulatory care                    |                                |                   |
| Cuts to funding                                     | 5                              | 0                 |
| Increased funding                                   | 3                              | 2                 |
| Changes to payment                                  | 1                              | 4                 |
| Delivery: closures                                  | 2                              | 0                 |
| Delivery: shifting care out of hospitals            | 11                             | 3                 |
| Delivery: skill mix                                 | 3                              | 0                 |
| Delivery: access                                    | 5                              | 1                 |
| The hospital sector                                 |                                |                   |
| Cuts to funding and reduced investment              | 28                             | 8                 |
| Increased investment                                | 3                              | 6                 |
| Changes to payment                                  | 8                              | 12                |
| Delivery: closures, mergers                         | 11                             | 7                 |
| Drugs and medical devices                           |                                |                   |
| Lower prices  | 22                             | 20                |
| Evidence-based use                                  | 10                             | 8                 |
| Health workers                                      |                                |                   |
| Lower payment and numbers                           | 22                             | 5                 |
| The role of health technology assessment (HTA)      |                                |                   |
| Greater use of HTA to inform coverage decisions     | 7                              | 8                 |
| Greater use of HTA to inform care delivery          | 9                              | 6                 |
| The role of eHealth                                 |                                |                   |
| Greater use of eHealth                              | 4                              | 7                 |

Source: Thomson et al. (2014).

### Increasing funding for primary care

Five countries reported that the crisis created an impetus to increase funding or prices for primary care (*Belgium*, *Hungary*, Lithuania, Netherlands, Republic of Moldova). Five reported reducing funding or prices (Belgium, Estonia, Germany, Latvia, Romania), although in all cases efforts were made to limit negative effects – for example, by ensuring price cuts in primary care were lower than price cuts for hospital care or by increasing primary care funding and prices in subsequent years.

### Reforming primary care payment methods

Six countries reported changes to primary care physician payment, most of which tried to link payment to general practitioner (GP) performance (*Belgium, France*, Latvia, *Romania, Serbia*). Ukraine introduced a pilot for capitation-based primary care payment.

### Shifting care out of hospitals

Fifteen countries reported structural reforms to strengthen primary care, including by shifting care from hospitals to primary and community care settings (Belarus, France, Greece, *Hungary*, Ireland, Italy, Latvia, Lithuania, Norway, *Poland*, Portugal, Republic of Moldova, *Russian Federation*, *UK*-England, *Northern Ireland*, *Wales*, Ukraine). In Greece and Portugal the changes were part of EAP requirements.

### Improving access to primary care

Two countries reported changes to increase the opening hours and availability of primary care (Latvia, UK-Wales).

### Changing the skill mix

Three countries reported changing the skill mix (the combination or grouping of health staff) in primary care by shifting the preventive activities of GPs to registered nurses (Slovenia), establishing a new family nurse project to strengthen chronic care delivery (Portugal) and introducing doctor assistants in primary care (Belarus).

### 6.4 The hospital sector

The corollary to strengthening primary care is to limit reliance on hospital care. Addressing excess infrastructure also enhances efficiency by reducing fixed costs. Measures to reduce hospital spending and investment were the most frequently reported direct response to the crisis. Where there was an acknowledged need for hospital restructuring, and some sort of planning had already taken place, measures to address excess capacity are likely to have generated savings and improved efficiency, especially when accompanied by policies to strengthen alternative facilities, reduce inappropriate admissions and facilitate quicker discharges (Kutzin, Cashin & Jakab, 2010; Rechel et al., 2009).

Several countries delayed public investment or sought private investment as a way of saving money. However, decisions taken rapidly to minimize costs rather than promote efficient rationalization may fail to account for important aspects of hospital capacity planning, such as the allocation of human resources (Ettelt et al., 2008). The potential for short-term savings should therefore be balanced against the increased costs and inefficiencies of operating with run-down facilities and equipment – for example, risks to staff and patient safety. Evidence from Europe suggests the use of public-private partnerships (PPPs) to finance hospital investment is problematic and may not reduce costs or promote efficiency in the longer term (Rechel et al., 2009).

### Cuts to funding, prices and investment

Nineteen countries reported reducing hospital budgets (*Austria, Bulgaria*, Croatia, *Denmark*, Greece, *Italy*, Latvia, Lithuania, Netherlands, Portugal, UK-Northern Ireland), or fees and tariffs (Belgium, Bulgaria, Cyprus, Czech Republic, *Denmark*, Estonia, France, Ireland, *Poland*, Slovenia, UK-England).

Twenty countries reported changes to hospital investment, including:

- abandoning or scaling down planned investment (Georgia, Iceland, Romania, Slovenia, Switzerland)
- slowing programmes to upgrade hospital and ambulance services and expensive equipment (Armenia, Belarus, Bulgaria, Montenegro)
- reducing capital expenditure (Bosnia and Herzegovina, Estonia – following a temporary increase, Republic of Moldova – reduction followed by an increase, Ukraine, UK-England, Northern Ireland, Scotland, Wales).

Of these nine countries attempted to raise extra resources for hospital investment, not usually in direct response to the crisis, by:

- drawing on private resources (PPPs) for investment (*Denmark*, *Netherlands*, Spain planned, UK-Scotland)
- drawing on EU structural funds for investment (*Bulgaria*, *Hungary*)
- borrowing to increase investment (*Belgium*, France, *Romania*).

### Reforming hospital payment methods

Eighteen countries reported changes to hospital payment methods, including:

- efforts to link payment to performance (*Belarus*, Bosnia and Herzegovina, France, *Hungary, Italy*, Latvia, Lithuania, *Poland*, *Republic of Moldova*, TFYR Macedonia)
- the introduction of diagnosis-related group (DRG) payment (Cyprus – planned, Czech Republic, Germany – psychiatric hospitals, Greece, Latvia – planned, Lithuania, Poland, Republic of Moldova, Slovakia, Switzerland)
- a shift away from per diem payment (Latvia, *Russian Federation*).

The introduction of DRGs was typically part of ongoing reforms rather than a direct response to the crisis.

## Restructuring hospital services: centralization, closures and mergers

Nineteen countries sped up the existing process of restructuring the hospital sector, mainly through closures and mergers, with varying degrees of progress (*Azerbaijan, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Greece, Hungary, Iceland,* Italy, Latvia, *Lithuania,* Netherlands, Portugal, Romania, Slovakia, Spain, TFYR Macedonia, Ukraine).

### Addressing waiting times

Several countries tried to address long waiting times, sometimes to mitigate negative effects on timely access associated with changes in provider payment, by:

- introducing, extending or enhancing the transparency of waiting time targets or guarantees (*Czech Republic, Denmark*, Estonia, *Italy, Russian Federation, Spain, Sweden*, UK-England, Scotland)
- increasing the transparency of waiting time information (Hungary, Kazakhstan, Slovakia)
- adopting other strategies to lower waiting times (*Finland, Italy, Malta, Slovenia*, UK-Wales).

### 6.5 Drugs and medical devices

Enhancing efficiency in the use of drugs has long been an important policy direction in Europe. The crisis enhanced the bargaining power of governments and other purchasers and many countries were able to negotiate lower prices for publicly financed drugs and medical devices. Some countries also strengthened policies to improve prescribing and achieve greater use of generic drugs (now available for most chronic conditions).

### Lowering prices

Most countries reported introducing or strengthening policies intended to lower the price of medical products (mainly drugs). These included:

- improving procurement processes, often by centralizing procurement (Cyprus, *Denmark*, France, Greece, *Kazakhstan*, Portugal, Romania, Spain), but also through tendering and selective contracting (Bulgaria, Czech Republic, *Hungary*, *Netherlands*)
- price reductions (Belgium, Bosnia and Herzegovina, Finland, France, Greece, Ireland, *Italy*, Lithuania, Portugal, Serbia, *Slovenia*, *Switzerland*, *Turkey*, Ukraine)
- price-volume, budget impact and other risk-sharing agreements (Belgium, *Croatia, Estonia*, Greece, Latvia, *Lithuania*, *Poland*, *Portugal*, *Romania*)
- external reference pricing (Belgium, Cyprus, Ireland, Lithuania, Portugal, *TFYR Macedonia*, Ukraine)
- internal reference pricing (introduced: Croatia, Greece, Malta, Slovakia, Slovenia; modified: Estonia, Hungary, Latvia, Romania, Slovakia)
- distribution margins (Cyprus, France, *Poland*, Portugal, *Russian Federation*)
- reducing VAT (Greece, Tajikistan)
- other measures (Belarus, Croatia, Greece, Kazakhstan, Republic of Moldova, Romania, Russian Federation).

### Improving prescribing, dispensing and use

Seventeen countries reported taking steps to support evidence-based prescribing, dispensing and use through:

- INN prescribing (Greece, *Hungary, Iceland*, Latvia, Lithuania, Portugal, Republic of Moldova, Romania, Spain)
- e-prescribing (Estonia, Greece, Portugal, Romania)
- prescribing guidelines (*Denmark*, Greece, Portugal)
- prescription monitoring (Cyprus, Montenegro, Portugal)
- generic substitution (Belgium, *Estonia, Hungary*, Latvia, Lithuania, Spain)
- information and training (Estonia, Kazakhstan, Russian Federation, Slovenia)

Several countries reported changes to coverage and reimbursement policy, such as the creation of positive lists and greater use of health technology assessment (HTA) to inform coverage decisions *(see section 5.2)*.

### 6.6 Health workers

Health worker costs account for the largest share of spending on health and have been a common target for savings, sometimes in countries where health worker pay has grown sharply, even excessively, in recent years, but also in countries where salaries are relatively low. Staff remuneration and working conditions play an important role in attracting and retaining skilled health workers, keeping motivation and morale high and incentivizing improvements in productivity and performance (Buchan, 2008; Wismar et al., 2011). Changes to recruitment policies should therefore be implemented as selectively as possible (Dussault et al., 2010), balancing cuts in staff numbers and pay against effects on worker morale, productivity and retention rates. This is also an area in which reversing cuts and reinvesting in human resources as economic conditions improve may be challenging and expensive.

Skill mix reforms can address staff shortages and uneven distribution as well as enhancing quality and efficiency in care delivery in the longer term (Bourgeault et al., 2008). However, their effectiveness depends on the incentive structures in place and changes need to account for quality, delegation and responsibility.

### Reducing staff numbers

Several countries reported measures to reduce the number of health sector workers, almost all in direct response to the crisis (Croatia, Greece, Iceland, Ireland, Italy, Portugal, Romania, Slovenia, Spain, *Sweden*, UK-England, Scotland, Wales).

### Reducing staff pay

Sixteen countries reported changes to health worker pay, almost all in direct response to the crisis (*Austria*, Cyprus, *Denmark*, Greece, Iceland, Ireland, *Italy*, Latvia, Lithuania, Montenegro, Portugal, Romania, Serbia, Slovenia, Spain, UK-England, Northern Ireland, Scotland). In some countries, especially those with EAPs, pay cuts have been substantial.

### Changing the skill mix

See section 6.3.

### 6.7 Health technology assessment

Health technology assessment (HTA) contributes to improving health system performance by identifying safe, effective, patient-focused and cost-effective interventions. Decisions about health coverage and best practice in care delivery that are not based on evidence of (cost)-effectiveness may result in suboptimal health outcomes and are highly likely to waste resources (Velasco Garrido et al., 2008). Evidence of wide variations in delivering care to similar patients has given impetus to efforts to optimize and, where appropriate, standardize treatment of specific conditions or groups of patients over the course of care using practice guidelines, protocols or care pathways. A small body of evidence suggests that mechanisms primarily designed to improve quality of care can also enhance efficiency and may reduce costs (Legido-Quigley et al., 2013).

## Increasing use of HTA to inform coverage decisions

Fifteen countries reported taking steps to intensify the use of HTA in making decisions about coverage. The actual number of countries may in fact be higher, as several reported introducing new positive lists (Bosnia and Herzegovina, Bulgaria, Greece, Kazakhstan, Lithuania, Portugal, Serbia, Tajikistan) or revising existing ones (Poland, Slovenia) but without specifying whether these steps were or would be informed by HTA. In most countries drugs and medical devices were the main target for HTA. Countries reported:

- establishing a new priority-setting agency (Denmark, Montenegro)
- strengthening HTA networks (Spain)
- using HTA when adding drugs to positive lists (*Belarus, Croatia, Russian Federation,* Spain)
- applying HTA to new areas such as medical devices (*Belgium, Hungary*, Romania, *Turkey*) and expensive equipment (Belarus)
- adding new criteria to HTA processes (France, *Germany, Switzerland*)
- plans to use HTA systematically in defining the benefits package in its entirety (Cyprus, Spain)
- other (Norway).

### Strengthening HTA use in health service delivery

Thirteen countries reported developing new practice guidelines and protocols (Cyprus, *Kazakhstan, Latvia*, Portugal, *TFYR Macedonia*) or care pathways (*Belgium*, *Denmark*, France, Ireland, *Italy*, Russian Federation, Slovenia, TFYR Macedonia). Some reported efforts to enforce adherence to practice guidelines by making them mandatory (Belgium) or through better monitoring (Portugal, Ukraine) and the introduction of financial incentives (Cyprus). Many of these new initiatives are in countries without well-established programmes of guideline development.

### 6.8 eHealth

In contexts other than the crisis, the introduction of electronic health records and e-prescribing has had positive effects on cost-effectiveness and quality in some countries (Dobrev et al., 2010). Electronic health records have proven to be complex to implement and are associated with high investment costs (Black et al., 2011), so may not be amenable to rapid introduction in a crisis situation. However, e-prescribing systems can be a critical tool for improving efficiency in the use of drugs and diagnostic tests if they are used to monitor prescribing patterns and are accompanied by measures to address inefficient prescribing behaviour.

Eleven countries reported changes to eHealth systems, including electronic prescribing for medicines (*Belgium*, Croatia, Czech Republic, France, Greece, *Latvia*, Portugal, *Romania*, *Serbia*, *TFYR Macedonia*, *Turkey*).

### 7 Implications for health system performance

In response to fiscal pressure, European health systems did not simply resort to spending cuts and coverage restrictions but also tried to get more out of available resources and to mobilize additional revenue. EU-IMFdetermined economic adjustment programmes (EAPs) in Cyprus, Greece and Portugal required coverage restrictions and, in Greece, spending cuts (Baeten & Thomson, 2012). These countries therefore had less opportunity than others to see if fiscal pressure could be addressed in other ways.

A look at the balance of direct and partial responses reported across countries (see Tables 3, 4 and 6) suggests that without the crisis countries would not have restricted population entitlement to publicly financed health services and many spending cuts would not have taken place, especially those affecting ministries of health, public health services, primary care and health worker numbers and pay. It also suggests that the crisis gave countries the impetus to introduce more complex changes likely to improve efficiency in the longer term, did not derail ongoing reforms to provider payment methods and stimulated a wide range of efforts to mobilize additional public revenue for the health sector.

Health system responses to the crisis varied across countries, reflecting differences in context but also differences in policy choices: changes in public spending on health and coverage were not consistently commensurate with the magnitude of the crisis. For example, Lithuania did not increase user charges and even tried to strengthen protection against existing charges, in spite of experiencing sustained reductions in per capita public spending on health, while user charges rose in countries in which public spending on health continued to increase, such as Finland and France. In this section we consider the implications of health system responses to the crisis for the following dimensions of performance: stability, adequacy and equity in funding the health system; financial protection and equitable access to care; and efficiency and quality of care.

# 7.1 Stability, adequacy and equity in funding the health system

Ensuring that levels of public funding for the health system are adequate, public revenue flows are predictable and revenue is raised in a way that does not unfairly burden households is essential to promoting financial protection, equitable access to care and equity in financing (Kutzin, 2008; WHO, 2010). It is also desirable for public funding to be raised and allocated as efficiently and transparently as possible.

### Stability

Many countries experienced significant volatility in per capita levels of public spending on health in the years following the onset of the crisis (*see Table 1*). Health budget cuts were evenly divided between systems mainly financed through the government budget and those that rely on earmarked contributions managed by a health insurance fund. Revenue-mobilizing efforts tended to be concentrated in contributionbased systems.

While the largest annual cuts occurred as a result of government decisions (Greece, Ireland, Latvia and Portugal), this largely reflected the magnitude of the economic shock, including external intervention through EU-IMF EAPs. It also reflected the absence of automatic stabilizers: Greece had no reserves or countercyclical formulas to compensate the health insurance system for falling revenue from payroll taxes, and Ireland had no countercyclical formula to cover a huge increase in the share of the population entitled to meanstested benefits. Reserves and countercyclical formulas provided a much-needed buffer in several countries. With the exception of Estonia, however, which had accumulated substantial health insurance reserves prior to the crisis<sup>1</sup>, automatic stabilizers alone were not enough to maintain levels of public funding for the health system where the crisis was severe or sustained. Policy responses played a critical role in ensuring stability; without policy action, levels of public spending on health would have been lower.

The study highlights three lessons for the future. First, automatic stabilizers make a difference in helping to maintain public revenue for the health system in an economic crisis. Second, although reserves and countercyclical formulas were originally designed to prevent fluctuation in employment-based revenues, there is no reason why systems predominantly financed through government budget allocations should not introduce similar mechanisms to adjust for changes in population health needs or to finance coverage increases linked to means-tested entitlement. Third, policy responses as the crisis develops are important: automatic stabilizers are not a substitute for action. Because they are likely, at some point, to require deficit financing, they may not be sufficiently protective in a severe or prolonged crisis or where political economy factors override health system priorities.

### Adequacy

Modest reductions in public spending on health need not, in themselves, undermine performance, especially if they are the result of measures to enhance efficiency. However, reductions are likely to be damaging if:

- they are sustained;
- they occur in underfunded health systems those that began the crisis in a relatively weak position due to allocating a below-average share of public spending to the health sector and having aboveaverage levels of out-of-pocket spending on health; and
- the crisis is severe.

The study's assessment of countries at risk of having inadequate levels of public funding following the crisis highlights Greece and Latvia as being at highest risk, followed by Croatia, Ireland, Lithuania and Portugal, then Armenia, Hungary, Malta, Montenegro, Russian Federation, Turkmenistan and Ukraine. The countries identified as being at moderate risk are Albania, Azerbaijan, Bulgaria, Cyprus, Estonia, Luxembourg, Slovenia and TFYR Macedonia. It is notable that so many of the highest-risk countries are in the European Union. Countries with the highest levels of out-of-pocket spending on health and significant gaps in coverage at the onset of the crisis<sup>2</sup> would have had the least potential for cutting public spending without further damaging financial protection and access to health services. It is likely that substantial cuts in public spending on health have negatively affected these important dimensions of health system performance in Greece and Latvia. Cyprus may experience the same problem if further cuts take place.

In contrast, Croatia and Ireland benefited from allocating a relatively high share of government spending to the health sector and very low levels of out-of-pocket spending before the crisis<sup>3</sup>. Lithuania and Portugal had some (more limited) leeway also. Nevertheless, cuts have taken their toll in Croatia and Ireland, with both countries experiencing sharp drops in the public share of total spending on health between 2007 and 2012 (by 7 and 11 percentage points, respectively), causing Ireland's share to fall to 64% in 2012, well below the EU average of 72%.

Overall, it is worrying that so many countries demonstrated pro-cyclical patterns of public spending on health during the crisis, notably in the European Union. It is especially worrying that pro-cyclical spending has been concentrated in the countries hit hardest by the crisis, including those with EAPs. This suggests that the important economic and social benefits of public spending on health have not been sufficiently acknowledged in fiscal policy decisions and EU-IMF EAPs.

### Equity in financing

Some countries took the opportunity the crisis offered to address longstanding sources of inequity in financing. Examples of equity-enhancing measures include abolishing or limiting tax subsidies for out-of-pocket payments and VHI (Denmark, Ireland, Portugal); raising or abolishing ceilings on health insurance contributions (Bulgaria, Czech Republic, Netherlands, Slovakia); carefully targeting changes in contribution rates to avoid increasing the financial burden on poorer people (Croatia, Ireland, Montenegro, Republic of Moldova); and extending the contribution levy base to non-wage income (Slovakia).

<sup>2</sup> For example, in 2007 out-of-pocket payments accounted for over a third of total spending on health in Albania, Armenia, Azerbaijan, Bulgaria, Cyprus, Greece, Latvia, TFYR Macedonia and Turkmenistan (WHO, 2014).

<sup>&</sup>lt;sup>1</sup> The Estonian health insurance fund learnt from the severe recession the country faced in the early 1990s and accrued additional reserves in the 2000s, in anticipation of an economic downturn.

<sup>&</sup>lt;sup>3</sup> Public spending on health was above 16% of government spending in both countries in 2007, while out-of-pocket payments accounted for less than 15% of total spending on health (WHO, 2014).

However, the out-of-pocket share of total spending on health increased in 21 countries between 2007 and 2012, indicating cost-shifting to households that is likely to have made health financing more regressive. One or two countries introduced contributions for pensioners, which might undermine equity in financing in countries where pensioners are generally poor, unless poorer pensioners are shielded from having to pay.

# 7.2 Financial protection and equitable access to care

Securing financial protection ensures people do not face financial hardship when accessing health services and promotes equitable access to care. The crisis may have undermined financial protection<sup>4</sup> and equitable access<sup>5</sup> through various pathways, as illustrated below:

- growing unemployment and poverty, which may increase people's need for health care and induce a shift away from privately financed use, particularly in countries where levels of out-of-pocket payments for health care were already high;
- the absence of timely and effective policy action to address existing gaps in coverage, especially where these gaps affected people at risk of poverty, unemployment, social exclusion and ill health; and
- spending cuts and coverage restrictions introduced in response to the crisis.

### Failure to address important gaps in coverage

Unemployed people are highly vulnerable in countries where entitlement to a comprehensive package of publicly funded health care does not extend beyond a fixed period of unemployment, and are even more vulnerable in countries facing an unemployment crisis. The policy response to this issue varied across countries. For example, very early on in the crisis (2009) Estonia extended health coverage to people registered as unemployed for more than nine months, on the condition that they were actively seeking work. As a result, a high share of the long-term unemployed now benefit from improved financial protection, although they still do not have publicly financed access to non-emergency secondary care (Habicht & Evetovits, 2014). In contrast, in Greece – where estimates suggest between 1.5 and 2.5 million people have lost their entitlement to health coverage due to unemployment or inability to pay contributions – action to protect these people was initially limited, slow and ineffective (Economou et al., 2014). Coverage of prescription drugs and inpatient care was only extended to the uninsured in 2014.

<sup>4</sup> Measured in terms of the incidence of catastrophic outof-pocket spending (represents an unduly high share of an individual's capacity to pay) or impoverishing out-of-pocket spending (pushes people into poverty).

### <sup>5</sup> Measured in terms of equity in the use of health services.

## *Restricting entitlement for more vulnerable groups of people*

Almost all of the reported reductions in population entitlement affected poorer households (Cyprus, Ireland, Slovenia) and non-citizens (Czech Republic, Spain). In Cyprus, Ireland and Slovenia the targeting of poorer households was the result of an increase in the meanstest threshold. This suggests that while means-testing gives policy-makers a degree of flexibility in a crisis situation, and may protect the poorest people, it cannot be relied upon as a safety net by those who are not in the poorest category.

### Linking entitlement to payment of contributions

Two countries took steps that will have the effect of a shift away from residence-based entitlement. Latvia introduced a proposal to link entitlement to contributions and Bulgaria limited entitlement to immunization and treatment of sexually transmitted infections to those covered by social insurance. Both changes will require careful monitoring to identify and address adverse effects.

## Excluding cost-effective items or whole areas of care from the benefits package

Targeted disinvestment from non-cost-effective services or patterns of use was uncommon in Europe. Systematic, HTA-based de-listing was only reported in EU countries and Switzerland. Instead, reductions in benefits tended to be ad hoc. This is a cause for concern, notably in the case of reported limits to primary care, such as Romania's new cap on the number of covered visits to a GP for the same condition (set at five per year in 2010 and cut to three in 2011), and cuts in temporary sickness leave benefits.

# Disproportionate reductions in investment and cuts to already low input costs

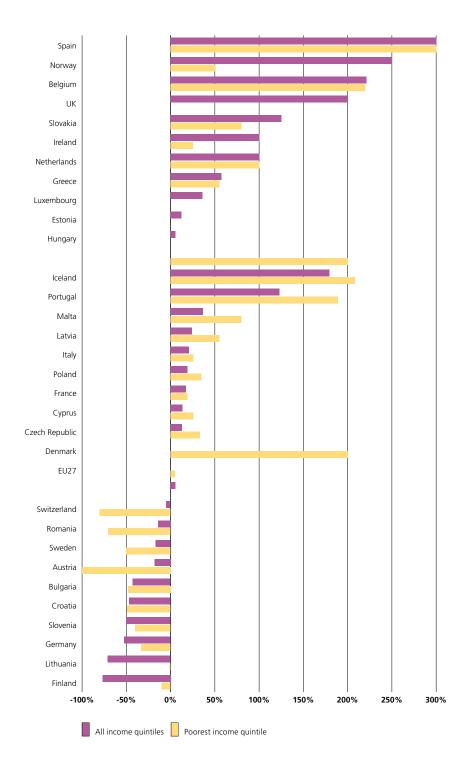
Cuts in budgets, infrastructure and human resources may have an immediate effect on access if they are large enough. For example, substantial cuts to hospital budgets in Greece and Latvia are reported to have pushed up waiting times. In Latvia very long waiting times for elective surgical procedures effectively removed these services from publicly financed coverage and forced those who needed them to pay out of pocket (Taube, Mitenbergs & Sagan, 2014). Conversely, the consequences of underinvestment in infrastructure or health worker migration due to cuts in staff numbers and pay may only become evident in the longer term.

### Higher user charges without protective measures

Changes to user charges were the most commonly reported coverage response, suggesting this was a relatively easy policy lever for many countries, but only a few countries simultaneously increased charges and strengthened protection. While EAPs in Cyprus, Greece and Portugal required an increase in user charges, they did not promote protection from user charges. In this respect, EU-IMF EAP requirements were not in line with international evidence or best practice and it was left to national decision-makers to initiate protective action.

### Figure 6

Change (%) in the share of the population perceiving an unmet need for medical treatment for cost reasons, 2008–2012, selected European countries



Source: Thomson et al. (2014), based on Eurostat (2014).

Note: Data for Austria and Ireland are for 2011; a zero value indicates the absence of change rather than the absence of data.

### **Protective measures**

Some countries demonstrated awareness of the importance of securing financial protection and strengthened protection against user charges. Some also tried to address fiscal pressure through efficiency gains rather than coverage restrictions. For example, reductions in drug prices in countries where user charges are set as a share of drug costs have lowered the financial burden on patients or enabled a wider range of drugs to be publicly financed.

### Impact

The question is whether protective strategies have been effective, especially for more vulnerable groups of people. To answer this involves data (disaggregated by income and health status) on use, the incidence of catastrophic or impoverishing out-of-pocket spending on health care and unmet need. In Europe only the last of these is routinely available<sup>6</sup>.

Data on the use of health services are only available for a small number of countries and are not disaggregated by income. Aggregate data do not show significant changes in use. However, a handful of countries reported changes that suggest patterns of use have been affected by the crisis. For example, many people stopped buying VHI in Ireland, and in Cyprus and Greece people switched from private to public providers. In Greece this shift was accompanied by a large drop in the out-of-pocket share of total spending on health.

Figure 6 shows how unmet need due to cost rose for the whole population in 17 countries and among the poorest fifth in 20 countries (Eurostat, 2014). The highest rises across the whole population – a doubling or more – were seen in Belgium, Iceland, Ireland, Netherlands, Norway, Portugal, Slovakia, Spain and the United Kingdom, albeit from a low starting point in all except Portugal. In Greece and Latvia the increases were smaller, but from a much higher starting point. It is not possible to tell from these data whether increases in unmet need for cost reasons are due to changes in households' financial circumstances or health system responses to the crisis (or both).

Recent analysis of the incidence of catastrophic or impoverishing spending on health is only available for a handful of countries. Research in Portugal suggests that the incidence of catastrophic out-of-pocket payments has risen since new user charges were introduced in 2012, reversing the trend of the previous decade (Galrinho Borges, 2013; Kronenberg & Pita Barros, 2013). Analysis from Hungary also indicates the reversal of a downward trend (Gaál, 2009). Neither exemptions nor lower drug prices have stopped the rise in Portugal, but lower drug prices have had some protective effect in Portugal and Estonia (Galrinho Borges, 2013; Võrk et al., forthcoming).

<sup>6</sup> Through the EU Survey on Income and Living Conditions (SILC) covering the EU28 countries, Iceland, Norway, Switzerland and Turkey.

To understand fully the effects of the crisis on financial protection and equitable access to care we need better data on the use of health services, more comparable data on unmet need and more systematic analysis of catastrophic and impoverishing out-of-pocket payments.

### 7.3 Efficiency and quality of care

Countries reported a wide range of strategies intended to generate savings and, in some cases, to enhance efficiency or quality. The absence of evaluation makes it difficult to assess effects on efficiency and quality. Although countries sometimes reported savings, it is not clear if national analysis is based on calculation of savings net of transaction costs or accounts for unintended consequences such as savings in one area triggering higher costs in another area. Assessment is further complicated by contextual differences in starting point and policy design and by the fact that some effects may not be immediately evident. In the following paragraphs we comment on health system costs and then focus mainly on savings and efficiency, where possible distinguishing between the two (*see Figure 7*).

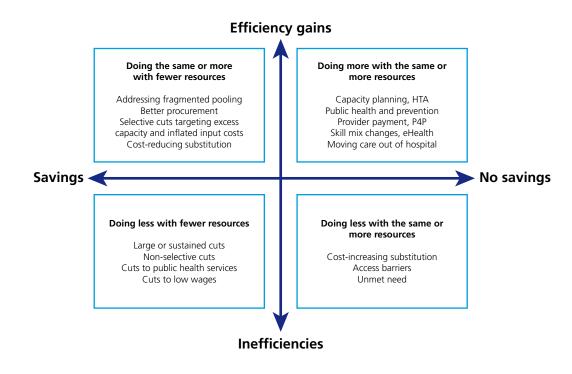
### Health system costs

Comparative data on public spending on health by function are only available for some (mainly EU) countries, do not go back further than 2003 and only go up to 2011. It is therefore difficult to establish a robust baseline for the aggregate spending changes shown in Figure 8 or to know how spending has developed since 2011. Nevertheless, there is a clear pattern of slower spending growth across all areas of care between 2007 and 2011 and actual reductions in spending in all except outpatient care. The reductions are most marked for prevention and public health, inpatient care and pharmaceuticals. Initial reductions in spending on administration in 2009 were followed by growth in subsequent years. We do not have data on health worker costs.

The largest reductions have tended to be concentrated in countries heavily affected by the crisis (Greece, Latvia, Lithuania, Portugal and Spain), although there are consistent reductions in countries such as Poland, which did not experience an economic shock. International data were not generally available for Croatia and Ireland. Cyprus experienced slower rates of growth between 2007 and 2011, but the largest spending cuts have probably taken place since then.

### Figure 7

Distinguishing between savings and efficiency gains



Source: Thomson et al. (2014).

## Doing the same or more with fewer resources: savings and efficiency gains

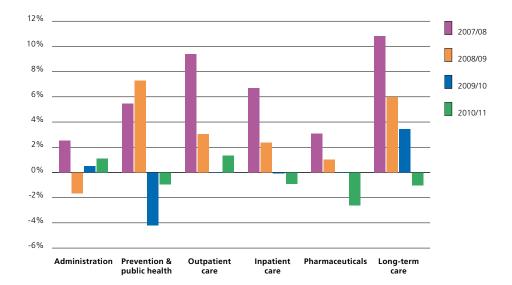
Some policies may have generated savings and enhanced (or at least not adversely affected) efficiency. Examples include the merging of health insurance funds to address fragmented pooling and purchasing in Greece; better procurement, lower drug prices and greater use of generic alternatives, a widespread response with evidence of slower growth in spending on drugs in some countries; and targeted cuts to tackle excess capacity, including reductions in overhead costs and health worker salaries where these were considered to be high by national and international standards.

# Doing less with fewer resources: savings without efficiency gains

Other policies may have achieved savings but undermined efficiency through disproportionate reductions in productivity or quality. Examples include cuts to public health budgets; large or sustained cuts to hospital budgets, leading to longer waiting times for effective services or lower quality (a particular issue in Greece and Latvia); and large or sustained cuts to health worker salaries where these were already low, leading to unintended consequences such as the out-migration or early retirement of skilled workers and adding to health system pressures via increased staff workload and lower morale. These types of response reflect a tendency to put the short-term need for quick savings above the need for efficiency and longer-term expenditure control. For some countries salary cuts were a compromise to keep staff in employment; a handful of countries also tried to protect the incomes of lower-paid health workers by making larger cuts to the salaries of higher-paid staff. However, the unintended consequences – which could have been foreseen in some instances – may prove to be both difficult and expensive to address in future.

### Doing more with the same or more resources: efficiency gains without (immediate) savings

Examples of policies likely to enhance efficiency without immediate savings or requiring upfront investment include: the creation of a centralized agency to support purchasing in the Czech Republic; strengthening policies to promote health or prevent disease (a relatively widespread occurrence, although usually planned before the crisis); greater use of HTA to inform coverage decisions and service delivery; developing eHealth; restructuring to shift care out of hospitals and boost primary care; and reform of provider payment methods, including efforts to link payment to evidence of performance.



### Figure 8

Change (%) in public spending on health by function, 2007–2011, EU27 and selected European countries

Source: Thomson et al. (2014), based on OECD-WHO-Eurostat (2013).

Note: Data include EU27, Iceland, Norway and Switzerland.

The number of attempts to strengthen the role of HTA and eHealth in response to the crisis is notable. Such reforms require investment and capacity and are not an obvious choice in a crisis. In many cases they were the result of pre-crisis plans or EAP requirements (for example, in Cyprus, Portugal and Greece). In this respect EAPs showed some balance between short- and longterm needs, even if expectations of what it is possible to achieve in the context of severe fiscal and time constraints may have been unrealistic.

## Doing less with the same or more resources: neither savings nor efficiency gains

Some policies may have undermined efficiency and failed to generate net savings once transaction costs or the costs of unintended consequences were accounted for. Examples include increases in user charges, without adequate protection mechanisms, which encourage people to forgo needed care or push them to use more resource-intensive services (for example, emergency departments instead of primary care).

A better understanding of the effects of the crisis on efficiency and quality will only be possible with further analysis and careful monitoring in and across countries, especially of the longer-term effects of large cuts in staff numbers, staff pay and spending on hospitals, cuts to spending on public health services and primary care, and delayed or reduced investment in infrastructure.

### 8 Impact on population health

This section summarizes what we know about the impact of economic downturns on population health.

### 8.1 Evidence from earlier recessions

Downturns can damage health through reductions in household financial security, particularly as a result of job loss, and reductions in government resources. Although earlier recessions have benefited health in terms of positive changes in behaviour and overall reductions in mortality, it is clear that improvements for some people masked adverse effects on more vulnerable groups in the population. Research based on more recent recessions, including the crisis, does not find a positive effect on mortality. Many individual-level studies from a wide range of high-income countries find an association between becoming unemployed and increased mortality.

### 8.2 Evidence from this crisis

Mental health has been most sensitive to economic changes so far. There has been a notable increase in suicides in some EU countries, often reversing a steady downward trend, and some evidence of an increase in the prevalence of mental disorders. The evidence generally suggests that unemployment and financial insecurity increase the risk of mental health problems.

Where other health outcomes are concerned, the evidence is not consistent. There is limited evidence (from Greece) of a decrease in general health status and increases in communicable diseases such as HIV and malaria. Changes in behavioural risk factors show mixed patterns, with limited evidence of increased alcohol consumption among people who are already heavy drinkers or who have experienced job loss. Once again, however, it is important to bear in mind that vulnerable people may be more negatively affected than the population in general, and that these people tend to be hidden in aggregate data. Negative effects are likely to be concentrated among some of the most vulnerable and least visible groups in society, including migrants, homeless people and drug users – people who are the most difficult for researchers to reach.

The full scale of the effects of the crisis on health may not be apparent for years. Much of the evidence reviewed in this study relates to conditions for which the time lag between exposure and outcome is relatively short, such as mental illness, suicide, infectious diseases and injuries. However, there are likely to be further adverse effects on health due to increases in household financial insecurity, inadequate and delayed access to health services and breakdowns in the management of chronic disease. These effects may not manifest themselves for some time. Close monitoring at national and international levels is therefore essential, as is policy action to mitigate adverse effects. Failure to monitor and act will be costly in both human and economic terms.

### 9 Policy lessons

This section summarizes the study's main findings and policy lessons.

### 9.1 Impact of the crisis

The crisis in Europe was multifaceted, varied in the way it played out across countries and did not affect all countries equally. As a result of the crisis, a handful of countries experienced a sustained decline in GDP, unemployment rose rapidly in the EU and many households faced growing financial pressure and insecurity.

Public spending on health fell or slowed in many countries between 2007 and 2012, both in absolute terms and as a share of government spending. Most changes were relatively small, but in several countries public spending on health was lower in 2012 than it had been in 2007.

This crisis confirms what we knew from previous experience: economic shocks pose a threat to health and health system performance. They increase people's need for health care, but make it more difficult for them to access the care they need. They heighten fiscal pressure, stretching government resources at the same time as people are relying more heavily on publicly financed health services. Negative effects on health tend to be concentrated among specific groups of people, especially those who experience unemployment, but can be mitigated by policy action.

# Some health systems were better prepared than others to cope with severe fiscal pressure.

Factors that helped to build resilience included countercyclical fiscal policies; adequate levels of public spending on health; no major gaps in health coverage; relatively low levels of out-of-pocket payments; a good understanding of areas in need of reform; information about the cost–effectiveness of different services and interventions; clear priorities; and political will to tackle inefficiencies and to mobilize revenue for the health sector. These factors made it easier for countries to respond effectively to the crisis. In contrast, **weak governance and poor health system performance undermined resilience.** 

In responding to the crisis, most countries introduced positive changes. Many were resourceful in mobilizing public revenue for the health sector, sometimes in ways that brought additional benefits – introducing public health taxes, for example, or measures to make health financing fairer. The crisis prompted action to enhance financial protection, including extending health coverage to new groups of people and reducing or abolishing user charges. Faced with growing fiscal pressure, countries also took steps to get more out of available resources. Efforts to strengthen pharmaceutical policy were especially common.

But countries did not always take needed action, were not always able to achieve desired results and sometimes introduced changes likely to damage performance. As a result, a handful of countries experienced a sharp and sustained reduction in public spending on health and there is some limited evidence of increases in unmet need for health care, in the incidence of catastrophic out-of-pocket spending and in mental health disorders. Evidence of these negative effects may grow as the crisis persists (particularly in countries where unemployment is still high) and as the longer-term consequences of blanket spending cuts and coverage restrictions begin to be seen.

### 9.2 Policy content

### Policy-makers have choices, even in austerity.

Fiscal and health policy responses to the crisis varied across countries, reflecting policy choices, not just differences in context. The wide range of responses (and their effects) analysed in this study shows how countries experiencing severe fiscal pressure can introduce changes that strengthen health system performance and build resilience.

Before cutting public spending on health, policymakers need to consider the trade-offs involved and weigh short-term needs against longer-term priorities. A strong case needs to be made to justify cutting public spending on health and other social sectors in response to an economic shock. Such cuts are likely to undermine fundamental societal goals, increase

hardship among already vulnerable groups of people, weaken health system performance and add to fiscal pressure in the future. Severe and sustained cuts are particularly risky. Countries should desist from basing policy decisions on short-term economic fluctuations and account for population health needs and other goals when considering fiscal sustainability.

In this and other crises, the health sector has been a target for cuts on account of its generally large share of public spending. Determining what and how much to cut based on spending volume alone is crude - if expedient – because it fails to consider the value obtained from that spending. We acknowledge the practical and political advantages of making cuts 'across the board'. We also recognize that, under some conditions, freezing or reducing the health budget may be an appropriate response, especially if the choice is between spending on health and spending on other social sectors. Our contention is not to promote spending on the health system at all costs. Rather, it is that decisions about public resource allocation should be informed, where possible, by an understanding of the trade-offs involved. Identifying areas in which public spending does not produce significant benefit (value), and selectively cutting in those areas, will not just avoid damage but also enhance efficiency.

Where spending cuts and coverage restrictions are the chosen course of action, they must be as selective as possible and informed by evidence of value. Within the health sector, arbitrary cuts to coverage, budgets, infrastructure, staff numbers and pay or service prices are likely to undermine efficiency, quality and access and unlikely to address underlying performance issues. As a result, they may cost the health system more in the longer term. In contrast, selective reductions informed by evidence and priority-setting processes can enhance efficiency. Not all spending achieves the same degree of benefit. It therefore makes economic sense to identify and limit spending on low-value (less cost-effective) areas and to protect spending on high-value (more cost-effective) areas, including public health services and primary care. Targeting excess capacity, inflated prices and low-value services, combined with a reallocation of resources to high-value services, will increase health gain as well as improving efficiency.

Secure financial protection and access to health services as a priority, especially for people at risk of poverty, unemployment, social exclusion and ill health. Economic shocks increase people's need for health care and make it more difficult for them to access the care they need. They also affect some people more than others. Ensuring financial protection and access to health services is central to preventing deterioration in health outcomes and should therefore be a policy priority. A targeted approach may be needed to promote access for high-risk groups of people, particularly those who experience job loss. Effective health policy responses include addressing important gaps in coverage, strengthening protection from user charges and targeting richer households for cuts in tax subsidies or increases in contribution rates.

**Focus on promoting efficiency and cost-effective investment in the health system.** Strategies likely to generate both savings and efficiency gains in the context of an economic shock include strengthening pharmaceutical procurement, pricing and substitution policies to achieve the same outcomes at lower cost; reducing inflated service prices and salaries; restricting the coverage of health services already known to be of low value; stepping up the implementation of planned hospital restructuring; and merging health insurance funds to minimize duplication of tasks and redress fragmented pooling and purchasing.

More complex changes that are unlikely to result in immediate savings and may require upfront investment – but will enhance efficiency in the longer term – include strengthening policies to promote health and prevent disease; greater use of HTA to inform coverage decisions and service delivery; restructuring to shift care out of hospitals and prioritize primary care; reform of provider payment methods, including efforts to link payment to evidence of performance; pursuing skill mix policies; and developing eHealth. During the crisis efforts to promote efficiency tended to focus on drugs rather than services and skills, reflecting pressure to make short-term savings at the expense of longer-term expenditure control; lack of information, analysis and capacity for effective decision-making; and resistance from stakeholders. Underlying weaknesses in the health system, and in health system governance, make it harder for countries to respond effectively to fiscal pressure.

If an economic shock is severe and prolonged – or if political will to address waste in the health system is limited – efficiency gains may not be able to bridge the gap between revenue and expenditure. In such instances, policy-makers will need to make the case for mobilizing additional public resources.

### Health financing policy can exacerbate or mitigate the threat presented by an economic shock and is critical to building health system resilience. The crisis has clearly demonstrated the importance of health financing policy design. When the crisis began, many health systems suffered from weaknesses that undermined performance and resilience – for example, heavy reliance on out-of-pocket payments, basing population entitlement on factors other than residence, and the absence of automatic stabilizers to smooth revenue across the economic cycle.

Employment-based entitlement has been tested to destruction in the crisis, leaving highly vulnerable people unable to access health care just when they needed it most. Countries that base entitlement on income (through a means-test) found that demand for publicly financed health care rose at the same time as health sector revenues were declining because falling incomes pushed up the number of people entitled, sometimes by a substantial amount. None of these countries had countercyclical formulas in place to link levels of public spending on health to population health needs.

Basing entitlement on factors other than residence makes it difficult to ensure universal access to health services. It also raises questions about justice. Countries are increasingly using general tax revenues to supplement contribution-based health financing and it may be regarded as unfair that the uninsured contribute to these revenues through consumption taxes – effectively subsidizing the health care costs of the insured – but are still excluded from coverage.

During the crisis automatic stabilizers such as reserves or countercyclical formulas for government budget transfers to the health sector helped to alleviate fiscal pressure. Policy responses have also been important in determining countries' ability to maintain an adequate and stable flow of funds to the health sector. Positive developments include better enforcement of tax and contribution collection; lifting or abolishing ceilings on social insurance contributions; broadening the contribution base to include non-wage sources of income; abolishing inefficient and inequitable tax subsidies for voluntary health insurance; and introducing or extending public health taxes. Mitigating the negative effects of an economic shock on health and health systems requires an inter-sectoral response. Some health and health system outcomes are affected by factors beyond the health system's immediate control. The two most relevant public policy areas are **social policy**, which promotes household financial security, and **fiscal policy**, which enables government to maintain adequate levels of social spending, including spending on the health system. Health policy-makers need to engage with policy-makers in these areas. Engaging with fiscal policy-makers is paramount because it is clear that health systems generally require more, not fewer, resources at a time of economic crisis, to address a greater need for health care and a greater reliance on publicly financed services. Fiscal policy should explicitly account for this probability. Social policies can limit periods of unemployment, provide safety nets for people without work and mitigate the negative health effects of job loss.

### 9.3 Policy implementation

Build on the crisis as an opportunity to introduce needed changes, but avoid the rushed implementation of complex reforms. An economic shock can be both a threat to, and an opportunity for, the health sector. The opportunity arises when there is a powerful force for change and policy responses systematically address underlying weaknesses in performance. However, a country's ability to respond effectively and achieve genuinely transformatory change in a crisis may be constrained by lack of resources, time, information, capacity and political support, and by uncertainty about the economic outlook.

EU-IMF economic adjustment programmes (EAPs) exerted strong pressure for quick savings and at the same time asked countries to set up electronic health records, establish HTA-based priority-setting processes, develop clinical guidelines, introduce DRGs and move care out of hospitals, usually within a two-year window. Imposing such complex reforms – which many countries struggle to implement even in normal circumstances – in unrealistic timeframes is risky and may undermine future ability to implement needed changes.

Rushed or partial implementation without adequate capacity, dedicated resources or sufficient attention to communication has been problematic in several countries. As a result, reforms sometimes failed to address inefficiencies, created gaps in responsibility for key areas like public health, led to unintended consequences and added to health system costs.

Ensure reforms are underpinned by capacity, investment and realistic timeframes. Severe fiscal pressure combined with pressure to generate savings very quickly encourages countries to postpone planned coverage expansions and adopt policies that are relatively easy to implement but are likely to undermine efficiency and access goals – for example, blanket cuts to budgets and staff, the closure of public health institutions, the raising of means-test thresholds and increases in user charges. Sustained fiscal pressure is equally challenging for two reasons. First, there is a limit to what countries can achieve through strategies such as cutting input costs. Eventually, they will need to consider more fundamental changes and attempt to mobilize additional resources. Such changes are usually difficult to achieve in a short space of time and often require capital investment – a very common target for cuts in the current crisis. Second, sustained pressure can erode political will to change, exhaust the willingness of health workers to tolerate further deterioration in pay and working conditions, and undermine public confidence in the health system.

Ensure reforms are in line with national policy goals, values and priorities. During the crisis many health systems experienced forceful external pressure to introduce changes. Pressure was exerted at international level through EAPs and, more commonly, at national level by ministries of finance. The European experience suggests that changes are more likely to be assimilated if they fit with existing goals, values and priorities, reflect a degree of consensus about the need for change and are supported by evidence. Some EAP requirements for the health sector were technically sound and in line with national goals, even if they were unrealistic given the fiscal context. However, some of them were known (or should have been known) to have potentially detrimental effects on health system performance – for example, increased user charges without accompanying protection mechanisms and pro-cyclical public spending on health.

Ensure transparency in communicating the rationale for reform and anticipate resistance to changes that challenge vested interests. Changes introduced in response to the crisis often encountered opposition from interested parties. This is to be expected, particularly where cuts and other responses directly threaten the incomes of patients, health workers, provider organizations and the suppliers of drugs, devices and equipment. Some countries anticipated and managed resistance more effectively than others, in part through efforts to communicate with the public and other stakeholders.

Improve information systems to enable timely monitoring, evaluation and the sharing of best practice. Policy-makers in Europe need much better access to health and health systems information and analysis. Assessing the effects of the crisis has been difficult, reflecting the relatively low priority international and national policy-makers have placed on collecting data on health status, mortality, the use of health services, the incidence and distribution of catastrophic and impoverishing out-of-pocket payments, the health workforce and health service, and health system outcomes. The absence of timely and relevant data makes it difficult to monitor and evaluate policy effects, which in turn limits the scope for improving performance.

Mitigating negative effects on health and health systems requires strong governance and leadership at national and international levels. Governance and leadership play a major role in enabling an effective response. In addition to ensuring timely and relevant data collection, relevant factors include setting clear priorities for action in line with health system goals; establishing and using information systems for monitoring and analysis; basing changes on evidence and best practice; exercising judgement about the sequence of reforms; and minimizing opposition and confusion through good communication. Not all of the health system policies called for in EAPs reflected international best practice and evidence; the balance of priorities sometimes weighed heavily in favour of cost containment as opposed to efficiency, and expectations about what could be achieved in a crisis context were often unrealistic. These limitations were echoed at national level.

### 9.4 The future

To be better equipped to address fiscal pressure in future, international and national policy-makers should aim to:

- **Develop better information systems.** The absence of timely and relevant data collection makes it more difficult to address an economic shock and monitor its effects.
- Address important gaps in coverage. Countries with significant pre-existing gaps in coverage have fewer policy levers with which to address fiscal pressure. The crisis has demonstrated the serious limitations of basing entitlement to publicly financed health services on employment or income, and the merits of basing entitlement on residence.
- Strengthen health financing policy design, so that in future the health system is less prone to, and better able to cope with, pro-cyclical fluctuation; levels of public spending on health are more explicitly linked to population health needs; the public revenue base is not overly reliant on employment; and tax subsidies do not foster inequalities in paying for and accessing health services.
- **Invest in measures to promote efficiency.** The risk is that as fiscal pressure eases, the momentum for efficiency will be lost, but promoting efficiency should be a constant endeavour.
- Foster governance and leadership at international and national levels. Whether or not countries are able to focus on the areas listed above will depend to a large extent on the quality of governance and political leadership.

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### Joint policy summaries

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**2. Assessing future health workforce needs** – Gilles Dussault, James Buchan, Walter Sermeus, Zilvinas Padaiga

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