

## HEALTH AND HEALTH SYSTEMS

---

The health systems of the European Union are a central part of Europe's high levels of social protection. Ensuring equal access to health care contributes to social cohesion, as recognised in the Europe 2020 Integrated Guidelines (Guideline 10), and social justice. Health systems, through equity in financing (financing according to ability to pay) and in access (access according to need and not on the basis of ability to pay) have a redistributive character, from the rich to the poor and from the healthy to the ill. Moreover, they can contribute to sustainable development as they add to intergenerational solidarity and can correct for negative population health externalities.

The overarching values of universality, access to good quality care, equity and solidarity are widely accepted at the EU level and shared across Europe, as recognised by the Council<sup>1</sup> and in the work of the different EU institutions. The Council has also recognised the need make health systems financially sustainable in a way which safeguards these values into the future<sup>2</sup>.

The health sector plays an important role in the overall economy: it accounts for 8% of the total European workforce and for 10% of GDP in the European Union. A large share of healthcare costs in the EU is borne by public means, which raises the issue of cost-effectiveness and long-term financial sustainability.

Against a background of rising demand and constrained resources, providing universal access to high quality care, while ensuring sustainability of health systems, requires increased cost-effectiveness in health spending.

### Key statistical indicators

***The health (and social) sector has seen a large rise in employment over the last few years and represents a potential for high-skilled and flexible employment.***

The 'health and social work' sector<sup>3</sup> is the sector which saw the largest rise in employment in recent years (and notably between the last quarter of 2008 and the second quarter of 2013) with more than 1.9 million new jobs. Within the health and social sector, the biggest increase in jobs took place in the 'residential care' sub-sector<sup>4</sup> (777 thousand new jobs, accounting for 40% of the new jobs created in the sector), followed by, the 'human health' sub-sector (with a net balance of 672 thousand new jobs, 35% of the total) and by 'non-residential social work' (490 thousand new jobs, 25% of the total).

With regards to absolute figures across the EU, the 'human health and social sector' accounted for 22,572,200 employees in the second quarter of 2013. The majority of them – 13,026,600 employees – were employed in the 'human health' subsector; the 'residential care' subsector accounted for 4,619,300 employees, while 4,926,300 workers were employed in 'social work activities without accommodation'.

---

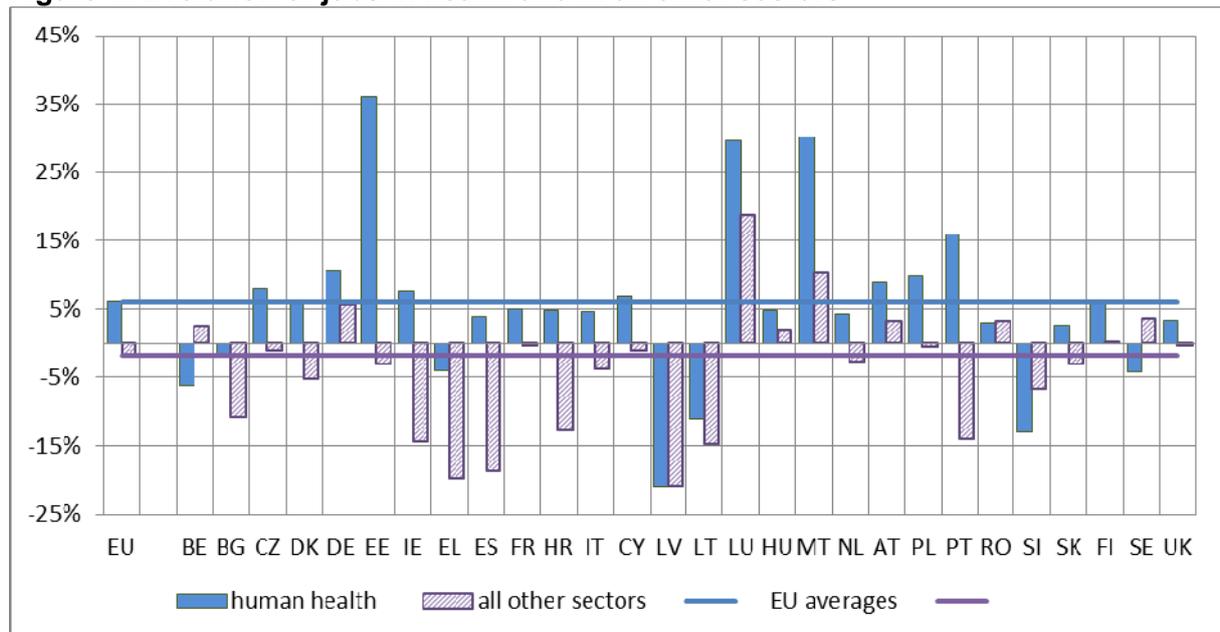
<sup>1</sup> Council Conclusions on Common values and principles in European Union Health Systems (2006/C 146/01): <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:146:0001:0003:EN:PDF>

<sup>2</sup> Council Conclusions on the sustainability of public finances in the light of ageing populations (3167<sup>th</sup> ECOFIN Council meeting, 15 May 2012): [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/130261.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/130261.pdf)

<sup>3</sup> The 'Health and social work' sector includes three sub-sectors: 'human health', 'residential care', and 'non-residential social work'. For some statistics no breakdown is available; in order to present comparable data it is therefore necessary to present the aggregate value for the whole sector.

<sup>4</sup> This sector is composed both by works which may be ascribed to human health and to social care, but under the current classification it is difficult to estimate the relative weights of the two sub-components. This means that the previous analyses relate to a different aggregate, as it excluded social long-term care.

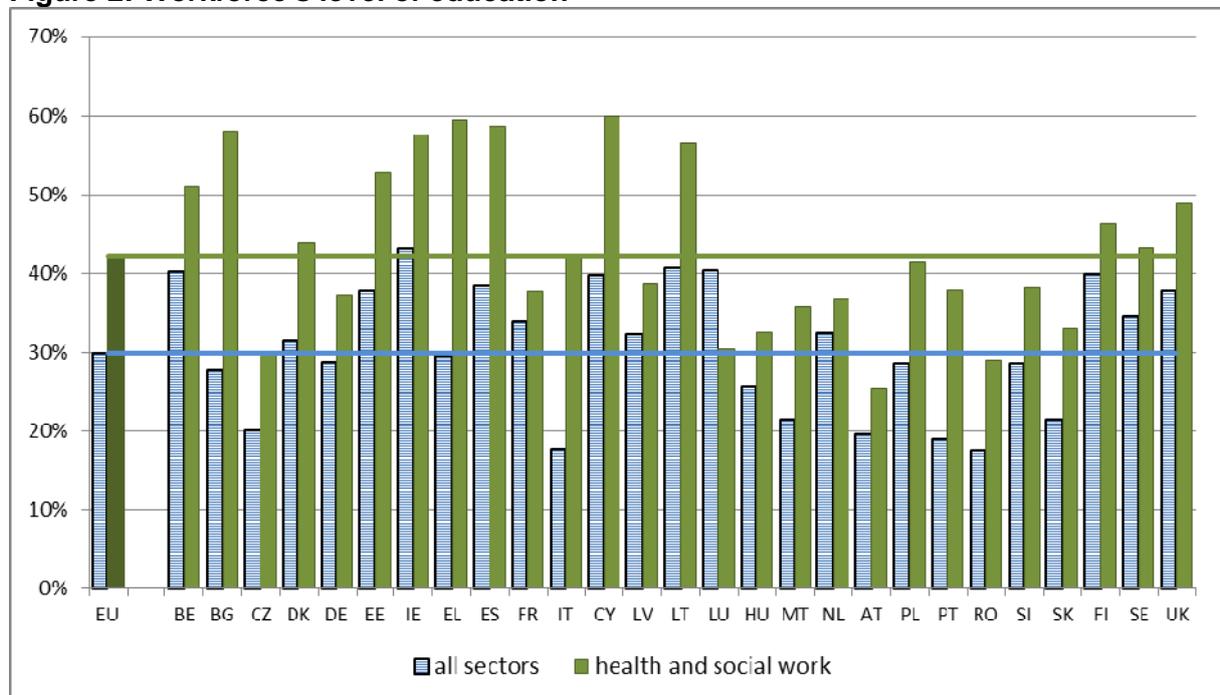
**Figure 1: Evolution of jobs in health and in all other sectors**



*Percentage changes in jobs between 2008 (Q4) and 2013 (Q3) in human health and in all other sectors - Source: Eurostat, labour force survey*

Workers in the health and social work sector present an education level which is far above the average of all sectors. As Figure 2 shows, the presence of workers with tertiary education is consistently higher in the health and social sector than in the whole economy.

**Figure 2: Workforce's level of education**



*Employment of workers holding a tertiary degree as a percentage of total employment in health and social work and in all sectors, 2011 - Source: Eurostat*

In the European Union as a whole, in 2011, 30% of all workers held a tertiary degree (corresponding to ISCED levels 5 and 6); in the health and social work sector this value was 42.2%, i.e. two workers out of five held a tertiary degree. The percentage of workers with an

upper or post-secondary education (ISCED 3-4) was 48.5% for the whole economy and 43.0% in the health and social work sector. To complete the picture, 21.5% of all workers held a no more than a lower secondary degree (ISCED 0-2), while this percentage was only 14.8% in health and social work sector.

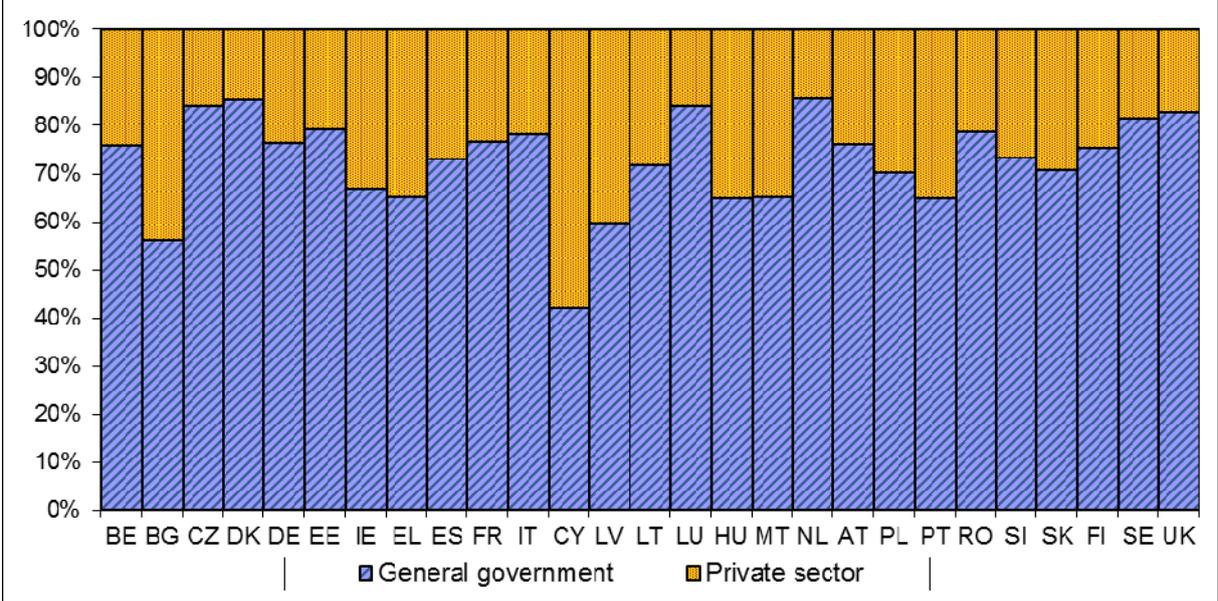
According to Commission services' estimations, around 15% of all people holding tertiary education qualifications in age group 30-34 are employed by the health and social work sector<sup>5</sup>.

**Health expenditure makes up a large and growing share of GDP**

Health expenditure makes up a large share of GDP in European Member States: the share of total (public and private) health expenditure as a percentage of GDP was slightly above 10% in 2010, and five MS had presented a value equal to or above 11% (DK, DE, FR, NL and AT). The public sector plays a major role in the financing of healthcare: in the vast majority of MS, more than 70% of health expenditure is funded by the public sector.

Figure 3 shows the share of public and private financing to healthcare systems across EU countries. MS with a relatively high share of private health expenditure are CY (58% of total health expenditure), BG and LV (above 40%), HU and PT (at 35 %), EL, MT and IE (above 30%). The MS with the highest share of health expenditure funded by the government are the NL and DK (above 85%), CZ, LU, UK, and SE (above 80%).

**Figure 3: Health financing**



Health expenditure by financing agent - Source: Eurostat, OECD, WHO – 2012 or most recent data

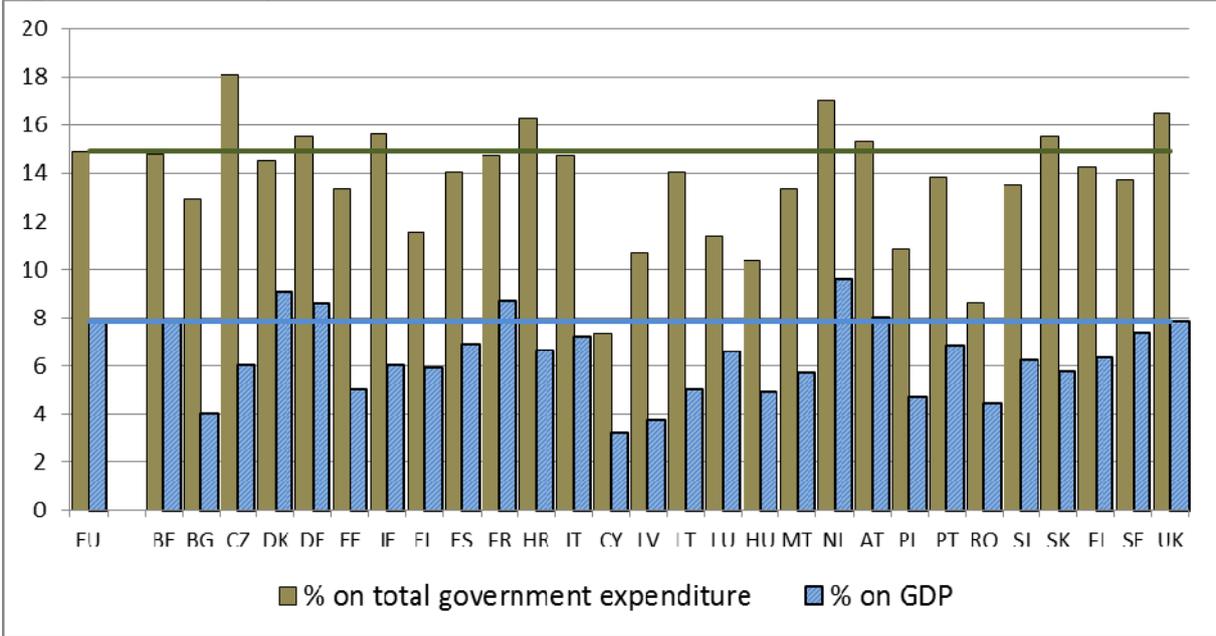
Figure 4 shows the figures on the levels of public expenditure on health in EU Member States, expressed both as a percentage of GDP and as a percentage of total general government expenditure. Seven Member States have a health expenditure-to-GDP ratio above the weighted EU average in 2011 (7.8 % of GDP): NL, DK, FR, DE, AT, BE, and UK.

<sup>5</sup> Commission services' calculations based on data from Eurostat, Eurofound and EU KLEMS.

The Member States with the lowest share of public health expenditure were CY and LV (below 4% of GDP), BG, RO, PL, HU, LV, and EE, all below 5% of GDP.

Expressing health spending as a percentage of total government expenditure shows eight Member States above the EU level (14.9%): CZ (above 18%), NL, UK and HR (above 16%), IE, DE, SK, and AT (all above 15%). The Member States with the lowest public expenditure in health, as a share of total public expenditure are CY (below 8%), RO (below 9%), HU, LV, PL (below 11%), LU and EL (below 12%).

**Figure 4: Public expenditure on health**



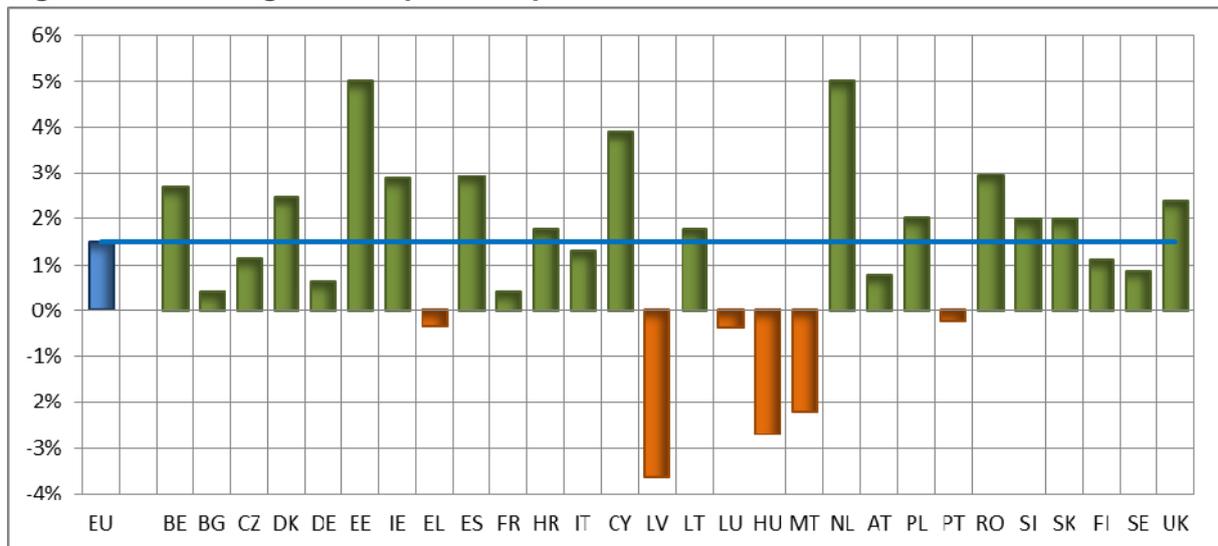
*Public health expenditure as a % of total government expenditure and of GDP*

*Source: Eurostat, OECD, WHO, national statistics; 2011 or most recent data – Commission services' calculations*

**The need to ensure fiscal sustainability of public expenditure on healthcare and long-term care**

Health spending is among the largest and fastest growing spending items for governments. Figure 5 shows the proportion of annual increase in public health expenditure as a percentage of GDP growth. To have a better understanding of it, one must note that a value of 0% means that the health expenditure has been growing at the same pace as the GDP.

**Figure 5: Relative growth of public expenditure on health and GDP**



*Average annual increase in public health expenditure as a % of GDP (2006-2011)*  
 Source: WHO Euro Health for all database (HFA-DB) – Commission services' calculations

The largest increase in public health expenditures (as a share of GDP) between 2006 and 2010 has been recorded in EE, NL, CY, RO, ES and IE. By contrast, public health spending grew less than GDP in LV, HU, MT, LU, EL, and PT.

Looking forward, growing incomes, population ageing and technological advancements are expected to increase pressure for higher health spending. According to the 2012 Ageing Report<sup>6</sup>, which analyses the effect of ageing, but also of non-demographic factors, on the expected development of health expenditure, a further increase in the share of public health expenditure on GDP is expected from now up to 2060. As shown in Table 1, according to the Ageing report's reference scenario, public expenditure on health as a percentage of GDP will increase by 1.1 percentage points between 2010 and 2060.

<sup>6</sup> [http://ec.europa.eu/economy\\_finance/publications/european\\_economy/2012/pdf/ee-2012-2\\_en.pdf](http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-2_en.pdf)

**Table 1 – Current levels and projected change in public spending on health care and long-term care; 2010-2060 as, % of GDP**

Projected public spending, 2010-2060, percentage points of GDP											
Projected age-related spending											
	Health care					Long-term care					
	Level	Change				Level	Change				
		Reference scenario		Risk scenario			Reference scenario		Risk scenario		
	2010	2010-2020	2010-2060	2010-2020	2010-2060	2010	2010-2020	2010-2060	2010-2020	2010-2060	
BE	6.3	0.1	0.4	0.2	0.8	2.3	0.4	2.7	0.5	3.5	BE
BG	4.3	0.2	0.5	0.5	1.1	0.5	0.0	0.3	0.0	0.4	BG
CZ	6.9	0.4	1.7	0.7	2.4	0.8	0.1	0.7	0.1	1.0	CZ
DK	7.4	0.4	0.9	0.5	1.5	4.5	0.3	3.5	0.3	3.5	DK
DE	8.0	0.6	1.4	0.9	2.0	1.4	0.3	1.7	0.3	1.8	DE
EE	5.2	0.2	1.1	0.5	1.8	0.5	0.0	0.3	0.1	0.5	EE
IE	7.3	0.0	1.1	0.1	1.7	1.1	0.2	1.5	0.2	2.1	IE
EL	6.5	-0.1	0.9	-0.1	1.2	1.4	0.2	1.2	0.2	1.8	EL
ES	6.5	0.0	1.3	0.2	1.9	0.8	0.0	0.7	0.1	0.8	ES
FR	8.0	0.4	1.4	0.7	2.1	2.2	0.4	2.1	0.4	2.2	FR
IT	6.6	0.0	0.6	0.1	1.0	1.9	0.1	0.9	0.1	0.9	IT
CY	2.6	0.1	0.4	0.1	0.5	0.2	0.0	0.1	0.0	0.1	CY
LV	3.7	0.1	0.5	0.3	1.1	0.7	0.1	0.4	0.1	0.4	LV
LT	4.9	0.3	0.7	0.5	1.3	1.2	0.1	1.1	0.3	3.2	LT
LU	3.8	-0.1	0.7	0.1	1.0	1.0	0.3	2.1	0.3	2.1	LU
HU	4.9	0.2	1.1	0.3	1.6	0.8	0.1	0.6	0.1	1.0	HU
MT	5.4	0.8	2.9	1.0	3.6	0.7	0.1	0.9	0.3	3.2	MT
NL	7.0	0.5	1.0	0.7	1.5	3.8	0.6	4.1	0.6	4.1	NL
AT	7.4	0.5	1.6	0.8	2.2	1.6	0.2	1.2	0.3	2.3	AT
PL	4.9	0.4	1.9	0.7	2.6	0.7	0.1	1.0	0.2	1.9	PL
PT	7.2	-0.4	1.1	-0.4	1.6	0.3	0.0	0.3	0.1	1.0	PT
RO	3.7	0.0	1.0	0.2	1.4	0.6	0.1	1.1	0.1	1.5	RO
SI	6.1	0.3	1.1	0.5	1.7	1.4	0.3	1.6	0.3	1.6	SI
SK	6.2	0.6	2.1	0.9	3.0	0.3	0.0	0.4	0.1	1.9	SK
FI	6.0	0.4	1.0	0.6	1.5	2.5	0.6	2.6	0.6	2.9	FI
SE	7.5	0.2	0.7	0.4	1.2	3.9	0.2	2.5	0.2	2.5	SE
UK	7.2	0.3	1.1	0.5	1.8	2.0	0.2	0.7	0.2	0.7	UK
EU27	7.1	0.3	1.1	0.5	1.7	1.8	0.2	1.5	0.3	1.7	EU27

**Source:** Commission services, EPC. EPC/EC 2012 Ageing Report.

**Notes:** \* Compared to the definition of public expenditure on health used in the previous graphs, the variable public spending on health care used here is that used in the EPC/EC 2012 Ageing Report and is a more restricted version of public expenditure on health for it excludes "Expenditure on long-term nursing care". The definition of public expenditure on long-term care is the sum of "Expenditure on long-term nursing care" plus "expenditure on social services of long-term care"

A key objective in the EU is to ensure sustainability of the public finances, including in a long-term perspective. Fiscal sustainability refers to the ability to continue now and in the future current policies (with no changes regarding public services and taxation) without causing public debt to rise continuously as a share of GDP. This approach for assessing fiscal sustainability can point to the scale and the scope of the sustainability challenges based on appropriate indicators, the S1 and S2 indicators.<sup>7</sup>

This multidimensional approach enables assessing medium-term (S1) and long-term (S2) challenges. These sustainability challenges are quantified via fiscal gaps related to the

<sup>7</sup> For details about the sustainability indicators, see the thematic fiche on public finance sustainability and Chapter 1 in European Commission (DG ECFIN), 2012, "Fiscal Sustainability Report 2012", European Economy, No. 8/2012, EC, Brussels.

excess of projected non-age and age-related expenditure (notably on pensions, health care and long-term care) over projected revenue. The time horizons of the fiscal gap indicators cover the full period (to 2060) of projections available from the 2012 Ageing Report<sup>8</sup> in the case of the S2 indicator and the period up to 2030 for the S1 indicator. Table 2 indicates the size of the fiscal gaps and additionally the contribution to the gaps from projected expenditure trends in health care and long-term care. Countries that have relatively high fiscal gaps and where the contribution from either the area of health care or long-term care is relatively high face the largest challenges<sup>9</sup>.

**Table 2: Fiscal sustainability indicators and contributions from health and long-term care**

	Sustainability indicator (S1)	Contribution to S1		Sustainability indicator (S2)	Contribution to S2	
		Health care	Long-term care		Health care	Long-term care
BE	5.2	0.1	0.3	6.9	0.3	1.9
BG	-2.9	0.2	0.0	1.1	0.4	0.2
CZ	0.7	0.3	0.1	5.0	1.1	0.4
DK	-2.5	0.3	0.5	1.7	0.7	2.6
DE	-0.3	0.4	0.1	1.4	0.9	0.1
EE	-3.4	0.2	0.0	1.2	0.9	0.8
ES	6.1	0.3	0.0	5.6	1.2	0.4
FR	2.3	0.4	-0.1	1.9	1.0	-0.1
IT	1.1	0.2	0.1	-2.1	0.6	0.6
LV	-3.0	0.1	0.0	-1.0	0.4	0.2
LT	1.0	0.1	0.1	5.7	0.4	0.7
LU	-1.5	0.2	0.2	8.6	0.7	1.5
HU	-1.4	0.2	0.1	-0.1	0.7	0.4
MT	3.1	0.7	0.2	6.8	1.9	0.6
NL	3.1	0.4	0.6	6.5	0.8	2.7
AT	2.4	0.4	0.2	4.0	1.1	0.8
PL	1.1	0.4	0.1	2.8	1.5	0.6
RO	-0.8	0.2	0.1	4.1	0.7	0.6
SI	4.2	0.3	0.2	8.6	0.8	1.0
SK	0.6	0.5	0.0	4.9	2.0	0.2
FI	2.1	0.3	0.6	6.2	0.7	1.9
SE	-2.7	0.2	0.4	2.4	0.5	2.0
UK	6.1	0.2	0.1	6.2	0.8	0.5

*Source:* 2012 Ageing Report, Fiscal Sustainability Report 2012, Commission services.

<sup>8</sup> European Commission (DG ECFIN) and Economic Policy Committee (AWG), 2012, "2012 Ageing Report: Economic and budgetary projections for the 27 EU Member States", European Economy, No. 2/2012, EC, Brussels.

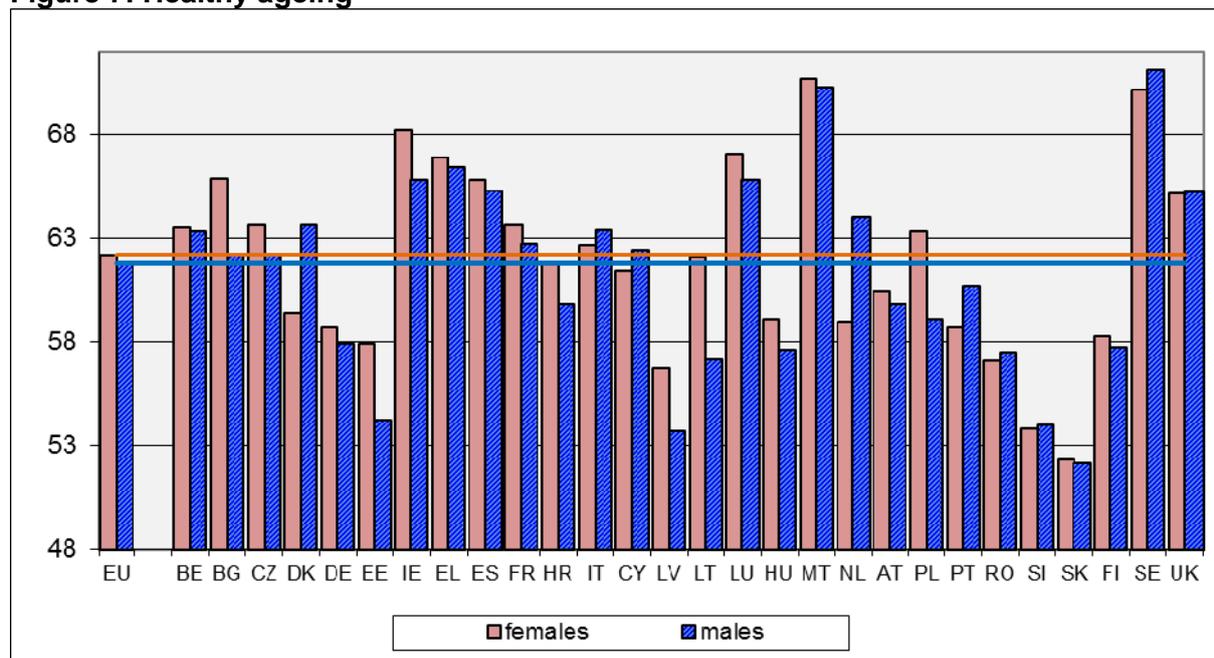
<sup>9</sup> The sustainability indicators and projections of age-related expenditure in this table are calculated on the basis of the AWG reference scenario from the 2012 Ageing Report. Presented figures are updated according to the latest available data. Projections of age-related expenditure for BE, DK, HU and NL include the macroeconomic impact of pension reforms implemented after the release of the 2012 Ageing Report, following peer reviews and endorsements of the new projections by the EPC. Cyprus, Greece, Ireland and Portugal are implementing adjustment programmes monitored by the EU, the IMF and the ECB. The macroeconomic and budgetary prospects for these 'programme' countries are assessed more frequently than for the other Member States. The time horizon covered by the forecasts for these countries is also different than for the other Member States and assume full implementation of the adjustment programme. They are therefore not included here.

### **The need to increase efficiency and cost-effectiveness of health care systems**

Against a background of rising demand and constrained resources, providing universal access to high quality care, while ensuring sustainability of health systems, requires increased efficiency and cost-effectiveness in health spending. Member States should identify cost-effective ways to deliver care, in order to allow the achievement of better health outcomes with more rational absorption of resources. Particular attention has to be paid in avoiding short-term savings which will lead to high costs in the mid to long-term.

Looking at large differences in healthy life expectancy can be observed across Member States. In fact, if the Member States which are performing below the average could increase their healthy life expectancy to the level of the present average score, this would result in an overall improvement of 1,5 Healthy Life Years at European level.

**Figure 7: Healthy ageing**



*Healthy Life Years at birth by gender, 2011 - Source: Eurostat*

A large number of studies in the literature have looked at the relation between the cost of health care inputs (proxied by per capita expenditure on health) and health outcomes (including life expectancy, healthy life expectancy, patient satisfaction, and health status inequalities across population groups). Literature shows that higher public expenditure on health may go together with better health but most countries could further improve their health outcomes with the resources they currently spend on the health sector. Indeed, countries vary significantly in their ability to translate a similar level of per capita expenditures into health. This suggests substantial room for improvement (i.e. efficiency gains) in many countries.

These analyses may be further improved by taking into consideration intrinsic differences in population conditions impacting the demand for healthcare (e.g. demographic structure, nutritional habits, smoking and alcohol consumption patterns, physical activity, etc.), as well as developing health outcome indicators which better reflect the overall goals of the health system (e.g. lifelong quality of life and avoidable mortality) and building a deeper understanding on how specific health policies impact them.

Based on a careful analysis of available studies and databases, possible shortcomings and potential areas for improvement, notably in terms of lower costs (savings) and improved cost-effectiveness (better health with same costs) in the healthcare sector can be identified. For this purpose, available data covering the main dimensions of public expenditure on healthcare, as well as covering different aspects of efficiency and cost-effectiveness can be

used. Further, pointing out the specific areas, where improvements can be expected, requires extensive information and analyses of country-specific features of healthcare systems.

Based on such an assessment, particular challenges with respect to health system performance can be identified in the areas of hospital care, ambulatory care, pharmaceutical and administrative spending.

To sum up, there seems to be substantial room for improvement in various areas of healthcare provision in many countries in order to enhance the cost-effectiveness of the systems and guarantee financially sustainable access to good quality care for current and future generations.