

# **INVESTING**

## IN HEALTH

Commission Staff Working Document Social Investment Package February 2013

Brussels, 20.2.2013 SWD(2013) 43 final

#### SOCIAL INVESTMENT PACKAGE

#### COMMISSION STAFF WORKING DOCUMENT

#### **Investing in Health**

Accompanying the document

## COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Towards Social Investment for Growth and Cohesion - including implementing the European Social Fund 2014-2020

{COM(2013) 83 final}

{SWD(2013) 38 final}

{SWD(2013) 39 final}

{SWD(2013) 40 final}

{SWD(2013) 41 final}

{SWD(2013) 42 final}

{SWD(2013) 44 final}

#### Introduction

This document complements the Commission Communication *Towards Social Investment for Growth and Cohesion* by showing how investing in health contributes to the Europe 2020 objective of smart, sustainable and inclusive growth.<sup>1</sup>

In line with that Communication, it advocates evaluating and modernising current social policies to optimise their effectiveness and efficiency. It also highlights the need for better targeted, individualised and integrated services and benefits. It looks at how health is incorporated into the main themes of the Communication: making efficiency gains in budgets, taking action throughout life, ensuring adequate livelihoods, activating and enabling policies, optimising social dividends and using EU funds.

It also follows on from the **2013 Annual Growth Survey** (AGS)<sup>2</sup> which recognises the contribution of the healthcare sector to prepare a job-rich recovery. The AGS also acknowledges the sector's role in promoting social inclusion and tackling poverty and recognises the positive effect modernising its public administration would have. It recommends reforming health systems to ensure their cost-effectiveness and sustainability and assessing their performance against the twin aims of providing access to high-quality healthcare and using public resources more efficiently.

This document establishes the role of health as part of the Europe 2020 policy framework. It strengthens the link between European health policies and support for health system reforms in the context of the European Semester. Investing in health helps the EU rise to the challenges identified in its Health Strategy<sup>3</sup> that have been compounded by the economic crisis: an ageing population, an increase in chronic diseases, a greater demand for healthcare and the high cost of technological progress.

**Health is a value in itself.** <sup>4</sup> It is also a precondition for economic prosperity. People's health influences economic outcomes in terms of productivity, labour supply, human capital and public spending.

**Health expenditure is recognised as growth-friendly expenditure**. Cost-effective and efficient health expenditure can increase the quantity and the productivity of labour by increasing healthy life expectancy. <sup>5</sup> However, the relatively large share of healthcare spending in total government expenditure, combined with the need for budgetary consolidation across the EU, requires more efficiency and cost-effectiveness to ensure the sustainability of current health system models. Evidence suggests there is considerable potential for efficiency gains in the healthcare sector.

<sup>&</sup>lt;sup>1</sup> Commission Communication, Europe 2020 Strategy — COM(2010) 2020, 3.3.2010.

<sup>&</sup>lt;sup>2</sup> Commission Communication, Annual Growth Survey 2013 — COM(2012) 750 final, 28.11.2012.

<sup>&</sup>lt;sup>3</sup> Commission White Paper 'Together for Health: A Strategic Approach for the EU 2008-2013' COM(2007) 630 final, 23.10.2007.

<sup>&</sup>lt;sup>4</sup> Council Conclusions on Common Values and Principles in European Union Health Systems, OJ 2006/C 146/01 22 6 2006

<sup>&</sup>lt;sup>5</sup> Commission, Directorate-General for Economic and Financial Affairs (2012), The Quality of Public Expenditures in the EU, European Economy, Occasional Papers 125, December 2012. http://ec.europa.eu/economy\_finance/publications/occasional\_paper/2012/pdf/ocp125\_en.pdf.

Average levels of health have been improving across the EU for many years. But this hides **major inequalities**. Poorer and disadvantaged people die younger and suffer more often from disability and disease

In the following sections, 'investing in health' is further developed.

- 1. **Investing in sustainable health systems** combines innovative reforms aimed at improving cost-efficiency and reconciling fiscal consolidation targets with the continued provision of sufficient levels of public services.
- 2. **Investing in people's health as human capital** helps improve the health of the population in general and reinforces employability, thus making active employment policies more effective, helping to secure adequate livelihoods and contributing to growth.
- 3. **Investing in reducing health inequalities** contributes to social cohesion and breaks the vicious spiral of poor health contributing to, and resulting from, poverty and exclusion.
- 4. Investing in health through adequate support from EU funds.

#### 1. Investing in sustainable health systems: Reform and Innovation

Health systems in Europe are at the core of its high level of social protection and they are a cornerstone of the European social market economy. The healthcare sector accounts for 8% of the total European workforce and for 10% of the EU's GDP. The large share of healthcare costs in the EU raises the issue of cost-effectiveness and the financial sustainability of health systems. The problems caused by the economic crisis, coupled with more structural changes in demography and the types of diseases affecting populations in Europe, reinforce the necessity to reform and modernise those systems. The EU can help Member States do so, to improve cost-efficiency through sound innovation and contribute to a better assessment of the performance of health systems.

#### 1.1. Sustainability of health systems

**Health is an important part of public budgets**. It represents almost a third of social policy budgets. Public expenditure accounts for almost 80% of healthcare budgets. In 2010, public spending on healthcare accounted for almost 15% of all government expenditure. In the decade before the crisis, it was one of the fastest growing spending items for governments in almost all Member States, <sup>7</sup> considerably outpacing GDP growth. Public expenditure on healthcare and long-term care is expected to increase by one third by 2060. This is due to a number of factors. On the demand side, it is chiefly due to population size and structure, its health status, individual and national incomes and provisions regulating access to healthcare goods and services. On the supply side, the increase is driven by the

<sup>&</sup>lt;sup>6</sup> Its size varies widely between Member States: above 11% of GDP in Austria, Denmark, France, Germany and the Netherlands; below 7% of GDP in Estonia, Latvia and Romania.

<sup>&</sup>lt;sup>7</sup> Health spending grew by nearly 5% per year in real terms in OECD countries from 2000 to 2009, but this was followed by zero growth in 2010, as several countries started implementing budgetary cuts. In fact, health spending per capita started declining in 2009 for countries that were hardest hit by the economic crisis (OECD Health Data 2012). See

http://www.oecd.org/document/39/03746,en 21571361 44315115 50655591 1 1 1 1.00.html .

availability of and distance from health services, technological progress and the framework regulating the provision of goods and services. The relatively large share of public healthcare spending in total government expenditure, combined with the need to consolidate government budget balances across the EU, underscore the need to improve the sustainability of current health system models. Ensuring efficiency and making the provision of health services more cost-effective and efficient is crucial if countries are to ensure universal access to and equity in health services and their adequate and sustainable financing. It is therefore essential to address the financial sustainability of health systems to ensure they are sustainable in terms of continuity of service, universal coverage and a high level of quality.

Financial sustainability may require budgetary cuts, including cuts in healthcare budgets. Several Member States also need to curtail health costs in the short term. As part of policy responses to the economic crisis between 2007 and 2011, 10 some Member States reduced their healthcare budgets: Bulgaria, Estonia, Hungary, Ireland, Italy, Greece, Latvia, Romania, Portugal and Spain. However, sudden significant reductions in healthcare budgets risk creating new inefficiencies, undermining access to and the quality of care, damaging health outcomes and ultimately jeopardising the sustainability of the health system even more by increasing costs. A careful assessment of these measures should shed light on what policies are effective in the short and long terms.

Evidence shows that **the relationship between healthcare expenditure and health outcomes is not linear**. If it were, any additional euro spent on healthcare would result in a corresponding improvement in the population's health status (measured, for instance, in terms of healthy life expectancy). In reality, the greater the expenditure, the lower the marginal improvement in health status as a result of its increase. <sup>11</sup> Countries also vary significantly in their ability to translate a similar level of resources into health outcomes. International comparisons show that the same amount of per capita healthcare expenditure can be associated with very different health outcomes even after taking into account the differences in lifestyle and socio-economic realities among countries <sup>12</sup>.

It is not only how much money is spent, but also how it is spent, that determines a country's health status. Present budget constraints should therefore be used as an opportunity to improve the value and effectiveness of healthcare spending.<sup>13</sup> Health system reforms and improvements in the

<sup>10</sup> WHO (2012) Health policy responses to the financial crisis in Europe, WHO Policy Summary 5 http://www.euro.who.int/ data/assets/pdf file/0009/170865/e96643.pdf.

<sup>&</sup>lt;sup>8</sup> Commission-EPC (2012), The 2012 Ageing Report: Economic and budgetary projections for the 27 EU Member States (2010-2060). The report projects an increase between 2010 and 2060 of 2.6% of GDP (percentage points) for public expenditure on healthcare and long-term care, a proportional increase of around 29.2% compared to the 2010 reference level of 7.9% of GDP. See <a href="http://ec.europa.eu/economy/finance/publications/european/economy/2012/pdf/ee-2012-2">http://ec.europa.eu/economy/finance/publications/european/economy/2012/pdf/ee-2012-2</a> en.pdf.

<sup>&</sup>lt;sup>9</sup> Directorate-General for Economic and Financial Affairs (2012) The Quality of Public Expenditures in the EU, European Economy, Occasional Papers 125, December 2012.

http://ec.europa.eu/economy finance/publications/occasional paper/2012/pdf/ocp125 en.pdf.

<sup>&</sup>lt;sup>11</sup> See for instance Journard et al. 'Health Care Systems: Efficiency and Policy Settings', OECD, 2010. http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=eco/wkp(2010)25&doclanguage=en

<sup>&</sup>lt;sup>12</sup> See for instance Journard I., Andre, C. and C, Nicq, 'Health care systems - efficiency and institutions', OECD, 2010, Working Paper No. 769. <a href="http://www.oecd.org/eco/economicsdepartmentworkingpapers.htm">http://www.oecd.org/eco/economicsdepartmentworkingpapers.htm</a>

<sup>&</sup>lt;sup>13</sup> Better implementation of policies could also result in large savings, as fraud and avoidable errors are estimated to represent an annual loss of 5.6 % for healthcare budgets. See European Healthcare Fraud and Corruption Network (2009) 'The financial cost of Healthcare fraud'

relative allocation of money can contain public spending and could result in large savings. The OECD has valued these savings at 2% of GDP on average by 2017 for OECD countries.<sup>14</sup>

**At EU level**, the Council has recognised the need to tackle these economic and budgetary difficulties by reforming health systems, while balancing the need to provide universal healthcare <sup>15</sup> and take account of their implications in all relevant fields of EU economic policy coordination. <sup>16</sup>

### 1.2. Helping Member States design reforms and improving the efficiency of health systems

Comparative international analysis shows that there is significant room for efficiency gains in health systems.<sup>17</sup> The Council has confirmed this, noting that in many Member States there appears to be scope to improve the population's health status without increasing health spending.<sup>18</sup> Member States should try to reap those gains by introducing efficiency-enhancing measures as part of the overall prioritisation and evaluation of public expenditure and in the context of the European Semester. This would help reconcile financial consolidation targets with the continued provision of sufficient levels of public services.

The Commission and the Economic Policy Committee identified a number of areas where structural reforms and efficiency gains could improve the sustainability of health systems:<sup>19</sup>

- o encouraging more **cost-effective provision and use of health services** through adequate incentives; this could involve
  - using financial incentives to encourage patients to register with a general practitioner (GP) or family doctor and using a referral system<sup>20</sup> to define a

http://www.ehfcn.org/media/documents/The-Financial-Cost-of-Healthcare-Fraud---Final-(2).pdf.

Please note that the savings achieved through better implementation are not additional to the figure on potential savings given below.

<sup>&</sup>lt;sup>14</sup> OECD, Economics Department IMF conference, 21 June 2011 'Public Health Care Reforms: Challenges and Lessons for Advanced and Emerging Europe. See: <a href="http://www.imf.org/external/np/seminars/eng/2011/paris/pdf/Joumard.pdf">http://www.imf.org/external/np/seminars/eng/2011/paris/pdf/Joumard.pdf</a>.

<sup>&</sup>lt;sup>15</sup> Council Conclusions on the Joint Report on Health Systems in the EU, 3054<sup>th</sup> Council meeting, Economic and Financial affairs, 7.12.2010.

<sup>&</sup>lt;sup>16</sup> Council Conclusions on the sustainability of public finances in the light of ageing populations, 3167 Council Meeting, Economic and Financial Affairs, 15.5.2012.

<sup>&</sup>lt;sup>17</sup> Commission, Directorate-General for Economic and Financial Affairs (2012) The Quality of Public Expenditures in the EU, European Economy, Occasional Papers 125, December 2012.

<sup>&</sup>lt;sup>18</sup> Council Conclusions on the Joint Report on Health Systems in the EU, 3054th Council meeting, Economic and Financial Affairs, 7.12.2010.

<sup>&</sup>lt;sup>19</sup> Joint Report on health systems prepared by the European Commission and the Economic Policy Committee, European Economy. Occasional Papers. 74. December 2010; and 3054th Council meeting Economic and Financial Affairs Brussels, 7.12.2010.

<sup>&</sup>lt;sup>20</sup> It is generally accepted, especially in recent years, that strengthening primary healthcare can help improve the equity, efficiency, effectiveness, and responsiveness of health systems. Most studies analysing the transfer of some services from secondary to primary care showed that primary care was more cost-effective. Evidence suggests (Fujisawa R. and Lafortune G., 2008, OECD) that in most countries the remuneration of specialists is higher than that of GPs. The share of GPs as a percentage of all practising physicians varies considerably across the EU, from 49% in France to 7% in Greece and Poland, with an EU average of 29% in 2006–07 and nine Member States where GPs constitute less than 20% of all doctors (Bulgaria, the Czech

cost-effective path of care: from GP, to outpatient specialist, to hospital, to emergency care, while encouraging patients to have less recourse to unnecessary care and emergency services;

- introducing activity- and/or quality-based payment for diagnosis-related groups of cases or for hospital financing that, for example, increases the use of day surgery instead of in-patient surgery when this is not necessary;
- ensuring a balanced mix of staff skills and anticipating staff needs due to ageing; this could include
  - improving staff motivation through non-financial aspects (working conditions, career advancement etc.) and encouraging continuous professional development;
  - addressing the uneven distribution of health staff across regions and developing human resources planning mechanisms to address skill mix shortcomings<sup>21</sup> (see Section 2.1 on employment in the health sector);
- reducing the unnecessary use of specialist and hospital care while improving primary healthcare services; improving access to primary care for certain population groups could include increasing the number of training posts and making general practice more attractive or developing new roles for other healthcare providers, such as advanced practice nurses, and encouraging the relocation of general practitioners to areas where there is a shortage of them;<sup>22</sup>
- better health promotion and disease prevention in and outside the health sector; this could include measures designed and implemented jointly with other sectors that have a major impact on health, such as education, housing, environment, employment <sup>23</sup> (see Section 2.3 on health promotion and Section 3 on health inequalities);
- improving data collection and using available information to underpin the improvement of the performance of health systems; in particular the collection of health data using the European Community Health Indicators (ECHI) and developing tools to better assess the efficiency of health systems (see Section 1.4 on health systems performance assessment);

Republic, Greece, Latvia, Lithuania, Poland, Portugal, Slovakia and Sweden). This may be relevant for countries wishing to implement a primary care-led system with a referral system from primary to specialist and hospital care.

<sup>&</sup>lt;sup>21</sup> Most countries with a relatively low number or uneven distribution of GPs have recognised the problem and increased the number of GPs in the last two decades. Despite an increase in the number of practising nurses in almost all Member States, except Lithuania and Slovakia, the ratio of nurses to physicians still varies widely, from four or more nurses per physician in Denmark, Finland, Ireland, the Netherlands and Luxembourg to less than one in Italy or Greece. Commission-OECD, Health at a glance: Europe 2012; http://ec.europa.eu/health/reports/docs/health\_glance\_2012\_en.pdf.

<sup>&</sup>lt;sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> For an economic valuation of the health impact of social welfare spending and mortality, see D. Stuckler, S. Basu. M. McKee; Budget Crisis, Health and Social Welfare Programmes; BMJ 2010, 340.

- o using health technology assessment more systematically for decision-making processes (see Section 1.3 on health technology assessment);
- o ensuring the cost-effective use of medicines; this includes increasing the **use of less expensive equivalent (generic) drugs**<sup>24</sup> for example through pricing measures (price limit, lower cost-sharing rate), their prescription, or facilitating their access to the market, as well as improving the assessment of the effectiveness and cost-effectiveness of medicines in general and better informing patients, healthcare staff and insurers about their use and misuse;

The recommendations above from the Commission/EPC report of 2010 are consistent with the WHO's 'ten leading sources of inefficiency of health systems' and the OECD's recommendations for health system reform. <sup>26</sup>

Health system reform is also addressed:

• As part of the European Semester, Member States have started to include health systems reform in their National Reform Programmes.<sup>27</sup> Following the 2012 Annual Growth Survey,<sup>28</sup> six country-specific recommendations on health <sup>29</sup> were issued for Austria (implementing reforms to improve the organisation, financing and efficiency of healthcare), Belgium (improving the long-term sustainability of public finances by curbing age-related expenditure, including health expenditure), Bulgaria (doing more to improve the quality of public spending, particularly in the education and health sectors), Cyprus (completing and implementing the national health system), Germany (continuing growth-friendly consolidation by doing more to improve the efficiency of public spending on healthcare and long-term care) and the Netherlands (implementing the planned reform of long-term care, aimed at separating the costs of medical care from the costs of assisted living, and complementing it with other measures to contain the increase in costs). The 2013 Annual Growth Survey recommends reforming health systems to ensure their cost-effectiveness and sustainability and assessing their performance against the twin aims of providing access to high-quality healthcare and

<sup>&</sup>lt;sup>24</sup> A recent study on forecasting EU pharmaceutical expenditure shows a consistent reduction (between 2% and 10% depending on the country) in pharmaceutical expenditure in six (France, Germany, Greece, Hungary, Portugal and the United Kingdom) out of seven countries studied (with the exception of Poland). The study concludes that the best ways of reducing pharmaceutical budgets are reducing generic prices, distributing biosimilars through the hospital chain and increasing the number of generic medicines.

<sup>&</sup>lt;sup>25</sup> WHO, The World Health Report — Health systems financing: the path to universal coverage (2010). http://www.who.int/whr/2010/whr10\_en.pdf.

<sup>&</sup>lt;sup>26</sup> The OECD has identified several system-level reforms: providing comparative performance indication, reforming provider payment mechanisms, improving the patient's choice and provider competition, giving guidelines on good practice and target, audit and inspection systems. OECD, *Achieving better value for money in healthcare* (2009) and health ministerial meeting, 7-8 October 2010. See also Smith Peter C. *What is the scope for health system efficiency gains to be achieved?*, Eurohealth incorporating Euro Observer — vol.18, No 3 (2012).

http://ec.europa.eu/economy finance/economic governance/sgp/convergence/programmes/2012 en.htm.

<sup>&</sup>lt;sup>28</sup> Commission Communication, Annual Growth Survey 2012 — COM(2011) 815 final, 23.11.2011. http://ec.europa.eu/europe2020/pdf/ags2012 en.pdf.

<sup>&</sup>lt;sup>29</sup> http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index en.htm.

using public resources more efficiently.<sup>30</sup>

• In a **reflection process as a follow-up to Council conclusions of 2010**, Member States are currently identifying effective ways of investing in health for modern, responsive and sustainable health systems. In this context, by the end of 2013, conclusions will be drawn on the following areas of focus of the reflection process: health in the context of the Europe 2020 Strategy and the European Semester; success factors for the effective use of Structural Funds for health investments; responses to health system challenges, in particular in relation to integrated care and the use of pharmaceuticals; measuring and monitoring the effectiveness of health investments.<sup>31</sup>

To support these processes, the Commission is setting up a multisectoral, independent **expert panel to advise on effective ways of investing in health**<sup>32</sup> and commissioned a number of **studies** on forecasting EU pharmaceutical expenditure, <sup>33</sup> external reference pricing of medicinal products, reimbursement systems of medicinal products, the economics of primary healthcare financing and the evaluation of public-private partnerships in healthcare delivery. <sup>34</sup>

#### 1.3. Improving cost-efficiency through sound innovation

New technologies are widely acknowledged as an important tool for boosting innovation. Technological developments can change ways of delivering and organising the provision of health services and goods and, under certain conditions, help increase cost-efficiency. They can however be expensive to buy and operate and may be used inappropriately. Innovations in medical technology are considered one of the primary drivers of healthcare spending. The introduction of innovative technological solutions should therefore be thoroughly assessed in terms of their potential to improve efficiency and productivity.<sup>35</sup>

**Health Technology Assessment** (HTA) is the main tool developed to assess and support the cost-effective use of new technologies and innovation in healthcare. <sup>36</sup> It is a multidisciplinary process firmly rooted in research and the scientific method that summarises information about the medical,

<sup>&</sup>lt;sup>30</sup> Commission Communication, Annual Growth Survey 2013 — COM(2012) 750 final, 28.11.2012, and thematic summary on health and healthcare systems relevant for the Europe 2020 Strategy: <a href="http://ec.europa.eu/europe2020/making-it-happen/key-areas/index\_en.htm">http://ec.europa.eu/europe2020/making-it-happen/key-areas/index\_en.htm</a>.

<sup>&</sup>lt;sup>31</sup> Council Conclusions: Towards modern, responsive and sustainable health systems, 3095 Employment, Social Policy, Health and Consumer Affairs Council meeting, Luxembourg, 6. 6.2011. This process started in 2011 under the auspices of the Working Party on Public Health at Senior Level and is expected to end at the end of 2013.

<sup>&</sup>lt;sup>32</sup> Commission Decision 2012/C 198/06 of 5 July 2012 on setting up a multisectoral and independent expert panel to provide advice on effective ways of investing in health.

<sup>&</sup>lt;sup>33</sup> Creativ-Ceutical (2012), EU Pharmaceutical expenditure forecast, final report 26 November 2012. http://ec.europa.eu/health/health/care/docs/creativ ceutical eu pharmaceutical expenditure forecast.pdf.

<sup>&</sup>lt;sup>34</sup> As envisaged in the 2013 work plan of the Health Programme, <u>Commission implementing decision of 28 November 2012 concerning the adoption of the 2013 work plan (2012/C — 378/07)</u>. The results of these studies financed by the EU Health programme are expected to become available in the course of 2014.

<sup>&</sup>lt;sup>35</sup> EC-EPC (2012), The 2012 Ageing Report: Economic and budgetary projections for the 27 EU Member States (2010-2060).

<sup>&</sup>lt;sup>36</sup> Health technology means a medicinal product, a medical device or medical and surgical procedures as well as measures for disease prevention, diagnosis or treatment used in healthcare.

social, economic and ethical issues related to the use of a health technology in a systematic, transparent and unbiased manner. It is an essential tool for informing decision-makers and assessing the value of specific actions or technologies, thus reducing the risk of implementing measures that negatively affect patient outcomes.

**At EU level**, the Commission has been helping Member States exploit the full potential of HTA by fostering cooperation that will pool expertise and prevent the duplication of work as set out in the Directive on the application of patients' rights in cross-border healthcare, through the European network for health technology assessment.<sup>37</sup>

#### **Health Technology Assessment examples**

In Austria and Norway, Health Technology Assessment was used to assess the introduction of the HPV vaccine in national vaccination programmes. Although the two countries had similar views on the effectiveness of the measure, other context-specific considerations, such as different cost considerations, led to different decisions regarding uptake.

In the UK, the National Institute for Health and Clinical Excellence (NICE) issues recommendations based on HTA. One such recommendation is based on the comparison of different medicinal products used as the primary way of preventing osteoporosis. This kind of report provides guidance on what products would be the preferred choice in different settings, based on a cost-effectiveness analysis. It thus serves as guidance for general practitioners in their practice, helping to avoid unnecessary, costly treatments.

In Poland, the Agency for Health Technology Assessment (AHTAPol) was established in 2005 as an advisory body to the Ministry of Health. It prepares recommendations on financing all healthcare services from public funds, notably on the drug reimbursement list (available in pharmacies); therapeutic drugs programmes (expensive, innovative drugs) and the hospital chemotherapy drug reimbursement list; non-drug technologies (medical devices, surgical procedures etc.); national and local government healthcare programmes. This allows for a more holistic approach to the use of limited public health budgets, taking the cost-effectiveness of different treatments into account.

**E-health** covers the range of tools that can be used to assist and enhance prevention, diagnosis, treatment, monitoring and management concerning health and lifestyle. It is often perceived as substantially increasing productivity, and therefore as an instrument to support the reform of health systems. Examples of successful e-health developments include health information management and networks, electronic health records, telemedicine services, wearable and portable monitoring systems and health portals. Developing and deploying new technologies is a long-term endeavour. European research programmes have been supporting the development of e-health for the last 15 years. They have established a number of best practices that could be successfully replicated, for example e-health applications improving quality of life and reducing hospitalisation to the benefit of citizens, their families and those involved in providing services.<sup>38</sup> Support for the interoperability of health systems

<sup>37</sup> Directive 2011/24/EU of 9 March 2011 on the application of patients' rights in cross-border healthcare — in particular Article 15. This is mainly realised through the European network for health technology assessment. See http://ec.europa.eu/health/technology\_assessment/policy/index\_en.htm

<sup>&</sup>lt;sup>38</sup> See in particular Lluch, M. (2012), Evidence consolidation — Report on best practices and key drivers of success, SIMPHS2, Luxembourg, JRC (European Commission).

within and across national boundaries will improve the mobility and the safety of patients even more by ensuring continuity of care and innovation.

The Commission also contributes to e-health through a range of actions and instruments, such as the Action Plan on e-Health<sup>39</sup> and the newly created EU e-Health Network, as part of the implementation of the Directive on the application of patients' rights in cross-border healthcare.<sup>40</sup>

#### E-health project example

The delivery of **e-prescriptions** in Sweden is a joint initiative between each county council and Apoteket, Sweden's national pharmacy. Via Sjunet, the Swedish Information and Communication Technologies (ICT) network for healthcare, or using web-based prescriptions, 42% of all prescriptions are electronically transferred from the doctor to the pharmacy. E-prescriptions increased the security and quality of prescriptions and reduced medication errors by 15%. They also enabled healthcare providers to save a lot of time. Patients benefited from a dedicated drug information hotline which improved their knowledge and safety and their flexibility to obtain their drugs in any pharmacy. The economic evaluation of the case-study on e-prescriptions in the Stockholm region showed that this electronic service generated an estimated annual net economic benefit of over €95 m in the eight years of its implementation. Five years after planning and development began, the net benefit was approximately £27 m. This is impressive, given the relatively low spending on ICT of less than £4 m for the whole period of eight years. Healthcare provider organisations get 80% of the benefits, mainly from time savings and avoided costs of providing the same timeliness, convenience and reduction in errors without e-health. Citizens get the remaining 20%, chiefly through more safety thanks to correctly issued prescriptions and better adherence to treatment.

#### 1.4. Developing tools to better assess the efficiency of health systems

Increasing the return on health investments requires a solid **assessment of the efficiency and effectiveness of spending**. Such an assessment faces three main methodological challenges.

The first is to verify that the evidence of efficiency gains and improvements in health obtained through better use of healthcare budgets remains valid when different definitions of health outcomes are used. <sup>42</sup> A major problem is that much of the evidence focuses on crude measurements such as life expectancy, failing to consider the quality of the years of life gained. This is more clearly brought out by concepts such as Disability Adjusted Life Years (DALY), or Healthy Life Years (HLY).

The second challenge is to disentangle the relative influence of health systems on health outcomes from the impact of other determinants of population health, especially living and working conditions, income, education and the most common lifestyle-related risk factors

 $\underline{http://is.jrc.ec.europa.eu/pages/TFS/documents/SIMPHS2D4.1FinalReportonEvidenceConsolidationrev2acc.}\\ \underline{pdf.}$ 

<sup>&</sup>lt;sup>39</sup> See <a href="http://ec.europa.eu/information">http://ec.europa.eu/information</a> society/activities/health/policy/index en.htm.

<sup>&</sup>lt;sup>40</sup> Directive 2011/24/EU of 9 March 2011 on the application of patients' rights in cross-border healthcare.

<sup>&</sup>lt;sup>41</sup> E-health is Worth it. The economic benefits of implemented e-health solutions at ten European sites. Karl A. Stroetmann, Tom Jones, Alexander Dobrev, Veli N. Stroetmann, 2006.

<sup>&</sup>lt;sup>42</sup> OECD (2008). 'Health Status Determinants: Lifestyle, Environment, HealthCare Resources and Efficiency,' OECD Economics Department Working Papers 627.

The third is the time lags between policy changes and their impact on health outcomes, <sup>43</sup> a problem that may involve 'false savings' because they may lead to increased costs or other unintended consequences in the long term.

Further assessment of the efficiency of health systems therefore requires a refined analytical framework, structured along three axes:

- (1) the definition of sound, reliable indicator(s) of health outcomes, building on the existing European Community Health Indicators,
- (2) a better understanding of the effects of health systems on health outcomes, as distinct from the impacts on health of other factors such as health determinants and lifestyles, and
- (3) a better understanding of the mechanisms, and therefore the timing, of how health policies affect health outcomes.

The Commission will continue to support the work of Member States by **improving the knowledge** and evidence on health expenditure and health outcomes in the achievement of structural reforms. It will do so by working towards a sustainable health monitoring system in Europe, using the European Community Health Indicators (ECHI),<sup>44</sup> by developing a sound methodology for Health System Performance Assessment and by assessing the cost-effectiveness of health systems through Life Table Analysis. It will also do more to provide much-needed information on the breakdown of expenditure per disease in the EU.<sup>45</sup>

#### 2. Health as an investment in human capital

Cost-effective and efficient health spending is a productive or growth-friendly type of expenditure. It helps increase the economy's production assets (labour, capital and knowledge). It increases the quantity and the productivity of labour by increasing healthy life expectancy. <sup>46</sup>Investing in the health of people of working age and enabling people to remain active and in better health for longer helps optimise the 'social dividend'. Investing in health also helps limit future costs related to the treatment of preventable diseases. And finally, investing in health also means investing in an efficient health workforce <sup>47</sup>.

<sup>&</sup>lt;sup>43</sup> See Philipa Mladovsky, Divya Srivastava, Jonathan Cylus, Marina Karanikolos, Tamás Evetovits, Sarah Thomson, Martin McKee, *Health policy responses to the financial crisis in Europe*, WHO Policy Summary 5 <a href="http://www.euro.who.int/">http://www.euro.who.int/</a> <a href="http://www.euro.who.int/">data/assets/pdf</a> <a href="file/0009/170865/e96643.pdf">file/0009/170865/e96643.pdf</a>.

<sup>&</sup>lt;sup>44</sup> A shortlist of 88 European Community Health Indicators (ECHI) has been developed under different EU Health Programmes and now provides a health monitoring system at EU level. It covers all aspects of health: health status, health determinants, healthcare services, health promotion, demography and socio-economic situation.

<sup>&</sup>lt;sup>45</sup> Actions to be undertaken with the financial support of the Health Programme, <u>Commission implementing</u> decision of 28 November 2012 concerning the adoption of the 2013 work plan (2012/C — 378/07).

<sup>&</sup>lt;sup>46</sup> Commission, Directorate-General for Economic and Financial Affairs (2012), The Quality of Public Expenditures in the EU, European Economy, Occasional Papers 125, December 2012.

<sup>&</sup>lt;sup>47</sup> Key issues pertaining to the future health workforce are covered in: "Towards a job rich recovery", COM(2012) 173 final, notably in the "Action Plan for the EU Health Workforce", SWD(2012) 93 final.

### 2.1. Contributing to employability and enabling people to remain active for longer

The health status of individuals strongly influences their labour market participation. For example, early labour market exit is often the result of health-related problems. <sup>48</sup> Depression, musculoskeletal diseases and unhealthy lifestyle factors (e.g. obesity and physical inactivity), are associated with reduced on-the-job productivity. Evidence suggests that ill-health in the population of working age leads to substantial productivity losses. Poor health leads to absenteeism (estimated absenteeism rates range between 3% and 6% of working time, representing a yearly cost of about 2.5% of GDP<sup>49</sup>), job loss (10% of the people who were previously employed left their job mainly for health reasons), premature retirement or premature mortality. Almost a quarter (23.5%) of the people currently employed suffer from a chronic condition and have their daily activities restricted.<sup>50</sup>

This **adverse effect of ill-health** is most significant in the later stages of life, when it contributes to a marked decrease in participation in the workforce. In 2010, the employment rate of people over 65 was 4.7%, that of people aged 60-64 was 30.5% and that of people aged 55-59 was 60.9%. Elderly people are much more likely to suffer from multiple diseases (co-morbidity). This has significant human and economic implications and increases the pressure on health systems and social care structures in terms of demand for care<sup>52</sup>.

Longer lives are not lived without disability. Europeans are expected to live on average almost 20 years with an activity limitation. The levels of healthy life expectancy in the EU are at 62.2 healthy life years (HLY) for women and 61 HLY for men,<sup>53</sup>

It is therefore possible to boost economic growth by improving the health status of the population and enabling people to remain active and in better health for longer Access to quality health care is a constituent part of the maintenance of a productive workforce and an integral part of the flexicurity setup<sup>54</sup>. There is scope for creating a cycle in which improvements in health and prosperity

http://www.eurofound.europa.eu/ewco/studies/tn0911039s/tn0911039s 5.htm.

http://epp.eurostat.ec.europa.eu/cache/ITY PUBLIC/3-13012012-BP/EN/3-13012012-BP-EN.PDF.

<sup>&</sup>lt;sup>48</sup> See for instance various findings from the large-scale Health and Retirement Study project collecting personal data in longitudinal follow-up.

http://hrsonline.isr.umich.edu/sitedocs/databook/HRS Text WEB Ch1.pdf.

<sup>&</sup>lt;sup>49</sup> EUROFOUND (2010), Absence from work report.

<sup>&</sup>lt;sup>50</sup> The average percentage of productivity loss at work among workers with cardiovascular diseases is estimated at 7%, compared with 15% on average for workers with depression and 34% among workers with upper extremity disorders, Oortwijn et al. (2011), Health of people of working age Report.

http://ec.europa.eu/health/social\_determinants/docs/final\_full\_ecorys\_web.pdf.

<sup>&</sup>lt;sup>51</sup> While several factors such as pension systems and age-management at work influence employment rates, people's health status also affects their ability to continue working. Commission (2012) data.

<sup>&</sup>lt;sup>52</sup> For more details, and notably on the need for long-term care, see the Staff Working Document on "Long-term care in ageing societies – Challenges and policy options" adopted as part of this package.

<sup>&</sup>lt;sup>53</sup> Commission-OECD (2012), *Health at a Glance: Europe 2012*, OECD Publishing. http://dx.doi.org/10.1787/9789264183896-en.

See "Towards a job rich recovery", COM(2012) 173 final, notably "Open, dynamic and inclusive labour markets", SWD(2012) 97 final.

are mutually reinforcing.<sup>55</sup> **Improving the population's health status leads to positive economic outcomes**. An OECD study estimates that for every year of increase in a population's life expectancy GDP could go up as much as 4%.<sup>56</sup> Occupational health plays a key role in that context.

However, the potential benefits from health investments through increased population employability are currently not understood well enough. The current cost of occupational accidents and work-related diseases amounts to between 2,6-3,8% of EU GDP<sup>57</sup>. Poor working conditions impact not only on the work-force employability, but also on the sustainability of national healthcare systems. By reducing the workers' exposure to risk factors, well-designed OSH-policies increase productivity and limit the cost of work-related accidents and ill health. European regulation and strategies have helped reduce the incidence of accidents and have played an important role in preventing occupational diseases. However, there is a continuous need to improve the workplace environment by investing in prevention of accidents and diseases caused by work. It should also take into consideration the economic context of the labour market in question. For example, musculoskeletal conditions would have a greater impact on the ability to work and on employability in the blue-collar manual jobs industry than in the white-collar service sector.

One example of a tool to assess the effect of alternative policy outcomes on long-term social expenditure is the social expenditure projection model (SOME<sup>58</sup>) developed in Finland. Explicit consideration is given to the impact of population health and beneficial employment effects. This way, future benefits associated with health investments can be better understood.

#### Health status of individuals and labour market participation: example of diabetes type 2

A striking example of how prevention can increase labour market participation is the avoidable negative effects of diabetes type 2, which currently affects 7% of Europeans. A French longitudinal study<sup>59</sup> found that diabetes type 2 patients lost an estimated mean time of 1.1 year in the workforce between the ages of 35 and 60.

More generally available statistical data<sup>60</sup> seem to show that chronic conditions have an important impact on several dimensions of social inclusion. Comparing to a healthy individual, the impact of diabetes type 2 for a 50-year old single man is significant. It represents almost 3% of career lost (in terms of years of working life). It also has significant individual consequences, as it shortens the lifespan by 2.3% and increases the chance of being at risk of poverty by more than 5%.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=6906144.

<sup>58</sup> Ministry of Social Affairs and Health, *Finland Social expenditure scenarios* — *effects of health promotion and a presentation of the analysis model*, Reports of the Ministry of Social Affairs and Health 2009:7, 13 February 2009.

<sup>&</sup>lt;sup>55</sup> Martin McKee and Marc Suhrcke (2010), Investing in Health: A Contribution to the Achievement of the Lisbon Agenda, European Review/Volume 18/Issue 01/February 2010.

<sup>&</sup>lt;sup>56</sup> Bloom, Canning, Sevilla (2004), The Effect of Health on Economic Growth: a production function approach, World Development, Vol. 32, No 1 (<a href="http://qcpages.qc.cuny.edu/~redwards/GC-Econ71100/bloom-etal-wd04.pdf">http://qcpages.qc.cuny.edu/~redwards/GC-Econ71100/bloom-etal-wd04.pdf</a>). The WHO 2010 Global Report on Non-Communicable Diseases recognises that each 10% rise in NCDs is associated with 0.5% lower rates of annual economic growth (<a href="http://whqlibdoc.who.int/publications/2011/9789240686458">http://whqlibdoc.who.int/publications/2011/9789240686458</a> eng.pdf).

<sup>&</sup>lt;sup>57</sup> https://osha.europa.eu/en/safety-health-in-figures

<sup>&</sup>lt;sup>59</sup> See http://www.hal.inserm.fr/docs/00/59/35/06/PDF/Diabetes Care May 2011.pdf.

<sup>&</sup>lt;sup>60</sup> Sources: Commission data for Poverty Rates, Life Expectancy, Population, GDP, labour market, healthcare expenditure. International Diabetes Federation (IDF) for Diabetes Type 2 epidemiology and direct medical cost, peer-reviewed journal publications for Quality of Life (QoL).

Another way to enable people to remain active and in better health for longer is to help people with chronic conditions that do not require hospitalisation to function actively in society and at home by empowering them to take care of their health in close collaboration with healthcare providers. Learning to manage their own condition should help people to remain integrated in society and the workforce.

The idea of **patient empowerment** is often considered an important and promising aspect of chronic disease management, that can help people lead more proactive and fulfilling lives. Some evidence suggests that self-management (supported for example by e-health applications<sup>61</sup>) can be effective through behavioural change, especially for people with long-term conditions. It may improve their health status and reduce their drug treatment costs and the time they spend in hospital. <sup>62</sup> Empowerment should not substitute professional acute care. However, various patient empowerment models can be applied. More research needs to be done to assess the efficiency and efficacy of these models, and find out how to reach and include specific target groups such as vulnerable populations.

The European Innovation Partnership (EIP) on Active and Healthy Ageing will help citizens to lead healthier, more active and independent lives while ageing. It aims to increase the number of healthy life years of Europeans by two years by 2020. It applies an innovative approach to policy-making in the EU by bringing together key stakeholders (end users, public authorities, and industry) and providing a forum for cooperation, the identification of potential innovation barriers and the mobilisation of funding instruments. It aims to improve the framework conditions for the uptake of innovation, leveraging financing and investments in innovation and improving coordination and coherence between funding for research and innovation at European, national and regional level in the European Union.

The EIP focuses on the following areas throughout a person's life: prevention, screening and early diagnosis; care and cure; active ageing and independent living. Between now and 2015, 261 commitments, made by over 3 000 stakeholders and grouped in six action plans, will be implemented, focusing on the following:<sup>63</sup>

- prescription and adherence to treatment;
- personal health management, starting with an initiative to prevent old people from falling;
- prevention and early diagnosis of functional decline and frailty;
- replicating and tutoring integrated care for chronic diseases, including remote monitoring;
- developing interoperable independent living solutions, including guidelines for business models; and
- innovating for age-friendly buildings, cities and environments.

<sup>&</sup>lt;sup>61</sup> See Lluch, M. (2012), Evidence consolidation — Report on best practices and key drivers of success, SIMPHS2, Luxembourg JRC (European Commission). Available at <a href="http://is.jrc.ec.europa.eu/pages/TFS/documents/SIMPHS2D4.1FinalReportonEvidenceConsolidationrev2acc.pdf">http://is.jrc.ec.europa.eu/pages/TFS/documents/SIMPHS2D4.1FinalReportonEvidenceConsolidationrev2acc.pdf</a>.

<sup>&</sup>lt;sup>62</sup> See Rijken, M., M. Jones, et al. (2008), Supporting self-management. Caring for people with chronic conditions: A health system perspective, E. Nolte and M. McKee, Maidenhead, Open University press (in cooperation with World Health Organisation 2008 on behalf of the European Observatory on Health Systems and Policies).

<sup>&</sup>lt;sup>63</sup> Commission Communication, Taking forward the Strategic Implementation Plan of the European Innovation Partnership on Active and Healthy Ageing — COM(2012) 83 final.

### Example of a project developed under the European Innovation Partnership on Active and Healthy Ageing — Feelgood Factory Agenda

This project helps people to monitor their health and receive advice through the television. Results show that patients who were in and out of the hospital every week now go to the hospital only once or twice a year.

Liverpool Primary Care Trust (PCT) in the UK is the Feelgood Factory Agenda's lead partner. Much of the focus is on people who are older and have long-term conditions (143 000 in Liverpool). One hundred and fifty 'community health champions' have been recruited to design packages for people with long-term conditions. The packages include lifestyle advice, self-management advice and equipment. Voluntary champion roles might motivate people to work in the emergency care sector, or up-skill unemployed people. Liverpool PCT will target 50 000 members, 3 500 users of telehealth, 5000 users of Life Enhancing Technologies (LETs) and 3 500 users of integrated LETs and social services. Financial and human resources allocated to the initiative include a  $\in$  21 million programme, consisting of a direct financial contribution of  $\in$  15.6 million and  $\in$  6 million in human resources, expertise, the provision of equipment and the use of existing services and infrastructure.

The following areas have proved particularly important in bringing about added value in improving cost-effectiveness and efficiency in health care and the Commission intends to continue to pursue action to:<sup>64</sup>

- support **research into the effects of health investments on employability**; better understanding the relationship between the two could facilitate the identification and exchange of good practice;
- contribute to the **practical understanding of patient empowerment** and support exchanges of experience in this field by launching a mapping of current policies and evidence; such a mapping would clarify the scope of patient empowerment and identify potential advantages and barriers;
- continue to encourage cooperation in the European Innovation Partnership on Active and Healthy Ageing.

#### 2.2. Promoting good health

Tackling the problem of chronic diseases and addressing the main risk factors that determine population health will help increase people's employability and enable them to stay longer in the workforce. The human and economic burdens of chronic diseases can be contained by devoting resources directly or indirectly to prevention, screening, treatment and care. It is important to do so by targeting the different age groups throughout their lives. <sup>65</sup> A large amount of health spending, including in particular disease prevention and health promotion, is regarded as an investment that yields a handsome rate of return. <sup>66</sup> Focusing on disease prevention can reduce high long-term treatment costs and improve health outcomes by avoiding tens of thousands of premature deaths

<sup>&</sup>lt;sup>64</sup> Through financing from the Health Programme, Commission implementing decision of 28 November 2012 concerning the adoption of the 2013 Health Programme work plan (2012/C — 378/07).

<sup>&</sup>lt;sup>65</sup> Council Conclusions on Healthy Ageing across the Lifecycle, 7.12.2012.

<sup>&</sup>lt;sup>66</sup> World Economic Forum, Harvard School of Public Health (2011), The Global Economic Burden of Non-Communicable Diseases.

and chronic diseases.<sup>67</sup> However, little relative importance is currently given to health promotion in budgetary terms. Only about 3% of current health expenditure is allocated to public health and prevention programmes. In other words, most Member States do not use the opportunities for substantial gains in prevention and health promotion, particularly through the health-in-all-policies approach, which aims to influence the environmental, economic and social determinants of health. Given the potential to contain the burden and cost of disease in the long term, the importance given to disease prevention and health promotion should be reassessed.

A recent study<sup>68</sup> showed that evidence-based workplace interventions to promote mental health could help save up to  $\in$  135 billion a year by reducing absenteeism and early retirement.

There is a wide array of health promotion and disease prevention measures authorities can and should make use of in many different settings (at work, at school and in health institutions). These range from public information campaigns in the media, excise taxes on certain products such as tobacco or alcohol, bans and stricter regulation on labelling, advertising and selling, to health education on school curricula and financial incentives for consumers, patients and providers. <sup>69</sup>

The World Health Organisation has also identified a number of 'best buys' in chronic non-communicable disease prevention: incentive fiscal measures, food product reformulation, detection and treatment of those at high risk of a heart attack, including early detection and treatment of high blood pressure.<sup>70</sup>

The Member States began a reflection process aimed to identify innovative approaches to address chronic diseases.<sup>71</sup> This could include setting up best practice mechanisms at EU level to identify, validate and disseminate good practice and information on policies and measures to tackle the problem of chronic diseases, including the development of quality control instruments. The reflection process on chronic diseases is expected to yield conclusions by the end of 2013.<sup>72</sup>

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<sup>&</sup>lt;sup>67</sup> OECD (2010), 'Obesity and the economics of prevention: Fit not fat'.

<sup>&</sup>lt;sup>68</sup> Matrix Insight (2012), 'Economic analysis of workplace mental health promotion and mental disorder prevention programmes and of their potential contributions to EU health, social and economic policy objectives — final report'. See also OECD (2011), 'Sick on the Job. Myths and Realities about Mental Health and Work' and Knapp, McDaid, Parsonage (2011), 'Mental health promotion and mental disorder prevention. The economic case'.

<sup>&</sup>lt;sup>69</sup> Joint Report on health systems prepared by the European Commission and the Economic Policy Committee, European Economy, Occasional Papers 74, December 2010.

World Health Organisation (2011), 'Global status report on non communicable diseases', <a href="http://whqlibdoc.who.int/publications/2011/9789240686458\_eng.pdf">http://whqlibdoc.who.int/publications/2011/9789240686458\_eng.pdf</a>.

<sup>&</sup>lt;sup>71</sup> Council Conclusions on 'Innovative approaches for chronic diseases in public health and healthcare systems' Brussels, 7.12.2010.

<sup>&</sup>lt;sup>72</sup> As foreseen in the 2013 work plan of the Health Programme, this process will be supported by a joint action on chronic diseases that will address preventing and delaying the onset of chronic diseases throughout the life cycle and aspects of the secondary prevention, screening, early diagnosis, and treatment of diabetes type 2, and develop innovative, cost-efficient and patient-centred approaches for the management of patients with multiple chronic conditions.

#### 2.3. Employment in the health sector

Investing in health also means investing in the health workforce. The health and social work sector <sup>73</sup> has in recent years been the single largest contributor to employment, accounting today for about 10% of employment. The sector also generates high-skilled jobs. Almost 40% of workers in the health and social work sector have tertiary qualifications. This is much higher than the 26% average across all sectors. <sup>74</sup> While the European Union lost more than two and half million jobs between 2008 and 2011, the sector generated over 2.8 million new jobs during the same period. Population ageing is likely to increase that trend. Assuming a constant share of labour in this area, this would mean a regular increase of up to eight million job vacancies by 2020, <sup>75</sup> although the impact of health reforms and organisational and technological changes on staff needs remains uncertain. The 2013 Annual Growth Survey highlights the potential that can be tapped in this sector, through a future-oriented, reliable legal framework, the development of adequate skills and targeted, fiscally sustainable public support. <sup>76</sup>

Nevertheless, as part of the process of modernising public administration, the possible increase in employment in the health and social work sector must be carefully balanced against the potential increase in public expenditure on health and overall public expenditure and must not compromise the attainment of fiscal sustainability. Future needs related to an ageing population must be met by exploiting the extensive margin for efficiency gain and better productivity.

The **Action Plan for the EU health workforce**, which is part of the Employment Package of Spring 2012 "Towards a Job Rich Recovery" supports cooperation to help improve workforce planning and forecasting and the recruitment and retention of health professionals. An EU joint action <sup>78</sup> on forecasting health workforce needs for effective planning in the EU will create a partnership of Member States and professional organisations to share good practice and develop methodologies.

<sup>&</sup>lt;sup>73</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>&</sup>lt;sup>74</sup> Commission services estimate.

<sup>&</sup>lt;sup>75</sup> The last CEDEFOP skills forecast expects employment to increase by one million between 2010 and 2020. Increasing healthcare needs and the ageing of healthcare professionals should result in seven million vacancies due to replacement needs. Therefore, together with net employment change, around eight million job vacancies in total are projected. See CEDEFOP (2010), Skills supply and demand in Europe Mediumterm forecast up to 2020 and <a href="http://www.cedefop.europa.eu/EN/about-cedefop/projects/forecasting-skill-demand-and-supply/skills-forecasts.aspx">http://www.cedefop.europa.eu/EN/about-cedefop/projects/forecasting-skill-demand-and-supply/skills-forecasts.aspx</a>.

<sup>&</sup>lt;sup>76</sup> Commission Communication, Annual Growth Survey 2013 — COM(2012) 750 final, 28.11.2012.

<sup>&</sup>lt;sup>77</sup> Commission Staff Working Document on an Action Plan for the EU Health Workforce — SWD(2012) 93 final attached to the Commission Communication, Towards a Job Rich Recovery — COM(2012) 173 final, April 2012.

<sup>&</sup>lt;sup>78</sup> To be financed by the EU Health programme, see Commission Implementing Decision of 28 November 2012 on the Health programme work plan for 2013 (2011/C/ 358/06).

#### 3. Reducing inequalities in health

**Health outcomes vary considerably within and between Member States**. In 2010, the gap in life expectancy at birth between the highest and lowest values for EU-27 Member States was 11.6 years for males and 7.9 years for females. People with a lower income and less education die younger and their health is worse. For example, differences in life expectancy at age 30 between those in higher education and those with basic secondary education or less exceed 10 years in many Member States. <sup>79</sup>

Across the EU the level of disability, in terms of reported restrictions on daily living activities, is more than twice as high in the lowest income quintile as in the highest income quintile. 80 Even larger health inequalities exist for some vulnerable groups such as some ethnic minorities (Roma) and some migrant groups.

These health inequalities represent not only a waste of human potential, but also a huge potential economic loss — conservatively estimated at between 1.5% and 9.5% of GDP according to a report written for the Commission.<sup>81</sup>

Reasons for these differences include barriers in access to healthcare, which is often worse for disadvantaged groups/ persons in vulnerable situations<sup>82</sup> and in less wealthy Member States,<sup>83</sup> as well as poorer diets, housing, living and working conditions, and higher levels of health-damaging behaviours. The impact of the current crisis on these factors threatens to increase health inequalities between social groups and between Member States.

As stated in the 2013 AGS, 'additional efforts are needed to ensure the effectiveness of social protection systems in countering the effects of the crisis, to promote social inclusion and to prevent poverty', including by providing broad access to affordable, high-quality health services. <sup>84</sup> Investments to reduce inequalities in health should therefore also make a positive contribution towards reaching the Europe 2020 poverty and social exclusion target.

A multisectoral approach is required, with a focus on achieving greater gains in less advantaged groups than the average in order to close gaps. 85 Key measures are to prioritise less advantaged groups

<sup>&</sup>lt;sup>79</sup> Eurostat statistics in focus 24/2010.

<sup>&</sup>lt;sup>80</sup> EU Statistics on Income and Living Conditions.

<sup>&</sup>lt;sup>81</sup> Economic implications of socio-economic inequalities in health in the European Union, Mackenbach J, Meerding W, Kunst A., Directorate-General for Health and Consumers 2007.

<sup>&</sup>lt;sup>82</sup> Devaux M, de Looper M, Income-related inequalities in health service utilisation in 19 OECD countries 2008-2009, OECD Health working papers 58, 2012.

<sup>&</sup>lt;sup>83</sup> Citizens from central and eastern Europe, as shown by the FP7 Research Project ASSPRO CEE 2007 (http://www.assprocee2007.com/), are often confronted with informal patient payments for healthcare services. These range from the ex-ante cash payment to the ex-post gift in kind. The causes of informal payments need to be tackled for these reforms to be successful and to guarantee equal access to healthcare. Vulnerable groups or households with a chronically ill member are less protected against informal payments and are most likely to forego treatment or to experience catastrophic, impoverishing effects due to formal and informal out-of-pocket payments.

<sup>&</sup>lt;sup>84</sup> Commission Communication — Annual Growth Survey 2013 — COM(2012) 750 final, 28.11.2012.

<sup>&</sup>lt;sup>85</sup> Two documents accompanying this package address in particular children, as investments in prevention during early childhood are likely to bring substantial benefits over the whole lifespan, and homelessness, as health problems are both a triggering factor and a consequence of homelessness. See the Commission

in policies to improve the quality of and access to health systems, to address the underlying risk factors in health behaviours and to ensure adequate incomes and living and working conditions. So Such measures are underpinned by the fundamental values and commitments the EU and its Member States have agreed on with regard to human rights, equal opportunities, social and economic cohesion and solidarity. Specific EU action on health inequalities is set out in the **2009 Commission Communication on health inequalities**, *Solidarity in Health*. A progress report on the health inequalities situation and the actions set out in the Communication will be published in 2013.

Data on the effects of social transfers on the at-risk-of-poverty rate suggests that **healthcare plays a significant role in reducing the at-risk-of-poverty rate.** Access to affordable healthcare is therefore necessary for adequate livelihoods. Fiscal consolidation measures applied to health systems should not compromise the access of poor, vulnerable populations to high-quality healthcare.

According to a study of policy responses to the economic crisis,<sup>87</sup> several countries have increased user charges for essential services, while in some cases also allowing more income-based exemptions.<sup>88</sup> Given that vulnerable populations are already disproportionately affected by the economic crisis and that ill health has negative outcomes on employability, possible effects on those populations should be carefully assessed. **Healthcare coverage can help reduce poverty.** Measures such as those that increase co-payments risk aggravating the economic hardship borne by vulnerable populations by reducing access to healthcare.<sup>89</sup>

**Increasing knowledge of the effects of healthcare coverage on poverty,** as measured at household level, should take the following into account:

- Evidence suggesting that a large amount of total spending on healthcare during a person's life is concentrated in the final year(s) of life. 90 Health expenditure comparisons between individuals would therefore ideally be based on lifetime analyses and not be limited to a given year.
- The inherent complexity of interactions among several causal factors and variables, such as the likelihood of similarity in the socio-economic backgrounds of spouses and feedback loops in causal pathways between health and poverty.

Recommendation on "Investing in children: breaking the cycle of disadvantage", and the Commission Staff Working Document on "Confronting Homelessness in the European Union" adopted as part of this package.

<sup>&</sup>lt;sup>86</sup> On the importance of access to quality services, and notably health services, as part of an active inclusion strategy, see the Commission Staff Working Document on "the Follow-up on the implementation by Member States of the 2008 European Commission recommendation on active inclusion of people excluded from the labour market" adopted as part of this package.

<sup>&</sup>lt;sup>87</sup> Philipa Mladovsky et al. (2012), Health policy responses to the financial crisis in Europe, WHO Policy Summary 5. http://www.euro.who.int/ data/assets/pdf file/0009/170865/e96643.pdf.

<sup>&</sup>lt;sup>88</sup> This is however unlikely to lead to substantial savings in budgets as health spending is concentrated on a section of the population that does not necessarily overlap with the poorest section (lowest income quintile), and protects against catastrophic health expenditure (the inability of individuals to pay for healthcare services — in itself not necessarily synonymous with high healthcare costs). This suggests that income-based exemptions should be coupled with co-payment ceilings.

<sup>&</sup>lt;sup>89</sup> HOPE, the European Hospital and Healthcare Federation reports a marked increase in emergency services activities and longer waiting time and waiting lists. <a href="http://www.hope.be/05eventsandpublications/docpublications/86">http://www.hope.be/05eventsandpublications/docpublications/docpublications/86</a> crisis/86 HOPE-The Crisis Hospitals Healthcare April 2011.pdf.

<sup>&</sup>lt;sup>90</sup> Commission, 2009 Ageing report, Economic and budgetary projections for the EU-27 Member States 2008-2060. <a href="http://ec.europa.eu/economy-finance/publications/publication14992">http://ec.europa.eu/economy-finance/publications/publication14992</a> en.pdf.

#### Good practice example — analysis of the redistributive impact of public health expenditure

A 2011 paper by Spadaro et al. 91 shows how data collected for the Eurostat Survey of Income and Living Conditions (SILC) can be used to analyse the redistributive impact of public health expenditure in Spain. This is done using an insurance value approach to take account of the effect of healthcare expenditure on household budgets. The equivalent household income complemented by public healthcare coverage is assessed and compared with household disposable income. It is found that public healthcare coverage is likely to keep families out of poverty. Extending the analysis to incorporate the household income foregone due to healthcare-related tax transfers would allow the net impact of public healthcare coverage to be estimated in terms of the percentage of poverty avoided. This could be calculated as the added number of covered residents that would fall below a given poverty threshold in the hypothetical absence of healthcare coverage.

Spain recently introduced reforms of its co-payment system for medicines. The reforms take into account the redistributive impact of the co-payment system by linking it to the level of income, thus making it more progressive.

The Commission will continue to support measures to address health inequalities within and between Member States by implementing the **2009 Communication Solidarity in Health: Reducing Health Inequalities in the EU.** <sup>92</sup> It plans to increase knowledge and evidence to facilitate the exchange of best practice and share understanding of the effects of health investments on social exclusion and poverty reduction. This must include tackling the methodological difficulty of valuing benefits in kind.

#### 4. European financial instruments for investing in health

As a follow-up to the current **EU Health Programme**, and as part of the Multiannual Financial Framework 2014–20, the Commission put forward a proposal for a new Health Programme. It strengthens the link between economic growth and a healthy population and is geared towards measures in line with the Europe 2020 objectives. The programme has four objectives:

- to contribute to innovative and sustainable health systems;
- to increase access to better and safer healthcare for all EU citizens;
- to promote good health and prevent diseases by addressing the risk factors of most diseases;
- to protect people from cross-border health threats.

The EU's **Cohesion Policy and its funds**<sup>93</sup> are also powerful instruments to help Member States invest in sustainable, innovative and reformed health systems, in people's health for employability and in reducing health inequalities. The Member States allocated over five billion euro on health infrastructure from 2007 to 2013. Using structural funds for non-direct health investments such as

<sup>91</sup> http://www.ief.es/documentos/investigacion/seminarios/economia\_publica/2011\_18MayoPPT.pdf.

<sup>&</sup>lt;sup>92</sup> COM(2009) 567 final. The Communication is implemented in particular through a Joint Action supported by the Health Programme: <a href="http://ec.europa.eu/eahc/projects/database.html?prjno=20102203">http://ec.europa.eu/eahc/projects/database.html?prjno=20102203</a>. A progress report on the implementation of the Communication is to be published in 2013.

<sup>&</sup>lt;sup>93</sup> For the specific role of the European Social Fund, see European Commission Staff Working Document - *Social investment through the European Social Fund*, SWD(2013) 44, adopted as part of this package.

urban regeneration, transport, environment, employment, social inclusion and housing can also have positive impacts on population's health.<sup>94</sup>

The Commission proposals for the next programming period (2014–2020) provide for the support of the Cohesion and Structural Funds to the Member States' investments in health. Health is also included in most of the thematic objectives of the Common Strategic Framework. The EU Cohesion and Structural Funds should co-finance investments in health by the Member States that follow a coherent, strategic policy approach by:

- investing in health infrastructure that fosters a transformational change in the health system, in particular reinforcing the shift from a hospital-centred model to community-based care and integrated services;
- improving access to affordable, sustainable and high-quality healthcare, in particular with a view to reducing health inequalities between regions and giving disadvantaged groups and marginalised communities better access to healthcare;
- supporting the adaptation, up-skilling and life-long learning of the health workforce;
- fostering active, healthy ageing to promote employability and employment and enable people to stay active for longer.

The Seventh Framework Programme and the EU programme for research and innovation for 2014 to 2020 (**Horizon 2020**)<sup>96</sup> also provide financial opportunities to address the societal challenge of an ageing population and harness innovation in public health and the management of health systems.

#### Conclusion

Getting more value for money through reforms and investments is crucial. Investing in health can lead to smarter spending — not more spending — that brings savings or secures better health outcomes. It may take different forms, such as change in the management of care to improve efficiency while improving health outcomes, investment in healthcare staff, training or equipment and initiatives to promote good health and prevent diseases. The avoidable morbidity and mortality underlying health inequalities represent a waste of human capital that must be reduced.

Universal access to safe, high-quality, efficient healthcare services, better cooperation between social and healthcare services and effective public health policies to prevent chronic disease can make an important contribution to economic productivity and social inclusion. Reforms complemented by the above mentioned targeted investments should foster cost-effective innovation to achieve good health outcomes and aim to avoid increasing disease and financial burdens in the long term. Financial consolidation and structural reform of health systems must go hand in hand to continue delivering on public policy goals and ensure that efficiency gains will guarantee universal access and increase the quality of healthcare. They should be addressed as part of the wider agenda of structural reforms within the context of Europe 2020 and the European Semester.

<sup>&</sup>lt;sup>94</sup> For more information on health gains through structural funds see <a href="http://www.healthgain.eu/">http://www.healthgain.eu/</a>

<sup>&</sup>lt;sup>95</sup> Commission proposal for a regulation laying down common provisions and creating a common strategic framework, in particular Annex IV — COM(2011) 615 final/2, 2011/0276 (COD).

<sup>&</sup>lt;sup>96</sup> Proposal for a Regulation of the European Parliament and Council establishing Horizon 2020 — the Framework Programme for Research and Innovation (2014–20), COM(2011) 809 final.

