European Foundation for the Improvement of Living and Working Conditions

Sector Futures

Policies and actions for a healthy Europe

emcc european Monitoring Centre on Change

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European health systems face uncertain futures. Previous articles in this Sector Futures series highlighted several factors that are contributing to this uncertainty, including an ageing population, rising expectations of healthcare delivery, the growing ubiquity of ICT, and the likely revolution in diagnostics and therapies offered by developments in genomics and other biotechnologies. This last article in the series examines policy responses to these and other factors at European level, aimed at encouraging future debates on prospective developments of healthcare systems in Europe.

Introduction

The two previous articles in this series identified several key trends and drivers which are likely to have significant impact over the coming decade. Drawing on existing futures and foresight work, three long-term *integrated visions* were developed for healthcare in Europe. Against this backdrop, this article explores in greater depth the European health policy landscape, with a view to providing a baseline account of actions and initiatives being promoted at European level. At present, health and social services are mainly within the responsibility of Member States, with the EU adopting the role of a 'knowledge-transfer platform' between states (through the 'Open Method of Coordination'). However, the active and direct role of the Union in healthcare policy is growing year-on-year as a result of public health 'mainstreaming' across other EU policy areas.

This feature outlines the contours of the European health policy landscape, before describing the current programme of Community action in the field of public health (2003–2008). It then explores four major policy issues facing the European healthcare system: reform of health and social care funding systems; exploitation of information and communication technologies (ICT); tackling major health determinants; and exploitation and regulation of developments in genomics and other biotechnologies.

European health policy landscape

Health and social service provision are predominantly the concern of national – and, in some cases, regional – governments, with little responsibility traditionally residing at the European level. In its health status report of the European Union, the European Commission makes the following point:

> *It is acknowledged that healthcare services are not, under the most recent treaty agreements, included among the responsibilities contemplated for the EU institutions. It is also clear that national governments and the EU agree that the 'European Union has neither the desire nor the ability to run (or to harmonise) national health systems', but 'what we cannot escape from, though, is the continuous convergence of these health systems'. Nevertheless, in the absence of an explicit common policy and strategy, the European Court of Justice has, through numerous rulings, filled the empty policy niche and, by default rather than by intent, has been creating a de facto emergent healthcare policy.*
>
> (European Commission, 2003, p. 42)

In other words, there is an emerging role for the EU. This is acknowledged in Article 152 of the Amsterdam Treaty, stating that 'a high level of human health protection shall be ensured in the definition and implementation of all Community policies and activities'. Thus, proposals in other key areas of Community activity such as internal market, social affairs, research and development, agriculture, trade and development policy, environment, etc, should actively promote health protection. In addition, the European Commission has now ample scope for direct intervention in healthcare matters, for example, in areas such as standardisation of indicators, infra-structural development for data exchange, stimulation of exchanges on evidence-based developments and best practices, and promoting quality benchmarks and supporting networking for greater coordination among different national and international groups (European Commission, 2003a, p. 45).

Community action programme for public health

In September 2002, the European Parliament and the Council adopted a new **Community action programme for public health**[1]. The programme aims to embody an integrated approach towards protecting and improving health, paying particular attention to the creation of links with other Community programmes and actions in areas such as agriculture, the internal market, research, education, etc. It runs for a six-year period from 1 January 2003 to 31 December 2008, and is based on three general objectives (see Figure 1):

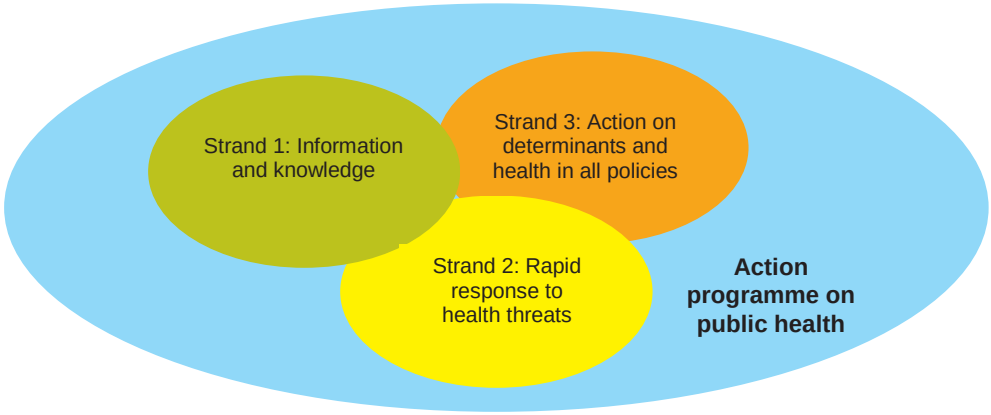
a) **health information**[2];

b) rapid reaction to **health threats**[3];

c) and health promotion through addressing **health determinants**[4].

The action programme, with a total budget of €312 million over six years, is based on Article 152 of the Treaty establishing the European Community, and is an 'incentive measure designed to protect and improve human health', 'excluding any harmonisation of the laws and regulations of the Member States'.

Figure 1: *EC's action programme on public health (2003–2008)*



Activities such as networks, coordinated responses, sharing of experience, training and dissemination of information and knowledge are being supported under this action programme. Achieving the overall aim and the general objectives of the programme requires effective cooperation of the Member States and dialogue through the EU's **Health Policy Forum**[5] with all key partners, such as:

a) non-governmental organisations in the public health field and patients' organisations;

b) organisations representing health professionals and trade unions;

1 **http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=32002D1786&model=guichett**

2 **http://europa.eu.int/comm/health/ph_information/information_en.htm**

3 **http://europa.eu.int/comm/health/ph_threats/threats_en.htm**

4 **http://europa.eu.int/comm/health/ph_determinants/healthdeterminants_en.htm**

5 **http://europa.eu.int/comm/health/ph_overview/health_forum/health_forum_en.htm**

c) health service providers and health insurance;

d) industry with a particular health interest.

The Health Policy Forum aims to ensure that the EU`s health strategy is open, transparent and responds to the public concerns. It is part of a three-tiered structure additionally consisting of the Open Forum and, in the future, the Virtual Forum, both of which enable a wider breadth of stakeholder involvement.

Addressing specific policy challenges

The focus now shifts from the general health policy picture in Europe to a set of specific challenges facing policymakers. Indeed, four broad challenges are highly relevant regarding future policy implications:

a) reforming health and social care funding systems;

b) exploiting ICT;

c) tackling major health determinants;

d) exploiting and regulating developments in genomics and other biotechnologies.

For each challenge, current policy initiatives at the European level are set out.

Reforming health and social care funding systems

According to a recent report on funding options for European healthcare,

> *European national policy-makers broadly agree on the core objectives that their health care systems should pursue. The list is strikingly straightforward: universal access for all citizens, effective care for better health outcomes, efficient use of resources, high-quality services and responsiveness to patient concerns. It is a formula that resonates across the political spectrum and which, in various, sometimes inventive configurations, has played a role in most recent European national election campaigns.*
>
> (Mossialos *et al*, 2002, p. 13)

But there are significant challenges to meeting these objectives, associated mainly with resources, in particular funding and skills. When it comes to financial resources, market mechanisms have proved popular as a means of increasing efficiency. Such measures include a clear demarcation between supply and demand, and the contractualisation of services. In its review of European health trends in 2002, the World Health Organisation (WHO) highlighted the following developments:

> *In a number of European countries there is a trend towards strategic purchasing as a way of allocating resources to providers to maximize health gain and health system performance. In national health system countries such as in Italy and the United Kingdom, this involves separating the provider and purchaser functions. In some social health insurance countries in Europe, such as Germany and the Netherlands, insurers aim to move away from reimbursing services towards more proactive purchasing services and selecting providers according to cost-effectiveness criteria. Contracting mechanisms and performance-related payment systems have become a means for purchasers to influence provider behaviour. With regard to paying providers, many countries are moving towards mixed payment systems, with prospective and retrospective components linked to performance.*
>
> (WHO, 2002, p. 113).

Member States have also been active in improving the information available on the cost of treatment of different ailments to ensure that the cost factor is included in determining and rationalising healthcare services. Linked to this, direct action has been taken to reduce expenditure on pharmaceuticals, by encouraging the use of generic drugs while restricting or prohibiting the use of expensive branded pharmaceuticals (European Commission, 2002a, p. 43).

For those already suffering from poor health or most at risk, it will become crucial to reinforce coverage, uptake and effectiveness of mainline provisions, thus ensuring universality. Promoting affordability will require that full eligibility for all necessary services is given free of charge to the lowest income group. At the same time necessary services for those outside this group have to be provided at a cost they can afford. This can be achieved through different policy instruments resulting in means-tested (income-related) exemptions of contributions, although the degree of coverage and the quality of care provided under the different systems may differ widely across Member States.

Another important policy reform concerns the gradual devolution of responsibility to the regional and local levels and, in some cases, to individual hospitals or general practitioners. This shift to primary care focus is underpinned by a belief that health and social services need to be more responsive to local needs and that better coordination can be achieved between needs and resources at this micro-level.

Finally, turning to human resources, developing an adequate supply of appropriate categories of personnel with the requisite skills for a high-tech health service will be crucial. The development of these skills increasingly involves changes in the way in which training is delivered, in curricula, in educational funding, and governance of health professions, with implications that go beyond the healthcare system affecting higher education and research.

Exploiting information and communication technologies

Expectations of eHealth are thriving. Potentially, information and communications technologies (ICT) can be applied across the whole range of functions that affect the health sector, including health information networks, electronic health records, telemedicine services, personal wearable and portable communicable systems, health portals, and many other ICT-based tools assisting prevention, diagnosis, treatment, health monitoring, and lifestyle management (European Commission, 2004a). Given this wide range of applications, the European Commission has declared eHealth to be

> *today's tool for substantial productivity gains, while providing tomorrow's instrument for restructured, citizen-centred health systems and, at the same time, respecting the diversity of Europe's multi-cultural, multi-lingual health care traditions.*
>
> (*ibid*, p. 4)

While there are already many successful applications of eHealth, in many places development is still at a pilot phase, often financed through research grants. The speed of organisational change is often slow, and it can take up to 20 years to achieve full implementation. Moreover, a broad range of challenges remains to wider implementation *(ibid*, p. 12). These include financial and organisational barriers, lack of interoperability of eHealth systems, user-friendliness of these systems and services, a lack of regulation and fragmentation of the eHealth market in Europe, confidentiality and security issues, challenge of access for all, the necessity of better integration of the needs and interests of users, and the absence of common understanding and concerted action amongst major stakeholder groups.

The European Commission, in cooperation with the Member States, started to address these challenges. In doing so, it has established the European eHealth Area, thus providing a framework for exchanging best practices and experience between different national health systems. The aim is to allow common approaches to shared problems to be developed

over time according to an action plan that was published in 2004 (*ibid*, p. 22). This action plan focuses upon three particular target areas:

a) how to address common challenges and create the right framework to support eHealth: through initiatives addressing health authority leadership; legal and regulatory issues; interoperability of health information systems, for example, by developing common standards for patient identifiers and electronic health record architecture; managing mobility of patients and health professionals between Member States (see European Commission, 2004b); enhancing infrastructure and technologies, and leveraging investments in eHealth;

b) pilot actions to jump start the delivery of eHealth: through initiatives informing citizens and authorities on health education and disease prevention, and working towards integrated health information networks and promoting the use of cards in healthcare;

c) sharing best practices and measuring progress: through disseminating best practices, for example, via the European eHealth Forum, benchmarking national progress, and encouraging international collaboration.

Progress in establishing the European eHealth Area will be regularly monitored against a set of specified delivery targets, which have been detailed in the European Commission's action plan.

Tackling major health determinants

Recent years have seen a major interest in promoting greater awareness of health determinants among citizens, aimed at encouraging greater responsibility for self-care by pursuing healthier lifestyles. Tackling major health determinants shows great potential in order to reduce the burden of disease and promote overall health of the population. A list of health determinants and their associated health problems is given in Table 1 below, covering the following dimensions that impact on people's health:

- personal behaviour and lifestyles;
- influences within communities which can sustain or damage health;
- living and working conditions and access to health services;
- general socio-economic, cultural and environmental conditions.

The aim of the European Commission's action in this area is twofold:

1. to encourage and support the development of actions and networks for gathering, providing and exchanging information in order to assess and develop policies, strategies and measures, with the purpose of establishing effective interventions aimed at tackling the determinants of health;
2. to promote and stimulate Member States' efforts in this field, for example, by developing innovative projects which will stand as examples of effective practice.

Table 1: *Determinants of observed morbidity and mortality*

Health problem	Determinants	
Low birth weight and prematurity	Smoking, alcohol abuse, drug abuse, access to quality healthcare	Age, gender, socio-economic status
Accidents/injuries	Alcohol abuse, drug abuse, environmental, access to quality emergency care	
Neuropsychiatric	Alcohol abuse, drug abuse	
Cancers	Smoking, nutrition, obesity, exercise, alcohol abuse, access to quality healthcare	
Circulatory disease	Smoking, alcohol abuse, nutrition, obesity, exercise, access to quality healthcare	
Infections	Nutrition, food and water safety, drug abuse, sexual behaviours, travel, access to quality healthcare	
Asthma and other respiratory problems	Environmental conditions, smoking, access to quality healthcare	

Source: *European Commission, 2003a, p. 31*

Finally, this section takes a closer look at lifestyle as a general determinant of health, together with two more specific determinants: tobacco and diet.

Lifestyle

Lifestyle-related health determinants are multi-dimensional and closely linked to a number of major health problems. Some health issues share the same determinants such as tobacco, alcohol and nutrition. Thus:

> *The effects and the prevalence of each different risk factor are not independent of the effects and prevalence of other risk factors. There is an interaction between smoking and alcohol consumption. The effects of alcohol are potentially exacerbated by problematic social conditions. Domestic violence is associated with drinking problems. Therefore the risk approach has been switching from a focus on affected individuals to a greater population emphasis, addressing a multiplicity of risks.*
>
> (European Commission 2003, p. 40)

In implementing the health information and knowledge strand of the Public Health Programme, the Commission has established the 'Lifestyles Working Party'. This is intended to improve the information and knowledge on the lifestyle-related aspects of public health, and to help promote positive lifestyles, as well as to deal with information and knowledge on other health determinants. The purpose of the Lifestyles Working Party is to provide a forum for discussion and exchange of views and experience on lifestyles information and information needs. As part of this, the Working Party will contribute to the compilation and development of a sustainable health monitoring system in the field of lifestyles, and to the collection, sharing and diffusion of lifestyles-related data.

Tobacco

Tobacco is the single largest cause of avoidable death in the European Union accounting for over half a million deaths each year and over a million deaths in Europe as a whole. It is estimated that 25% of all cancer deaths and 15% of all deaths in the EU could be attributed to smoking. In order to curb this epidemic, the European Community is actively

developing a comprehensive tobacco control policy, which is characterised by **legislative measures**[6], support for Europe-wide smoking prevention and cessation activities, and mainstreaming tobacco control into a range of other Community policies (for example, agricultural policy, taxation policy, development policy, etc). The Commission has also established a **Tobacco fund**[7], which grants financial support to projects improving public awareness of the harmful effects of tobacco consumption in any form, in particular by means of information and education.

Diet

Good nutrition can help to reduce the prevalence of many diseases common in Europe today, such as cardiovascular disease, cancer, diabetes, obesity and osteoporosis. Of a broad range of causes, diet-related factors are believed to be responsible for nearly 10% of the total disease burden – including overweight (3.7 %), low fruit and vegetable consumption (3.5 %) and high saturated fat consumption (1.1 %) (European Commission, 2003b, p. 7). Addressing such problems through policy is not easy. At a recent EC conference on obesity, the multi-causal character of the obesity epidemic was generally underlined, and the need for a coordinated multi-stakeholder approach to reverse current trends was stressed. There was general agreement that the combination of increasing calorie intake coupled with a more sedentary lifestyle and decreasing levels of physical activity are at the root of the problem. At the same time, the participants emphasised the need for taking national/regional/local cultural and dietary differences into account: there is neither a typical European diet nor a typical European consumer. Consequently, only a general framework should be established at European level (European Commission, 2004c).

There is also a clear link between socio-economic conditions and diet. Those on a low income spend a greater proportion of their income on food, but eat a diet of lower nutritional quality than those on a high income. Knowledge about food, cooking skills and sufficient time available for preparing food, along with working patterns and domestic relations, also influence dietary patterns. Information from official sources, the media and the food sector influence the types of food consumed. Food choices are also determined by access to retail outlets, income and the relative prices of food European Commission, 2003b, p. 7). Nevertheless, it is widely acknowledged that the burden of disease exists in the majority of the population, and not only in high-risk groups. The optimal public health strategy is thus to focus on the population as a whole, rather than targeting those with increased risk factors or pre-existing disease.

Exploiting and regulating developments in genomics and other biotechnologies

DG Research and DG Enterprise are both actively involved in promoting the application of genomics and other biotechnologies to healthcare. For example, besides units on pharmaceuticals and medical devices including diagnostics, DG Enterprise currently focuses on promoting tissue engineering. According to former European Enterprise and Information Society Commissioner Erkki Liikanen:

> *A specific Regulation on the conditions for placing on the market tissue-engineered products is being prepared. It will introduce a set of common rules designed to clarify the legal framework for business operators, as well as guarantee the highest level of safety for users and patients. Such common rules will ensure that tissue-engineered products circulate freely within the EU, thus making innovative therapies available to those who need them.*

[6] **http://europa.eu.int/comm/health/ph_determinants/life_style/Tobacco/legal_smoking_prevention_tobacco_en.htm**

[7] **http://europa.eu.int/comm/health/ph_determinants/life_style/Tobacco/funds_tobacco_en.htm**

Clearly, there are all sorts of ethical and privacy issues at play here, in addition to the concerns over European sector competitiveness. With these in mind, DG Research has established a **European Group on Ethics in Science and New Technologies**[8]. This group is an independent, pluralist and multidisciplinary body which advises the European Commission on ethical aspects of science and new technologies in connection with the preparation and implementation of Community legislation or policies. Genomics and biotechnologies have been a major concern of the group to date. Moreover, in 1997 the European Commission set up the European Group on Ethics (EGE) to succeed the Group of Advisers on the Ethical Implications of Biotechnology (**GAEIB 1991–1997**[9]). During its first mandate the **EGE (1998–2000)**[10] provided **opinions**[11] on subjects as diverse as human tissue banking, human embryo research, personal health data in the information society, doping in sport and human stem cell research.

Yet, despite the establishment of these groups, together with a science and society unit in DG Research (and an accompanying research budget in the Sixth Framework Programme – FP6), the main focus of Commission activity lies in exploiting the unprecedented opportunities for generating new knowledge and translating it into applications that enhance human health. To this end, both fundamental and applied research are being supported under the thematic priority area of Life Sciences, Genomics and Biotechnology for Health (one of only seven thematic priorities of FP6). The emphasis lies on integrated, multidisciplinary, and coordinated efforts that address the present fragmentation of European research and increase the competitiveness of the European biotechnology industry.

The indicative budget of this thematic priority area is €2514 million for the period 2002-2006, including up to €475 million for cancer-related research. Box 1 below shows some of the action lines to be funded under this thematic priority.

[8] **http://europa.eu.int/comm/european_group_ethics/index_en.htm**

[9] **http://europa.eu.int/comm/european_group_ethics/gaieb/en/index.htm**

[10] **http://europa.eu.int/comm/european_group_ethics/gee1_en.htm**

[11] **http://europa.eu.int/comm/european_group_ethics/avis_en.htm**

Box 1: *Examples of two action lines under the Life Sciences, Genomics and Biotechnology for Health thematic priority area in the EC's Sixth Framework Programme (FP6)*

Combating major diseases: Application-orientated genomic approaches to medical knowledge and technologies

This line's strategic objective is to integrate advanced genomic technologies into more established medical approaches for the prevention and management of human disease, and for living and ageing healthily. The emphasis lies on translating basic research into clinical applications. Funding is available for research on topics in the following four areas:

- combating cardiovascular disease, diabetes and rare diseases[12];
- combating resistance to antibiotics and other drugs[13];
- studying the brain and combating diseases of the nervous system[14];
- studying human development and the ageing process[15].

Application of knowledge and technologies in the field of genomics and biotechnology for health

The objective of this line is to foster the competitiveness of Europe's biotechnology industry in developing new diagnostic, disease prevention and therapeutic tools that contribute to better and more cost-efficient healthcare. The approach being used centres on the establishment of so-called technology platforms, in which academic and industrial partners collaborate in multidisciplinary ways to develop these tools, using cutting-edge technologies arising from genomic research. At present, a **Technology Platform for Innovative Medicines**[16] has been established.

Conclusion

This article sets out some of the current policy responses at EU level to healthcare issues in Europe. Despite the fact that the main responsibility for healthcare delivery resides with the Member States, an impressive array of initiatives and actions comes out of Europe. At their simplest, these initiatives focus on exchange of knowledge and good practice between Member States. More ambitious initiatives address, for example, issues of eHealth standardisation, the mobility of health professionals and patients in the Single Market, and the support for high-tech innovation in biotechnology start-ups. How these initiatives will contribute to a desirable vision of healthcare in Europe in 2015 is a matter for discussion, as is their impact on the growth and competitiveness of the healthcare sector in Europe.

[12] **http://www.cordis.lu/lifescihealth/major/cardio.htm**

[13] **http://www.cordis.lu/lifescihealth/major/drugs.htm**

[14] **http://www.cordis.lu/lifescihealth/major/brain.htm**

[15] **http://www.cordis.lu/lifescihealth/major/ageing.htm**

[16] **http://www.cordis.lu/lifescihealth/innovativemedicines.htm**

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[17] ll links accessed on 20 December 2004.

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