



World Health  
Organization

REGIONAL OFFICE FOR Europe

# Some reflections on priorities for health systems strengthening in the WHO European Region

---

By:

Peter C. Smith  
Imperial College London  
United Kingdom of Great  
Britain and Northern Ireland

September 2015



# **Some reflections on priorities for health systems strengthening in the WHO European Region**

---

By:

Peter C. Smith  
Imperial College London  
United Kingdom of Great  
Britain and Northern Ireland

# Abstract

This report takes stock of the measures that Member States of the WHO European Region have put in place to strengthen health system accountability since the Tallinn Charter: Health Systems for Health and Wealth (2008) and the Health 2020 policy framework (2012) were adopted. These last years have been undoubtedly marked by significant challenges facing the health systems in the Region, including international and national environments affected by an economic crisis, increased health needs, as well as resource scarcity. However, and in spite of the challenging context, Member States across the Region have taken abundant and significant steps to improve health system accountability. This report summarizes the experiences of Member States strengthening health system accountability in the context of the momentum created by the Tallinn Charter and Health 2020 through rigorous goal setting, as well as health system performance measurement and review.

## Keywords

HEALTH PERSONNEL

HEALTH POLICY

HEALTHCARE FINANCING

HEALTHCARE SYSTEMS

PUBLIC HEALTH

Address requests about publications of the WHO Regional Office for Europe to:

Publications

WHO Regional Office for Europe

UN City, Marmorvej 51

DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>).

## © World Health Organization 2015

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

# Contents

|   |    |
|---|----|
| Acknowledgements . . . . .                                | IV |
| 1. Introduction . . . . .                                 | 1  |
| 2. Health systems . . . . .                               | 2  |
| 3. The six building blocks . . . . .                      | 5  |
| 3.1 Service delivery . . . . .                            | 5  |
| 3.2 Health workforce . . . . .                            | 6  |
| 3.3 Information . . . . .                                 | 8  |
| 3.4 Medical products, vaccines and technologies . . . . . | 9  |
| 3.5 Financing . . . . .                                   | 10 |
| 3.6 Leadership and governance . . . . .                   | 12 |
| 4. Minimizing inefficiency . . . . .                      | 14 |
| 5. The health system in context . . . . .                 | 16 |
| 6. Alignment . . . . .                                    | 18 |
| 7. Constraints . . . . .                                  | 20 |
| 8. Concluding comments . . . . .                          | 22 |
| References . . . . .                                      | 24 |

# Acknowledgements

I would like to thank Dr Tamás Evetovits, Senior Health Financing Specialist and acting Head of the WHO Barcelona Office for Health Systems Strengthening, Barcelona, Spain; and Dr Sarah Thomson, Senior Health Financing Specialist, also of the WHO Barcelona Office, for their invaluable guidance.

I would also like to thank the participants at the expert meeting on health systems strengthening in the context of Health 2020, held in Barcelona on 3–4 November 2014.

Special recognition is given to the support of Dr Hans Kluge, Director, Division of Health Systems and Public Health of the WHO Regional Office for Europe.

# 1. Introduction

This note offers some introductory comments on the priorities for health system strengthening in the WHO European Region. It must be stressed that it gives a personal perspective and is intended merely to stimulate discussion. Its objective is to address two key areas for health systems, identifying:

- the key constraints and challenges health systems are likely to face in the next 5–10 years, taking into account the diversity of countries in the Region;
- priority areas for health system strengthening.

## 2. Health systems

Acceptance is now widespread that efforts to improve health and maximize the efficiency of health sector spending will fail unless strategies to promote those objectives are coordinated and aligned. This requires careful attention to the design and operation of what has become known as “the health system”.

The *World health report 2000* defined the health system as “... all the activities whose primary purpose is to promote, restore or maintain health” (1). This definition has not been seriously challenged, although interpretations have differed at times. The Tallinn Charter (2) further elaborated the definition as follows:

Within the political and institutional framework of each country, a health system is the ensemble of all public and private organizations, institutions and resources mandated to improve, maintain or restore health. Health systems encompass both personal and population services, as well as activities to influence the policies and actions of other sectors to address the social, environmental and economic determinants of health.

This underlines the importance of the public health function within the health system.

Agreement is also widespread on what some of the fundamental objectives of the health system should be:

- to improve health;
- to protect people from the financial consequences of ill health;
- to promote associated equity objectives;
- to minimize inefficiency associated with pursuit of these objectives.

The notion of “responsiveness”, defined as “the ability of the health system to meet the population’s legitimate expectations regarding their interaction with the health system, apart from expectations for improvements in health or wealth” was introduced as a further objective in the *World health report 2000* (1). Consensus is less widespread, however, on the precise formulation and importance of this objective, which embraces concepts such as respect, dignity, privacy and speed of treatment.

The report initially identified four key “functions” of the health system: stewardship, financing, resource creation and service delivery (1). These were subsequently elaborated to six key health system “building blocks” (3):

- service delivery;
- health workforce;
- information;
- medical products, vaccines and technologies;



- financing;
- leadership and governance.

This formulation has proved a useful starting-point for examining the operation of the health system, diagnosing its weaknesses and making proposals for health system strengthening, so this note examines these building blocks in detail.

International commitment to the notion of the health system was underlined in Europe by the signing of the Tallinn Charter. Under this, Member States committed to invest in health systems, to make them more responsive to citizens' expectations, to foster investment across sectors that influence health and to ensure that systems are prepared and able to respond to crises (2). These commitments reflect the recognition that – while many of the determinants of health lie outside the health system – the organization of preventive and curative services represents a fundamental instrument for securing the promotion and maintenance of health.

When considering the concept of the health system, it is important to have clarity about the purpose of the analysis. Loosely speaking, the WHO concept of a health system adopts the perspective of a health ministry and the actions it might take. This is appropriate, as the health minister is usually the member of the government accountable for the health of the population and for the actions taken to protect and promote health. When formulating general proposals for health system strengthening, however, it is important to recognize that the precise boundaries of accountability vary between countries. In some, ministers have a very broad responsibility for the well-being of the population; in others, accountability may be limited to a narrow responsibility for curative health services.

Considering the health system as a whole (as opposed to individual interventions) is important because many of the system's building blocks contribute to several different interventions and treatments. For example:

- many of the institutions of service delivery – particularly hospitals – contribute to a great variety of treatments;
- information resources contribute to better prevention and treatment across a wide range of health problems;
- financing mechanisms (especially the reimbursement of providers) give rise to incentives across all disease and treatment areas.

Thus, strengthening the building blocks of the health system may have ramifications across a wide range of treatments and disease areas.

Another important reason for considering the system as a whole is that many important interactions take place between different functions of the health system. For example, poorly functioning preventive or disease management services will have knock-on effects for associated curative and emergency services, and

treatments that share health system resources (such as the workforce) may have important interdependencies. These interactions are a central feature of the systems perspective.

To use the language of economics, the health system contains the potential for numerous forms of economies of scale and scope. Poor design or poor operation of the health system may threaten the quality and efficiency of a wide range of services. Conversely, a properly operative system yields benefits across many services. The functioning of the health system therefore deserves especially careful attention from policy-makers.

Finally, it is important to underline the dynamic nature of the health system (4). Good (or poor) performance in the current period will feed back as an important input into the future functioning of the system, in the form of medical needs, service utilization and system expenditure. Disease prevention is one important aspect of this dynamic perspective but many other dynamic determinants of the future demand for and supply of health services should – in principle – be taken into consideration when strengthening health systems.

Using as an organizing principle the six building blocks outlined above, this note sets out what I consider to be some of the more important elements of the health system in need of careful attention by policy-makers. For each block I suggest – using purely personal judgement – a small number of topics that may be priority areas for health system strengthening. These satisfy the following criteria:

- the associated policy choices are likely to have a profound impact on the attainment of health system objectives;
- the associated policy choices will have an impact across the health system as a whole;
- considerable doubt remains about how to advise policy-makers on the topic;
- there appears to be scope in the area for improved evidence and policy recommendations.

A discussion follows on the key issue of minimizing inefficiency, which can be considered an unwanted output of the health system, and on the contextual factors that have a strong influence on performance. The note ends with some reflections on the need to align individual reforms to the elements of the system and the constraints that apply when seeking to strengthen or reform the system.

## 3. The six building blocks

### 3.1 Service delivery

The efficient organization and operation of provider institutions is a crucial requirement for securing high levels of performance. Many aspects of service delivery are matters for local decision-makers and therefore not immediate matters for policy-makers (although, of course, supervision of efficiency and quality of services will always be needed – see the section on leadership and governance below).

The design of delivery systems often reflects historical responses to past health care needs and technology. With rapid changes in both epidemiology and technology, many health systems are seeking to reorganize hospital services to become more efficient and effective by consolidating services, creating centres of excellence and closing small, ineffective departments or hospitals. The reorganization of stroke services in London, United Kingdom of Great Britain and Northern Ireland, is an instance of such reconfiguration (5). Other examples include efforts to redesign the mix of community and hospital care for the better management of chronic disease.

Local services operate within a framework determined by policy-makers; that framework can have crucial implications for local actions and the associated health system performance. Strategic elements of service delivery include:

- the nature and ownership of the health care providers – for example, primary, secondary and tertiary care;
- the extent to which competition and integration of providers is allowed or encouraged;
- the extent to which providers enjoy freedom to innovate and explore new modes of service delivery;
- the ease with which providers can enter or leave the market.

An important consideration in many efforts to redesign services is the political context of such policy-making. Patients, the broader population, clinicians and local politicians are often understandably resistant to reorganization of local services. Policy-makers frequently require both great resilience and authoritative external support for the changes they propose.

A particularly pressing issue, especially given the ageing populations in many countries, is how best to coordinate the care of people with long-term conditions and multiple comorbidities. In this domain, innumerable questions about the role of primary care, interactions with the social care sector, use of information technology and the role of family and informal caregivers are unresolved. Further, arrangements for collaboration and joint working across traditional sectors often need improvement.

Interest has increased in making care more “person-centred”, in the sense of tailoring services to the preferences and needs of the individual (6). One manifestation of this movement is the notion of “personal budgets”, through which individuals can choose to receive a budget with which to purchase certain services directly, according to their preferences (7). This offers an interesting insight into one way in which coordination of care might be accomplished in the future. Whether increased personalization leads to improved outcomes, efficiency or cost containment and who will seek it remain research questions. It is nevertheless likely that services will increasingly be expected to respect individual needs and preferences.

The quality of health services has historically been given surprisingly little attention at a policy level. The work of the Institute of Medicine, however, has highlighted the extraordinary variations in practice and outcome that are likely to exist in all health systems (8). An obvious area for health system strengthening is to monitor such variations, gain an understanding of when they are unwarranted and put in place mechanisms to improve unacceptable performance. The health care professions clearly have an important role to play in this.

The important policy choices about service delivery should ideally be based on solid evidence; their consequences should be monitored and evaluated to enable policy-makers to review the operation of the health system in terms of costs, the processes of care and outcomes for patients. From an economic perspective, key issues are the extent of economies of scale and scope offered by different configurations of service delivery. An evidence gap and a key need for research evidence in this respect are apparent.

### Priority areas for service delivery

Priorities for health system strengthening include:

- optimal configuration of health systems – hospitals and community services;
- the role of primary care;
- the degree of concentration of specialist services;
- coordination of chronic disease care;
- reconciliation of service personalization with cost containment and efficiency;
- research evidence on economies of scale and scope.

## 3.2 Health workforce

The workforce is the single largest expenditure element of most health systems. Furthermore, the decisions of clinicians determine a great deal of the allocation of resources within the health system and the effectiveness of those resources. Thus, the nature, preferences and quality of the workforce are key aspects of system performance and require careful policy attention (9).

Key elements of policy include:

- regulation of the workforce;
- flexibility of roles and work substitution;
- workforce migration;
- employment conditions, pay and reimbursement;
- training and retirement policy.

Concern exists in all European health systems with labour supply, particularly of doctors and nurses. Scope for market failure is profound in these labour markets, especially for doctors, given the long and costly training and uncertainties about future priorities for clinical skills. Inward migration of the medical workforce has been one solution to date for higher-income countries, but the increased practical and ethical concerns associated with relying on overseas-trained clinicians call into question the sustainability of such policies. There is also concern that individual countries have an incentive to “free ride” on the training given by other countries and to fail to train replacement levels of clinical expertise. The associated scarcity of doctors and other professionals may furthermore increase the pay costs of the workforce and the difficulty of attracting sufficient skilled workers to remote or unattractive areas.

Given the importance of securing an adequate type, volume, quality and commitment of the workforce, it is surprising how little solid evidence exists on the optimal training, motivation, retention and professional development of clinicians. It may be the case that relatively simple changes to the context in which professionals work could have profound influences on their quality and efficiency – in particular, in relation to the design of multidisciplinary teams. The potential also exists, however, for great waste if reforms to working practice are ineffective. The need to generate new research evidence is clear.

With the free movement of labour within much of Europe, assuring comparability and quality of professional competences is a central concern. More generally, the regulation of clinical competences and the ability and willingness of clinicians to adopt new and flexible roles are also important factors influencing labour supply and affecting health system performance.

## Priority areas for health workforce

Priorities for health system strengthening include:

- assurance of necessary labour supply across all disciplines and specialities;
- reassessment of professional roles and promotion of flexibility;
- coordination of international migration and quality assurance;
- human resources in remote and disadvantaged geographical areas;
- research evidence on securing the most from the workforce.

### 3.3 Information

Information is a fundamental resource at all levels of the health system; it is used in different ways by patients, clinicians, providers, strategic purchasers and the system as a whole. Uses of information are many and diverse, including improving clinical care, tracking public health, determining and implementing appropriate treatment paths, supporting clinical improvement, monitoring the safety of the health care system, assuring managerial control and promoting the accountability of the system to citizens. Underlying all these efforts is the role information plays in enhancing decision-making on the part of the various stakeholders – patients, clinicians, managers, governments and citizens – to steer the health system towards achieving better outcomes (10).

Nevertheless, the collection, organization, storage, analysis and dissemination of information are profound weaknesses in most health systems. The potential productivity and quality gains offered by better information management – so manifest in other sectors of the economy – have rarely been realized to any great extent in health.

Some concrete examples exist of the potential offered by better information, such as the electronic health record in Estonia (11), yet the more usual experience is disappointing. Key potential improvements in information not yet fully embedded in health systems include:

- interoperability of electronic patient records between providers;
- setting and disseminating treatment guidelines and standards;
- measurement of patient outcomes and assessing provider performance;
- whole health system performance assessments.

Information is a critical resource for health service and public health research, and is the foundation of the intelligence needed for proper governance. Research design and prioritization are frequently ignored aspects of health system strengthening, yet without them policy-makers and managers may lack the evidence necessary to act with assurance. For example, many system reforms or service reconfigurations are implemented without proper regard for subsequent evaluation. Much of the value of the action for ensuing learning and transferability may therefore be unnecessarily lost.

Although information is a vital resource for many stakeholders in the health system, its effective use often relies on the ability to compare across similar patients, providers or geographical areas. Such comparison is not feasible without national or international agreement on data specification, information protocols and mandating of reporting and dissemination. Without such agreement, the system will fail to produce the data necessary for secure comparison, and many preconditions for health system improvement will be absent.

## Priority areas for information

Priorities for health system strengthening include:

- electronic health records as a resource for care coordination;
- improved treatment guidelines;
- performance assessments of practitioners, organizations and systems;
- national and international standardization and data comparison.

### 3.4 Medical products, vaccines and technologies

Medical products, vaccines and technologies are frequently neglected aspects of health policy. Policy-makers tend to act passively in response to available technologies and rarely actively encourage innovations. The key policy actions in this area have related to health technology assessment (HTA), product procurement and product pricing. In support of these functions, HTA agencies have now been established in many European countries.

HTA is in principle a key policy lever for ensuring that publicly funded health services achieve the maximum social benefit (usually expressed in terms of health gain) for the limited resources available. Its aim is to ensure that only those technologies that secure the best value in relation to their cost are selected for funding from public resources (12). It can help guide both investment and disinvestment decisions – either when budgets are growing or when cost containment is required. HTA can be extended to indicate the circumstances (for example, patient type or stage of disease progression) in which certain technologies are used, and even to inform the development of clinical guidelines.

Considerable scope nevertheless remains for improving the methodology of HTA and the institutional arrangements within which it is undertaken. Numerous technical issues remain unresolved – for example, how to incorporate objectives in addition to health improvement (including equity); how to handle interactions between treatments; how to present and manage uncertainty; whether and how to discount future costs and benefits; and how to assess the impacts of technologies beyond health gains.

Uncertainty abounds regarding securing the best institutional arrangements for HTA. For example, how can the recommended use of technologies be implemented in practice, without extending utilization to inappropriate patient groups? How can HTA be used to secure optimal pricing of beneficial technologies? Agreement is lacking on how to secure the appropriate engagement of relevant stakeholders, such as patients, payers, manufacturers and politicians.

Among the weakest areas of health system functioning is stimulating new markets in health technology – especially for innovations in prevention and disease management. Health technology development, especially in pharmaceuticals, has relied on a crude patent system that has functioned well in delivering many “blockbuster” products for common diseases with large markets. Evidence is now widespread, however, that this approach to research and development (R&D) is reaching the end of its useful life, as health systems seek to address demands for new types of treatment (such as preserving independent living for those with long-term conditions) or addressing diseases where there is no large market (such as rare diseases or infection control).

If the traditional “property rights” approach to product development is to be abandoned, new models of collaboration may be required – for example, involving international research collaboration or public/private partnerships. It will be important to align HTA processes with policy objectives for future technological developments.

## Priority areas for medical products, vaccines and technologies

Priorities for health system strengthening include:

- ensuring that HTA is embedded in the system;
- pricing and procurement of medical technologies;
- stimulating the market for appropriate technological innovations ;
- exploring the scope for public/private partnerships and other R&D innovations.

## 3.5 Financing

Flows of finance in the health system create the means necessary for service delivery and incentives for all actors within the system. The fundamental flows in any system are:

- collecting and pooling revenues from individuals, corporations, international donors and other payers in the form of taxes or insurance premiums;
- distributing pooled funds to purchasing agents such as social insurers, local governments or local health authorities;
- provider payment from those purchasing agents (often referred to as strategic purchasers) to service providers;
- out-of-pocket payments made directly by users and other individuals for products and services, sometimes in the form of “informal” payments.

The magnitude and nature of these four fundamental flows vary greatly between systems, but they exist everywhere.

The sources of public finance are rather limited in most countries, taking the form of general taxation or insurance payments by employees and employers. The role



of public health (or “sin”) taxes in broadening the sources of finance has been debated, although these are mainly ways of making palatable an increase in general taxation (allegedly earmarked taxes can, in practice, rarely be assigned to particular government functions). The key issue for policy-makers interested in promoting universal health coverage is to ensure that contributions to health system finance – in whatever form – are unrelated to an individual’s health care needs, and that the sources are stable and robust to future economic circumstances.

Once collected at an aggregate level, funds must be distributed to strategic purchasers, such as local health authorities or insurers. A central concern at this stage is usually to secure some sort of risk equalization that compensates those purchasers for variations in the health care needs of their populations, in order that a standard package of benefits can be delivered. This is technically a challenging undertaking, but is especially important to prevent market failure in systems of competitive health insurance markets.

Payment of providers is possibly the area of health financing policy offering the most promise for policy improvement. Although most countries have abandoned crude “fee for service” reimbursement, many continue to rely on case payment mechanisms, often based on some system of diagnosis-related groups (DRGs) (13). Such systems encourage cost reductions within each DRG, but – unless designed carefully – can stimulate inappropriate provision of treatment, especially in a hospital setting. Traditional case payment systems are especially inappropriate for chronic disease management. Many health systems are therefore seeking out more appropriate provider payment mechanisms, such as annual capitation payments and other “bundled” payments, which seek to incentivize improvements in health status and reductions in avoidable service utilization. These innovations must, of course, be accompanied by adequate monitoring of performance in order to assure accountability of the providers to patients and payers.

More ambitiously, interest is growing in pay-for-performance schemes, under which providers receive increased payment when certain quality criteria are satisfied. The results from such schemes have hitherto been modest, although they do appear to be a good means of making the strategic purchasing function more focused and providers more accountable (14).

Out-of-pocket payments play two roles: they raise finance for the health system and manage demand for services. They are generally highly regressive and compromise efforts to secure universal coverage and access. Nevertheless, they are the main source of revenue in many low-income countries, and many higher-income countries use them in some areas, particularly for pharmaceuticals and in ambulatory settings. User charges can be used to signal “preferred” behaviour – for example, deterring patients from seeking treatment beyond the publicly funded package or from using a provider who is not authorized by the payer.

A market in voluntary (private) health insurance may arise when user charges are significant, when the quality of publicly funded services is low, when the statutory package of care is limited or when some people are not eligible for publicly financed care (15). From a health coverage perspective, such markets disadvantage poorer or sicker people if the premiums are set actuarially on the basis of expected expenditure. Also, if people hold voluntary health insurance then the direct incentive effects of user charges may be lost.

## Priority areas for financing

Priorities for health system strengthening include:

- secure, stable sources of revenue for health services;
- an appropriate role for user charges;
- appropriate “bundling” of provider payments;
- the role of pay-for-performance schemes.

## 3.6 Leadership and governance

Even the best designed health system cannot function without good leadership and governance. Health systems therefore need the capacity to ensure that the institutions of the health system operate as intended. Governance can refer to a huge range of issues relating to health system design, regulation and strategic purchasing. An insight into the governance requirements of a complex health system is provided by the experience in the Netherlands, where the large number of “preconditions” indicates the governance requirements of the chosen system of “managed competition” (16). Less developed health systems, with more limited leadership and governance capacity, may find it necessary to adopt simpler approaches to regulation and purchasing of health services and health promotion.

The numerous approaches to the institutional design of the health system include choices relating to insurance mechanisms; the functions of health promotion and primary care; the markets in which health services operate; the role of private, governmental and not-for-profit sectors; and the mechanisms whereby actors are held to account. Work by the Organisation for Economic Co-operation and Development (OECD) suggests that there is no clearly “best” approach to system design and regulation (17). Rather, it seems that the more important issue is the effective operation of the chosen institutions and mechanisms.

Regulation is needed at all levels of the system to correct market failures and ensure that the system is functioning as intended. Important regulatory functions include quality assurance of providers, training and quality assurance of the workforce, distribution of funds to strategic purchasers, HTA, strategic purchasing, financial

audit, competition oversight and market regulation, setting prices for health services, pharmaceutical approval and pricing and the oversight of clinical research. Failures in any of these sectors can have seriously adverse consequences for patients and payers.

Governance mechanisms include the accountability arrangements under which actors' performance is scrutinized and they are held to account. These may take the form of “command and control” governmental performance management, market mechanisms for patient choice, professional oversight and regulation or democratic voting processes. Each of these relies on high-quality information, and none on its own is likely to be adequate to secure good performance (10).

Leadership is an important requirement for enhanced managerial capacity at every level in the health system, including the management of clinical teams. High-quality management is required in the health sector, particularly if it is to innovate and develop imaginative solutions to the challenges of health service delivery. The ability to innovate often entails giving managers increased levels of autonomy; this can only be done securely if those managers have the necessary leadership capacity.

Research into leadership and governance in the health sector is at an early stage and the need to clarify concepts and frameworks before more substantive analysis can proceed is clear (18). The objective should be to get a better understanding of what governance arrangements are needed, how they can best function and the leadership capacity needed to steer the system at all levels (system-wide, purchasing, organizational and clinical). Note that governance in some ways is an overarching concept that relates to all building blocks of the health system, as weaknesses in governance can occur in any of the other building blocks (for example, a failure in workforce regulation).

## Priority areas for leadership and governance

Priorities for health system strengthening include:

- appropriate types and levels of regulation;
- better strategic purchasing of health services;
- creation of leadership capacity at all levels;
- better specification and dissemination of objectives and performance metrics.

## 4. Minimizing inefficiency

Inefficiency, in many forms, is found in all health systems: it can be considered an unwanted output of the health system. It arises from the health system either undertaking the “wrong” activities (allocative inefficiency) or undertaking activities ineffectively (technical inefficiency). Perhaps the easiest way of characterizing inefficiency is to consider it as wasted resources. Of course, such waste ultimately has deleterious effect on patients – either directly, by offering some of them suboptimal care, or indirectly, by denying treatment to some patients because of waste somewhere else in the system.

Berwick and Hackbarth (19) estimate that about a third of health care expenditure in the United States of America is wasted. They characterize types of waste as:

- failures of care delivery;
- failures of care coordination;
- overtreatment;
- administrative complexity;
- pricing failures;
- fraud.

These illustrate the ways in which health system finance can be misused or used ineffectively.

The two broad approaches to characterizing health system inefficiency can be termed the “macro” and “micro” perspectives. The macro perspective examines the performance of the health system as a whole in producing desired outputs (specifically health improvement), given the resources consumed by the system and uncontrollable contextual influences on attainment. Inefficiency is the extent to which the outputs fall short of what such a health system could produce in principle. This perspective is useful for examining whether the health system is well designed and functioning as intended. It is less useful, however, for pinpointing the sources of any inefficiency. For that, more micro indicators of performance are needed, such as those related to avoidable admissions to hospital, length of hospital stays and the incidence of medical errors. These too can be seriously misleading if not viewed in a broader context – for example, it is perfectly feasible to have a highly efficient hospital sector operating within a highly inefficient health system, if much of the work undertaken by hospitals could be undertaken more effectively and at lower cost in a preventive or primary care setting.

Attention to each of the building blocks of the health system can help to address inefficiency. A first requirement is to develop the micro measures of inefficiency that can identify where inefficiencies are occurring. Cylus and Smith (20) examine

a typical disease pathway and note that such metrics can cover all or part of the pathway, including:

- failing to target preventive measures effectively;
- failures in disease management and coordination;
- avoidable use of hospital and other expensive resources;
- overuse of hospital resources during hospital stays;
- poor hospital discharge and rehabilitation services;
- failure to prevent patients entering long-term nursing care.

Any of Berwick and Hackbarth's types of waste can give rise to these forms of inefficiency.

Health system design can increase the risk of certain types of inefficiency occurring. For example, the absence of a primary health care infrastructure makes it more likely that weaknesses in care coordination will arise. Certain types of payment mechanisms can incentivize unnecessary hospital use. Lack of comparative information may inhibit the search for improved efficiency among providers.

Many sources of inefficiency arise whatever the system design, however. The requirement in such circumstances is to ensure that the necessary information and appropriate forms of governance are put in place to root out inefficiency. In particular, the role of strategic purchasing should be given adequate prominence and the capacity to fulfil its obligations to the payers.

### Priority areas for minimizing inefficiency

Priorities for health system strengthening include:

- better efficiency metrics at all levels of the system;
- understanding of key determinants of waste and inefficiency;
- creation of a system of governance that promotes efficiency;
- improvement of the strategic purchasing function.

## 5. The health system in context

When considering the health system, it is essential to consider the social and economic context within which it operates. The most immediate context is created by the population served. Population characteristics with particularly important bearings on the health system include:

- demographic and epidemiological trends;
- the culture and preferences of individuals and the population;
- health-related behaviour;
- the level and distribution of income;
- broader social determinants of health, such as education.

A fundamental question to be addressed by decision-makers in all health systems is the impact on needs and expenditure of an ageing population. It can be argued that longer life expectancy imposes no additional costs on a health system: most expenditure is concentrated close to death, so longer life expectancy simply serves to defer costs. On the other hand, if older citizens survive longer than previously but in relatively poorer health with multiple morbidities, the consequences for health system expenditure could be seriously adverse.

For this reason, many observers focus on behavioural change as being the key to future good health and reduced health care expenditure. In particular, arresting the rise of obesity and the associated chronic diseases has been shown to have dramatic implications for future health-related quality of life and service expenditure.

A concern for all health systems, associated with demography, economic development and national income, is the future trajectory of the revenue base for the health system. Questions about the “sustainability” of the existing health system relate ultimately to whether the package of benefits currently offered (and projected to the future) can continue to be financed from the existing revenue base. If not, the system is – in an actuarial sense – unsustainable and new sources of revenue must be found, some limits to the package must be imposed or some transformation in health system productivity must be introduced.

Another important context for the health system is created by the technological innovations relevant to the delivery of health services. As well as the medical devices and technologies referred to earlier, examples may include innovations in information technology that make new methods of service delivery feasible and cost-effective. The challenge for the health system is that while improving effectiveness (and possibly reducing costs) for existing patients, new technologies can also expand the patient base by making treatment feasible for patients who would hitherto have received none. While this may lead to improved outcomes for all patients treated,

it may also be one of the most important reasons for increases in health system expenditure.

It is important that the health system does not adopt a passive approach towards its environment. Most obviously, through its public health responsibilities it can directly or indirectly exert an important influence on future health status, health care needs and health system expenditure. Direct influences are represented by the traditional functions of public health, including disease prevention and health promotion. Indirect influences include numerous actions to ameliorate the adverse social determinants of health. These include advocacy to ensure that health-related issues are given full consideration in areas including legislation (such as smoking bans), taxation (such as sugar taxes) and governmental budgetary processes.

### Priority areas for the system context

Priorities for health system strengthening include:

- health-related issues given full consideration in all areas of government;
- health-related behaviour;
- coordination with other sectors of the economy;
- assurance of continued popular support for the social health model.

## 6. Alignment

A core element of “systems thinking” is that the individual components of the system are connected; thus, changes to one component can have important knock-on effects on others. This interconnectedness is a fundamental reason for thinking of the health system as a whole, examining the ramifications of any changes across the entire system and seeking to align all the components so that they function efficiently to promote the overall objectives of the system. Without such alignment, there is a serious risk of what management scientists have called “suboptimization”: the individual components of the system seek to maximize their own objectives but do not necessarily promote the objectives of the system as a whole (21).

Examples in the health sector might include:

- hospitals maximizing their surplus by encouraging low-cost patients (relative to the fee they receive) and discouraging complex cases, even if the potential health gains are greater for the latter group;
- primary care organizations sending patients for treatment in hospitals, even though treatment may be more effective and less costly in the community setting;
- competing insurers failing to promote healthy behaviour and disease prevention because the annual mobility of insurees gives insurers little incentive to take a longer-term perspective.

Such examples arise because the relevant institutions face incentives that are misaligned with the overall objectives of the system. Usually this is because the costs of treatment are incurred by the organization, while the associated health benefits are not properly recognized as signals of their performance. Another frequent reason for suboptimization is that organizations or individuals are held to account using faulty or incomplete performance metrics.

The key requirement for overcoming suboptimization is to ensure that all entities are working towards the same objectives, and that all the elements of the health system are aligned in pursuit of those objectives. Examples of potential reforms to each of the six building blocks discussed above include the following.

- Service delivery – where necessary, the traditional “silos” of care delivery are broken down to allow better coordination of care across all sectors.
- Health workforce – regulation of the workforce promotes (rather than impedes) necessary changes in roles and responsibilities, such as between doctors and nurses.
- Information – reported performance of organizations reflects their overall contribution to the health system, in line with its stated objectives.



- Medical products, vaccines and technologies – HTA encourages innovations that promote the objectives of the health system.
- Financing – provider reimbursement incentivizes attention to the overall health care needs of the individual rather than to isolated episodes of care.
- Leadership and governance – regulation allows the autonomy necessary to encourage innovation and checks on success using performance metrics that are faithful to all the system’s objectives.

## 7. Constraints

This note has mainly focused on weaknesses in health systems and how they might be addressed. Numerous constraints may apply to a health system, however, that impede optimization of the whole system or even transition towards improvement.

- All systems comprise an existing configuration of preventive, primary, secondary and tertiary care service delivery that – at least in the short term – is often costly or impossible to reform.
- Training of clinical professionals (especially doctors) is costly, and the existing mix of skills is only partially amenable to short-term reform.
- Information systems are often limited in scope and timeliness, and efforts to improve can be costly, long-term and vulnerable to failure.
- Strategic purchasing arrangements, whether by central or local government or social health insurance funds, are largely fixed, at least for the medium term.
- Provider reimbursement mechanisms are often severely constrained by a country's institutional arrangements.
- Many countries have limited leadership capacity to undertake proper scrutiny and control of the use made of public funds.

Furthermore, a rich political economy always affects the health system, comprising powerful interests such as patient groups, geographical regions, the medical professions and technological industries. This can often severely circumscribe policy-makers' freedom of action.

The challenge for policy-makers is whether to accept such constraints and work within them, or to seek reform. Most reform will be costly and disruptive in the short term, perhaps requiring dual running while old systems are replaced, diverting attention from immediate delivery of services, and with a serious risk of failure. Whether, when and how to reform are therefore often fine judgements. A great deal of health system strengthening activity can nevertheless be characterized as seeking to relax constraints and rigidities in the health system.

Mills and colleagues (22) discuss health system strengthening in low- and middle-income countries in relation to the identification and overcoming of constraints. They consider constraints that may inhibit access to necessary services at a number of levels, which include the individual; health services; health policy; broader public policy; and the environmental and contextual factors. This hierarchy highlights the frequent need to take action simultaneously at a number of levels.

As well as determining a course of action (whether system strengthening or system reform) policy-makers must also consider the pathway for effecting the transition to the new system. This often requires reconciliation with key stakeholder interests

and may require short-term expenditure of political and financial capital. Very little evidence is available to guide policy-makers about the processes of reform and methods for making a transition. De Savigny and Adam (23) suggest ten stages for a strengthening process in the context of low-income countries:

- I. intervention design:
  1. convene stakeholders;
  2. collectively brainstorm;
  3. conceptualize effects;
  4. adapt and redesign;
  
- II. evaluation design:
  5. determine indicators;
  6. choose methods;
  7. select design;
  8. develop plan;
  9. set budget;
  10. source funding.

Such checklists are important reminders of the types of process that any successful health system strengthening is likely to require.

Constraints to improvement can be found everywhere, but it is challenging to develop a generic categorization of constraints that can serve as a basis for transferring experience and advising governments. Perhaps the most fruitful way forward is to assemble case studies of how specific health systems have overcome serious constraints to reform.

## 8. Concluding comments

The discussion above highlighted a large number of weaknesses in health systems that appear to satisfy the following criteria for requiring careful attention:

- the associated policy choices are likely to have a profound impact on the attainment of health system objectives;
- the associated policy choices will have an impact across the health system as a whole;
- considerable doubt remains about how to advise policy-makers on the topic;
- there appears to be scope in the area for improved evidence and policy recommendations.

These priority areas are summarized in Table 1.

In addition, the final two sections discussed the important overarching policy challenges of securing alignment of policies and the constraints to policy implementation. Alignment is a “meta” policy concern that few health systems (with the possible exception of the Netherlands) have sought explicitly to address. Constraints are often context-specific, so collecting case studies may be the most useful approach to understanding their importance and how they may be overcome.

The paper has sought to identify the key constraints and challenges health systems are likely to face in the next 5–10 years, and the priority areas for health system strengthening. The nature and importance of the issues discussed will vary between systems. It is likely, however, that all systems will benefit from reviewing the performance of health system functions. To address shortcomings it will be important not only to improve the functioning of the individual building blocks but also to ensure that they are considered as a system – aligned with each other and addressing a common set of goals.

Table 1. Summary of priority areas

| Service delivery   | Health workforce   | Information   | Medical products, vaccines and technologies                                   | Financing   | Leadership and governance  | Minimizing inefficiency                                     | The health system in context  |
|--|--|---|---|---|--|---|---|
| Optimal configuration of health systems – hospitals and community services | Assurance of necessary labour supply across all disciplines and specialities | Electronic health records as a resource for care coordination       | Ensuring that HTA is embedded in the system                                   | Secure, stable sources of revenue for health services | Appropriate types and levels of regulation                                   | Better efficiency metrics at all levels of the system       | Health-related issues given full consideration in all areas of government |
| Role of primary care   | Reassessment of professional roles and promotion of flexibility              | Improved treatment guidelines                                       | Pricing and procurement of medical technologies                               | An appropriate role for user charges                  | Better strategic purchasing of health services                               | Understanding of key determinants of waste and inefficiency | Health-related behaviour  |
| Degree of concentration of specialist services                             | Coordination of international migration and quality assurance                | Performance assessments of practitioners, organizations and systems | Stimulating the market for appropriate technological innovations              | Appropriate “bundling” of provider payments           | Creation of leadership capacity at all levels                                | Creation of a system of governance that promotes efficiency | Coordination with other sectors of the economy                            |
| Coordination of chronic disease care                                       | Human resources in remote and disadvantaged geographical areas               | National and international standardization and data comparison      | Exploring the scope for public/private partnerships and other R&D innovations | Role of pay-for-performance schemes                   | Better specification and dissemination of objectives and performance metrics | Improvement of the strategic purchasing function            | Assurance of continued popular support for the social health model        |
| Reconciliation of service personalization with cost containment            | Research evidence on securing the most from the workforce                    |   |   |   |  |   |   |
| Research evidence on economies of scale and scope                          |  |   |   |   |  |   |   |

## References

1. World health report 2000 – Health systems: improving performance. Geneva: World Health Organization; 2000 (<http://www.who.int/whr/2000/en/>, accessed 22 July 2015).
2. The Tallinn Charter: Health Systems for Health and Wealth. Copenhagen: WHO Regional Office for Europe; 2008 (<http://www.euro.who.int/en/health-topics/Health-systems/health-technologies/publications2/2008/tallinn-charter-health-systems-for-health-and-wealth-2008>, accessed 22 July 2015).
3. Everybody's business: strengthening health systems to improve health outcomes – WHO's framework for action. Geneva: World Health Organization; 2007 (<http://www.who.int/healthsystems/strategy/en/>, accessed 22 July 2015).
4. van Olmen J, Criel B, Van Damme W, Marchal B, Van Belle S, Van Dormael M et al. Analysing health system dynamics: a framework. Antwerp: ITG Press; 2012 (Studies in Health Services Organization & Policy, No. 28, 2nd edition; <http://dspace.itg.be/handle/10390/6945>, accessed 22 July 2015).
5. Porter M, Mountford J, Ramdas K. Reconfiguring stroke care in north central London. Cambridge, MA: Harvard Business School; 2011.
6. Health 2020: a European policy framework supporting action across government and society for health and well-being. Copenhagen: WHO Regional Office for Europe; 2013 (<http://www.euro.who.int/en/publications/abstracts/health-2020-a-european-policy-framework-supporting-action-across-government-and-society-for-health-and-well-being>, accessed 22 July 2015).
7. van Ginneken E, Groenewegen PP, McKee M. Personal healthcare budgets: what can England learn from the Netherlands? *BMJ*. 2012;344:e1383. doi: 10.1136/bmj.e1383.
8. Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington, DC: National Academies Press; 2001.
9. DuBois C, Nolte E, McKee M, editors. Human resources for health in Europe. Maidenhead: Open University Press; 2006 (<http://www.euro.who.int/en/health-topics/Health-systems/health-workforce/publications2/2006/human-resources-for-health-in-europe>, accessed 28 July 2015).

10. Smith PC, Anell A, Busse R, Crivelli L, Healy J, Lindahl AK et al. Leadership and governance in seven developed health systems. *Health Policy*. 2012;106(1):37–49.
11. Electronic health record. In: e-Estonia [website]. Tallinn: e-Estonia; 2015 (<https://e-estonia.com/component/electronic-health-record/>, accessed 28 July 2015).
12. Garrido MV, Kristensen FB, Nielsen CP, Busse R, editors. Health technology assessment and health policy-making in Europe: current status, challenges and potential. Copenhagen: WHO Regional Office for Europe; 2008 (<http://www.euro.who.int/en/health-topics/Health-systems/health-technologies/publications2/2008/health-technology-assessment-and-health-policy-making-in-europe.-current-status,-challenges-and-potential>, accessed 28 July 2015).
13. Busse R, Geissler A, Quentin W, Wiley M, editors. Diagnosis-related groups in Europe. Maidenhead: Open University Press; 2011 (<http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/diagnosis-related-groups-in-europe>, accessed 28 July 2015).
14. Cashin C, Chi Y-L, Smith P, Borowitz M, Thomson S, editors. Paying for performance in healthcare: implications for health system performance and accountability. Maidenhead: Open University Press; 2014 (<http://www.euro.who.int/en/publications/abstracts/paying-for-performance-in-health-care.-implications-for-health-system-performance-and-accountability>, accessed 22 July 2015).
15. Thomson S. What role for voluntary health insurance? In: Kutzin J, Cashin C, Jakab M, editors. Implementing health financing reform: lessons from countries in transition. Copenhagen: WHO Regional Office for Europe; 2010 (<http://www.euro.who.int/en/publications/abstracts/implementing-health-financing-reform-lessons-from-countries-in-transition>, accessed 22 July 2015).
16. van de Ven WPMM, Beck K, Buchner F, Schokkaert E, Schut FT, Shmueli A et al. Preconditions for efficiency and affordability in competitive healthcare markets: Are they fulfilled in Belgium, Germany, Israel, the Netherlands and Switzerland? *Health Policy*. 2012;109(3):226–45.
17. Joumard I, André C, Nicq C, Chatal O. Health status determinants: lifestyle, environment, health care resources and efficiency. Paris: OECD Publishing; 2008 (OECD Economics Department Working Papers, No. 627; [http://www.oecd-ilibrary.org/economics/health-status-determinants\\_240858500130](http://www.oecd-ilibrary.org/economics/health-status-determinants_240858500130), accessed 22 July 2015).

18. Barbazza E, Tello JE. A review of health governance: definitions, dimensions and tools to govern. *Health Policy*. 2014;116(1):1–11.
19. Berwick DM, Hackbarth AD. Eliminating waste in US health care. *JAMA*. 2012;307(14):1513–16.
20. Cylus J, Smith P. Measuring efficiency. In: Papanicolas I, Smith P, editors. *Health system performance comparison: an agenda for policy, information and research*. Maidenhead: Open University Press; 2013.
21. Ackoff RL. Towards a system of systems concepts. *Management Science*. 1971;17(11): 661–71.
22. Mills A, Rasheed F, Tollman S. Strengthening health systems. In: Jamison DT, editor. *Disease control priorities in developing countries (2nd edition)*. Washington, DC: International Bank for Reconstruction and Development/ World Bank; 2006.
23. de Savigny D, Adam T, editors. *Systems thinking for health systems strengthening*. Geneva: World Health Organization; 2009 (<http://www.who.int/alliance-hpsr/resources/9789241563895/en/>, accessed 22 July 2015).









## **The WHO Regional Office for Europe**

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

### **Member States**

Albania  
Andorra  
Armenia  
Austria  
Azerbaijan  
Belarus  
Belgium  
Bosnia and Herzegovina  
Bulgaria  
Croatia  
Cyprus  
Czech Republic  
Denmark  
Estonia  
Finland  
France  
Georgia  
Germany  
Greece  
Hungary  
Iceland  
Ireland  
Israel  
Italy  
Kazakhstan  
Kyrgyzstan  
Latvia  
Lithuania  
Luxembourg  
Malta  
Monaco  
Montenegro  
Netherlands  
Norway  
Poland  
Portugal  
Republic of Moldova  
Romania  
Russian Federation  
San Marino  
Serbia  
Slovakia  
Slovenia  
Spain  
Sweden  
Switzerland  
Tajikistan  
The former Yugoslav  
  Republic of Macedonia  
Turkey  
Turkmenistan  
Ukraine  
United Kingdom  
Uzbekistan

## **World Health Organization Regional Office for Europe**

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark  
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01  
Email: [contact@euro.who.int](mailto:contact@euro.who.int)  
Website: [www.euro.who.int](http://www.euro.who.int)