IMPROVING HEALTH SYSTEM EFFICIENCY

Reforms for improving the efficiency of health systems: lessons from 10 country cases

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1 INTRODUCTION

Universal health coverage ensures affordable access to high-quality health services for all; this will inevitably require governments to find additional budgetary resources and therefore to increase the fiscal space for health. While there are a number of ways of increasing health sector resources, such as mobilizing additional domestic resources when the macroeconomic conditions are conducive, increasing the priority of health in the public budget or relying on donor aid, recent attention has been directed to increasing the efficiency of the use of health resources. This is due partly to the fact that countries are increasingly obliged to contain growth in health spending as a result of rapidly ageing populations, growing burdens of noncommunicable disease and co-morbid conditions, technological progress and rising population expectations (*1*). In addition, fiscal crises in advanced economies and overextended governments in low- and middle-income economies make efficiency in health care delivery a pressing concern globally.

As highlighted in the 2010 *World health report*, efficiency is critical to sustainability: progress towards universal health coverage will require not just more money for health but more value for money. It was estimated in the 2010 *Report* that 20–40% of all resources spent on health are wasted. The *Report* identified 10 main sources of inefficiency in health care systems. For example, huge inefficiency is seen in the use of medicines, with under-use of generic medicines in favour of higher-margin, profit-making drugs, inappropriate and ineffective prescriptions and substandard or counterfeit products. An inadequate, costly mix of health workers, infrastructure and health services that fail to meet population needs are other sources of inefficiency. The dearth of alternative long-term care facilities can result in long hospital stays and maintains expensive hospital-based delivery. Limited transparency, accountability and appropriate compensation schemes lead to waste, corruption and other health system leakages (*2*). These are, however, merely categories, with no standard measures of causes, and the solutions are highly context-specific. Health systems are inefficient to varying degrees, and countries can and do undertake reforms to address the issues. Their experiences have not, however, been well documented.

As a follow-up to the 2010 *World health report*, WHO commissioned 11 country case studies in 2013, to review national attempts to improve efficiency with the use of various health system and financing reforms. The WHO regional offices were consulted to identify relevant country reform experiences, and this report is based on the resulting 10 country case studies, in Africa (Burundi, Democratic Republic of the Congo, Ethiopia and South Africa), Asia (China and the Republic of Korea) and Latin America (Chile, El Salvador, Mexico and Uruguay). The studies covered topics including reform of provider payment, organization of social health insurance, selection of health benefits, drug regulation and pricing and the training and skill mix of health workers. The goal of this report was to describe the efforts made in these countries to address various problems of efficiency in their health systems, synthesize the lessons learnt and provide promising directions for policy and future research.

Section 2 of the report describes the concept and definition of efficiency and outlines the framework used for analysing efficiency in the context of a health system. Section 3 summarizes the forms of inefficiency and the policy interventions described in each of the 10 country cases. Section 4 is a synthesis of the lessons learnt, and section 5 lists areas for future research.

2 DEFINITIONS, CONCEPTS AND FRAMEWORK

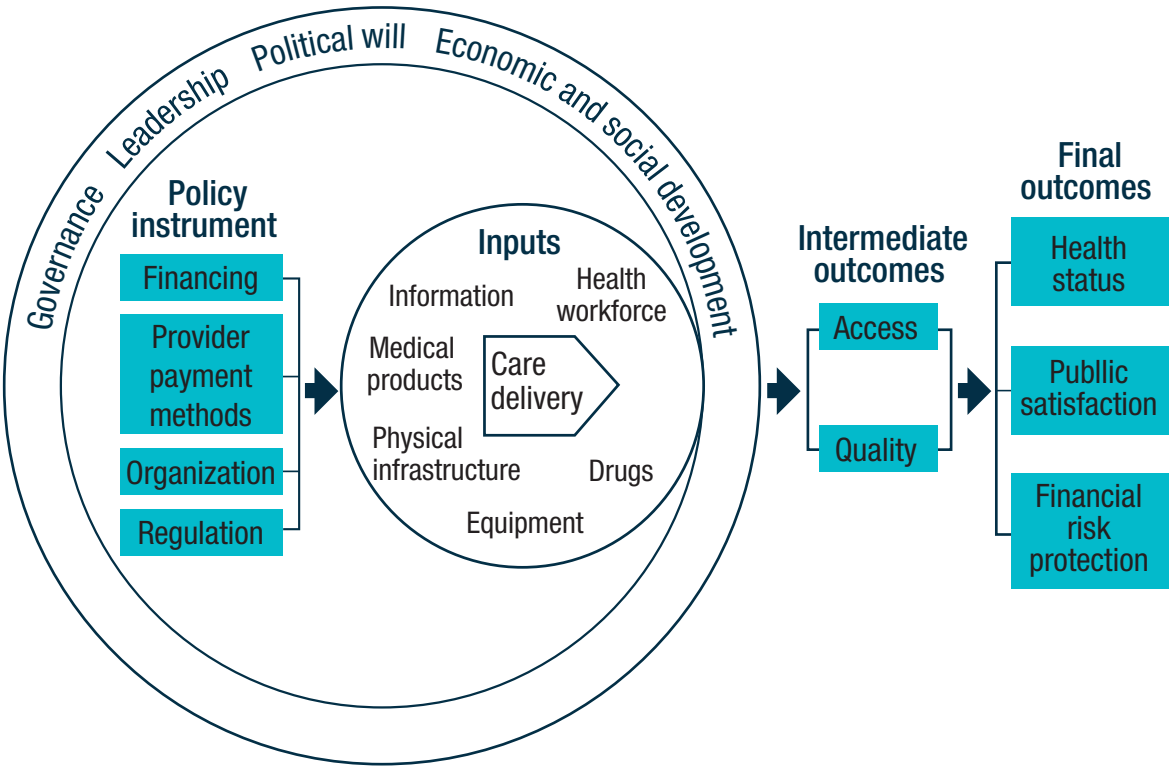
The two concepts of efficiency commonly used in economics are: allocative efficiency and technical efficiency. Allocative efficiency is allocating resources in such a way as to provide the optimal mix of goods and services to maximize the benefits to society; technical efficiency is using the least amount of resources or the right combination of inputs to produce a given mix of goods and services. In other words, allocative efficiency is motivated by "doing the right thing", while technical efficiency focuses on "doing things the right way". It should be noted that allocative efficiency is different from equity; no other allocation of resources can make at least one individual better off without making another individual worse off; an allocatively efficient situation may therefore be inequitable. Similarly, moving from an inequitable to an equitable distribution of resources can be suboptimal from the perspective of allocative efficiency.

In this report, we adapt these concepts to a health systems framework. In this framework, inputs, including funding, human resources, physical infrastructure, drugs, medical equipment and information, are all used to produce health goods and services. This ultimately leads to the outcomes, or benefits to society, which include improved health status, financial risk protection and public satisfaction (Figure 1). In this context, allocative efficiency means that there is no alternative mix of health goods and services that could increase the health system's final outcomes over the status quo; technical efficiency means that there is no alternative use of inputs or input mix that could produce the same level of goods and services at a lower cost. For instance, if a nation could improve its health outcomes by reallocating resources from hospital care to primary care, that nation has not yet maximized allocative efficiency. If a nation could shift tasks among the workforce and matches skills with needs to produce the same level of outpatient visits and hospital admissions while spending less, that nation has not yet achieved technical efficiency.

On the left of Figure 1 is a set of policy instruments: financing, provider payment methods, organization and regulation. Together, they affect how resources are allocated to different goods and services and how inputs are used to produce a given set of goods and services. These are the tools that policy-makers can use to influence the allocative and technical efficiency of a health system. For the purposes of this paper, we define financing as encompassing decisions on how much resources to mobilize for health care, what risk pooling mechanisms to use, what benefit package to adopt, which populations to target, and what institutional arrangements to use for managing resources. *Financing* is one of the most powerful policy instruments for determining whether a country ensures affordable access to care, especially through benefit package designs and targeting of funding. *Provider payment methods* are the ways in which funders or purchasers remunerate providers. Each payment method has different incentives, motivating provider behaviour in their treatment choices to various degrees. This affects not only quality but also efficiency. *Organization* covers a broad set of policies for managing and coordinating the delivery system: for example, whether services are delivered by the public sector only or by both the public and the private sectors, whether competition is encouraged or whether the delivery of primary, secondary and tertiary care is integrated. *Regulation* involves setting the rules, standards and operating guidelines within which the system is meant to operate. These include approval of medicines, certification and accreditation of hospitals and licensing of the health workforce.

The scope and effectiveness of policy instruments are further influenced by macro factors, such as the socioeconomic development of a country, political will, governance and leadership structures.

Figure 1. A systems framework for analysing the efficiency of health care resource use



In practice, countries use a combination of policy instruments to effect change. The 10 country case studies summarized in section 3 reflect this reality. Burundi, Chile, Ethiopia and Uruguay introduced various financing policies (e.g. free care, insurance and a re-designed benefits package) to improve access to care in priority services (e.g. maternal and child care, primary care). They also introduced policies to ensure that the services were available to meet increased demand: Burundi and Uruguay by pay-for-performance incentives linked to the delivery and quality of a set of priority services, Ethiopia by training additional community health care workers and holding them accountable for delivering a well-defined service package, and Chile by regulation that requires public and private providers to offer the same mandated benefits package. Chile, Mexico and Uruguay proposed predominantly financing reforms, offering essential and standardized benefits packages according to the population's epidemiological profile and the cost of disease in order to maximize health gains and financial risk protection. The Republic of Korea changed the organization of its national health