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**Health financing strategies to support scale-up of core noncommunicable disease interventions and services**

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# 12

## **Health financing strategies**

to support scale-up of core  
noncommunicable disease  
interventions and services

**Melitta Jakab  
Tamas Evetovits  
David McDaid**

# Agenda for action

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**Reasonable levels of public funding** need to be allocated to health-improving activities

1

2

**More explicit criteria should be used** to prioritize the health budget linked to development and health objectives

An outcome-oriented approach is needed **to fund intersectoral actions** and address misalignment of incentives across sectors

3

4

**Incentives should be aligned and optimized** across the service delivery interface to reinforce a service delivery model oriented to population outcomes

## Motivation

Previous chapters have presented ambitious agendas for transforming public health, primary care and specialist services to scale-up core NCD interventions and services. Health financing arrangements (revenue collection, pooling, purchasing and benefit design) are powerful enablers of such transformation, ensuring availability of funding for the right services at the right time, and providing behavioural incentives.

Unfortunately, however, health financing arrangements in many countries not only do not facilitate transformative agendas but may actually hinder them, as shown in Chapter 5. The following issues pose a particular challenge when it comes to scaling up core NCD interventions and services:

- **significant underfunding of health systems** in several European countries, in particular for prevention and health promotion;
- **lack of explicit priority-setting processes**, which undermines governments' ability to allocate resources in line with stated policy objectives and targets, and results in ineffective governance arrangements for holding actors accountable for results;
- **ineffective models to fund population interventions**, including intersectoral action, and limited use of incentives to promote health promotion and preventive activities; and
- **misaligned incentives** throughout the individual service delivery network, which undervalue health promotion and prevention, reinforce specialist and hospital orientation of care provision and episodic rather than continuous care.

In this chapter, we propose four key policy messages for a more effective health financing strategy to address these challenges in a comprehensive and aligned health system response to NCDs. Each message aims to provide specific policy recommendations, while recognizing that at this particular time there may not be clear evidence or consensus in some policy areas. In such cases, we have set out the advantages and disadvantages of the various options for consideration.

We take the view that financing strategies for NCDs cannot be separated from financing strategies for the health system as a whole. The concept of funding NCD interventions per se suggests a vertical, programme-based approach and is at odds with sustainability and systems thinking. Throughout the chapter, we consider overall health system financing strategies that support the scale-up of core NCD interventions and services rather than talking about funding NCD interventions directly in a narrow sense. In more practical terms, this means identifying revenue-raising and pooling arrangements to ensure sufficient health revenues, prioritizing these revenues and considering the implications of how they could be allocated to the organizations and individuals expected to deliver core interventions and services. The approach has to be holistic and the case for investment needs to be strong, whether for NCDs or for other areas. The strategies we propose will therefore be helpful not only for scaling up NCD-specific interventions, but also for improving all health outcomes where service delivery strategies are based on health promotion and prevention through intersectoral action (such as road safety) and on integrated primary care centred service delivery (such as maternal and child health and tuberculosis care).

## Reasonable levels of public funding need to be allocated to health-improving activities



**Key Message**

### Ensuring sufficient fiscal space for health

There is a strong business case for investing in health, and in NCD interventions in particular. Yet insufficient funding remains one of the most frequently noted obstacles to progress. The overall funding envelope for NCDs comes from the budgets of the health sector and other sectors engaged in intersectoral activities that affect – among other social objectives – NCD outcomes. In this chapter, we will focus on the former in key messages 1 and 2, and on the latter in key message 3. If a health system is underfunded in general, NCD interventions will certainly be underfunded. A united effort by all stakeholders in health and welfare is therefore needed to secure sufficient fiscal space for health, with appropriate priorities and effective mechanisms for resource allocation and purchasing, to ensure equity and efficiency.

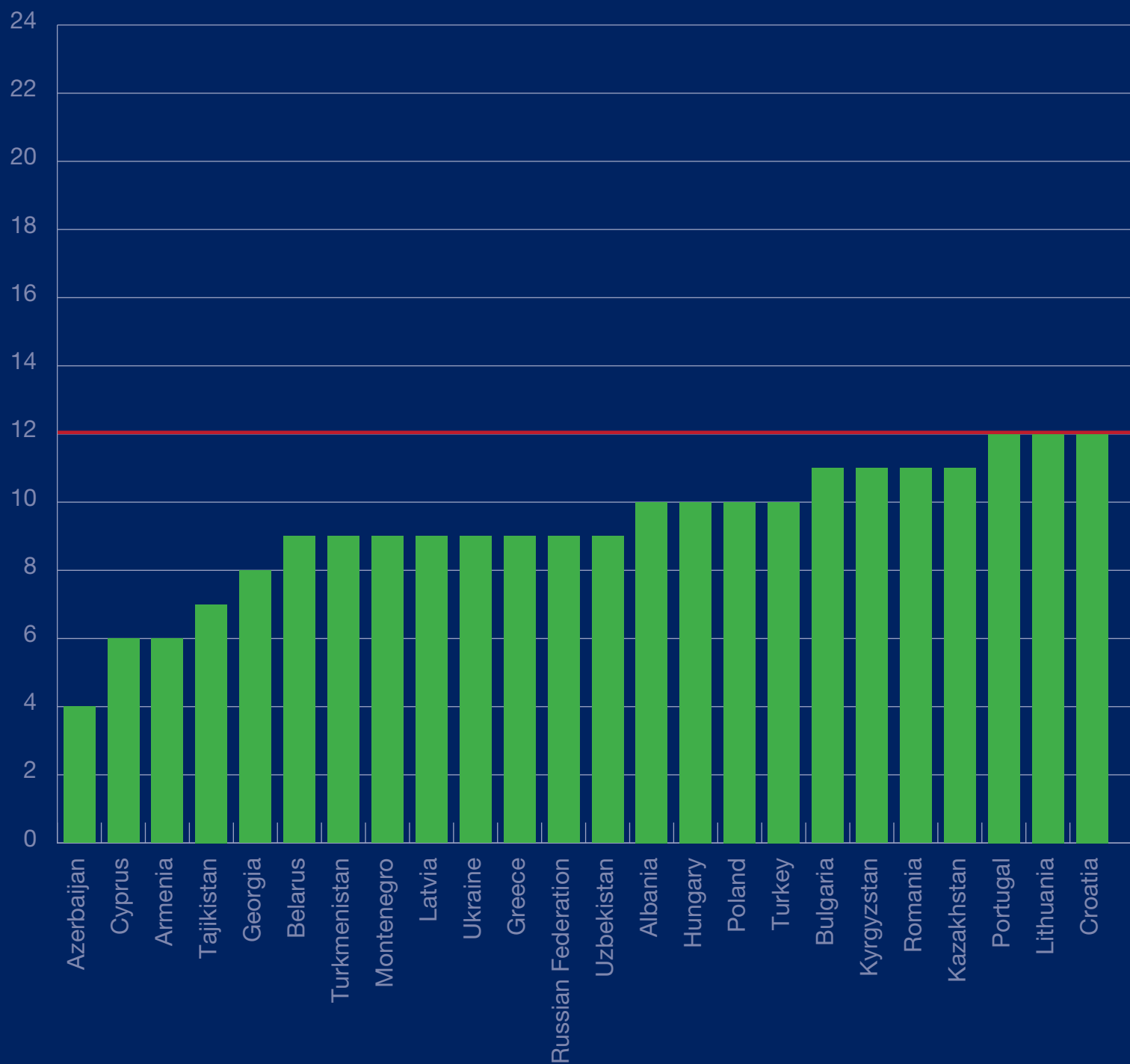
To understand policy options for increasing government spending on health, it is helpful to decompose government spending on health into two factors: overall fiscal space (how much public revenue countries want to and can collect through taxes and other fiscal instruments); and the decision to allocate these funds across sectors and in particular to health. The former will depend on the size of government, the degree of economic development and the strength and transparency of public institutions, and can only grow with long-term economic and institutional development, while the latter is an annual policy decision and therefore more amenable to change in the short run. It is important for health stakeholders to engage in dialogue on both of these factors: to support overall taxation efforts that ultimately benefit the sector on the one hand, and to participate in a fiscal dialogue about resource allocation on the other.

Government spending on health in the WHO European Region ranges from 4% to 22% of overall national budgets, reflecting substantial variation in priorities and commitments (see Figure 12.1). When it comes to considering what proportion of public funding should be allocated to health, there is no universally accepted standard. Furthermore, some aspects of health system responsibility lie outside the health system and health budget (including children's health, long-term care and welfare) and therefore add to the complexity of this matter.

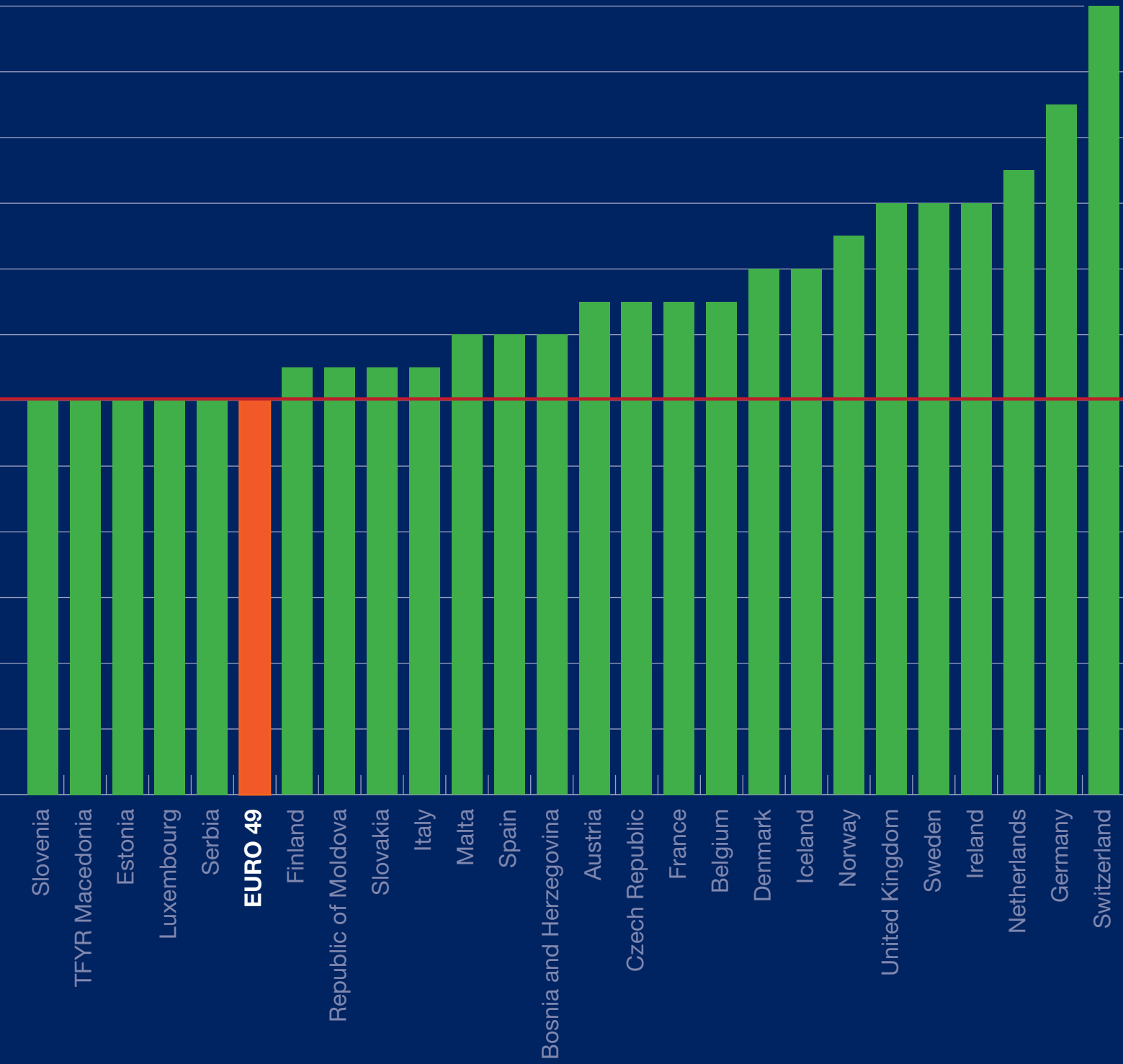
There are, however, guidelines on what constitutes too little. In the WHO European Region, when a government spends less than 12% of its budget on health, more problems are reported regarding access to quality care and weaker financial protection (Thomson et al., 2018, in press). Other signals of underfunding may also be documented, such as informal payments, lack of supplies and medicines, gaps in staffing, service dilution and waiting lists. Since public health and health promotion are more likely to suffer from disproportionately low funding when fiscal space is tight (see Chapter 7), significant underfunding will ultimately impact on the health of the population (Bokhari, 2007; Moreno-Serra & Smith, 2015).

Over the past decade, the priority given to health in national budgets has increased slightly in high-income countries in the European Region, and now averages just above 14% (see Figure 12.2). In upper middle-income countries, on the other hand, government spending on health has reduced to an average of 10% of national budgets. These contrasting trends have widened the gap in prioritization of health in government budgeting processes between high- and upper middle-income countries. Despite lower middle-income countries having the most constrained fiscal space, the priority given to health in their national budgets has increased significantly over the past decade.

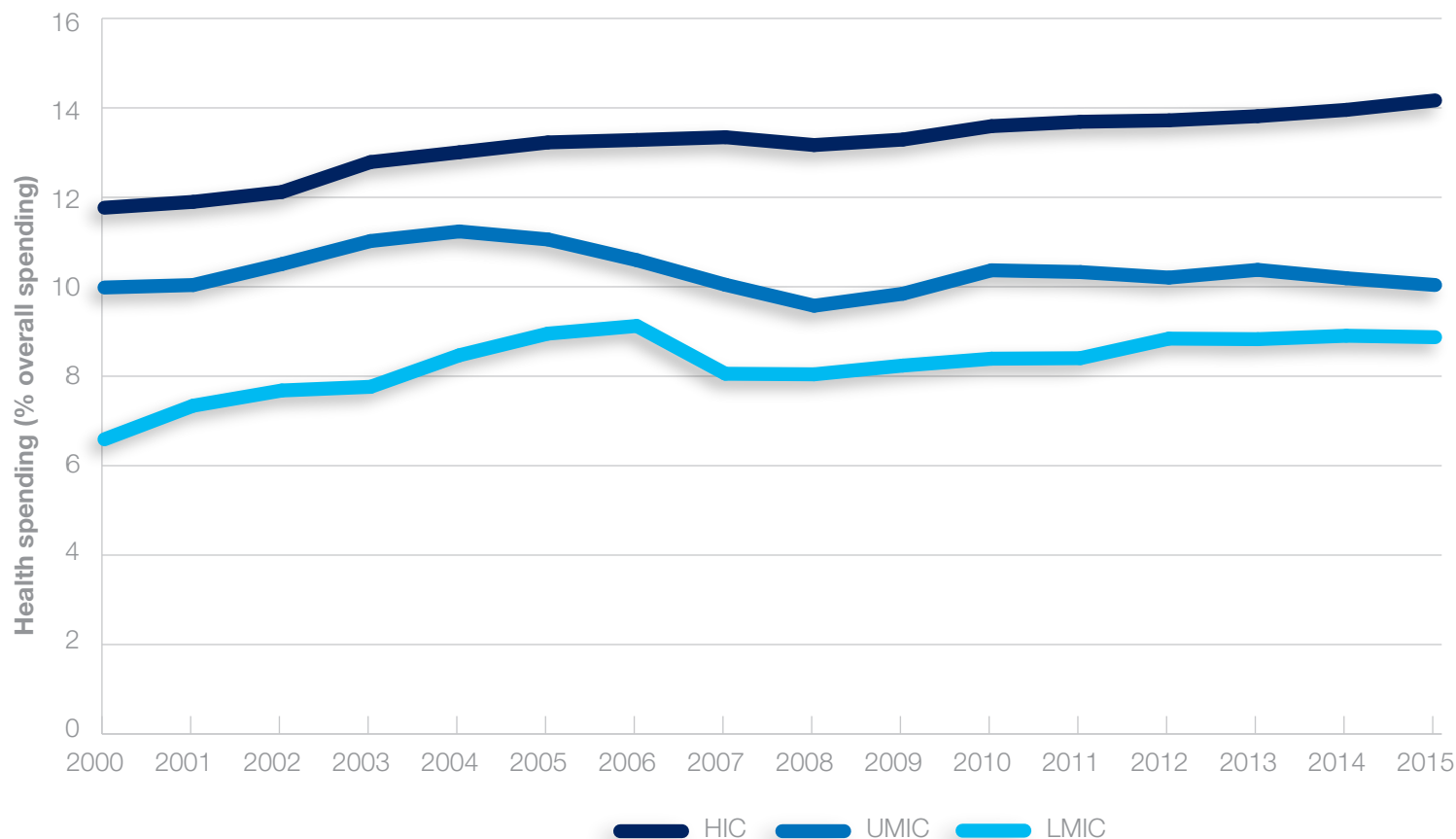
Figure 12.1. General government spending on health as a percentage of overall government spending, 2014



EURO 49: WHO European Region Member States; data for Israel missing and three small countries excluded.  
 Source: WHO Global Health Expenditure Database, 2017.



**Figure 12.2. General government spending on health as a percentage of overall government spending, 2000–2015**



Source: WHO Global Health Expenditure Database, 2017.

Note: HIC = high-income countries, UMIC = upper middle-income countries, LMIC = lower middle-income countries.

Irrespective of the proportion of government funds allocated to health, a comprehensive approach is essential to efficiently translate funding into better health outcomes. The dual strategy of “more money for health and more health for the money available”, which emphasizes efficiency gains, is critically important for addressing NCDs. In many health systems, resource allocation decisions at the subsystem level are implicit. They follow historical patterns and may still be linked to existing structures and staffing, and therefore do not always reflect present needs. In such systems, funding does not translate automatically into core services and interventions. This means that in addition to advocating for reasonable fiscal space for health, a much stronger push must be made to develop more transparent and effective priority-setting processes (key message 2) and resource allocation mechanisms to ensure that the additional funds benefit the interventions and services that can have the greatest impact (key messages 3 and 4).

Beyond these general recommendations, however, individual country context is essential when identifying an appropriate priority-setting strategy. As the four country vignettes in Box 12.1 show, the extent of fiscal space, prioritization of health in government spending, extent of efficiency gains already harnessed, and attainment of outcomes all interrelate in a complex manner. This means that an appropriate balance must be struck between advocating for new funding, and optimizing the use of existing funds. Increasing government funding may not always be at the frontline of that strategy. In some cases, while there may not be any scope for expansion of fiscal space, there may be scope to improve outcomes through efficiency gains (see Kyrgyzstan). Alternatively, health may already be a high priority in the government budget with excellent outcomes, which means that the task for the future would be to sustain those outcomes (as is the case in Spain and Sweden). There are unequivocal cases, however, where obvious efficiency gains have been achieved and any further improve-



## Box 12.1 Context of revenue generation in four countries

### Latvia

The Latvian Government spends less 10% of its resources on health. Latvia's premature mortality rate for NCDs is at the upper end of the range for high-income countries. Low spending translates into gaps in resources for core interventions and services, and in coverage (WHO Regional Office for Europe, 2017a). Coverage of cost-effective medicines in particular is low and contributes to the high financial burden and access barriers that ultimately impact on effectiveness. Latvia has squeezed its system to deliver outcomes through efficiency gains. The good news is that there is fiscal space to increase health spending. With strong priority-setting and purchasing arrangements, the allocation of additional funds will have a significant and swift impact on NCD outcomes and financial protection.

### Kyrgyzstan

In Kyrgyzstan, the priority given to health in government spending increased from below 10% in 2010 to 13% in 2015 (Data based on calculations by the Government of Kyrgyzstan, not the WHO GHED). Increased funding has resulted in improved services for several reasons, including better priority-setting with increased funding for primary care, population- and output-based purchasing mechanisms and enhanced primary care and community outreach (Jakab & Manjjeva, 2008). Although this has translated into improved NCD outcomes, there is room to improve further by scaling up population interventions and individual services (WHO Regional Office for Europe, 2015a). There is, however, consensus that there is no more significant fiscal space to increase allocations for health in the medium term and thus efficiency gains must be at the heart of the health financing strategy. There is evidence of inefficiencies that need to be addressed as the next step in improving system performance.

### Sweden

With one of the lowest premature mortality rates in the WHO European Region, Sweden is universally acknowledged as having a strong health system embedded in a strong welfare state. Sweden's focus on intersectoral approaches and equity-enhancing policies is of great interest to the rest of the Region. Regarding financing, Sweden spends 18% of its State budget on health. This proportion of funding not only translates into excellent health outcomes through strong priority-setting but also enables good and timely quality of care to be provided in a manner that responds to user expectations. The task for the future will be to maintain these outcomes at an affordable cost.

### Spain

Outcomes for premature NCD mortality in Spain are among the best in the European Region. The Government allocates 15% of its overall spending to health. Great attention has been paid to enhancing efficiency, partially necessitated by the financial crisis. Spain increasingly implements population interventions and intersectoral approaches with attention to redressing inequalities. Its strong multidisciplinary primary health care is well known throughout Europe, as is its approach to a streamlined and well regionalized specialist care. The efficiency of the Spanish system is demonstrated by low numbers of avoidable admissions for NCDs such as coronary heart disease, chronic obstructive pulmonary disease and diabetes (OECD, 2017). Maintaining a balanced approach between prioritizing health, focusing on efficiency gains and allocating funding to effective interventions and services have contributed and will continue to contribute good outcomes at reasonable cost.

ment in outcomes will be difficult without additional funding for scaling up interventions and services (such as in Latvia).

## Making a better business case to invest in health

A potentially effective way to increase the priority given to health spending in the government budget would be to invest in capacities to make a better business case for health. In many countries, the health sector has not generally been a strong negotiator in the annual budget process, and investing in capacity to make the business case for health has not been a priority. Against that background, cross-sectoral dialogues between health and finance were often unproductive, did not reflect the pursuit of the common goal of societal welfare, and lacked mutual understanding of perspectives. To move towards a more collaborative and productive approach, with equality of voice and perspectives, ministries of finance need to recognize the economic and social costs of illhealth and the adverse effects of the high financial burden on the population caused by direct payments. Ministries of health need to make a stronger case for investing in health and focus on potential efficiency gains as a source of funds. Demonstrating the economic and social dividends of investing in health and reducing inequalities, showing the benefits of efficiency gains already made, and having a multiyear plan for addressing remaining inefficiencies will enhance the credibility of the health sector among economists and public financing experts in the negotiation process.

The business case for investing in NCD interventions and services is particularly strong, with general agreement on three points: the economic consequences of NCDs are staggering; costs of scaling up core interventions and services are low compared with the costs of their burden; and the returns on scale-up are enormous (World Economic Forum, 2015; WHO & UNDP, 2016). These three points can form the basis of arguments in country-specific business cases. Importantly, significant benefits of investment in health occur beyond the health system, for example a more productive population and fewer sick days taken, which results in greater economic growth better educational attainment, among others (McDaid & Park, 2016; McDaid, Sassi & Merkur, 2015; Devaux & Sassi, 2015; Leal et al., 2006; Luengo Fernandez, Leal & Sullivan 2012). The returns on investment are particularly significant in upper middle-income countries with high premature mortality from cardiovascular disease or a fast growing NCD burden (Schuhrcke et al., 2007; Chisholm et al., 2011).

■ **Globally**, the projected cumulative lost output from NCDs for the period 2011–2025 is US\$ 7 trillion in lower middle-income countries, which equates to roughly 4% of annual GDP. This far outweighs the

estimated US\$ 11.2 billion cost of implementing core NCD interventions and services in those countries (WHO & UNDP, 2016).

- In the **European Union**, NCDs result in the premature death of some 550 000 people of working age every year. This represents a loss of 3.4 million potential productive life years and amounts to a loss of 0.8% of European Union GDP. In addition, the equivalent of 1.7% of European Union GDP is spent on sick leave and disability payments each year (OECD, 2016). This is on top of the direct treatment costs associated with NCDs.
- Although there are no comprehensive estimates for the **eastern part of the WHO European Region**, high rates of premature mortality (which is more pronounced among men) suggest that the labour market impact of NCDs is high and the returns on investment would therefore be even greater. In Belarus, Kyrgyzstan and Turkey, for example, business cases for investing in NCDs have recently been developed, for use in the budgetary process and to inform parliamentarians. All three countries experience a considerable economic burden from NCDs and are therefore likely to see significant returns from scaling up NCD core interventions and services (WHO Regional Office for Europe, 2017b; WHO Regional Office for Europe, 2018 in press; WHO Regional Office for Europe, 2018 forthcoming; see Table 12.1).

To ensure sustainability and long-term impact, these approaches need to be institutionalized in routine budget formation through a mandated process, and credible evidence needs to be presented to policy-makers in a comprehensive and accessible manner. There must also be the political know-how to communicate these messages to an audience not versed in the intricate details of public health and the health system. Investment in that regard is therefore essential to strengthen health system governance. Recognizing the great potential in this area, the Organisation for Economic Co-operation and Development (OECD) explicitly promotes and supports dialogue, and has created the Joint Network of Health and Budget Officials on the Fiscal Sustainability of Health Systems. Annual Network meetings at the global and regional levels bring together health and budget officials to discuss key issues affecting the sustainability of health systems and to exchange perspectives on budgeting processes in OECD member States. The Network has been widely regarded as a successful partnership for overcoming well known sectoral divides. Its success has prompted other organizations to join and create similar networks in other subregions and regions.<sup>20</sup> The WHO Regional Office for Europe

<sup>20</sup> <http://www.oecd.org/gov/budgeting/sbnetworkonhealthexpenditures.htm> (accessed 28 February 2018).

**Table 12.1. Economic costs of NCDs and return on investments in three countries**

	Belarus	Kyrgyzstan	Turkey
Costs	% of GDP	% of GDP	% of GDP
Direct health-care costs of NCDs*	0.27	0.82	1.27
Indirect costs of NCDs (loss from premature death, absenteeism and presenteeism)**	5.13	3.1	2.31
Overall cost of NCDs	5.4	3.9	3.6
<b>Return on investment at 15 years</b>			
Salt reduction	94	12.3	88
Tobacco control	31.1	3.8	5
Alcohol control	12	-	0.6
Physical activity awareness	5.2	3.6	2.3
Cardiovascular diseases and diabetes clinical interventions ***	0.6	0.01	4.3

Source: WHO Regional Office for Europe, 2017b; WHO Regional Office for Europe, 2018 in press; WHO Regional Office for Europe, 2018 forthcoming.

\*NCDs include cardiovascular disease, chronic respiratory diseases, diabetes and cancer, unless otherwise specified.

\*\*In calculating the indirect costs of absenteeism and presenteeism in all three countries, the indirect costs of chronic respiratory diseases and cancer were not included.

\*\*\*Diabetes was not included under the clinical interventions package in Kyrgyzstan.

has joined forces with OECD to increase the number of countries covered in the Network and to support joint subregional meetings.

## Engaging in long-term fiscal dialogue and strengthening the budget process

So far, this chapter has described complex systemic changes to achieve a shift in funding in favour of the health system, which would also have a positive impact on NCDs. From the perspective of wanting to have a greater and faster impact on NCDs, however, these changes are complex, have long horizons and require public funding investments in capacity and institutions. Calls for simpler solutions are increasing, such as leveraging consumption taxes related to NCD risk factors and earmarking them for health-enhancing activities.

The public health impact of consumption taxes on tobacco, alcohol, and nutrition is unequivocally significant; tobacco tax at 75% of retail price has proven the most consistent and cost-effective way to reduce tobacco use. These taxes also yield significant additional revenue for government budgets and therefore represent a win-win policy instrument for public health and public finance (WHO, 2016a).

At the same time, partially or fully earmarking these types of tax revenue for health is controversial and has generated considerable debate (WHO, 2016b; Cashin, Sparkes & Bloom, 2017). Earmarking is a budgetary practice whereby the proceeds of a tax are designated for a particular purpose (expenditure). In the WHO European Region, examples include the earmarking of tobacco tax for the health system and public health in Poland (until 2015b) and Romania (WHO, 2016a), and tax on unhealthy foods and drinks, introduced in Hungary in 2011 (WHO Regional Office for Europe, 2015). Earmarking can take many forms and its impact depends partly on its design features. How it is integrated into the annual budget and public finance management processes is also important. “Hard” earmarking is when designated funds to some extent bypass budget formation controls (such as parliament) and public finance management controls (such as the treasury), while “soft earmarking” is when tax proceeds go through the treasury and are subject to annual parliamentary review.

There are several potentially positive effects of earmarking consumption taxes from tobacco, food and alcohol for health. It may improve the allocative efficiency of public spending by linking taxes to the provision of services or benefits that are proven to be cost-effective and

are currently underprovided, such as using the revenue from tobacco excise taxes for smoking cessation or prevention activities. It may also improve public acceptance of taxes (Bird, 2015; Doetinchem, 2010). This is particularly important for tobacco tax, where progress has been slow, despite overwhelming evidence. Earmarking tobacco tax revenues for health can be a useful economic tool to build consensus and garner political support (WHO, 2016a). Finally, in contexts of rigid public financial management systems, if tax revenues are channelled into extrabudgetary funds for health promotion and prevention, there can be more flexibility in the types of activities funded (WHO, 2016a).

Aside from these positive attributes, there is less consensus with respect to the impact of earmarking in increasing fiscal space for health. In contexts where budgetary priority-setting is weak, the introduction of earmarked revenues has mobilized resources for previously underfunded health-related activities (such as health promotion and mental health) (WHO, 2016a). It is important, however, to note that earmarking of a particular tax may not improve the fiscal space for health overall because other sources of funding from general budget revenues may be reduced by the same or an even greater amount, thus offsetting any potential gains (Cashin, Sparkes & Bloom 2017; Bird, 2015; Kutzin et al., 2007). Earmarking may therefore solve one problem (providing greater funding for NCD prevention) while creating another (reducing the overall funding envelope for other health activities). It can also cause fragmentation in pooling arrangements, thus undermining the possibility of redistributing to activities that have a greater impact on health or equity (Cashin, Sparkes & Bloom, 2017; Kutzin et al., 2007).

Earmarking can fragment and undermine transparent budget formation processes linked to criteria based on social policy objectives. Hard earmarking in particular, where designated funds bypass budget formation controls (parliament) and public finance management controls (treasury) may contribute to reduced transparency.

Overall, earmarking alone does not solve the problem of generating sufficient resources for health, and, in some cases, it may even do the opposite. Building and strengthening comprehensive fiscal dialogue and a transparent, evidence-informed budget process should therefore remain a key health financing policy priority for all stakeholders. Those involved in NCDs can be strong advocates for this policy direction. Earmarking can, however, contribute to garnering greater political support for public health taxes and, through this, marginally increase fiscal space for health. In this case, it is important to use earmarking for activities or programmes of high national priority, in order not to undermine the overall objective of strengthening the public finance dialogue and priority-setting. Earmarking practices should remain as close as possible to standard budget processes: “softer earmarks with broader expenditures purposes and more flexible revenue-expenditure links” (Cashin, Sparkes & Bloom, 2017). Earmarking could perhaps be effective in areas where it can catalyse significant change in previously underserved areas, populations and conditions, such as health promotion and mental health, for which channelling regular budget funds might be problematic and may not have popular support. Finally, measuring the effective use and impact of earmarked funds is an important means of strengthening accountability.



## More explicit criteria should be used to prioritize the health budget linked to development and health objectives

Establishing an effective revenue generation strategy and ensuring sufficient fiscal space are only the first steps towards ensuring that the funding allocated to health is translated into the right services, for the right people, at the right time, and that those services impact on outcomes. According to a recent OECD review, one fifth of health spending could be channelled to better use.

In other words, this spending delivers no benefits, or worse still causes harm, and lower-cost alternatives are not adopted (OECD, 2017). There are many such examples related to NCDs, including failure to reach the target audience with health promotion and prevention, late detection of hypertension, insufficient coverage of cancer screening programmes, unnecessary hospitalizations for hypertension, diabetes, and chronic obstructive pulmonary diseases, excessive and repeated

diagnostics and testing, delays in response time for stroke beyond the window of effectiveness, intermittent use of cost-effective chronic medicines, among others. Several policy instruments affect whether funding is spent on measures to improve outcomes, including prioritization of health budgets, purchasing and service delivery arrangements, clinical practices, medicines coverage and other policies.

Reflecting health and development priorities in the health budget is an important policy direction for strengthening the linkage between resources spent and outcomes achieved (see Box 12.2).<sup>21</sup> There are, however, several challenges in this regard. First, the process for setting policy priorities is often separate from the process of setting budget directions and ceilings. Health budget officials may not be able to bridge this gap; insufficient decision rights, timing of the budget process and lack of capacity have been noted as key obstacles. Second, weaknesses in revenue planning and tax administration may lead to ad hoc adjustments and create an unpredictable and unstable budget. Third, there is a particularly weak link between budgets and services where budget formation occurs primarily on the basis of input-based line-item categories. This approach favours maintaining the status quo in resource allocation patterns and service delivery arrangements, even if they are inefficient and inequitable, since these criteria do not surface in budget allocation discussions. It also lacks the flexibility to shift expenditures as needs change or savings occur, and can lead to underspending and inefficiency. These factors make systemic transformation requiring shifts in resources difficult to discuss and implement.

Challenges related to misalignment of resources and policy priorities are particularly relevant for NCDs. Other chapters of this report note several areas where a significant shift in resources would be needed to achieve the desired transformation and scale-up of services. Chapter 6 highlights the need for sustainable financing arrangements for cost-effective intersectoral action. Chapter 7 notes the historical underfunding of health promotion and disease prevention activities, which undermines efforts to switch health systems' focus from cure to prevention. Chapter 8 calls for complex multidisciplinary team-based primary care, requiring investments and operational resources. Chapter 13 highlights the lack of effective coverage in several countries for cost-effective NCD medicines to prevent costly acute complications. Although these measures for health system strengthening would go a long way towards scaling up NCD interventions and services, they are difficult to reflect in the budget process in contexts where prioritization of the health budget is not based on explicit criteria and not reexamined regularly. This applies equally to settings with line-item and programme-based budget formation approaches. Admittedly, there

<sup>21</sup> See Cashin, Sparkes & Bloom (2017) for a more comprehensive treatment of alignment of public finance and health finance through the entire budget cycle including budget formation, execution and monitoring.

## Box 12.2 Benefits of aligning public finance arrangements with policy priorities

**Health sector policies and priorities are reflected in the budget.** Health budget allocations are sufficient and stable enough to meet health sector objectives and commitments.

**Funds are directed to health sector priorities.** Funds can be pooled, allocated and disbursed across populations, geographical areas and time to respond to health needs and ensure equity and financial protection for target populations.

**Funds are used effectively and efficiently to deliver high-value services.** Funds are directed to priority populations, interventions and services, and payment to providers is based on service outputs and performance. Disbursements are predictable, and flexibility in purchasing and provider payment ensures efficiency and value for money.

**Funds are accounted for against priorities.** The ministry of health and ministry of finance are both accountable for the proper use of public funds and effective delivery of health interventions, goods and services.

Source: Cashin et al., 2017.



are other factors making reallocation of funds difficult beyond imperfections in the budget process. For example, political economy factors surround reallocation decisions with implications for facility restructuring and health workforce consolidation and reprofiling.

Two trends in strengthening public finance management have the potential to strengthen the link between policy priorities and budget allocations: policy-based budget formulation and programme-based budget classification (Cashin et al., 2017).

■ **Policy-based budget formulation** implies strengthening the quality of annual health budget proposals with well defined, achievable priorities that are linked to a policy framework, sector strategy, or national development strategy aligned with cost estimates. While the annual budget may remain based on inputs and line items, an explicit cross-walk to policy priorities can be made by reflecting on how to adjust budget ceilings. A medium-term expenditure or budget framework can be helpful for avoiding underinvestment in areas that produce results in the longer term. These medium-term budget processes can provide more helpful opportunities for reprioritization in support of policy objectives than the fast-paced preparation of annual budgets.

■ **Programme-based budget classification** implies classifying, organizing and releasing the budget according to programmes with shared objectives, rather than along

administrative and input lines. Policy goals can be explicitly incorporated into targets. Forming budgets and setting spending levels at the programme level (such as essential primary care services), rather than at the level of facilities or vertical programmes by disease, can ensure more efficient allocation across levels of care and can provide flexibility through reallocation of efficiency gains and savings within a given programme. Programme-based budgets provide a good opportunity to link spending to policy priorities. This is not automatic, however, and depends on how well the programmes are structured and what processes are in place to regularly reflect on priorities.

Analytical methods and models can be used to understand how best to forecast pressures, cost new policies, and identify opportunities to shift resources from lower- to higher-value uses. Needs-based formulaic allocation is one such methodology, which is worth mentioning and is used in larger, deconcentrated or decentralized countries.

It is important that health policy-makers and health budget officials show greater engagement with and support for strengthening public finance management. Investment and training of health budget officials in public finance management principles would be an effective means of optimizing these processes at the country level. Change will build capacity. The timeline for attaining the Sustainable Development Goals affords opportunities for investing in the preconditions required for such change, which should not be abandoned in favour of easier or less intensive solutions.



## An outcome-oriented approach is needed to fund intersectoral actions and address misalignment of incentives across sectors

In making a business case for improving health outcomes, including those related to NCDs, health systems should harness the support and activities of other sectors. Key message 2 focused on the development of explicit criteria when determining the allocation of resources within health budgets. Assuming that adequate resources are allocated to actions to improve NCD outcomes through transparent priority-setting and needs assessment, further consideration must be given to the extent to which some of these resources

may be used to help facilitate actions to address NCDs, particularly through health promotion, disease prevention and early intervention measures delivered outside the health system.

Examples include actions to address underlying social determinants of health that will reduce risks or consequences of some NCDs. Although many of these actions can be funded and delivered within the health system, such as access to physical health training for high-risk groups, the health system may benefit from working with local government or

the education sector, for example, to reach the general population and encourage more active travel to work, or greater participation in sport and other physical activities. Tackling harmful alcohol consumption, for example, not only requires health system actions such as screening and brief intervention in primary care, but also work across many sectors, including the finance ministry on taxation, justice and transport ministries on enforcement of drink-driving legislation, businesses and local government on retail access, advertising authorities on alcohol advertising, and schools on health literacy messages for young people.

Despite the importance of intersectoral activities to address NCDs, intersectoral financing initiatives have historically been modest in much of the WHO European Region. The scope for using financial mechanisms to stimulate intersectoral activity is substantial. One consultation in 2013 found that only three out of 25 European Union member countries reported fully developed approaches to generating funds from different sectors for intersectoral interventions to promote gender equity and health (Aluttis et al., 2013). This situation is changing and momentum towards the financing of intersectoral actions is growing; a review in 2016 pointed to implementation and evaluation of range of actions at national and local level, both in the European Region and outside it (McDaid & Park, 2016). Box 12.3 provides three brief illustrative examples of actions where different financing approaches have been used to stimulate partnership working between the health sector and others.

To further stimulate and facilitate actions, health system budget holders, including health insurance funds, need to be able to objectively justify why some of their resources might best be allocated to the delivery of actions in other sectors. Traditionally, the focus has been on highlighting subsequent short-, mid- and long-term health system benefits that arise from these actions, such as a reduction in the need for health services and long-term care related to conditions such as diabetes or cardiovascular disease. One specific example is the reduction in harmful drinking patterns associated with different sectors working effectively together in the Netherlands (de Goeiji et al., 2016).

It is not, however, simply a question of making a case from a health system perspective. Different sectors will have different priorities. They might not be persuaded that improving health outcomes is of sufficient importance, even if they receive financial compensation for taking action. Crucially, health systems will therefore also need to become savvier in the way they work with other sectors, to leverage additional resources from them for what are seen as mutually desirable outcomes (see Chapter 6). They will need to identify and highlight the benefits that are of interest to these sectors, including economic returns from addressing NCD risk factors or better managing NCD conditions.

## Box 12.3 Examples of funding mechanisms facilitating intersectoral action.

- **KASTE Programme, Finland.** This programme provided national discretionary funding for local government level intersectoral work involving two or more sectors, with a strong emphasis on activities to promote physical, mental and social well-being, as well as reducing inequalities in well-being and health.
- **State Public Health Promotion Fund, Lithuania.** The Fund, which was established in 2016 using a share of revenues from alcohol excise duty, has been used to finance time-limited projects, some of which focus on NCDs.
- **Co-commissioned Work and Health Programme, England.** This forthcoming scheme will pool financial resources from the new Greater Manchester Combined Authority, which now has responsibility for most health matters in Greater Manchester, and the United Kingdom Department of Work and Pensions, to help deliver services and support to address the health (especially mental and musculoskeletal health) and employment needs of the long-term unemployed.

The economic return on investment in actions to address NCDs and their determinants is increasingly documented (see for example Dyakova et al., 2017; McDaid, Sassi & Merkur, 2015). Measures to reduce harmful levels of alcohol consumption, for example, as well as having direct health benefits, positively impact on the costs of dealing with road-related accidents and congestion, as well as antisocial behaviour and interpersonal violence. This can create potential opportunities for partnership working, successful examples of which can be seen in many countries. Finance ministries can also have an important role in using this evidence to create the conditions to work across sectoral boundaries.

## **Funding mechanisms for intersectoral action for NCDs**

Different funding and resource allocation mechanisms have been used to stimulate and sustain funding for intersectoral actions (McDaid & Park, 2016). Such institutionalized funding mechanisms are the key to enabling stable and responsive governance mechanisms (Chapter 6). Their effectiveness will in part depend on regulatory and contextual factors.

One commonly used approach is to agree on dedicated funds from the health budget for the express purpose of delivering intersectoral activities that will help achieve overall health objectives. Typically, the administration of such funds is managed at the national level by the health ministry, local health budget holders or local government. Social insurance funds may also set aside some funds for these types of activities. The process for allocating funding may be prescriptive, stipulating that funding is linked to use of a specific cross-sectoral programme to address a particular issue, or it may allow for innovation in the way in which a priority issue is addressed. The latter may be a competitive process where organizations from two or more sectors may have to develop a proposal regarding how funds will be used to address an NCD concern.

Examples of this include the scheme in Finland, highlighted in Box 12.3, where municipalities have applied for funding for intersectoral health promotion programmes, which have been used to support mental health activities in schools. In such schemes, initiatives tend to be time-limited and often small in scale, which may raise questions about long-term sustainability. The Public Health Agency of Canada's Innovation Strategy may provide a useful example of moving to sustainability; funding is provided in three phases for up to eight years, to

scale-up intersectoral projects that have been shown to be successfully implemented and evaluated.<sup>22</sup>

Another approach is to establish an independent body or agency which can then set its own priorities for intersectoral action. Funds can be delegated to the independent agency from multiple sources of revenue or taxation, not just health budgets. One example of this is Health Promotion Switzerland, which receives funding from an annual surcharge on health insurance premiums. It then co-finances (through a competitive process) intersectoral projects that are aligned with its strategic goals, particularly in the areas of diet, physical activity and mental health. The challenge, however, is to ensure that the priorities of these organizations match those of the health system in general, including those for NCDs. Other examples of this approach include the Healthy Austria Fund and the recently established Lithuanian State Public Health Promotion Fund, which received 0.5% of alcohol excise duties in 2016 to support health promotion projects.

A practical way to leverage funding from multiple sectors is to adopt a joint budgeting approach. This can also be used to overcome inflexibility in funding within health systems. There are many ways in which this approach can be implemented on either a voluntary or a mandatory basis, for instance there may be budget alignment to address a specific issue, with mutually determined targets and outcomes, or there may be a formal legal process to establish a joint fund, often time-limited, to be spent on agreed projects or delivery of specific services. There are examples of formal and informal joint budgeting initiatives at the local and regional levels in England, which focus on health promotion among unemployed people with chronic physical and mental ill health, to promote return to work (see Box 12.3 above).

## **Common design and implementation features**

The effectiveness of these and other mechanisms for intersectoral action depends heavily on factors such as organizational structure, management, culture and trust. While this requires careful consideration in the WHO European Region as a whole, it may be of particular significance in some Member States in the eastern part of the Region, which have less experience of intersectoral funding for health actions. In part, lack of trust across sectors might be overcome by highlighting cost-effectiveness and the return on investment for different sectors,

<sup>22</sup> <https://www.canada.ca/en/public-health/services/innovation-strategy.html> (accessed 16 March 2018).



but this evidence base still needs strengthening and adapting to different country contexts in the European Region.

Sectors other than health should be included early in the prioritysetting process. This can help establish a joint sense of ownership which may help in leveraging funds and commitments from these sectors. There are also practical ways to develop trust that go beyond the scope of this chapter, such as the co-location of staff from different organiza-

tions in order to help build up relationships and strengthen trust (see Chapter 6). The contractual and regulatory mechanisms highlighted in key message 4 are also vital: even in systems with a long history of collaboration and cooperation, legislative frameworks that allow for flexibility in the use of finances, as well as mechanisms to monitor contracts and assess the attainment of targets, can help to ensure an environment where intersectoral actions can be sustained.

## Incentives should be aligned and optimized across the service delivery interface to reinforce a service delivery model oriented to population outcomes



The fourth aspect of developing a health financing strategy for better NCD outcomes is to identify and address any misalignment of incentives across the health system that undermines the envisioned service delivery model. To implement the service delivery arrangements outlined in Chapters 7, 8, 9, and 10, strategic purchasing mechanisms must value health promotion, provide for early detection and management of conditions, reward task profile expansion of primary care, provide incentives to consider the full spectrum of care rather than the illness episode, reward individuals and groups working together in the interests of people, and foster work across levels of care. These service delivery dimensions are critical for all individual NCD services, including cardiovascular disease, diabetes, lung disease or cancer.

Many countries in the WHO European Region are strengthening their strategic purchasing mechanisms to better align incentives with the envisioned service delivery approach. This area of health financing policy is a dynamically moving area. Most countries are adapting incremental approaches to attenuate the weaknesses of base payment mechanisms and traditional incentives. A few countries are experimenting with larger, bolder and more disruptive changes (see Table 12.2 below).

### Incremental approaches to changing incentives

In many European countries, incremental approaches have been used to address weaknesses in base payment mechanisms and the interface across them. These approaches involve retaining base payment mechanisms and adding on further elements, such as pay-for-coordination or pay-for performance, or carving out services for bundled payments whereby the whole spectrum of care provision for a particular condition is given one single payment for a defined period of time. Mixed or blended payments, which use two or more types of payment mechanism together to achieve an optimal incentive mix, are also becoming increasingly common (OECD, 2016). These approaches have not changed the fundamental payment mechanisms, but rather made adjustments on the margin.

**Pay-for-coordination** is an example of an add-on payment typically made as a lump sum to a given provider, per chronic patient, to organize coordination of care through explicit care plans and collaborative care meetings, acknowledging the greater costs of these activities. Pay-for-coordination has been introduced in Austria, France, Germany and Hungary, among other countries. Experiments with this type of

payment began in France in 2009 with multiprofile primary care centres (OECD, 2016). Primary care centres receive payment for coordination and for NCD prevention and care (such as tops-up paid to GPs for diabetes screening), which they then allocate as they see fit; the rest of their business is paid predominantly on a fee-for-service basis. Evaluations have been positive both for uptake and for impact, in particular for diabetes management. They also echo findings in other incremental approaches showing that the impact does not necessarily come from large financial incentives but from making sure that coordination and care management activities are explicitly included in service baskets and are paid for with accountability for quality.

**Pay-for-performance** to improve quality and efficiency on top of capitation payments or in combination with fee-for-service has been the “go-to” solution in many countries, including in the eastern part of the European Region (see Chapter 5). Literature on mixed payments, and particularly on pay-for-performance, is not easy to interpret. While there is general agreement that breakthrough quality improvement (defined in a comprehensive sense to also include outcomes) has not been documented (Cashin et al., 2014), specifically defined incentivized services saw significant scale-up once pay-for-performance had been introduced on top of capitation payments. Beyond direct impact, there is an ongoing debate about how extrinsic motivation affects intrinsic motivation, and whether the excessive use of pay-for-performance creates a new culture between purchaser and provider whereby all changes in the terms of engagement (such as changes in the service basket) will require financial incentives.

A significant proportion of the available literature comes from higher-income countries, which have reasonable payment rates in primary health care, while other parts of this literature come from countries with fee-for-service payment mechanisms. These results are difficult to extrapolate to settings with underpaid and understaffed primary health care services that have low capitation base rates and extremely low coverage of basic NCD-related detection and management services (Chapter 4). In such cases, pay-for-performance or selective fee-for-service for particular services may provide a stepping stone towards more active primary care providers, and the additional funds may enable them to hire additional staff (such as nurses) to perform these labour-intensive activities.

In this regard, there are encouraging examples from several countries. In Estonia (see Box 12.4), a modest pay-for-performance, which was introduced in a comprehensive approach to primary care strengthening, and linked to practice guidelines, contributed to the scale-up of early detection and management of cardiovascular disease and diabetes. In Lithuania, cancer screening was scaled up and the incidence

## Estonia

### Box 12.4 Pay-for-performance in a comprehensive approach to primary care strengthening

In Estonia, modest pay-for-performance was introduced as part of a comprehensive approach to primary care strengthening and linked to practice guidelines. The financial reward was small: just 2% of the budget allocated for primary health care. The incentive contributed to scaling up early detection and management of cardiovascular disease and diabetes. An important lesson was that the behaviour change that ensued was less likely to be due to the funds themselves but rather to the information that became available as a result of the programme. Some years later, it was recognized that weaknesses in the service delivery modality (solo practices and fragmentation) cannot be rectified by further refining the payment mechanism, which has led to a complete rethink of the approach to delivering and paying for primary health care services in Estonia.

*Source:* Good practice brief: pay for performance in Estonia ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0005/287096/Good-practice-brief-pay-for-performance-in-Estonia.pdf](http://www.euro.who.int/_data/assets/pdf_file/0005/287096/Good-practice-brief-pay-for-performance-in-Estonia.pdf))

of late-stage cervical cancer was reduced after the introduction of pay-for-performance incentives. In Kazakhstan, hospitalizations for ambulatory care sensitive conditions were reduced in a comprehensive approach using guidelines and pay-for-performance at primary care level for lower levels of hospitalization. Another particularly relevant example for NCDs comes from Australia, where the pay-for-performance mechanism has been structured to be fully aligned with what they term “a full cycle of care” for selected NCD conditions, such as diabetes or cervical cancer (Cashin et al., 2014). The full cycle of care encompasses detection, regular check-ups and condition management, with incentives for each stage in the process and a greater reward for fully completed processes.

**Bundled payment** for selected conditions is a third type of incremental approach, which is of particular interest in countries where fragmented fee-for-service arrangements are the starting point for all outpatient care. Disease-specific bundled payments have been introduced in Germany, the Netherlands, Portugal and Sweden (OECD, 2016). Bundled payments provide a single prospective payment for all services provided for a patient with a specific condition over a defined time period, even if the services are provided by several providers. In the Netherlands, this approach was initially piloted in 2007 for primary care based reimbursement for diabetes, and scaled up to include chronic obstructive pulmonary disease and vascular risk management in 2010. The Netherlands reports several positive effects, such as improved care coordination across providers and protocol adherence within a welldefined multidisciplinary approach with reduced reliance on specialists. This has led to increased satisfaction of patients and providers (Bakker et al., 2012; Llano, 2013; Struijs et al., 2012; Struijs, 2016). At the same time, bundled payments group previously fee-for-

service-based payments in primary care without outpatient specialist and hospital care, which are the areas where the greatest potential for unwarranted cost shifting lies.

While experiences with bundled payments are promising, thus far they only relate to mature health systems, which already have a long history of strengthening purchasing arrangements and payment mechanisms, and a well functioning monitoring system to detect potential adverse effects of financial incentives. It is also important to note the starting point of a fee-for-service payment for outpatient care, and simultaneous fragmentation and duplication. Applying bundled payment approaches to less developed systems and different base payment mechanisms is not straightforward. Furthermore, as these payment systems are condition-specific, they can trigger service delivery reconfigurations for those conditions, which could create new silos and verticalization of services. Condition-specific bundled payments therefore do not seem particularly well aligned with the idea of broad-based integrated primary care, driving the redesigning of service delivery for all patients.

The examples above and in the literature show that some of the weaknesses in commonly used base payment mechanisms can be overcome using incremental approaches. The main advantage of this approach is that it can be introduced relatively quickly to overcome inertia. Initial complexities can be adjusted to the experience and capacity of the strategic purchaser, using complex approaches, provider management capacity and autonomy, available information systems, and an acceptable incremental administrative burden. Moving towards more complex payment mechanisms will strengthen these dimensions, build purchaser and provider capacity and contribute to

**Table 12.2. Potential to improve the incentive interface**

	Pay-for-coordination	Pay-for-performance	Bundled payment for specific conditions
<b>Values health promotion, early detection and management</b>	High	High	High
<b>Rewards task profile expansion in primary care</b>	Moderate	High	Moderate
<b>Provides incentives for full spectrum of care (vs. episodic)</b>	High	Moderate	High
<b>Provides incentives for coordination and pathways</b>	High	Moderate	High
<b>Rewards teamwork, groups, networks across levels of care</b>	High	Moderate	High

strengthening the information system. A critical design aspect of more successful initiatives is clear: clinical practice and the model of service delivery need to be clearly defined for new payment incentives to have lasting effect.

## More evaluated experiments of large-scale change are needed

While the approaches described above are common and likely to be an improvement on the typical interface of capitation, fee-for-service and case-based payment, they influence provider and patient behaviour without making any fundamental change to the basic incentives that do not support the envisioned service delivery model. They tinker at the margins without actually addressing the genuine root cause of incentive alignment problems. This is insufficient to dramatically transform the way services are delivered. Bolder changes must therefore be made to the way in which health services are purchased. The problem is that proven, tested and evidence-based solutions are only just beginning to emerge, and that lessons learned are not yet systematically available. More experimentation in large-scale change to purchasing arrangements is needed, with contextualized evaluations to identify success factors.

Large-scale change would involve moving away from payment mechanisms defined by level of care towards full capitation for the totality of care for a defined population with care coordination intermediaries between the purchaser or payer and the provider network. We will refer to this approach as “full capitation” to distinguish it from the capitation payments commonly used in primary care. Population-based full capitation payments to providers or managed care organizations have a history in the United Kingdom (GP fundholding) and in the United States, in the publicly funded Medicare system (managed care). Since 2012, a new wave of accountable care organizations has emerged in the United States in response to health reforms under the Patient Protection and Affordable Care Act. In the WHO European Region, smaller-scale initiatives have been introduced in Germany, Hungary (see Box 12.5) and Spain.

Compared with GP fundholding and managed care, these approaches all measure success by improved health outcomes and lower overall costs. The latter is often the source of incentives for participating providers as they benefit from shared savings arrangements. Population-based full capitation for the totality of care provision normally means that providers receive payments for services in the traditional ways during the year, but if there are any savings at the end of the year compared with the prospective budget calculated using the full capitation

## Hungary

### Box 12.5 Full capitation and care coordination pilot

The Hungarian experiment covered 20% of the population – more than 2 million people. Care coordinator status could be granted to a group of general practitioners or a polyclinic providing secondary level outpatient services, or to a hospital contracting general practitioners to enrol patients in the pilot. The minimum population size was 50 000 people per care coordinator. The care coordinator was responsible for coordinating patient pathways across levels of care and providing care at their own level. The health insurance fund provided utilization data on all patients under the care coordinator to facilitate analysis. It also continued to administer payments centrally using the traditional payment methods to all providers, regardless of whether they were part of the care coordinator network. An adjusted capitation formula for the full spectrum of care was developed and used as virtual currency. At the end of the year, savings were calculated based on the difference between the virtual capitation formula for the population served by the care coordinator, and the actual payments made to providers. The care coordinator received the savings and shared them with participating providers (general practitioners and others collaborating in improved patient pathways and care). They also received a fixed fee for care coordination and pay-for-performance for documented prevention programmes introduced, regardless of the financial balance at the end of the fiscal year. The care coordinators were not budget holders and did not administer any payments, but focused on managing patient pathways in the system, ensuring adherence to clinical protocols and rational pharmacotherapy, reducing unnecessary referrals to higher levels of care and broadening the capacities at primary care and secondary outpatient care levels for all conditions and patients.

formula, they can be kept and shared among participating providers and the care coordination intermediary.

A well documented and evaluated experiment is Germany's *Gesundes Kinzigtal*, a physician-led accountable care organization where both the providers and the insurer benefit from shared savings (Pimperl et al., 2017). Care models and patient pathways have been redesigned to make them more patient-centred with less fragmentation between providers. Preventive activities target patients with increased risk for particular conditions. Rational pharmacotherapy is a key instrument for improved patient safety, better health outcomes and significant savings. Successful arrangements use integrated IT systems that allow real-time monitoring of metrics which are connected to registries and public reporting systems (OECD, 2016). The experience is subject to rigorous evaluation and reporting on health outcomes (Pimperl et al., 2017) and on patient experience. Savings made continue to be a key driving force in system redesign and care coordination.

The full capitation pilot for provider-based care coordination in Hungary is less well known, but equally valuable as an experience (Box 12.5). It has produced promising results and tested various organizational arrangements. It offered health-care providers the opportunity to be granted the status of care coordinators and take responsibility for the whole spectrum of care for a population (Gaál et al., 2011). The pilot facilitated cooperation between local health-care providers, incentivized improving care coordination and reducing fragmentation in the system, focused on prevention and early detection, and strengthened capacities at primary and outpatient care levels. Savings, calculated annually and shared between providers, provided financial incentives. The average 5% annual savings were sufficiently attractive for the care coordinators and participating providers to make the extra effort to improve care and reduce inefficiencies in the system (Bonz et al., 2015).

Service delivery redesign and the coordination of care for all patients across settings and over time are inherent in population-based full capitation models. This is more likely to lead to large-scale system reform and address key weaknesses in the service delivery model. Since NCDs give rise to the need for health services across all levels of care, we should move beyond traditional thinking along levels of care and disease-specific programmes, and introduce large-scale system changes where financial incentives play a partial, but important, catalytic role in system redesign for better population health outcomes and patient experiences.

In reviewing many examples of financial incentives to understand how they change provider and patient behaviour, common themes have emerged. First, financial incentives, be they pay-for-performance, pay-for-coordination, bundled payment or full capitation, should not be introduced as an isolated instrument, but rather as an integral component of a systematic and multipronged approach to transforming the service delivery system with a view to scaling up prevention, early detection and disease management for NCDs. Other instruments should include guidelines, training, performance monitoring with feedback, better information solutions and task shifting, among others. Second, while incremental financial incentives can help address some of the weaknesses in commonly used base payment mechanisms, they can only go so far in correcting misalignment issues. Third, if the underlying service delivery structure is not effective (such as solo practice in primary care, lack of integration with outreach, lack of provider autonomy or ineffective staff mix), no incentives can fix these larger systemic, structural problems. Finally, policy-makers and purchasing organizations also have non-financial incentives at their disposal to steer provider behaviour and address misalignments (see Table 12.3).

**Table 12.3. Examples of instruments to address misalignment of incentives across the interface of care for NCDs**

Financial incentives	Non-financial incentives
<ul style="list-style-type: none"> <li>■ Payment for coordination across different providers</li> <li>■ Pay-for-performance with NCD-related objectives and indicators in primary health care</li> <li>■ Selective fee-for-service in primary health care</li> <li>■ Disease-specific bundled payments</li> <li>■ Payment below cost for ambulatory care sensitive conditions in hospital settings</li> <li>■ Strategic use of volume constraints</li> <li>■ Full capitation</li> </ul>	<ul style="list-style-type: none"> <li>■ Use of contractual obligations and commitments beyond payment</li> <li>■ Contracting groups of providers and thereby spreading risks and rewards to help with continuity</li> <li>■ Quality monitoring efforts</li> <li>■ Performance monitoring and feedback with benchmarking (external)</li> <li>■ Greater investment in information solutions to self-track performance at provider level (internal)</li> <li>■ Non-financial rewards such as competition between regions</li> </ul>



Table 12.4. Summary of key messages and policy responses

Key messages	Policy responses
<p><b>Reasonable levels of public funding need to be allocated to health-improving activities</b></p> 	<ul style="list-style-type: none"> <li>■ Ensure that public funding for health is at or above 12% of total government spending.</li> <li>■ Invest in mechanisms, people, data, and skills to make a better business case for health and NCD spending and ensure the inclusion of credible plans to harness inefficiencies.</li> <li>■ Engage in continuous strengthening of fiscal dialogue and budgetary processes to increase funding for health, and in particular for underfunded activity and programme areas.</li> <li>■ Apply high taxes to tobacco, alcohol and unhealthy foods to have a significant public health impact while increasing fiscal space, but have realistic expectations of earmarking.</li> </ul>
<p><b>More explicit criteria should be used to prioritize the health budget linked to development and health objectives</b></p> 	<ul style="list-style-type: none"> <li>■ Engage and support the processes of strengthening public finance management</li> <li>■ Invest in strengthening the public finance management capacity of health budget officials.</li> </ul>
<p><b>An outcome-oriented approach is needed to fund intersectoral actions and address misalignment of incentives across sectors</b></p> 	<ul style="list-style-type: none"> <li>■ Highlight outcomes and economic returns of specific interest to other sectors, not just the health sector, when seeking to involve those other sectors in funding or delivering actions for better NCD outcomes.</li> <li>■ Consider joint budgeting, specific health system funding conditional on intersectoral partnership, and financing of independent agencies as primary options for financing intersectoral actions for better NCD outcomes.</li> <li>■ Understand that financing mechanisms cannot work in isolation; issues such as governance, the regulatory and legal environments and measures to foster trust must also be taken into account.</li> </ul>
<p><b>Incentives should be aligned and optimized across the delivery interface to reinforce a service delivery model oriented to population outcomes</b></p> 	<ul style="list-style-type: none"> <li>■ Identify misalignment and inconsistencies between the envisioned service delivery model and the behaviour encouraged by the sum of incentives in the system (move away from optimizing incentives within levels of care only).</li> <li>■ Adopt an incremental approach to rapidly mitigate weaknesses in base payment mechanisms.</li> <li>■ For countries with a strong tradition of strategic purchasing, experiment and evaluate larger-scale change to the incentives continuum.</li> <li>■ Deploy non-financial incentives and the full range of strategic purchasing to influence provider and patient behaviours.</li> </ul>

# Conclusions

This chapter takes a holistic, systems view of health financing for NCDs. It has demonstrated that there are several important health financing policy areas that can impact on the scale-up of core NCD interventions and services. Reasonable levels of public funding need to be allocated to health and health-improving activities. To achieve this, policy-makers need to make a strong business case for health, including for NCDs, and become full and equal partners in a continuous dialogue about budgets and public financial management. More explicit priority-setting criteria can help reduce waste and inefficiencies and ensure that funds are translated into effective services. Since intersectoral action has a significant impact on NCDs, stronger and more sustainable mechanisms are needed to fund it. Finally, to improve scale-up of core individual services and care experiences for people with NCDs, incentives across the service delivery interface need to be better aligned. For key messages and policy responses, see Table 12.4 above.

## References<sup>23</sup>

Aluttis CA, Chiotan C, Michelsen M, Costongs C, Brand H, on behalf of the Public Health

Capacity Consortium (2013). Review of public health capacity in the EU. Published by the European Commission Directorate- General for Health and Consumers ([https://ec.europa.eu/health/sites/health/files/social\\_determinants/docs/report\\_ph\\_capacity\\_2013\\_en.pdf](https://ec.europa.eu/health/sites/health/files/social_determinants/docs/report_ph_capacity_2013_en.pdf)).

de Bakker DH, Struijs JN, Baan CB, Raams J, de Wildt JE, Vrijhoef HJ, et al. (2012). Early results from adoption of bundled payment for diabetes care in the Netherlands show improvement in care coordination. *Health Aff.* 2:426–33.

Bird RM (2015). Tobacco and alcohol excise taxes for improving public health and revenue outcomes: marrying sin and virtue? [Policy Research Working Paper Series 7500]. Washington (DC): World Bank.

Bokhari FAS, Gai Y, Gottret P (2007). Government health expenditures and health outcomes. *Health Econ.* 16(3):257-73. doi:10.1002/hec.1157.

Boncz I, Evetovits T, Dózsa C, Sebestyén A, Gulácsi L, Ágoston I et al. (2015). The Hungarian care managing organization pilot program. *Value Health Reg Issues.* 7C:27–33.

Cashin C, Sparkes S, Bloom D (2017). Earmarking for health: from theory to practice [Health Financing Working Paper]. Geneva: World Health Organization; 5.

Cashin C, Chi Y-L, Smith P, Borowitz M, Thomson S, editors (2014). Paying for performance in healthcare: implications for health system performance and accountability. [European Observatory on Health Systems and Policies Series]. London: Open University Press ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0020/271073/Paying-for-Performance-in-Health-Care.pdf](http://www.euro.who.int/__data/assets/pdf_file/0020/271073/Paying-for-Performance-in-Health-Care.pdf)).

Cashin C, Bloom D, Sparkes S, Barroy H, Kutzin J, O’Dougherty S et al. (2017). Aligning public financial management and health financing. Geneva: World Health Organization (<http://apps.who.int/iris/bitstream/10665/254680/1/9789241512039-eng.pdf?ua=1>).

Chisholm D, Abegunde D, Mendis S (2011). Scaling up action against noncommunicable diseases: how much will it cost? Geneva: World Health Organization.

Devaux M, Sassi F (2015). The labour market impacts of obesity, smoking, alcohol use and related chronic diseases [OECD Health Working Papers]. Paris: OECD Publishing; 86 (<http://dx.doi.org/10.1787/5jrqn5fvpv0v-en>).

Doetinchem O (2010). Hypothecation of tax revenue for health. [World health report 2010 background paper 51]. Geneva: World Health Organization (<http://www.who.int/healthsystems/topics/financing/healthreport/51Hypothecation.pdf>).

Dyakova M, Hamelmann C, Bellis MA, Besnier E, Grey CNB, Ashton K, et al. (2017). Investment for health and well-being: a review of the social return on investment from public health policies to support implementing the Sustainable Development Goals by building on Health 2020 [Health Evidence Network synthesis report]. Copenhagen: WHO Regional Office for Europe.

Gaál P, Szigeti S, Csere M, Gaskins M, Panteli D (2011). Hungary: Health system review [Health Systems in Transition; European Observatory on Health Systems and Policies]. Copenhagen: WHO Regional Office for Europe; 13(5):1–266.

<sup>23</sup> All references accessed on 1 March 2018.

- de Goeij MC, Jacobs MA, van Nierop P, van der Veecken-Vlassak IA, van de Mheen D, Schoenmakers TM et al. (2016). Impact of cross-sectoral alcohol policy on youth alcohol consumption. *J Stud Alcohol Drugs*. Jul;77(4):596–605 (<https://www.ncbi.nlm.nih.gov/pubmed/27340964>).
- Jakab M, Manjjeva E (2008). The Kyrgyz Republic: good practices in expanding health care coverage, 1991-2006. In: Gottret P et al. editors. *Good practices in health financing*. Washington (DC): World Bank (<https://openknowledge.worldbank.org/bitstream/handle/10986/6442/446440PUB0Heal101OFFICIAL0USE0ONLY1.pdf?sequence=1>).
- Kutzin J, Cashin C, Jakab M, editors (2010). *Implementing health financing reform: lessons from countries in transition*. Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies (<http://www.euro.who.int/en/publications/abstracts/implementing-health-financing-reform-lessons-from-countries-in-transition-2010>).
- Leal J, Luengo-Fernandez R, Gray A, Petersen S, Rayner M (2006). Economic burden of cardiovascular disease in the enlarged European Union. *Eur Heart J*. 27:1610–19.
- Llano R (2013). Bundled payments for integrated care in the Netherlands. *Eurohealth*. 19;2.
- Luengo-Fernandez R, Leal J, Sullivan R (2012). The economic burden of malignant neoplasms in the European Union [Results presented at the Congress of the European Society for Medical Oncology, Vienna, Austria, 22 May 2012].
- McDaid D, Sassi F, Merkur S, editors (2015). *Promoting health, preventing disease: The economic case*. European Observatory on Health Systems and Policies Series. Maidenhead: Open University Press ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/283695/Promoting-Health-Preventing-Disease-Economic-Case.pdf?ua=1](http://www.euro.who.int/__data/assets/pdf_file/0006/283695/Promoting-Health-Preventing-Disease-Economic-Case.pdf?ua=1)).
- McDaid D, Park AL (2016). Evidence on financing and budgeting mechanism to support intersectoral actions between health, education, social welfare and labour sectors [Health Evidence Network synthesis report]. Copenhagen: WHO Regional Office for Europe.
- Moreno-Serra R, Smith PC (2015). Broader health coverage is good for the nation's health: evidence from country level panel data. *J R Stat Soc Ser A Stat Soc*. 2015 Jan; 178(1): 101–24. doi: 10.1111/rssa.12048.
- OECD (2016). *Better ways to pay for health care* [OECD Health Policy Studies]. Paris: OECD Publishing (<http://dx.doi.org/10.1787/9789264258211-en>).
- OECD (2017). *Tackling wasteful spending on health*. Paris: OECD Publishing (<http://dx.doi.org/10.1787/9789264266414-en>).
- Pimperl A, Schulte T, Mühlbacher A, Rosenmöller M, Busse R, Groene O et al. (2017). Evaluating the impact of an accountable care organization on population health: the quasi-experimental design of the German *Gesundes Kinzigtal*. *Popul Health Manag*. Jun;20(3):239–248. doi: 10.1089/pop.2016.0036.
- Schuhrecke M, Rocco L, McKee M, Mazzucco S, Urban D, Steinherr A (2007). Economic consequences of noncommunicable diseases and injuries in the Russian Federation [European Observatory on Health Systems and Policies]. Copenhagen: WHO Regional Office for Europe.
- Struijs JN (2016). How bundled healthcare payments are working in the Netherlands. *NEJM Catalyst* (<https://catalyst.nejm.org/how-bundled-health-care-payments-are-working-in-the-netherlands/>).
- Struijs JN, de Jong-van Til JT, Lemmens LC, Drewes HW, de Bruin SR, Baan CA (2012). *Three years of bundled payments for diabetes care in the Netherlands*. Bilthoven: National Institute for Public Health and the Environment (<https://www.rivm.nl/bibliotheek/rapporten/260013002.pdf>).
- Thomson S, Cylus J, Evetovits T (2018 in press). Can people afford to pay for health care? Coverage, access and financial protection in Europe, Copenhagen: WHO Regional Office for Europe.
- WHO (2016a). *Earmarked tobacco taxes: lessons learnt from nine countries*. Geneva: WHO Press ([http://apps.who.int/iris/bitstream/10665/206007/1/9789241510424\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/206007/1/9789241510424_eng.pdf?ua=1)).
- WHO (2016b). *Fiscal space, public financial management and health financing: sustaining progress towards universal health coverage*. Montreux, Switzerland: World Health Organization; 26–28 April 2016 [WHO/HIS/HGF/HFWorkingPaper/16.2; Health Financing Working Paper No. 2] (<http://apps.who.int/iris/bitstream/10665/250127/1/WHO-HIS-HGF-HFWorkingPaper-16.2.pdf?ua=1>).
- WHO, UNDP (2016). *What ministries of finance, tax and revenue need to know: noncommunicable diseases*. Geneva: World Health Organization and United Nations Development Programme.



WHO Regional Office for Europe (2015a). The case for investing in public health. A public health summary report for EPHO 8. Copenhagen: WHO Regional Office for Europe (<http://apps.who.int/iris/handle/10665/170471>).

WHO Regional Office for Europe (2015b). Public health product tax in Hungary: An example of successful intersectoral action using a fiscal tool to promote healthier food choices and raise revenues for public health. Copenhagen: WHO Regional Office for Europe. ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0004/287095/Good-practice-brief-public-health-product-tax-in-hungary.pdf?ua=1](http://www.euro.who.int/__data/assets/pdf_file/0004/287095/Good-practice-brief-public-health-product-tax-in-hungary.pdf?ua=1) [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0004/287095/Good-practice-brief-public-health-product-tax-in-hungary](http://www.euro.who.int/__data/assets/pdf_file/0004/287095/Good-practice-brief-public-health-product-tax-in-hungary)).

WHO Regional Office for Europe (2017a). Financial protection in high-income countries: a comparison of the Czech Republic, Estonia and Latvia. Copenhagen ([http://www.who.int/health\\_financing/events/who\\_europe\\_uhc\\_day\\_report\\_web.pdf?ua=1](http://www.who.int/health_financing/events/who_europe_uhc_day_report_web.pdf?ua=1)).

WHO Regional Office for Europe (2017b). Prevention and control of noncommunicable diseases in Kyrgyzstan. The case for investment. Copenhagen: WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/349683/BizzCase-KGZ-Eng-web.pdf?ua=1](http://www.euro.who.int/__data/assets/pdf_file/0006/349683/BizzCase-KGZ-Eng-web.pdf?ua=1)).

WHO Regional Office for Europe (2018 forthcoming). Prevention and control of noncommunicable diseases in Belarus. The case for investment. Copenhagen.

WHO Regional Office for Europe (2018 in press). Prevention and control of noncommunicable diseases in Turkey. The case for investment. Copenhagen: WHO Regional Office for Europe.

World Economic Forum (2015). Maximizing healthy life years: investments that pay off. Geneva ([http://www3.weforum.org/docs/WEF\\_Maximizing\\_Healthy\\_Life\\_Years.pdf](http://www3.weforum.org/docs/WEF_Maximizing_Healthy_Life_Years.pdf)).