Abstract—Collective financing, in the form of either public domestic revenues or pooled donor funding, at the country level is necessary to finance common goods for health, which are population-based functions or interventions that contribute to health and have the characteristics of public goods. Financing of common goods for health is an important part of policy efforts to move towards Universal Health Coverage (UHC). This paper builds from country experiences and budget documents to provide an evidence-based argument about how government and donor financing can be reorganized to enable more efficient delivery of common goods for health. Issues related to fragmentation—within the health sector, across sectors, and across levels of government—emerge as key constraints. Effectively addressing fragmentation issues requires: (i) pooling funding and consolidating governance structures to repackage functions across programs; (ii) aligning budgets with efficient delivery strategies to enable intersectoral approaches and related accountability structures; and (iii) coordinating and incentivizing investments across levels of government. This policy response is both technical in nature and also highly political as it requires realigning budgets and organizational structures.

INTRODUCTION

The Sustainable Development Goals (SDGs) bring together a set of priorities that require public participation and strong political commitment to reduce poverty, conserve biodiversity, mitigate climate change, and educate and improve the health of populations. Implicit within the SDG framework is the notion of interdependency; the achievement of each goal depends on the achievement of the others.¹ This approach necessitates coherence, coordination, and prioritization in policy responses both within and across sectors.² The World Health Organization’s knowledge program on Financing Common Goods for Health is a direct response to this call for harmonized and multisectoral investments. It places the efficient provision of common goods for
health (CGH) as the starting point for financing that aligns to that goal.

CGH include a set of population-based functions or interventions that require collective financing (e.g. pre-paid and pooled resources from government or donor sources) in order to be provided at all. Unlike personal services, the mode of delivery of CGH is population-based, and the benefits accrue to entire populations. This means that it is generally not possible to exclude an individual from the benefits of the service (e.g. by only allowing fee-paying consumers to benefit), and the “consumption” of a CGH by one individual does not usually reduce the opportunity for others to benefit equally from it. These characteristics, termed “non-excludability” and “non-rivalry,” locate most CGH in the category of market failure known as “public goods.” In practice, however, many goods and services are partially rival and/or excludable, and we consider these as CGH as well, as long as the health benefits they provide are sufficiently significant to be considered to have large social externalities. CGH can be classified into five categories: (i) policy and coordination; (ii) taxes and subsidies; (iii) regulations and legislations; (iv) information, collection, analysis & communication; and (v) population services.

This paper focuses on specific issues related to government financing mechanisms that influence how efficiently CGH are organized and delivered. Building from country experiences and budget documentation, it addresses how financing mechanisms for CGH interact with other aspects of health system financing and public finance more generally. It seeks to identify how to better organize and allocate financing across the system to enable more efficient delivery of CGH.

In the following section, the conceptual approach that forms the basis for country-level financing of CGH issues is explained. We then describe the methods used to collect and analyze country experiences. The next section presents key findings in the form of current challenges and issues related to financing CGH. The following section explains the implications of these challenges and discusses policy interventions to address them. Finally, the conclusion provides a call to action for countries and the global health community to support more efficient delivery of CGH through redesigned collective financing mechanisms.

CONCEPTUAL APPROACH

Three central concepts form the basis for the approach taken to financing CGH in this paper. These concepts are used to distinguish financing mechanisms and related issues for CGH from other forms of government or health system financing. One concept is the specific categories of market failure to which CGH pertain. The second is the type of services CGH provide. The third concept is placing the efficient delivery of CGH as a central organizing principle to align financing systems.

Market Failures

While financing CGH requires collective financing for CGH from either governments or donors, it does not do so to the exclusion of financing for personal services. The associated market failures for these personal services, particularly specific manifestations of information failure as it pertains to insurance markets (adverse selection), in addition to equity considerations, necessitate predominant (but not sole) reliance on public financing as well. Put another way, there are several categories of market failure, and public action, often including financing, is a necessary response to these. In this paper, however, we are not focused on the types of market failure that apply to personal health services, as we are defining CGH as population-based services that are public and quasi-public goods and are cost-effective with large social externalities.

Population-based Services

In most cases, collective financing for CGH will come from general government tax revenues; however, in some circumstances (e.g. fragile or conflict-affected areas, or low-income countries) external assistance will be needed to ensure the provision of CGH. This financing consideration directly complements policy efforts to move towards Universal Health Coverage (UHC) that focus on ensuring effective access for the entire population to quality, affordable health services. In practice, UHC-related health financing reforms have often focused on personal services delivered to individuals, with less attention paid to population-based functions. By working on financing CGH, we aim to redress this imbalance and clarify the importance of these population-based functions within the overall UHC agenda. Reflecting this priority, the service coverage tracking indicator used to monitor progress towards SDG 3.8—achieving universal health coverage—includes population tracers such as health security and water and sanitation alongside indicators for personal service coverage such as antenatal care and diabetes management.

It is important to note that some CGH functions and personal services share common inputs, such as workforce and infrastructure. In these cases, financing issues for personal health services and CGH functions will need to be addressed jointly. However, where there are distinctions, as when population-based services (e.g. mass public health promotion campaigns) are organized and delivered differently from personal services (e.g. immunization
of a child during an ambulatory care visit), they also potentially have different financing mechanisms. Recognizing the distinctive nature of CGH is an important step to design financing mechanisms that enable their efficient delivery.

Efficiency

Efficiency is approached in two ways. The issue of allocative efficiency—in this instance, a country allocating resources to finance CGH—addresses decisions made based on the need to address market failures. In the case that a country has already made the decision to prioritize financing and policy interventions for CGH, inherent public financing resource constraints necessitate using the second form of efficiency: technical efficiency. This involves identifying the least-cost mix of available resources to produce CGH, determining how to strengthen and align existing functions and interventions before investing more in these areas. This second form of efficiency is the focus of this article. To assess technical efficiency in the context of UHC at the population level, this paper uses the entire health system, and in some cases broader government systems, as the unit of analysis rather than at the level of an individual health program.

In this way, we address the efficiency part of fiscal space for health by examining how to make the most of existing resources. It does not focus on revenue-raising issues for CGH specifically. Funding for CGH is a matter of budgetary design, prioritization, and allocation mechanisms, and not necessarily about specific revenue-raising mechanisms.

DATA ON COUNTRY EXPERIENCE WITH THE FINANCING OF CGH

Literature Reviews

We conducted literature reviews on financing-related issues pertaining to how revenues are pooled and used to purchase and deliver CGH, focusing on specific country experiences. The following electronic databases were used to identify the articles and country examples: PubMed/MEDLINE; JSTOR; Google; Google Scholar; and Harvard HOLLIS. We limited our search to articles published after January, 2000.

From the overall review of literature, select country examples related to issues around country-level financing of CGH were collected for further exploration. Based on the selected literature and country examples, we analyze how specific CGH have been and can be financed in countries. Attention is given to system-level challenges and strengths that emerged in the analysis phase. We then discuss mechanisms to address these issues to enable more efficient delivery and production of CGH.

Comparative Budget Analysis

To better understand where CGH sit within domestic budgets, a comparative analysis was conducted of domestic budgets selected from the World Health Organization’s repository of health budgets. This repository includes both health budgets and a mapping of types of budget classifications used in more than 100 countries. Specific areas that were analyzed included disease surveillance systems, disaster and emergency preparedness, health security, and water and sanitation. These can be usefully considered as areas for public health action and are specific topics in which CGH functions are needed for delivery. The health budget review was complemented with a review of overall public-sector budgets in a select set of countries. Our literature reviews and comparative budget analyses were then supplemented by consultations with public health experts on these issues.

FINDINGS

Based on our literature review, budget analysis, and consultations with experts, we identified three financing-related issues that can constrain the efficient delivery of CGH. These issues were determined based on their direct impact on financing mechanisms, relevance to CGH, and the availability of viable policy interventions to address them. The findings focus on how a country can efficiently organize its financing arrangements for CGH. To highlight key policy challenges, we grouped the selected issues in three categories: (i) within the health sector; (ii) across sectors; and (iii) across levels of government. Specific examples are presented to both illustrate and provide the evidence base for each of these challenges.

Within the Health Sector

The separation of activities and functions based on vertical disease- or intervention-based programs is well-documented. This parallel approach may be driven by country-level organizational and budgeting processes but it is often compounded in low- and middle-income countries by fragmented and uncoordinated donor financing and related priorities. In the case of CGH, this can be particularly challenging because many health programs have common functions (e.g. disease surveillance). Segmenting these functions by individual health program means they are only able to service that one particular issue. Therefore, for many health programs the consolidation of such functions as part of a common platform can both improve efficiency and enable more flexible and adaptable approaches.

Reviewing country experiences with financing aspects of CGH highlights the difficulties arising from financial and
organizational fragmentation. For example, prior to the Ebola epidemic in Liberia, there was no institutionalized system for disease tracking. The surveillance systems were weak and fragmented by specific disease programs in a way that impeded their flexibility to adapt to and detect other emerging and infectious diseases that fell outside of their specified mandates. In contrast, the polio surveillance system in Nigeria has developed to serve other notifiable conditions with its strong disease detection, laboratory networks, immunization services, and outbreak preparedness and response structures. In doing so, Nigeria has demonstrated that cross-cutting capabilities in the polio surveillance system could help in other disease outbreaks, while still serving polio-specific needs. This example stresses the value of taking a functional approach to CGH rather than being constrained by the limits of individual programs.

While the issue of fragmented and overly vertical functions is increasingly recognized, it remains challenging to enable system-wide platforms. Similar to Nigeria, the polio eradication initiative in India was primarily externally financed through 2014, when the country was declared polio free. This initiative not only focused on polio, but also financed India’s underlying surveillance system to detect and protect against other vaccine-preventable diseases. After the country was declared polio free, funding from the Global Polio Eradication Initiative (GPEI), UNICEF, Gavi, and other donors declined precipitously. However, there was still an identified need to finance the broader disease surveillance system domestically, in addition to funding polio prevention. In this instance, the Indian government recognized the necessity for government action to mitigate the impact of decreased external financing for this CGH. As a first step, in 2019 the Government of India has committed to fully fund the disease surveillance system in the country, including the contracts of approximately 700 staff members. However, due to administrative constraints they have had to take an interim measure of channeling the designated program funds through the World Health Organization. The ability for the budget, civil service, and Ministry of Health to fully integrate the surveillance functions, and specifically the personnel, into government systems remains a challenge to be addressed in the coming years. This example underscores that while funding is critical, the key to sustaining surveillance activities depends on the national budget system and bureaucracy to conduct disease surveillance as a cross-cutting function (i.e. beyond one disease).

Segmenting CGH functions by disease raises efficiency concerns that go beyond pure effectiveness issues. For example, in the case of South Africa, investments from external agencies have contributed to the establishment of HIV and tuberculosis information and reporting systems that are separate from and not well-coordinated with the overall health system information platform (i.e. District Health Information Software). This contributes to a large administrative burden, with one study finding that HIV prevention and treatment data were both manually entered on separate paper forms. These systems also do not allow for coordination for the same patient across diseases. The existing arrangements are inefficient, both in terms of higher-than-necessary costs and because the outputs from these systems are less useful than would be the case if they were integrated or interoperable.

In countries that use agencies with explicit responsibility to purchase personal health services (e.g. national health insurance agencies), the population-based nature of CGH requires conceptual clarity on roles and responsibilities, as the skills and systems needed to oversee payment to providers of personal services are very different from those needed for CGH. Because all countries that have achieved universal affiliation to national health insurance agencies transfer general budget revenues to ensure the inclusion of people who do not make a direct contribution (e.g. the poor), governments need to fund both these transfers and CGH. Reflecting this, countries such as the Republic of Korea, Thailand, Mexico, and others with a form of universal national or social health insurance institutions have distinct agencies or organizations tasked with ensuring the provision of CGH and other public health priorities. These agencies are set up to complement the personal services that are the focus of health insurance institutions. Distinct market failures provide the rationale for the use of general government revenues to fund CGH (public goods and externalities) and personal services (information failure and natural monopoly), as well as equity and efficiency considerations.

### Across Sectors

Given the multisectoral nature of CGH, different parts of the public sector may be responsible for both their financing and provision. For example, tobacco control may be the responsibility of the health sector, but the fiscal mechanisms to curb tobacco use (i.e. tobacco taxes) are primarily the responsibility of finance authorities. Health taxes more broadly (e.g. taxes on tobacco, alcohol, or sugary beverages) are considered an important CGH in that they require collective action to implement (in the form of a government decision) and have proven impacts on population health. Efforts to implement this CGH requires direct engagement with the finance authorities who ultimately hold taxation power. The introduction of a tobacco excise tax in the Philippines in 2012 demonstrates the potential for mutually reinforcing objectives between health and finance, while also underscoring the critical importance of
multisectoral action. In this case, the Ministry of Finance had to rely heavily on the health-related objectives of the tax to overcome opposition to increased taxation and ultimately pass the tax legislation. While health and finance actors had distinct objectives, they were able to reinforce one another through a shared instrument. Finding these mutually beneficial solutions across sectors can facilitate policy action on CGH.

From a budgetary perspective, the structure of a country’s budget can place constraints on the financing of these goods. To enable efficient delivery of CGH requires coordination among different sectors, political action, and often budget reform. Opportunities for financing CGH can easily become constrained or neglected when ownership and coordination of funds are spread across different sectors. Additionally, difficulties arise when linking spending and health priorities with budgets structured based on inputs and administrative units.

The case of water and sanitation services offers an example of an issue that contains many CGH, including water quality regulations and sewage system infrastructure. When conducting our comparative analysis of country budget structures, water-and-sanitation-related activities fell under many sectors, which varied by country. Eswatini (also known as Swaziland), for example, has multiple ministries that have programs aimed at providing potable water and sanitation services to areas throughout the country. The Ministries of Health, Natural Resources and Energy, Agriculture, Economic Planning and Development, and Education all independently provide funding to the local level for the provision of these services (Table 1). Due to the shared objectives of some of these services, efficiency gains could be made through cross-sectoral coordination to avoid fragmentation by ministry. Therefore, from a financing perspective, coordination of activities and related budgets is a reflection of national public sector governance and coordination mechanisms.

### Across Levels of Government

Decentralization—when power, resources, and management functions are shared across levels of government—can directly impact how resources are raised, pooled, and allocated to finance CGH. Decentralization can take many forms but is usually a government-wide initiative that pertains to multiple sectors, not only health. Decentralization involves transferring authority that was primarily held within central Ministries or Departments to sub-national entities that then have power over their finances, decision-making, and management. Decentralization can impact financing CGH in two important ways, as demonstrated by the cases of Kenya and Tanzania.

| Sector | Objective | Program |
|--------|-----------|---------|
| Ministry of Health | To improve and preserve the state of health of the citizens of Swaziland | Water and Sanitation Project: Local funds for the provision of potable water and construction of pit latrines in several locations in the country |
| Ministry of Natural Resources and Energy | Power and Water – To provide and maintain facilities for ensuring availability of adequate power and water and ensure optimal land use | Rural water supply: Local funds for provision of potable and safe water and sanitations to rural communities |
| Ministry of Economic Planning and Development | To assist in planning and implementing economic policies to accomplish Government development objectives | Infrastructure development: Local funds for capacity building and community projects such as water supply schemes |
| Ministry of Agriculture | To develop the Swaziland Agricultural Sector and create a conducive environment for sustainable agricultural development, attainment of food security and growth of the national economy, through the formulation of appropriate policies, strategies and programs, and legal and institutional framework | Downstream developments: Local and donor funds for resettlements, potable water, and sanitation |
| Ministry of Education and Training | To provide facilities and training for the purpose of improving the general level of education and to regulate education and training facilities | Provision of water to rural schools: Donor funds for the provision of water to rural schools |

**Table 1.** The Government of the Kingdom of Swaziland 2017 Budget: A selection of water and sanitation related programs
below. First, short-term and local political interests can work against investments in CGH. In cases in which CGH have been prioritized at national (or even supranational) level, local governments may fail to adequately fund and deliver CGH that provide benefits outside of their constituencies. Second, uniform systems, regulations, guidelines, and funding from the national level will likely continue to be needed to efficiently deliver these population-wide CGH. This requires strong national leadership and operational planning to establish a system-wide approach that coordinates and supports implementation across sub-national entities.

Kenya’s recent experience provides an example of how decentralization processes can impact financing for CGH. In 2013, Kenya transitioned to a decentralized governance system. The provision and financing of public health and primary health activities were transferred to 47 county governments, while the central Ministry of Health retained policy and regulatory functions and responsibility for some national infrastructure and strategic facilities. Investments in infrastructure and delivery of personal services in many counties have taken priority over population-based services due to the tangibility and short-term rewards of such investments. Compounding this challenge, financing for CGH such as emergency preparedness and health security at the county level is constrained by limited budgetary allocation and lack of either a legal framework at the national level or standards or goals to guide disaster management in counties. One study found that the national executive and legislative leaders did not see the need to house disaster preparedness and management under one body in Kenya. The various political entities charged with this function preferred instead to operate independently and rely on ad hoc relationships across sectors for its provision.

De-prioritization of CGH under decentralized budget authority is also seen in the example of Tanzania. Fund transfers from the central government to the local level are classified under block grants, giving local governments the responsibility for covering recurrent and capital costs. With respect to the Rural Water Supply and Sanitation Program (RWSSP) in Tanzania, the central government coordinates and facilitates the program, while local level authorities are responsible for implementation. Villages are expected to apply in advance for RWSSP development grants. However, local-level priorities are developed based on a participatory process in which villages rank their budgetary priorities, and to date the citizenry has been inadequately aware of the available funding mechanisms for water and sanitation development. Decision making is further influenced by insufficient information and weak coordination at the district level, resulting in limited action to identify vulnerable areas in need of RWSSP.

### POLICY IMPLICATIONS AND INTERVENTIONS

The findings listed above highlight the contextual factors that influence whether and how a country can organize and align financing mechanisms to promote the efficient delivery of CGH. This is not an exhaustive list of potential issues, but shows that country-level financing responses for CGH need to be placed within the context of the overall financing and institutional arrangements of a given country. In particular, to address the inefficiencies resulting from fragmented delivery of CGH, existing financing arrangements have to be reexamined and likely changed. This finding suggests that there are targeted interventions and policies that can be implemented to align financing flows and incentives with a more efficient system-wide organization of CGH. Importantly, while some of these interventions are in the purview of either the health sector or health financing domain, many relate to fragmented governance arrangements and organizational structures that make intersectoral policy coordination difficult. Ultimate ownership and accountability for CGH may need to rest at the national level or within an office that has cross-cutting responsibilities. What is most important, in the first instance, is to have clarity on how to organize and deliver CGH in the most efficient way possible, and then to support this direction through aligned financing arrangements (e.g. budget reform). Table 2 provides

| Type of financing fragmentation and related constraints | Possible interventions/responses |
|-------------------------------------------------------|---------------------------------|
| Across programs and schemes within the health sector  | • Pooled financing for CGH investments |
| Across sectors: governance and budgeting              | • Budget/organizational/institutional reforms to unpack and repackage functions across programs |
| Across levels of government: coordination and prioritization | • Budget/PPM reform to enable intersectoral budgeting and related accountability mechanisms (ex. program-based budgeting design) |
|                                                       | • Increased control over and accountability for sub-national units |
|                                                       | • Explicit incentives through intergovernmental fiscal transfer instruments |

**Table 2.** Constraints and Policy Responses and Interventions Related to Fragmented Financing
a summary of the possible responses to address the various issues raised above, which are elaborated below.

**Pool Funding and Consolidate Governance Structures**

Addressing fragmentation in both the financing and organization of CGH will likely require changes to the structures of financial flows and organizational units. Based on the prioritized CGH, efforts will need to be made to identify if, where, and how they are currently financed and delivered across government entities. Such a review should focus on identifying particular areas of duplication, overlap, or misalignment as a basis to first identify feasible options to bring financing and organizational structures together to support the more efficient production of CGH. This review is important to ensure that the functions identified can serve entire populations and address multiple diseases. Policy responses can then be designed to consolidate specific functions across programmatic activities. For example, if HIV and TB health programs share information networks that are related to surveillance, efficiencies can be gained by unifying their platforms or enabling inter-operability. This would reduce system-wide needs for physical and human resources while enhancing potential gains from a unified surveillance system. There may be short-run costs associated with unifying functions; they will require identifying and costing the investments needed to enable efficiency in the long run.

Interventions to address fragmentation likely involve changes to (or within) public financial management (PFM) and budgeting systems to allow funds to flow to shared functions. Additionally, institutional arrangements will have to shift so that responsibility and accountability are shared across the health sector (or government more widely) to ensure the quality and availability of CGH. This process can be difficult from a political perspective; it implies shifting authority for both financing and delivery of CGH, which is likely to upset vested interests. In many low- and middle-income countries it will also have direct implications for how donor funds are pooled and used to enable cross-cutting investments. Issues related to on-budget financing (i.e. funding that runs through government public financial management systems), flexibility to invest across diseases and sectors, and time horizon considerations are all critical areas that should be addressed when reexamining how donors provide financial support to countries. As is highlighted in the case of GPEI in India, these issues become even more pressing when combined with transition-related processes; however, a transition may also provide political opportunity to make long-needed changes.

Consolidating financing and authority for CGH may in some cases involve establishing new institutions, similar to the creation of quasi-public national health insurance entities as a way around obstacles to efficient pooling and purchasing within core budgetary arrangements. For instance, as part of its overall health reform efforts designed to progress towards UHC in the early 2000s, Thailand established the ThaiHealth Promotion Foundation to provide population-based promotion and prevention activities. The Foundation, which was not affiliated to an explicit formal sector coverage scheme, served as a complement to the Universal Coverage Scheme focused on access to personal health services for the entire population. Similar, as explained by Góméz-Dantés and Frenk (2019) in their discussion of the establishment of the System of Social Protection in Health in Mexico to provide health coverage to the informal sector, specific provisions were made to protect financing for public health interventions. These examples highlight that consolidation efforts may have direct institutional consequences for current structures as well as potentially new institutions.

**Align Budgeting with More Efficient CGH Delivery**

From a financing perspective, the budget is a central mechanism to match funding with priorities and population needs. In terms of budgeting practices, line item-based budgets are an obstacle to the cross-cutting approach needed to drive efficiency in organization and delivery of CGH. Moving away from input-based budgeting toward budgets that are formulated and executed on the basis of programs organized by functions can help strengthen the linkages between budget allocations and government priorities. Many countries are moving to program budgeting to enable greater flexibility in allocations, both across departments within a Ministry of Health and also across an entire government. These reforms aim to establish a performance-orientation, whereby multiple departments or even sectors are jointly accountable for achieving a single performance metric. This change in budgeting logic can help to streamline implementation for CGH. In many cases, this will require deeper analysis to decompose the functional elements of programs as a means to identify certain CGH. This will then enable exploration of how budgetary programs might be redesigned to align resources with system-wide functions.

Australia’s program budget provides an example of how this budgeting arrangement can enable cross-cutting investments in CGH, as shown in Table 3. Dedicated resources coming from general tax revenues finance “outcome five” in the program...
Within this outcome, disease surveillance and information systems, immunizations, public health security response and antimicrobial resistance regulations, and stockpiling of drugs are all listed as key performance indicators (KPIs). These indicators do not sit within specific departments or health programs but are at the level of the health sector. This program-budgeting approach reflects Australia’s investment in national priorities (e.g. a national disease surveillance system) that cut across all health programs. Furthermore, the health sector budget related to this outcome specifically references other linked budget programs outside of its own authority because of their contributions to outcome five.

Afghanistan provides an example of a country that, while at a different stage in budgeting reforms, locates CGH in a range of different sectors with clear targets and KPIs to track progress. For instance, outcomes and KPIs related to vaccination coverage and the establishment of surveillance centers are housed under the Ministry of Public Health, while KPIs related to disaster preparedness are housed under the Afghanistan National Disaster Management Agency. While there are no explicit links made across sectors for shared outcomes, CGH are still prioritized and tracked. The program budgets of both Australia and Afghanistan show how the budget can be a tool to reflect CGH priorities. By aligning and coordinating the programmatic composition of their budgets with system-wide organization of CGH functions, the governments can enable potential cross-cutting investments to finance these functions.

The United Kingdom (UK) and New Zealand have both experimented with multisectoral collaboration towards a common goal through initiatives that pool funding for shared objectives at the supra-ministerial level. In 2004, to prioritize investments to combat childhood obesity, the UK Government pooled and linked funds to performance in three departments (the
Departments of Health, Education and Skills, and Culture, Media and Sport). In doing so, the departments needed to align their activities and related budgets so that they were mutually supportive to ensure their joint target was met. Despite their efforts, implementation proved difficult due to the challenges in effective coordination and governance arrangements. An audit of the program concluded that one department or agency needed to be given lead authority in order for the approach to be effective.  

New Zealand has had better success in implementing a budgetary framework (Table 4) that enables cross-agency funding as a way to improve collaboration and reduce the transaction costs of working across agencies. As of 2014, the framework provides a basis for determining both governance and financing arrangements associated with delivering activities that contribute to shared outcomes. There are three possible funding models: (i) cost recovery charges, wherein one agency buys a service from another agency and recovers costs through a service fee; (ii) pooled funding, in which a group of agencies combine funds in order to share costs to achieve a common goal; and (iii) centrally-determined funding, when ministers determine cross-agency collaboration is needed and then identify funding sources.  

Align Prioritization of CGH across Levels of Government

Coordinating priorities to finance and deliver CGH across levels of government in the context of decentralization has implications for both financing and governance arrangements. The relevant policy levers may differ based on both the degree of decentralized authority and on the degree and composition of decentralization-oriented reforms. In countries where the central government cannot simply dictate or mandate how sub-national governments allocate their budgets, intergovernmental fiscal transfers include mechanisms that the central government can use to influence allocation decisions at sub-national levels for particular functions or services. Most countries have several forms of transfers, such as matching grants or specific formulas, depending on the objectives to be achieved. These levers can influence regulations and incentivize investment in core government functions. The transfers are also a way to enhance equity in per capita funding levels across sub-national entities with diverse revenue-raising capacities.  

In addition to fiscal mechanisms, regulatory or governance-related interventions can also serve as potential means to influence the provision of CGH. One option might be to negotiate for the centralization of specific CGH, for example in relation to the procurement of vaccines or the management of information and communications systems that facilitate surveillance. Additionally, legislative and regulatory instruments can be put into place to ensure the provision of CGH based on nationally defined standards.

The conditional grant framework in South Africa for HIV and other national-level priorities presents an example. To operationalize the national-level priority to finance HIV/AIDS, a conditional grant fiscal instrument was created that runs in parallel to other fiscal transfers allocated from the National Treasury to provincial-level treasuries. The HIV conditional grant runs from the National Treasury to the National Department of Health before being transferred in a highly regulated and controlled manner directly to Provincial Departments of Health. In

| Funding Model                 | Definition                                                                 | Example                                                                 |
|------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Cost recovery charge         | An agency buys a service from another agency that recovers costs through a service fee | The costs of advice and representation functions by the Crown Law Office (the public service department charged with advising the government on legal affairs) are recovered from “clients” (departments) on a fee-for-service basis. |
| Pooled funding               | Agencies pool funds from their baselines to share costs of an initiative to achieve a common goal | The Central Agencies Shared Services (CASS) combines resources to provide corporate services (information technology and management, human resources, and finances) to the Department of the Prime Minister and Cabinet, the State Services Commission, and the Treasury. |
| Centrally-determined funding | Ministers determine that an activity is to be funded on a cross-agency basis and determine the funding sources | The Better Public Services (BPS) Seed Fund was established to speed up development of cross-agency initiatives that contribute to BPS. Decisions about use of the Fund are made by the Minister of Finance, Minister of State Services and Associate Ministers of Finance, on the advice of the central agency chief executives. |

TABLE 4. New Zealand’s Models for Funding Cross-agency Initiatives
this case, health authorities at both levels of government have more control over the level and use of financing for HIV services as compared with other health sector financing. This approach could also be applied to CGH.

Policy interventions to align financing with the desired delivery strategy for CGH are varied and will be context specific. This review and discussion aimed providing a basis for considering contextually appropriate intervention strategies by first identifying common key constraints as well as related interventions that have already been used by countries as the basis for developing policies and strategies to effectively match funding arrangements with strategies for the efficient delivery of CGH.

CONCLUSIONS

Fragmentation of financing—within the health sector, across sectors, and among levels of government—is a constraint to the efficient delivery of CGH for populations. Responding to fragmentation requires defining a delivery strategy and then aligning budgeting processes and creating coherent priorities across sectors and levels of government. Many countries are grappling with such challenges, and not solely in relation to CGH. Similar to health financing more broadly, strategies for financing CGH should build on systems that are already in place. In doing so, critical gaps or areas that need improvement can be identified that are clearly linked with the objective to ultimately have CGH to promote health, prevent the spread of diseases, and protect against risks. These efficiency considerations will need to be coupled with prioritization and allocation of resources for CGH.

In this article, we aimed to show that embedding these financing considerations within overall health and government financing processes is an integral part of efforts to move towards UHC. The findings also have implications for the donor community, particularly those that channel funding for specific disease interventions and programs. These donors might consider reformulating their support for particular cross-cutting functions. System-wide approaches to the design and delivery of CGH, combined with political commitment to and public awareness about their importance, can enable governments to implement more effective mechanisms to finance CGH.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

No potential conflicts of interest were disclosed.

ACKNOWLEDGMENTS

We would like to acknowledge the feedback received during a March 2019 Technical Experts Group meeting on Financing

Common Goods for Health that helped to improve subsequent drafts of this article. Finally, we gratefully acknowledge the support and guidance of Agnès Soucat, Matthew Jowett, Elina Dale and Antonio Durán.

FUNDING

This article was supported by the World Health Organization, Funding from Finland’s Ministry of Social Affairs and Health, the UK Department for International Development, and the European Commission is gratefully acknowledged. We also thank the Ministry of Health and Welfare of the Republic of Korea for their financial support.

ORCID

Susan P. Sparkes http://orcid.org/0000-0003-3289-5745
Joseph Kutzin http://orcid.org/0000-0003-1061-5693
Alexandra J. Earle http://orcid.org/0000-0001-9594-7210

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