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






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The Government Budget: An Overlooked Vehicle for Advancing Strategic Health Purchasing

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ABSTRACT

The most effective way to finance universal health coverage (UHC) is through compulsory prepaid funds that flow through the government budget. Public funds—including on-budget donor resources—allow for pooling and allocation of resources to providers in a way that aligns with population health needs. This is particularly important for low-income settings with fiscal constraints. While much attention is paid to innovative sources of additional financing for UHC and to implementing strategic purchasing approaches, the government budget will continue to be the main source of health financing in most countries—and the most stable mechanism for channeling additional funds. The government budget should therefore be front and center on the strategic purchasing agenda. This commentary uses lessons from Tanzania and Uganda to demonstrate that more can be done to use the government budget as a vehicle for making health purchasing more strategic, across all phases of the budget cycle, and for making greater progress toward UHC. Actions need to be accompanied by measures to address bottlenecks in the public financial management system.

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Introduction

Compulsory prepaid funds are the most effective vehicle for financing universal health coverage (UHC).^{1–4} Public funds—including tax and non-tax revenue, prepaid contributions, and on-budget donor resources that flow through the government budget—allow for the equitable and efficient pooling and allocation of resources. Health systems that make the government budget (including resources channeled through national health insurance systems or other mechanisms) the cornerstone of their health financing arrangements have proven to be more equitable and sustainable and generate better results for population health than those that do not.⁵ These health systems also enhance financial protection with less impoverishment from out-of-pocket spending, improve visibility into resource flows, and improve the government's ability to engage in long-term planning.⁶

But given the macroeconomic and fiscal outlook for most African countries, increasing domestic government revenue alone will likely be insufficient to meet growing health needs. This has been evident during the COVID-19 pandemic. Some countries were able to increase per capita

government health expenditure to address the impacts of COVID-19, while others were not.⁷ This requires additional measures to use available funds more effectively.^{8,9}

As calls for more donor resources and new innovative financing solutions continue,¹⁰ the government budget, regardless of fiscal constraints, will continue to be the main source of health financing in most countries and the most stable mechanism for channeling additional funds. The government budget should therefore be front and center on the strategic purchasing agenda.

Strategic purchasing—using evidence and information about population health needs and health provider performance to make decisions about which health services to cover with public funds, which providers to select to deliver those services, and how and how much to pay those providers—is generally accepted in the global health community as a critical facilitator of progress toward UHC given limited resources and as fiscal space expands.^{11–23} To ensure that public resources are used efficiently and strategic purchasing approaches are fully employed, governments need to better align public financial management (PFM) rules with their health financing

objectives,^{24,25} particularly to direct health funds to priority populations and services and create incentives for providers to use funds more equitably and efficiently.

This commentary uses lessons from Tanzania and Uganda to show that more can be done to use the government budget as a vehicle for making health purchasing more strategic, across all phases of the budget cycle, and for making greater progress toward UHC. This needs to be accompanied by measures to address bottlenecks in the PFM system.

The Case for the Government Budget as a Cornerstone of Strategic Purchasing

Many countries, particularly in Africa, have introduced new health financing arrangements that operate in parallel with the government budget; they include contributory national health insurance schemes, community-based health insurance, and other, smaller-scale schemes. These schemes are expected to generate additional revenue and create the opportunity for more strategic purchasing of covered services.^{26,27} But even in these contexts, the government budget remains the most effective and equitable vehicle for strategic purchasing, and public resources are required to advance UHC objectives—for several reasons, as we detail in this section.

Budgets Allow Governments to Take a Multisectoral Approach to Addressing Health Priorities

As the steward of human capital investments, the government should oversee health resources to help meet the priorities of the state and the people. A central tenet of strategic purchasing is the alignment of funding flows with what is purchased and what the population needs. Governments have the authority to use the government budget to fund a comprehensive health benefit package, while at the same time engaging in multisectoral efforts to support individual well-being and the social determinants of health. For example, in a single budget the government can support gender empowerment that leads to later childbirths, water and sanitation efforts that improve access to safe drinking water, infrastructure projects such as roads that contribute to health facility access, and a host of other interlinked priorities. These priorities cannot be addressed through the health sector alone; the budget ensures deliberate, coordinated action across sectors.

Program-based budgeting (PBB) reforms in Uganda illustrate the use of budgets to advance multisectoral collaboration that leads to more effective purchasing of health services and the removal of barriers to access and

service utilization that are beyond the influence of the health sector. Emerging lessons include the need to encourage further alignment between PBB and the Medium Term Expenditure Framework (MTEF) process and to channel a greater proportion of partner contributions through PBB.^{28,29}

The Government Budget Is Determined by a System of Representation and Emerges through a Negotiation Process

The government budget is formulated through a priority-setting process that involves varying degrees of negotiation among stakeholder groups.³⁰ Both Tanzania and Uganda use a deliberative approach to budgeting that includes a high degree of stakeholder engagement, consultation, and negotiation. They also employ mechanisms to take into account priorities at lower administrative levels, including frontline health providers and populations.^{31,32} For instance, Direct Health Facility Financing (DHFF) in Tanzania—a mechanism that channels general revenue from Tanzania's Health Basket Fund (a fund that collects foreign donor assistance) directly to health facility bank accounts—uses health facility governing committees (HFGCs) to engage communities in health budget planning, execution, and accounting and account for local priorities, which has helped to improve the quality of health services.³³ In Uganda, participatory budgeting processes provide opportunities for the budget to support service delivery that focuses on community needs. This reinforces the strategic purchasing objective of allocating funds according to population needs and sectoral priorities.^{34–37}

The Budget Processes Can Be a Tool for Supporting Broader Reform Objectives, Such as Decentralization and Health Provider Autonomy

Strategic purchasing is enabled by a separation of functions, usually between purchasers and providers.³⁸ In Tanzania and Uganda, service delivery is a constitutional responsibility of local governments, while the central government is responsible for strategic functions such as regulation, policy formulation, and resource mobilization. Tanzania's DHFF has increased provider autonomy by allowing budget funds to be transferred directly to health facility bank accounts. DHFF has shifted control of funds from local governments to primary health care (PHC) facilities and significantly altered their roles and relationships in the delivery of PHC services. PHC facilities now lead planning, budgeting, and implementation of plans—using

funds that they control—while facilitating inclusion of community priorities in facility planning and budgeting.³⁹

An explicit provider-purchaser split is not apparent in Uganda, where the Ministry of Health is more involved in direct service delivery. However, some elements inherent in the budgeting process support decentralization and enhanced provider autonomy. For example, local governments oversee and supervise service providers within their jurisdiction, which supports the performance monitoring function of strategic purchasing and helps ensure effective financial management and accountability.⁴⁰

The Government Budget Supports Accountability

All government budget processes include mechanisms to track funding flows and ensure accountability. These can be used to link funding to performance, which is a key principle of strategic purchasing. In Uganda, the Ministry of Finance, Planning and Economic Development (MoFPED) employs top-down control mechanisms, such as budget circulars and MTEFs,⁴¹ which allow it to play a stewardship role as a de facto purchaser—albeit a passive one. Uganda’s evolution from purely input-based budgeting to output-based budgeting—and, more recently, program-based budgeting—is advancing the strategic purchasing principle of linking funding to performance while improving accountability by monitoring not only financial performance but also service delivery. Output-based budgeting makes it possible to link provider payment to both service delivery and results, which improves accountability. The government budget also supports accountability at all stages of disbursement and use of funds.

While health facilities and local governments in Tanzania and Uganda receive funds directly into their accounts, disbursement approvals follow financial management and accountability rules. The Facility Financial Accounting and Reporting System (FFARS) is used to ensure that facility expenditure is consistent with, and does not exceed, facility budgets. The government can also monitor service-level data collected through centralized DHIS2-based health management information systems.⁴²

Making the Government Budget Work for Strategic Purchasing

Because government budgets are governed by a country’s PFM rules, how to make the budget work better for strategic purchasing and health service delivery outcomes is a fundamental PFM policy question.^{25,43}

For government budgets to support optimal resource allocation and strategic purchasing practices, the budget structure and PFM processes must align with health financing objectives and allow for the introduction of incentives for good performance at each step of budget formulation, execution, and monitoring.²⁵ Given this alignment, strategic purchasing through government budgets and the PFM system can generate positive outcomes. For instance, research has shown that reductions in under-5 mortality are directly associated with a one-unit increase in PFM quality; for countries that channel at least 75% of health expenditure through the government system, this can translate to as many as 17 deaths averted per 1,000 live births.⁴⁴ In the upcoming sections, we explore possible actions to improve alignment between PFM systems and strategic purchasing to make most effective use of government budgets to advance UHC goals, while also touching on bottlenecks, drawing on the experiences of Tanzania and Uganda.

Budget Formulation

Reduce Fragmentation

The budget allows for more strategic management of resources, but this can be hampered by fragmentation of funding sources and management of funds, including parallel donor funding practices. Such fragmentation can limit the government’s ability to direct funds to health priorities, which is a key aspect of strategic purchasing. This is a particular problem when public-sector management capacity is limited or when the public sector lacks visibility across funding sources.²⁵ Heavy reliance on donor funding can further exacerbate the problems caused by fragmentation.⁴⁵ Some funders deliver resources through implementing partners, which makes it difficult for governments to control resource flows and can lead to spending that is not in line with government priorities. This may also crowd-out government funding, as the government shifts resources to other sectors.^{46,47}

Some tools, such as basket funding, can help coordinate resource flows from multiple sources in line with government priorities. In Tanzania, the Health Basket Fund established in 1999 channels on-budget donor funding—pooling donor funds with tax revenue. In 2017, the government shifted to output-based payment for PHC under the Health Basket Fund.^{48,49} External funds distributed by foreign entities declined by 57% in Tanzania between 2015 and 2020, indicating increased channeling of external resources through the government, particularly given that overall external resources increased by 1.4% during the same period.⁵⁰

Sector-wide approaches can also guide how stakeholders can best contribute to national health priorities through the budget.⁵¹ In Uganda, a disease-specific HIV Trust Fund has been passed into law but is not yet operational. The fund was meant to pool local and donor funds for the HIV response. However, concerns about sustainability and further fragmentation in funding streams have constrained rollout.⁵²

Formulate Budgets Based on Defined Benefit Packages

When it comes to assessing resource needs and what to purchase, using an evidence-based health benefit package to determine where to allocate funds can help match funding with health needs—and build trust and accountability. When budgets are allocated based on inputs rather than the benefit package, it is difficult to track what services were purchased on behalf of the population.⁵³ In Uganda, the government focuses local-level budget formulation processes on the resources required to deliver the Uganda National Minimum Health Care Package (UNMHCP).⁵⁴ The UNMHCP comprises interventions that are considered cost-effective in promoting health, preventing disease, and reducing morbidity and mortality. It was first established in the 1999/2000 National Health Policy and was accompanied by the country's first Health Sector Strategic Plan.⁵⁵ However, the UNMHCP is not linked to available resources. Furthermore, Uganda lacks adequate resources to provide universal access to the UNMHCP.⁵⁶ The country has an opportunity to use the budgeting process to further target and channel limited funding to the most vulnerable groups to ensure access to the package.

Allocating budgets based on defined benefit packages is easier when the budget structure is based on programs or on sets of objectives set out by the government—that is, PBB instead of input-based line items for administrative units.⁵³ PBB makes it possible to organize budgets around groups of services, such as the UNMHCP. Uganda recently adopted PBB, which could support efforts to strategically link budget funds to health objectives and outcomes—and make a clearer link between budget allocations and the delivery of the UNMHCP.²⁹ However, the current structure of programs and sub-programs does not entirely correspond to the benefit package, and the culture of fragmented budgeting and implementation must be addressed.^{29,57}

Use Needs-Based Allocation Formulas

Using needs-based formulas can ensure that health budgets are allocated according to health needs.²⁵ The Health Basket Fund in Tanzania uses a needs-based

formula for allocation under the DHFF mechanism. The formula puts 60% weight on population size, 10% on morbidity measured by the under-5 mortality rate, 10% on poverty, and 20% on distance from district headquarters as a proxy for remoteness of the locality.⁵⁸ Use of the allocation formula has improved equity in distribution of resources. The DHFF mechanism has improved the predictability and timing of funds transfers to providers, as well as reduced leakages due to elimination of additional channels before funds reach those providers.³³ Uganda uses a multi-criteria formula to inform the allocation of health funds to districts, but allocations to health facilities are based on their level within the system and their catchment population size, not performance, and allocations are not adequately aligned with evolving population needs.⁵⁹

Budget Execution

Transfer Funds to Health Providers Using Output-Based Payment

Strategic purchasing involves moving away from health budget execution linked solely to input-based line items and instead transferring all or part of the government budget to providers based on service delivery outputs. Aligning financial incentives with the objectives of the health system requires flexibility to pay providers based on service outputs and performance.²⁵ In Tanzania, output-based payment for PHC began with the implementation of DHFF in 2017.³⁹ The centerpiece of DHFF is the direct transfer of funds from the Ministry of Finance and Planning to frontline PHC facilities. The shift was geared toward increasing service delivery efficiency by reducing leakages and enhancing predictability and timeliness of funds transfers to PHC facilities.³⁹ Health facility budgets are based on the type and number of services provided and include adjustments based on need (the size of the population served), performance (the types of services used), and equity (access to the facility).⁶⁰ Health facilities also have autonomy through DHFF to plan, budget, and use their funding to deliver high-quality services.

Implement PFM Rules that Allow for Flexibility with Financial Accountability

In order for output-based payment to create effective incentives, providers need the flexibility to respond to them.⁶¹ Government budgets can be more effective if they give frontline providers autonomy in planning and implementation, complemented with the capacity and skills to take advantage of that autonomy.⁶¹ In Tanzania, DHFF was intended to address these issues by recognizing facilities as accounting units that receive financing

from the Ministry of Finance and Planning directly into their bank accounts through an integrated financial management platform called PlanRep. The reform gave greater control over the budget to providers and included a clear framework and guidelines for staff to make decisions and be involved in budgeting and budget execution in line with facility priorities and plans, including such items as renovations and facility upgrades.⁵⁸

Budget Monitoring

Use Planning Processes that Ensure a Link between Budget Monitoring and Commitments to the Population

In Uganda, the Comprehensive National Development Planning Framework sets out national priorities and requires sectors and local governments to align their plans and budgets with these priorities. The National Planning Authority is responsible for issuing compliance reports annually, to ensure that budgets align with development priorities. While this is good in principle, in practice enforcement is weak, making it difficult to ensure that budgets deliver on commitments to the population and priorities over the strategic planning period.⁵⁹

In Tanzania, health facility plans and budgets are developed by health facility managers and approved by health facility governing committees as the first level of control. The plans and budgets are then entered into the PlanRep system, and facilities are expected to execute them according to the PlanRep. Approved health facility budgets are exported to FFARS, and all expenditures are made in line with approved budgets.⁶⁰ Health facility governance committees oversee budget implementation and execution at the facility level and ensure that all expenditures are in line with the approved budget and address community needs. FFARS has built-in internal controls that prevent payments before local government treasurers confirm availability of funds.

Use Integrated Financial Accounting Systems to Support Accountability

Tanzania's new financial accounting system and reporting requirements—combined with citizen oversight through health facility governance committees—enhance transparency and accountability. Health facilities are included in local government authorities' charts of accounts, have opened bank accounts at government banks, and are included in the PlanRep system as well as FFARS. These

cross-sectoral and interconnected systems allow for integrated planning and budgeting including all facility revenues, expenses, and internal controls.⁶⁰

Conclusion

In Africa, even as innovative financing sources continue to draw attention, the government budget can be an important tool for strategic purchasing and for getting more value from limited funding. Government budgets can be tied to public priorities and systems through a chain of command that is under the government's control and has the potential to operate flexibly, accountably, and strategically. Ensuring that health systems deliver for the population thus requires an understanding of the budget as a tool for strategic purchasing, including how to maximize donor resources coming through government channels so they align with national priorities and agendas. Shared learning is also needed across the public sector and across the government budget countries if the health sector is to benefit from public funds. Sectors and countries need to share lessons so that best practices for PFM can take the place of fragmented approaches to managing resources.

Government budgets aren't a silver bullet, but they provide an important starting point for ensuring that resources flowing through health systems are used in service of the population. For optimal resource allocation and strategic purchasing practices, governments may also need to ensure that the budget structure and PFM processes allow budget funds to be directed to priority services and incentives to be introduced for good performance. Experiences from Tanzania and Uganda show that mechanisms within the government budget process and PFM systems can be better exploited to achieve more strategic purchasing of priority services for UHC.

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Author Contributions

DB led the drafting of the manuscript based on interviews with co-authors, and co-authors reviewed the drafts and added critical input.

Data Availability Statement

The authors confirm that the data supporting the findings of this study are available within the article and/or its supplementary materials.

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References

1. United Nations. Resolution adopted by the general assembly on 69/313. Addis Ababa Action Agenda of the Third International Conference on Financing for Development; New York (NY): United Nations; 2015 July 27 [accessed 2021 Oct 2]. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_69_313.pdf.
2. Barroy H, Vaughan K, Tapsoba Y, Dale E, Van de Maele N. Towards universal health coverage: thinking public: overview of trends in public expenditure on health (2000–2014). Geneva (Switzerland): World Health Organization; 2017 [accessed 2022 May 5]. (Health Financing Working Paper; No. 7). <https://apps.who.int/iris/handle/10665/255782>.
3. World Health Organization (WHO). Financing for universal health coverage: dos and don'ts. Geneva (Switzerland): WHO; 2019 [accessed 2021 Oct 2]. (Health Financing Guidance Note; No. 9). <https://p4h.world/system/files/2019-09/WHO19-01%20health%20financing%20complete%20low%20res%200922.pdf>.
4. Tandon A, Bloom D, Oliveira Hashiguchi L, Hoang-Vu Eozenou P, Cain J, Nigam A, Nagpal S, editors. Making the case for health: a messaging guide for domestic resource mobilization. Arlington (VA): Joint Learning Network for Universal Health Coverage; 2021 [accessed 2021 Oct 2]. <https://www.jointlearningnetwork.org/resources/messaging-guide-making-the-case-for-drm-for-health/>.
5. Cotlear D, Nagpal S, Smith O, Tandon A, Cortez R. Going universal: how 24 developing countries are implementing universal health coverage reforms from the bottom up. Washington (DC): World Bank; 2015 [accessed 2021 Oct 2]. <https://openknowledge.worldbank.org/bitstream/handle/10986/22011/9781464806100.pdf?sequence=4>.
6. Jowett M, Kutzin J. Raising revenues for health in support of UHC: strategic issues for policy makers. Geneva (Switzerland): World Health Organization; 2015 [accessed 2021 Oct 2]. (Health Financing Policy Brief; No. 1). https://apps.who.int/iris/bitstream/handle/10665/192280/WHO_HIS_HGF_PolicyBrief_15.1_eng.pdf?sequence=1&isAllowed=y.
7. Kurowski C, Evans DB, Tandon A, Eozenou PHV, Schmidt M, Irwin A, Cain JS, Pambudi ES, Postolovska I. From double shock to double recovery: implications and options for health financing in the time of COVID-19. Technical update: widening rifts. Washington (DC): International Bank for Reconstruction and Development / World Bank; 2021 [accessed 2022 May 5]. (Health, Nutrition, and Population Discussion Paper). <https://openknowledge.worldbank.org/handle/10986/35298>.
8. World Bank. High-performance health financing for universal health coverage: driving sustainable, inclusive growth in the 21st century. Washington (DC): International Bank for Reconstruction and Development / World Bank; 2019 [accessed 2021 Oct 2]. <https://documents1.worldbank.org/curated/en/641451561043585615/pdf/Driving-Sustainable-Inclusive-Growth-in-the-21st-Century.pdf>.
9. Tandon A, Cain J, Kurowski C, Dozol A, Postolovska I. From slippery slopes to steep hills: contrasting landscapes of economic growth and public spending for health. *Soc Sci Med.* 2020;259:113171. doi:10.1016/j.socscimed.2020.113171.
10. Boum YC. Beyond COVID-19: scaling up and sustaining mobile health in Africa. *Lancet.* 2021;398(10315):1962–63. doi:10.1016/S0140-6736(21)02349-7.
11. World Health Organization (WHO). The world health report: health systems financing: the path to universal coverage. Geneva (Switzerland): WHO; 2010 [accessed 2021 Sep 28]. <https://apps.who.int/iris/handle/10665/44371>.
12. Hanson K. Researching purchasing to achieve the promise of universal health coverage. London (UK): London School of Hygiene & Tropical Medicine; 2014 [accessed 2021 Sep 28]. <https://resyst.lshtm.ac.uk/resources/researching-purchasing-to-achieve-the-promise-of-universal-health-coverage>.
13. Mathauer I, Dale E, Jowett M, Kutzin J. Purchasing health services for universal health coverage: how to make it more strategic? Geneva (Switzerland): World Health Organization; 2019 [accessed 2021 Sep 22]. (Health Financing Policy Brief; No. 6). <https://apps.who.int/iris/handle/10665/311387>.
14. World Health Organization (WHO). The world health report 2000: health systems: improving performance. Geneva (Switzerland): WHO; 2000 [accessed 2022 Jan 27]. <https://apps.who.int/iris/handle/10665/42281>.
15. Kutzin J. Health financing for universal coverage and health system performance: concepts and implications for policy. *Bull World Health Organ.* 2013;91(8):602–11. doi:10.2471/BLT.12.113985.

16. Figueras J, Robinson R, Jakubowski E. Purchasing to improve health systems performance: drawing the lessons. In: Figueras J, Robinson R, Jakubowski E, editors. *Purchasing to improve health systems performance*. Berkshire (GB): Open University Press; 2005 [accessed 2022 May 5]. p. 44–80. (Figueras J, McKee M, Mossialos E, Saltman RB, editors. *European Observatory on Health Systems and Policies series*). https://www.euro.who.int/__data/assets/pdf_file/0004/98428/E86300.pdf#page=67.
17. Langenbrunner JC, Hovig D, Cashin C. Trends in health financing: the move from passive to strategic purchasing in middle- and low-income countries. *World Hosp Health Serv*. 2016;52:12–19.
18. Hanson K, Barasa E, Honda A, Panichkriangkrai W, Patcharanarumol W. Strategic purchasing: the neglected health financing function for pursuing universal health coverage in low- and middle-income countries; comment on “what’s needed to develop strategic purchasing in healthcare? Policy lessons from a realist review. *Int J Health Policy Manage*. 2019;8(8):501–04. doi:10.15171/ijhpm.2019.34.
19. Tangcharoensathien V, Limwattananon S, Patcharanarumol W, Thammatacharee J, Jongudomsuk P, Sirilak S. Achieving universal health coverage goals in Thailand: the vital role of strategic purchasing. *Health Policy Plan*. 2015;30(9):1152–61. doi:10.1093/heapol/czu120.
20. Patcharanarumol W, Panichkriangkrai W, Sommanuttaweechai A, Hanson K, Wanwong Y, Tangcharoensathien V. Strategic purchasing and health system efficiency: a comparison of two financing schemes in Thailand. *PLoS One*. 2018;13(4):e0195179. doi:10.1371/journal.pone.0195179.
21. Bein MA, Unlucan D, Olowu G, Kalifa W. Healthcare spending and health outcomes: evidence from selected East African countries. *Afr Health Sci*. 2017;17(1):247–54. doi:10.4314/ahs.v17i1.30.
22. Novignon J, Olakojo SA, Nonvignon J. The effects of public and private health care expenditure on health status in sub-Saharan Africa: new evidence from panel data analysis. *Health Econ Rev*. 2012;2(1):22. doi:10.1186/2191-1991-2-22.
23. Limwattananon S, Neelsen S, O’Donnell O, Prakongsai P, Tangcharoensathien V, van Doorslaer E. *Universal coverage on a budget: impacts on health care utilization and out-of-pocket expenditures in Thailand*. Amsterdam (NL): Tinbergen Institute; 2013 [accessed 2022 May 5]. (Tinbergen Institute discussion paper; 13–067/V). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2265867.
24. World Health Organization (WHO). 5th meeting of the Montreux Collaborative on fiscal space, public financial management and health financing: overview of the meeting. Geneva (Switzerland): WHO; 2022 [accessed 2022 May 5]. <https://www.who.int/news-room/events/detail/2021/11/15/default-calendar/5th-meeting-of-the-montreux-collaborative>.
25. Cashin C, Bloom D, Sparkes S, Barroy H, Kutzin J, O’Dougherty S. *Aligning public financial management and health financing: sustaining progress toward universal health coverage*. Geneva (Switzerland): World Health Organization; 2017 [accessed 2022 May 5]. (Health Financing Working Paper; No 4). <http://apps.who.int/iris/bitstream/10665/254680/1/9789241512039-eng.pdf>.
26. Yazbeck AS, Savedoff WD, Hsiao WC, Kutzin J, Soucat A, Tandon A, Wagstaff A, Chi-Man Yip W. The case against labor-tax-financed social health insurance for low- and low-middle-income countries. *Health Aff*. 2020;39(5):892–97. doi:10.1377/hlthaff.2019.00874.
27. Cashin C, Dossou JP. Can national health insurance pave the way to universal health coverage in Sub-Saharan Africa? *Health Syst Reform*. 2021;7(1):e2006122. doi:10.1080/23288604.2021.2006122.
28. Ssekikoko J. Strengthening budgeting for sustainable development: Uganda’s transition from output-based budgeting to program-based budgeting. *KDI School of Public Policy and Management*; 2020 [accessed 2022 May 5]. (Global Delivery Initiative Case Study Series). <https://www.effectivecooperation.org/system/files/2021-06/GDI%20KDIS%20Case%20Study%20Uganda%20Program%20Based%20Budgeting.pdf>.
29. Abewe C, Margini F, Mwami E, Mwoga J, Kwesiga B. *Transition to programme budgeting in Uganda: status of the reform and preliminary lessons for health*. Geneva (Switzerland): World Health Organization; 2021 [accessed 2022 May 5]. (Health Financing Case Study; No. 20: Budgeting in Health). <https://www.who.int/publications/i/item/9789240027770>.
30. Parliamentary Centre (Africa Programme). *The budget process in Africa: a comparative study of seven countries*. Ottawa (Canada): Parliamentary Centre; 2010 [accessed 2022 May 5]. https://www.agora-parl.org/sites/default/files/agora-documents/the_budget_process_in_africa_2010_en.pdf.
31. Health Policy Plus. *Guide for civil society organizations: influencing government health budgets in Tanzania—a resource for advocates*. Washington (DC): Palladium, Health Policy Plus; 2021 [accessed 2022 May 5]. <http://www.healthpolicyplus.com/pubs.cfm?get=18544>.
32. Ministry of Finance, Planning and Economic Development. *Background to the budget: fiscal year 2021/22*. Kampala (Uganda): Republic of Uganda; 2021 [accessed 2022 May 5]. <https://www.finance.go.ug/publication/background-budget-fiscal-year-202122>.
33. Abt Associates. *Assessing the effects of key reforms and systems strengthening on service delivery, facility management and governance: an operations research study report*. Cambridge (MA): Abt Associates Inc.; 2019.
34. Kuteesa F, Magona I, Wanyera M, Wokadala J. *Uganda: a decade of budget reform and poverty reduction*. *OECD J Budg*. 2006;6(2):1–25. doi:10.1787/budg-v6-art10-en.
35. Galkiande-Kiganda M, Moitmelo L. *Participatory budgeting in local governments in Uganda: challenges of responsiveness and localism*. *Direct Res J Soc Sci Educ Stud*. 2020;7:168–74.

36. Mukokoma M. The ‘people’s budget’ and budget effectiveness: the case of local governments in Uganda. *J Sci Sustain Dev.* 2010;3:101–12.
37. Kasozi-Mulindwa S. The process and outcomes of participatory budgeting in a decentralized local government framework: a case in Uganda [thesis]. Birmingham (GB): University of Birmingham; 2013 [accessed 2022 May 5]. <https://etheses.bham.ac.uk//id/eprint/4517/1/Kasozi-Mulindwa13DBA.pdf>.
38. Busse R, Figueras J, Robinson R, Jakubowski E. Strategic purchasing to improve health system performance: key issues and international trends. *Healthc Pap.* 2017;8(sp):62–76. doi:10.12927/hcpap.2007.19221.
39. Kapologwe NA, Kalolo A, Kibusi SM, Chaula Z, Nswilla A, Teuscher T, Aung K, Borghi J. Understanding the implementation of Direct Health Facility Financing and its effect on health system performance in Tanzania: a non-controlled before and after mixed method study protocol. *Health Res Policy Sys.* 2019;17(1):11. doi:10.1186/s12961-018-0400-3.
40. Davies F, Geddes M, Wabwire M. Equity of local government health financing in Uganda. London (UK): Overseas Development Institute; 2021 [accessed 2022 May 5]. (Working Paper; No. 617). https://cdn.odi.org/media/documents/ODI-EquityLocalGov-Aug21_aS81br8.pdf.
41. Republic of Uganda, Ministry of Finance, Planning and Economic Development. Budget preparation, execution and monitoring. Kampala (UG): Ministry of Finance, Planning and Economic Development; 2022 [accessed 2022 May 5]. <https://www.finance.go.ug/directorate/budget-preparation-execution-and-monitoring>.
42. Van Schalkwyk F, Silaa R. Connecting flows and places: making data useful to hyperlocal communities in Tanzania. Dar Es Salaam (Tanzania): Data Zetu; 2018 [accessed 2022 May 5]. https://www.academia.edu/38423614/Connecting_Flows_and_Places_Making_Data_Useful_to_Hyperlocal_Communities_in_Tanzania.
43. Piatti-Fünfkirchen M, Schneider P. From stumbling block to enabler: the role of public financial management in health service delivery in Tanzania and Zambia. *Health Syst Reform.* 2018;4(4):336–45. doi:10.1080/23288604.2018.1513266.
44. Piatti-Fünfkirchen M, Smets L. Public financial management, health financing and under-five mortality: a comparative empirical analysis. Washington (DC): Inter-American Development Bank (IDB); 2019 [accessed 2022 May 5]. (IDP working paper series; no. 976). https://publications.iadb.org/publications/english/document/Public_Financial_Management_Health_Financing_and_Under-Five_Mortality_A_Comparative_Empirical_Analysis.pdf.
45. Institute for Health Metrics and Evaluation. Financing global health 2019: tracking health spending in a time of crisis. Seattle (WA): Institute for Health Metrics and Evaluation; 2020 [accessed 2021 Oct 2]. http://www.healthdata.org/sites/default/files/policy_report_FGH/2020/FGH_2019_Interior_Final_Online_2020.09.18.pdf.
46. Dieleman JL, Hanlon M. Measuring the displacement and replacement of government health expenditure. *Health Econ.* 2014;23(2):129–40. doi:10.1002/hec.3016.
47. Dieleman JL, Cowling K, Agyepong IA, Alkenbrack S, Bollyky TJ, Bump JB, Chen CS, Grépin KA, Haakenstad A, Harle AC, et al. The G20 and development assistance for health: historical trends and crucial questions to inform a new era. *Lancet.* 2019;394(10193):173–83. doi:10.1016/S0140-6736(19)31333-9.
48. Ministry of Health. Community Development, Gender, Elderly and Children. Mid-term review of the health basket fund functionality at all levels. Dodoma (TZ): United Republic of Tanzania; 2019.
49. Barroy H, Kabaniha G, Boudreax C, Cammack T, Bain N. Leveraging public financial management for better health in Africa: key bottlenecks and opportunities for reform. Geneva (Switzerland): World Health Organization; 2019 [accessed 2022 May 5]. (Health Financing Working Paper; No. 14). <https://apps.who.int/iris/handle/10665/339297>
50. Ministry of Health, Community Development, Gender, Elderly and Children. National health accounts. Dodoma (TZ): United Republic of Tanzania; 2016–2020.
51. Organisation for Economic Co-operation and Development (OECD), Development Assistance Committee (DAC). Harmonising donor practices for effective aid delivery: budget support, sector wide approaches and capacity development in public financial management. Vol. 2. Paris (France): OECD Publishing; 2006 [accessed 2021 Oct 2]. (DAC guidelines and reference series). https://read.oecd-ilibrary.org/development/harmonising-donor-practices-for-effective-aid-delivery_9789264035843-en#page4.
52. Birungi C, Colbourn T. It’s politics, stupid! A political analysis of the HIV/AIDS Trust Fund in Uganda. *Afr J AIDS Res.* 2019;18(4):370–81. doi:10.2989/16085906.2019.1689148.
53. Barroy H, Dale E, Sparkes S, Kutzin J. Budget matters for health: key formulation and classification issues. Geneva (Switzerland): World Health Organization; 2018 [accessed 2022 May 5]. (Health Financing Policy Brief; No. 4: Budgeting in health). <https://apps.who.int/iris/handle/10665/273000>.
54. Kadowa I. A case study of the Uganda national minimum health care package. Kampala (Uganda): Ministry of Health, Regional Network on Equity in Health in East and Southern Africa (EQUINET); 2017 [accessed 2022 May 5]. (EQUINET Discussion Paper; No. 110). <https://p4h.world/system/files/2021-08/EHB%20Uganda%20case%20study%20repAug2017pv.pdf>.
55. Wright J; Health Finance and Governance Project. Essential package of health services country snapshot: Uganda. Bethesda (MD): Health Finance and Governance Project, Abt Associates Inc.; 2015 [accessed 2022 May 05]. https://pdf.usaid.gov/pdf_docs/PA00MTR2.pdf.
56. Ekirapa-Kiracho E, Mayora C, Ssenyonyo A, Baine SO, Ssegooba F. Purchasing health care services for universal health coverage: policy and programme

- implications for Uganda. In: Ssenyooba F, Kiwanuka SN, Rutebemberwa E, Ekirapa-Kiracho E, editors. *Universal health coverage in Uganda: looking back and forward to speed up the progress*. Kampala (Uganda): Makerere University; 2017. p. 205–225.
57. Ssenyonjo A, Ssenyooba F, Criel B, Titeca K, Van Belle S. 'Writing budgets for meetings and teas?': a multitheoretical analysis of intragovernmental coordination for multisectoral action for health in Uganda. *BMJ Global Health*. 2022;7(2):e007990. doi:10.1136/bmjgh-2021-007990.
 58. US Agency for International Development (USAID). PS3 case brief: Direct Health Facility Financing. Washington (DC): USAID; n.d. [accessed 2022 May 5]. https://www.usaid.gov/sites/default/files/documents/PS3_Case_Brief_-_Direct_Health_Facility_Financing.pdf.
 59. Ekirapa-Kiracho E, Ssenyonjo A, Ssempala R, Mayora C, Ssenyooba F. Critical analysis of key strategic purchasing arrangements and their implications for universal health coverage in Uganda. *Health Serv Res*. Forthcoming.
 60. USAID. PS3 case brief: facility accounting and financial management. Washington (DC): USAID; n.d. [accessed 2022 Mar 18]. https://www.usaid.gov/sites/default/files/documents/PS3_Case_Brief_-_Facility_Accounting_and_Financial_Management.pdf.
 61. Langenbrunner JC, Cashin C, O'Dougherty S, editors. *Designing and implementing health care provider payment systems: how-to manuals*. Washington (DC): International Bank for Reconstruction and Development / World Bank; 2009 [accessed 2022 Feb 1]. <https://openknowledge.worldbank.org/bitstream/handle/10986/13806/48599.pdf>.