



Beyond Production: Using Health Financing Information

to Inform Decisions that Improve Health Systems

HFG Series: Advances in Health Finance & Governance

Authors:

Karishmah Bhuwanee, Abt Associates Stephen Musau, Abt Associates Heather Cogswell, Abt Associates

April 2018

About the Health Finance and Governance Project

The Health Finance and Governance (HFG) Project works to address some of the greatest challenges facing health systems today. Drawing on the latest research, the project implements strategies to help countries increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. The project also assists countries in developing robust governance systems to ensure that financial investments for health achieve their intended results.

With activities in more than 40 countries, HFG collaborates with health stakeholders to protect families from catastrophic health care costs, expand access to priority services – such as maternal and child health care – and ensure equitable population coverage through:

- Improving financing by mobilizing domestic resources, reducing financial barriers, expanding health insurance, and implementing provider payment systems;
- Enhancing governance for better health system management and greater accountability and transparency;
- Improving management and operations systems to advance the delivery and effectiveness of health care, for example, through mobile money and public financial management; and
- Advancing techniques to measure progress in health systems performance, especially around universal health coverage.

The HFG project (2012-2018) is funded by the U.S. Agency for International Development (USAID) and is led by Abt Associates in collaboration with Avenir Health, Broad Branch Associates, Development Alternatives Inc., the Johns Hopkins Bloomberg School of Public Health, Results for Development Institute, RTI International, and Training Resources Group, Inc. The project is funded under USAID cooperative agreement AID-OAA-A-12-00080.

To learn more, visit **www.hfgproject.org**

About this series

HFG's Advances in Health Finance & Governance series is designed to highlight learning and lessons from the HFG project in nine core areas: domestic resource mobilization, strategic health purchasing, health financing strategies, expanding coverage through health insurance, financial data for decision making, governance, institutional capacity building, workforce and efficiency, and building understanding for universal health coverage.

This report was made possible by the generous support of the American people through USAID. The contents are the responsibility of Abt Associates and do not necessarily reflect the views of USAID or the United States Government.

Beyond Production: Using Health Financing Information to Inform Decisions that Improve Health Systems

Executive Summary

Health financing information, such as information on a country's health spending, health costs, and efficiency, is vital to making informed decisions about national health systems. Yet, while good-quality information is available to many ministries of health, there is great variability among countries in whether and how the information is used. Good-quality health financing information alone does not guarantee its use: decision makers balance many other factors when deciding on a course of action.

In its six years supporting the production and analysis of health financing information at a global and country level, the Health Finance and Governance (HFG) project observed that strong country ownership in the process and strategic packaging of information to reach specific audiences are key elements in ensuring the use of health financing information for decision-making.

- Key Lessons

- Use of health financing information is influenced by **THE DEGREE OF COUNTRY INVOLVEMENT** in defining the need for information, producing it, and analyzing it.
- PACKAGING HEALTH FINANCING INFORMATION EFFECTIVELY goes a long way toward helping busy decision makers quickly identify the implications of information presented to them.
 - Using health financing information for decision-making is **A BEHAVIOR CHANGE THAT TAKES TIME**.

Introduction

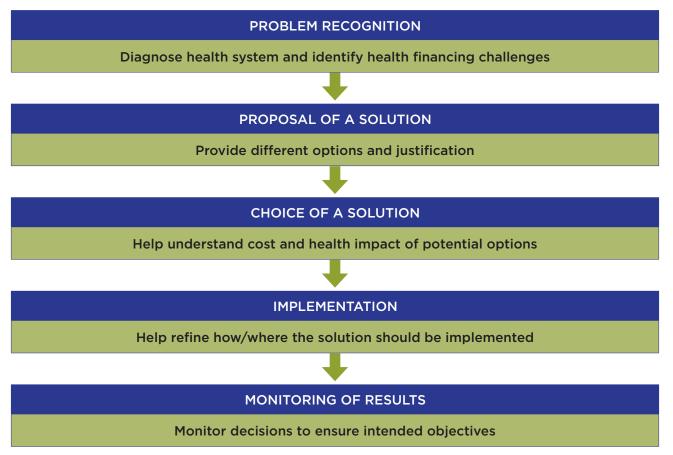
Countries face pressure to achieve health targets while managing reduced donor funding, escalating demand for services, and increasing costs of services. Ministries of health and other health stakeholders must make decisions that ensure adequate resources for health and their efficient use in order to achieve desired health outcomes. Health financing information is a critical component of this decision-making, but is often underutilized.

Health financing information is essential at all stages of the decision-making cycle (Figure 1). It can help decision makers to:

 diagnose the financial condition of the health system (Is the country spending enough for health? How sustainable are the sources of health financing?) and identify areas of inefficiency (Are resources skewed to highly specialized services?) or inequity (What is the burden of health spending on households and what financial risks do households incur to access health services?);

- conceptualize different solutions and justify those solutions;
- understand the cost and impact of different solutions and determine the most appropriate course of action;
- refine the chosen solution to inform implementation (for example, prioritize the geographical areas to focus on); and
- monitor whether chosen actions are achieving their intended objectives.

Figure 1. How health financing information supports the five stages of decision-making



Source: Adapted from Badie et al., 2011

Decision makers such as health and finance ministry officials, health insurance authorities, and health providers make decisions in complex environments, often under time pressure. They may have access to health financing information but they must also consider political demands, the interests of different stakeholder groups, available resources, and their personal interests and perceptions when making decisions. These other factors may or may not be in line with the evidence that health financing information provides. The result can be a big, glossy health information report that few people read, or policies that may prove infeasible for the country or may be implemented without achieving the intended results.

Promoting the use of data to inform health policy continues to be a challenge (Rodriguez et al. 2017, Nove et al. 2014, and community forums to promote data use such as Health Systems Global's thematic working group on translating evidence into action). This brief builds on this work to identify lessons from HFG about factors that promote or hinder the use of health financing information for decisionmaking. In the past six years, HFG has supported over 100 activities that generated or used health financing information. This includes more than 50 resource tracking studies (such as Health Accounts, Public Expenditure Reviews and National AIDS Spending Assessments); approximately 15 costing exercises (including costing of essential health services, health benefit packages for insurance, and costing of strategic plans); more than 10 studies to strengthen health purchasing mechanisms; and studies that look at improving the efficiency of health spending. Our lessons focus on health financing information but they echo principles of data for decision-making more broadly (Maeda et al. 2012, De et al. 2003, Rodriguez et al. 2017, Primary Health Care Measurement for Improvement collaborative 2017). In addition, we focus our lessons on using health financing information (see Box 1 for a clarification of terms). We also interpret decision-making broadly, from decisions about day-to-day management of resources for health, to high-level decisions about health financing policy and strategy.

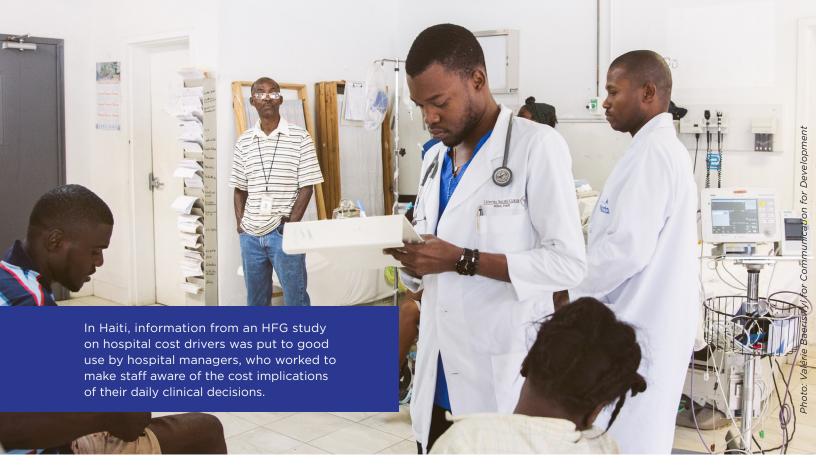
Box 1. Data vs. information vs. knowledge: a note on terminology

The terms "data," "information" and "knowledge" are often used interchangeably. However, they do not refer to the same thing.

Data are facts that describe a state or an object. They are often descriptive and are in a raw form, e.g., insurance claims data showing spending for each claim.

Once data are meaningfully arranged into a digestible output, it becomes **information** that can be acted upon. For example, insurance claims data can be summarized to show spending by category (such as drugs, tests, consultations) and regional/global benchmarks as well as spending relative to peers. In Ghana, analyzing claims data in this way helped the National Health Insurance Authority to recognize a problem with high proportions of claims spending on drugs. This led the authority to negotiate a 30% reduction in drug prices (HFG 2018).

When decision makers interpret information over time, e.g., by using their own experience and observations, information becomes **knowledge** (Ackoff 1989).



Lessons Learned in Using Health Financing Information to Inform Decisions that Improve Health Systems

Lesson 1

Information use is influenced by the degree of country involvement in defining the need for information, producing it, and analyzing it.

The idea that countries should be empowered to make decisions that affect their health system is not new. Country ownership is essential in the context of using information for decision-making. Ownership applies from the start, when countries take the lead in identifying their pressing health system challenges and questions. Ownership is also important during the data production process to ensure that country actors understand the methodology and the analysis produced. Equally important is country involvement in the process of interpreting the information and identifying practical next steps.

In Nigeria, HFG conducted service availability and readiness assessments (SARAs) in Kogi, Ebonyi, Cross-River, Bauchi, Sokoto and Osun states. The purpose was to gather empirical evidence on gaps in service delivery at the facility level to inform future donor investments. While the states were engaged in the process, the immediate outputs of the SARAs were not used by the states because the information from the SARAs in its 'raw' form didn't meet their needs. During this time, the potential availability of earmarked health systems strengthening funding in the form of a Global Financing Facility grant and Nigeria's own Basic Health Care Provision Fund led the states to reexamine the SARA data and analyze it according to their needs in collaboration with HFG. These results were now useful as advocacy tools illustrating the consequences of underinvestment in health infrastructure and the need for increasing the capital expenditure on health. The results also

prompted the implementation of specific costdetermining exercises (e.g., Bills of Quantities) that produced itemized materials, parts and labor required to close service provision gaps. This information could be directly incorporated into budgets and implementation plans.

In Barbados, HFG conducted an HIV/AIDS Sustainability Index Dashboard (SID) assessment to identify where the gaps are for sustaining the HIV/ AIDS response in the country. While the Ministry of Health (MOH) helped provide data to feed into the dashboard, it considered the results to be more useful for the donor than for the MOH. Key stakeholders in the ministry were not able to fully appreciate the value of the results for the country because of their limited involvement. It was more than one year later, when the MOH, Ministry of Finance and the National HIV/AIDS Commission were working together to develop a domestic resource mobilization plan that they analyzed the SID results in detail. The SID identified major areas of risk to achieving sustainability in the national HIV response, such as financing being dependent on external sources. Government stakeholders reviewed these risk areas and built strategies to address them.

Once a country's priorities are defined and understood, country involvement in the data collection and analysis process is also important. In Fiji and Indonesia, decision makers in the MOH have delegated the production of Health Accounts to local universities. Though the MOH is not directly involved in producing the data, it has developed strong relationships with these organizations and remains closely engaged with the universities to define the type of analysis it needs from Health Accounts, to understand the methodology and analysis, and to interpret the information to identify potential courses of action. In Indonesia, the MOH's Health Financing Unit and the University of Indonesia (which currently produces the Health Accounts) work together to interpret the Health Accounts results, develop policy briefs and respond to policy questions. The information they produce is being used to monitor the impact of national health insurance (through Jaminan Kesehatan Nasional, JKN) on reducing household out-of-pocket spending. The results will In addition to engagement during data collection and analysis, it is equally important for decision makers to be involved after the analysis to ensure the information is properly understood and used.

help inform refinements in the JKN, such as with the benefit package provided or co-payment rates.

When decision makers are not engaged in the data collection process, duplication of studies may occur, which can create confusion and discourage decision makers from using the information. The National AIDS Spending Assessment (NASA) and Health Accounts data both provide key information on the resource flows for the health sector and for the overall HIV/AIDS response. In 2012-2013, Namibia conducted both a NASA and Health Accounts, with limited coordination between the two studies. Because the studies used different methods to account for government HIV/AIDS spending, their resulting estimates were about US \$40 million apart. Without an understanding of the circumstances in which one methodology was more appropriate than the other, senior-level decision makers in the Ministry of Health and Social Services were confused and uncertain which figures to rely on. Since then, the ministry has discussed with WHO and UNAIDS how the data needs for both methodologies could be coordinated. As a result, the 2015-2016 Health Accounts is being conducted jointly with the NASA team, with a joint data collection instrument. This coordination will provide an opportunity for the technical teams to explain to decision makers why NASA and Health Accounts estimates may legitimately differ, and help decision makers decide which figure to use and when.

In addition to engagement during data collection and analysis, it is equally important for decision makers to be involved after the analysis to ensure the information is properly understood and used. In Haiti, senior management at the Sacré-Cœur de Milot Hospital asked HFG to conduct a study of the hospital's major costs drivers so it could strengthen its financial sustainability. After completing the study, HFG carefully planned a dissemination strategy with senior hospital management to ensure that hospital staff understood the study results. HFG worked with hospital management to make clinical staff aware of the cost implications of their clinical decisions, and to facilitate agreement between hospital management and clinical staff on potential strategies to improve efficiencies, such as reviewing the procurement of pharmaceuticals and medical supplies, which were a major cost driver. The cost estimations, combined with a detailed analysis of revenues, were also used by hospital management to make decisions on a revised package of services.

The importance of supporting countries in interpreting health financing information is especially relevant in the context of costing studies. Studies supported by HFG to cost an essential package of services (e.g., in Bangladesh), or a benefit package for health insurance (e.g., in Cameroon), revealed financing needs that are significantly larger than the country's existing resources. In such scenarios, results may discourage decision makers from taking action to raise the needed resources. It is important that technicians and donors support decision makers in identifying priorities or thinking through potential ways to address resource gaps. In Haiti, HFG used the costing results to calculate the financing gap for the Sacré-Cœur de Milot Hospital and worked with senior management to brainstorm different ways to raise the resources required. As a result, the Sacré-Cœur de Milot Hospital introduced a private wing to the facility to increase revenues to fill in the financing gap. These discussions, which occur after information has been produced and disseminated, often fall outside of the technical advisor's scope of work. Investing up-front in technical assistance to help country counterparts interpret the information and identify practical next steps can ensure that health financing information contributes to action.

Lesson 2

Packaging health financing information effectively goes a long way toward helping busy decision makers quickly identify the implications of information presented to them.

HFG observed that decision makers often perceive that "financial information is not really for them," that it can be deciphered only by "finance people," or that it is filled with technical jargon that is difficult to interpret. Decision makers have limited time and sometimes lack capacity to process health financing information, even more so if they consider this type of information to be particularly complex. HFG has found that health financing information is more likely to be used if it is analyzed and meaningfully arranged into a digestible product that responds to the preferences of the decision maker.

To help package health financing information in a responsive way, Burkina Faso and Uganda have established 'rapid response units.' These units conduct health financing studies but do not publish reports. Instead, they use the study data to produce tailored, on-demand analyses in response to specific questions or requests from Ministry of Health officials. The units' responses may vary from a single paragraph to a two-page policy brief. Most importantly, each response is tailored to directly answer the initial request.

In Uganda, decision makers who had access to the unit's services included mid- and senior-level MOH decision makers, NGO decision makers, and MOH support staff. Decision makers requested the unit's services on topics including governance, health technology assessments, financial arrangements,

> Health financing information is more likely to be used if it is analyzed and meaningfully arranged into a digestible product that responds to the preferences of the decision maker.

A common donor-funded activity is to collect data on service delivery gaps at the facility level, including at community clinics like this one in Lundazi, Zambia. Whether the information will be useful to country decision makers, however, often depends on whether they were involved in defining the need for it in the first place.

LO HEALTH (MACH) DEPAT

and implementation strategies. After receiving the unit's support, 66% of decision makers changed their view on the original policy question that they had posed to the unit (Mijumbi et al. 2014). Further, 46% of decision makers who used the unit's services changed their course of policy action as a result of the unit's analysis (Mijumbi et al. 2014). For those whose answers didn't change, the unit's support made 33% feel very confident about their original answers, compared to 1.5% who felt very confident before using the unit.

The experience from Uganda shows that efforts to adapt health financing information to the user's needs can also help with decision-making by (i) providing alternative courses of action that decision makers previously may not have been aware of, and (ii) increasing decision makers' confidence in actions, through the reassurance that their chosen course of action is evidence-based.

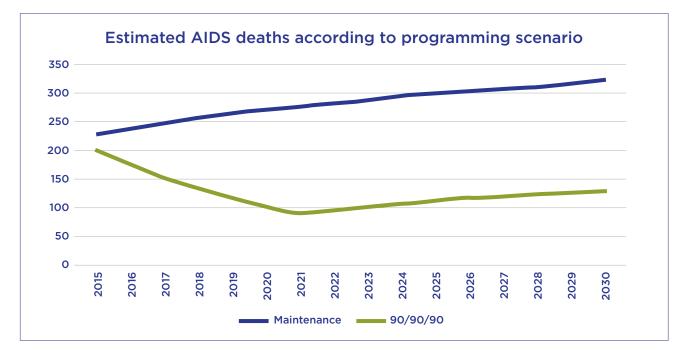
Second, translating health financing information into themes, language and metrics that resonate with decision makers help increase its use. For example, some decision makers care about cost implications, while others are interested in health impact. Ministries of finance may want to understand how efficiently current health resources are being used before considering a funding increase. When deciding how to invest in health, donors often want to know not only the cost of their investment, but also the health impact that can be expected. Within ministries of health, decision makers will vary, and may be interested in issues ranging from efficiency, to how spending compares to needs, to disease-specific information. HFG found it helpful to tailor health financing information to effectively reach and influence specific audiences.

In the Eastern Caribbean, country governments requested HFG's support to estimate the cost of scaling up the HIV/AIDS response to help access regional funding for HIV/AIDS. To assist donors in understanding the impact of additional investments, HFG translated costing results into information on numbers of lives saved and infections averted, a more powerful metric for that specific audience (Figure 2). The work resulted in a \$5.3 million multi-country grant from the Global Fund for the Eastern Caribbean's HIV/AIDS response.

Figure 2: Packaging Information to Aid Decision-Making

Translating costing data into incidence and mortality information to clarify the implications of two HIV/AIDS programming options for the Eastern Caribbean region.

ESTIMATED NUMBERS OF NEW INFECTIONS ACCORDING TO PROGRAMMING SCENARIO							
HIV PROGRAMMING SCENARIO	2015	2016	2017	2018	2019	2020	TOTALS
Maintenance	358	365	371	374	377	380	2,225
90/90/90	342	313	283	255	231	208	1,632
INFECTIONS AVERTED WITH 90/90/90 SCENARIO							
Number of new infections averted with 90/90/90 programming scenario compared to maintenance	16	52	88	119	146	172	593



Source: HFG, 2014

Health staff receive updates on new clinical and health financing policies at a December 2017 meeting in Ninh Binh City, Vietnam.

Lesson 3

Using health financing information for decision-making is a behavior change that takes time.

Building a culture of systematically using health financing information to make decisions is a behavior change that takes time. Yet, organizations that fund health financing studies often have deadlines to share results and demonstrate how results have been used. The need to demonstrate use of results guickly and the time it takes to build a culture of using information for decision-making can often be in conflict. This conflict does not have an easy solution, but is a factor that donors and countries must consider. Producing good-quality health financing information is the easy part of the job. By contrast, involving country stakeholders in every step of the process and building ownership over results and their implications is more complex and time consuming. HFG's support to develop health financing strategies in Botswana, Cambodia, and Vietnam involved lengthy but necessary processes to bring together

HFG's support to develop health financing strategies in Botswana, Cambodia, and Vietnam involved lengthy but necessary processes to bring together stakeholders from multiple sectors and effectively engage them.

stakeholders from multiple sectors and effectively engage them.

Efforts to increase country ownership and package health financing information more strategically are a worthwhile investment, even if use of health financing information is not immediately seen. Often, information gets used in unexpected ways and at unexpected times. For example, the Nigeria SARAs and Barbados SIDs were used by the government a long time after they were initially disseminated. Investing in generating and using health financing information is the start to developing a culture of using health financing information to make decisions that will improve health systems.



Conclusion and Recommendations

Decision-making is a complex process. It is the culmination of balancing many different factors, including evidence, stakeholder interests and pressures, the personal interests and perceptions of the decision maker, and the resources available. When health financing information is not part of the decision-making process, efficiency and equity gains are ad hoc at best and therefore more difficult to achieve on a regular basis.

Identifying the factors that influence the use of health financing information raises the question, "Who is responsible for ensuring that health financing information is used by decision makers?" Is it the responsibility of the technical experts who produce the information? Or are decision makers responsible for ensuring they use information to inform and justify their decisions? We believe that everyone has a role to play.

Technical experts can help by identifying "champions" to make health financing information part of the policy discussion. Technicians can also make sure that up-to-date health financing information is available when key discussions will take place -- for example, by making information on health spending and health resources accessible during a country's annual budget planning exercise. Technicians can also help ensure that their work is driven by country-level decision makers who (i) communicate the issues they are grappling with and the information they need, (ii) support the data production process and understand how data is generated, and (iii) discuss the implications of health financing information and help set priorities. Investing time at the beginning to clearly understand the country's needs and what information will respond to those needs will help to achieve the intended use and demonstrate a worthwhile investment.

For organizations funding health financing studies, country ownership should be designed into the activity from the very beginning to help ensure use. Investing time at the beginning to clearly understand the country's needs and what information will respond to those needs will help to achieve the intended use and demonstrate a worthwhile investment. Investing time after health financing information is generated to help decision makers interpret the information and identify potential courses of action is equally important.

Finally, decision makers themselves need to recognize that health financing information is a key tool in their toolbox. It helps decision makers (i) diagnose the health financing challenge(s), (ii) expand the possible options available to them, (iii) provide evidence on the cost and impact of those options, (iv) monitor the impact of decisions made and whether changes are necessary, and (v) be more accountable for the decisions they make.



Ackoff, R. L. 1989. From Data to Wisdom. Journal of Applied Systems Analysis. 16:3-9.

- Badie, B., Berg-Schlosser, D., Morlino, L. 2011. Stages Model of Policy Making. International Encyclopaedia of Political Science, p 2480-2481; DOI http://dx.doi.org/10.4135/9781412959636.n576
- Bhargava, S., and Loewenstein, G. 2015. Behavioral Economics and Public Policy 102: Beyond Nudging. American Economic Review: Papers & Proceedings. 105(5): 396-401.
- Bond LW, Bertrand WE, Mera R. 1994. Data for Decision Making for the Health Sector Project: A Mid-Term Evaluation. Health Technical Services Project of TvT Associates, Inc. and the Pragma Corporation.
- Colchero MA, Popkin BM, Rivera JA, Ng SW. 2016. Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study. BMJ:352:h6704.
- De S, Dmytraczenko T, Brinkerhoof D, Tien M. 2003. Has Improved Availability of Health Expenditure Data Contributed to Evidence-Based Policymaking? Country Experiences with National Health Accounts. Bethesda (MD): Health Reform*plus* Project, Abt Associates Inc.
- Feleke, S., Mitiku, W., Zelelew, H., and Ashagari, T. 2015. Ethiopia's Community-based health Insurance: A Step on the Road to Univeral Health Coverage. Bethesda, MD: Health Finance and Governance project, Abt Associates.
- Ferdinand E. 2011. Barbados 2011 fact sheet [Internet]. Barbados Ministry of Health; [cited 2016 Jun 28]. Available from: http://www.who.int/ncds/surveillance/global-school-student-survey/en/
- Gilovich, Thomas; Griffin, Dale; Kahneman, Daniel (2002-07-08). Heuristics and Biases: The Psychology of Intuitive Judgment. ISBN 9780521796798.
- Guszcza, J. 2015. The last-mile problem: How data science and behavioural science can work together. Deloitte Review 16, 63-79.
- Health Caribbean Coalition. 2016. The Implementation of Taxation on Sugar-Sweetened Beverages by the Government of Barbados. Bridgetown, Barbados
- Health Finance and Governance Project (HFG). 2014. Sustaining the HIV and AIDS Response in Countries of the OECS: Regional Investment Case Analysis. [Accessed April 6, 2018] https://www.hfgproject.org/sustaining-hivaids-response-oecs-regional-investment-case-analysis/
- Health Finance and Governance Project (HFG). 2018. Making Numbers Count: Using Health Expenditure Data to Achieve Policy Change. [Accessed March 5, 2018]. https://www.hfgproject.org/webinar-making-numbers-count-using-health-expenditure-data-to-achievepolicy-change/
- Health Finance and Governance Project (HFG). 2017. Revenue Retention Improves Quality of Care at Addis Ababa Health Center. [Accessed November 12, 2017] https://www.hfgproject.org/revenue-retentionimproves-quality-care-addis-health-center/.
- Health Finance and Governance Project (HFG). 2016. Project Profiles: Ethiopia's Move Toward Universal Health Coverage. Bethesda, MD: Health Finance and Governance project, Abt Associates.
- Health Systems Global. Translating Evidence into Action Technical Working Group. [Accessed October 23, 2017]. http://www.healthsystemsglobal.org/twg-group/2/Translating-Evidence-Into-Action/

- Maeda A, Harrit M, Mabuchi S, Siadat B, Nagpal S. 2012. Creating an evidence for better health financing decisions: A strategic guide for the institutionalization of national health accounts. Washington (DC): The World Bank Group.
- Matjasko, J.L., Cawley, J.H., Baker-Goering, M.M., and Yokum, D.V. 2016. Applying behavioral economics to public health policy. *American Journal of Preventive Medicine*. 50(5S1):S13-S19.
- Mijumbi R, Oxman A, Panisset U and Sewankambo N. 2014. Feasibility of a rapid response mechanism to meet policymakers' urgent needs for research evidence about health systems in a low income country: a case study. Implementation Science 2014,9:114. doi:10.1186/s13012-014-0114-z
- Nove A., Hulton, L., Martin-Hilber, A., Matthews, Zoe. 2014. Establishing a baseline to measure change in political will and the use of data for decision-making in maternal and newborn health in six African countries. International Journal of Gynecology and Obstetrics 127 (2014) 102–107. http://dx.doi.org/10.1016/j. ijgo.2014.07.002, http://dx.doi.org/10.1016/j.ijgo.2014.07.001
- Price J, Guinness L, Irava W, Khan I, Asante A, Wiseman V. 2016. How to do (or not to do) translation of national health accounts data to evidence for policy making in a low resourced setting. Health Policy Plan. 31: 472–481.
- Rodriguez D, Hoe C, Dale E, Rahman M, Akhter S, Hafeez A, Irava W, Rajbangshi P, Roman T, Tirdea M, et al. 2017. Assessing the capacity of ministries of health to use research in decision-making: conceptual framework and tool. Health Res Policy and Syst. 2017;15(65). doi:10.1186/s12961-017-0227-3
- Thaler RH, Sunstein CR. 2008. Nudge: Improving decisions about health, wealth, and happiness. Yale University Press.

