BETTER GOVERNANCE, BETTER HEALTH: THE EVIDENCE

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.

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This report was produced with funding from USAID. The World Health Organization (WHO) funded expert guidance and review. The HFG project provided direction and oversight. A secretariat was established, with representatives from USAID, WHO and HFG, to agree on methods and approaches, set timetables, and ensure sufficient resources to complete the work. Members of the Secretariat include:

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BETTER GOVERNANCE, BETTER HEALTH? COMPOSITE EVIDENCE FROM FOUR LITERATURE REVIEWS

The "Better Governance, Better Health? Composite Evidence from Four Literature Reviews" report was produced by Tiernan Mennen[1], Maryam Bigdeli[2], and Robert Fryatt.[1]

The authors would like to thank the members of the four Marshalling the Evidence Thematic Working Groups and Marshaling the Evidence Secretariat for their inputs. They would also like to thank USAID and WHO for their contribution in the development of this critical component to the health governance evidence base.

ACCOUNTABILITY, HEALTH GOVERNANCE, AND HEALTH SYSTEMS: UNCOVERING THE LINKAGES

The "Accountability, Health Governance, and Health Systems: Uncovering the Linkages" report was produced by Derick W. Brinkerhoff[12], David Jacobstein[4], Jeremy Kanthor[11], Dheepa Rajan[2] and Katie Shepard[13].

The authors would like to thank the members of the Marshalling the Evidence Secretariat for their guidance; the Accountability thematic working group for its input on framing the investigation, suggestions on key informants, and comments on earlier drafts; and key informants for taking the time to share their perspectives and suggestions for additional research studies to consult. They would also like to thank USAID and WHO for their contribution in the development of this critical component to the health governance evidence base.

A SCOPING REVIEW OF THE USES AND INSTITUTIONALIZATION OF KNOWLEDGE FOR POLICY IN LOW AND MIDDLE INCOME COUNTRIES

The "Scoping Review of the USES and Institutionalization of Knowledge for Policy in Low and Middle Income Countries" study was produced by Adam Koon[1], Lauren Windmeyer[3], Maryam Bigdelli[2], Jodi Charles[4], Fadi El Jardali[5], Walter Flores[6], Jesse Uneke[7], Sara Bennett[8].

The authors would like to thank the Marshalling the Evidence Secretariat for their guidance. They would also like to thanks USAID and WHO for overall study guidance and advice on communicating the findings.

PUBLIC FINANCIAL MANAGEMENT, HEALTH GOVERNANCE, AND HEALTH SYSTEMS

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DO BETTER LAW AND REGULATIONS PROMOTE UNIVERSAL HEALTH COVERAGE? A REVIEW OF THE EVIDENCE

The "Do Better Law and Regulations Promote Universal Health Coverage? A review of the Evidence" publication was produced with funding from United States Agency for International Development USAID through the Health Policy Plus (HP+) Project as part of the HP+ Project's role as Co-Chair of the Policy and Regulation Thematic Working Group (TWG), in the Marshalling the Evidence for Health Governance Initiative (MTE). The World Health Organization funded expert guidance and review of this report through their role as Co-Chair of the Policy and Regulation TWG. The Health Finance and Governance Project provided direction and oversight as the Secretariat of the MTE Initiative.

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[13] Results for Development (R4D)

CONTENTS

ACRONYMS

ABF	Activity-Based Funding
ATI	Access to Information
BRICS	Brazil, Russia, India, China, South Africa
BVS	Beneficiary Verification System
COPE	Client-Oriented, Provider-Efficient
DALY	Disability Adjusted Life Year
DFID	Department for International Development, United Kingdom
DPC	District People's Council
DPCOM	District People's Committee
DRG	Diagnosis Related Groups
ESID	Effective States and Inclusive Development Research Program
FBO	Faith-Based Organization
FOI	Freedom Of Information
GAPP	Governance, Accountability, Participation, and Performance Project
GDP	Gross Domestic Product
GP	General Practitioner
GPS	Global Positioning System
GRB	Gender Responsive Budgeting
HFC	Health Facility Committee
HFG	Health Finance and Governance Project
HMIS	Health Management Information System
HP+	Health Policy Plus Project
HPSR	Health Policy and Systems Research
HSS	Health System Strengthening
ICT	Information and Communication Technology
IFMIS	Integrated Financial Management Information System
IMF	International Monetary Fund
IPSAS	International Public Sector Accounting Standards
JKN	Jaminan Kesehatan Nasional
LAC	Latin America and the Caribbean

LMIC	Low- and Middle-Income Country
M&E	Monitoring and Evaluation
MENA	Middle East and North Africa
MNH	Maternal Newborn Health
MOF	Ministry of Finance
MOH	Ministry of Health
MSF	Multi-Stakeholder Forum
MtE	Marshaling the Evidence Initiative
MTEF	Medium-Term Expenditure Framework
NGO	Nongovernmental Organization
NHA	National Health Accounts
NHIS	National Health Insurance Scheme
ODI	Overseas Development Institute
OECD	Organization for Economic Cooperation and Development
P4P	Pay-for-Performance
PAQ	Community Partnership for Quality Improvement
PB	Participatory Budgeting
PBB	Program-Based Budgeting
PBF	Performance-Based Financing
PEM	Public Expenditure Management
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Survey
PFM	Public Financial Management
QAPC	Quality Assurance Partnership Committee
QCA	Qualitative Comparative Analysis
RBF	Results-Based Financing
RCT	Randomized Controlled Trial
ROB	Results-Oriented Budgeting
SAI	Supreme Audit Institutions
SCM	Supply chain management
SDG	Sustainable Development Goal
SMS	Short Message Service
SSA	Sub-Saharan Africa

TFR	Total Fertility Rate
TOC	Theory Of Change
TSA	Treasury Single Account
TWG	Technical Working Group
UHC	Universal Health Coverage
USAID/GH/OHS	U. S. Agency for International Development, Global Health Bureau, Office of Health Systems
VHSC	Village Health and Sanitation Committee
WBG	World Bank Group
WHO	World Health Organization

BETTER GOVERNANCE, BETTER HEALTH? COMPOSITE EVIDENCE FROM FOUR LITERATURE REVIEWS

Prepared by Tiernan Menen, Maryam Bigdeli, and Robert Fryatt.

WHY GOVERNANCE?

The importance of governance in health systems is well recognized, but there is still considerable debate on how governance interventions affect change in health outcomes and which interventions are appropriate for different contexts. This lack of clarity often reduces health governance efforts to a limited set of interventions, or justifies their exclusion altogether. As governments and development partners increase emphasis on efficiency, accountability, and transparency of health systems to achieve universal health coverage (UHC), there is an urgent need for greater evidence on governance impacts on health.

To help address the evidence gap, in September 2016 USAID's Office of Health Systems, the World Health Organization (WHO), and the USAID Health Finance and Governance (HFG) project launched the initiative Marshaling the Evidence for Health Governance to consolidate the evidence base on how governance contributes to health system performance and improves health outcomes.[1] The overall objective of the initiative is to increase awareness and understanding of the evidence regarding what works, and why, in strengthening health governance to improve health system performance, with a focus on country-level systems.

OVERALL APPROACH

Framing the problem and defining objectives

A multi-stakeholder group was convened to start the work; it included experts from USAID, WHO, and the World Bank; academics; and civil society groups. Their aim was to clarify the problem to be resolved; come to agreement on conceptual links between governance interventions, health system performance, and health outcomes; and agree on priority thematic areas. A secretariat was established, with representatives from all groups, to agree on methods and approaches, set timetables, and ensure sufficient resources to complete the work.

Thematic Working Groups[2]

Four Thematic Working Groups (TWGs) were formed to consolidate evidence by conducting literature reviews and key informant interviews from low- and middle-income countries (LMICs) in selected areas:

1. Accountability
2. Laws and Regulation
3. Public Financial Management (PFM)
4. Uses of Knowledge in Health Systems

These areas were chosen because of their comprehensive nature and importance to health systems, and because of the lack of an international consensus on priority interventions. The TWGs consisted of a small group of experts from various organizations and academic institutions from different parts of the world. The TWGs consulted with various policymakers and experts globally. Each TWG was led by two

[1] Marshaling the Evidence Webpage*:* https://www.hfgproject.org/marshaling-evidence-health-governance/

[2] List of TWG members and co-chairs: https://www.hfgproject.org/marshaling-evidence-health-governance/

co-chairs from different organizations, and included a member from WHO and the HFG project. Each TWG drafted a report on their findings and on the gaps in evidence for their subject area.

The Cross-Cutting Synthesis Analysis

The Marshaling the Evidence secretariat agreed that a cross-cutting synthesis paper was necessary to frame the work in the wider context of governance in health systems, drawing distinctions and consensus across all four TWG papers. Members of the secretariat, some of whom also were members of the TWGs, conducted the analysis across each TWG report and wrote the synthesis report. The report compiles results from the TWGs into a searchable database, contained in Annex 1. The report also lays the foundation for future action—from dissemination to further research agendas and policy plans.

Dissemination

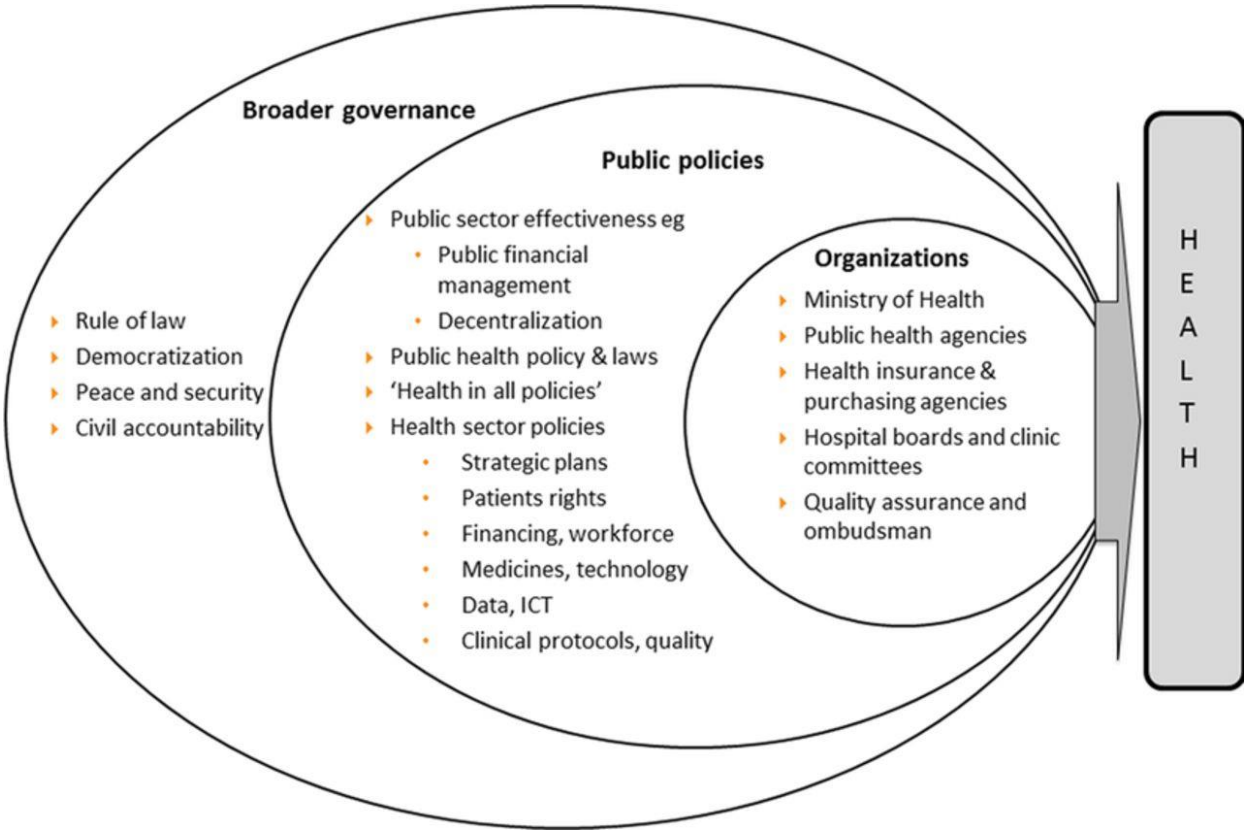
The four TWG reports and synthesis report identified consensus, and gaps in the evidence, to inform research and policy agendas at the international, regional, and country level. The five reports were launched at the Marshaling the Evidence Event on November 8, 2017 in Washington, DC. Global stakeholders discussed each report and the overall findings, and the analysis was revised to reflect these input. Key findings were subsequently disseminated at various global and regional events—including the Collaborative for Health Systems Governance event held as part of the UHC 2030 Day events in Tokyo on December 12, 2017. Findings will also be shared more broadly at the World Bank/International Monetary Fund Spring Meetings in Washington, DC, on April 15-20, 201

METHODOLOGY

The TWG Reports

The TWGs conducted scoping literature reviews, supported by key informant interviews, to identify evidence, areas for further study, and the policy implications of their own conclusions. The reviews used the Marshaling the Evidence conceptual framework to broadly orient understanding of how governance might contribute to health systems outcomes and health impacts (see Figure 1.1, below; Fryatt, Bennett, and Soucat 2017). The literature reviews used scoping methods to characterize the range of research studies and the content of the literature, and any gaps that require further exploration.

Figure 1.1 Conceptual Framework for Health Governance

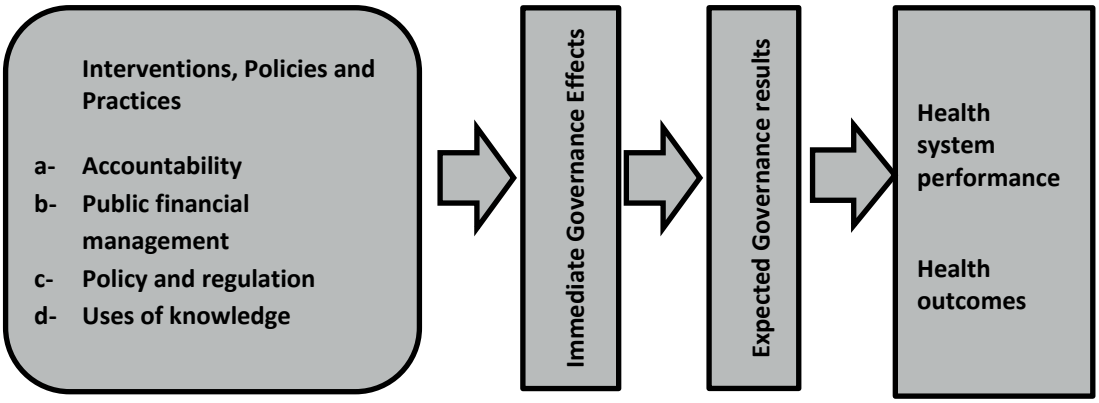


Synthesis Methodology

The synthesis analysis attempted to bring consistency across the TWG reviews through the development and application of a common health governance framework (see Figure 1.2 and Annex 1), defined further below. The framework facilitated the identification of: common findings, consensus in the evidence, discrepancies in evidence, and gaps in the literature on important health governance topics.

The health governance framework was based on a review of active health governance frameworks. The framework relied on Siddiqi et al. (2009) to emphasize seven categories of health governance results, defined further below—Responsiveness, Efficiency and Effectiveness, Transparency, Accountability, Voice and Empowerment, Rule of Law/Anticorruption, and Equity—that are consistent with categories of governance results from other research. While there are some overlap and definitional challenges in the seven categories, they prove a useful tool for further characterizing the often amorphous term "governance." Applied to the TWG areas, the framework uses a simplified, linear theory of change that analyzes categories of governance interventions, policies, and practices for immediate governance effects, each with implications for health system performance and health outcomes. Findings from each TWG were run through the framework and are further detailed in Annex 1 of this report.

Figure 1.2 Marshaling the Evidence Health Governance Framework



Definitions of Governance Results

Responsiveness. The general definition of responsiveness is individuals or organizations reacting in a way that is needed, suitable, or right for a particular situation. Siddiqi et al. (2009) define responsiveness as the capacity of institutions and processes to serve all stakeholders and to ensure that the policies and programs are responsive to the health and non-health needs of users.[3]

*Effectiveness and efficiency***.** This the extent to which a specific intervention, procedure, regimen, or service, when deployed in the field in routine circumstances, does what it is intended to do for a specified population.[4] Efficiency in particular refers to the capacity to produce maximum output/outcome for a given input.

Transparency. Transparency is built on the free flow of information. Processes, institutions, and information should be directly accessible to those concerned with them, and enough information should be provided to understand and monitor results compared to expected outcomes.[5]

Accountability. Obligation for individuals or agencies to provide information about, and/or justification for, their actions, along with the imposition of sanctions for failure to comply and/or engage in

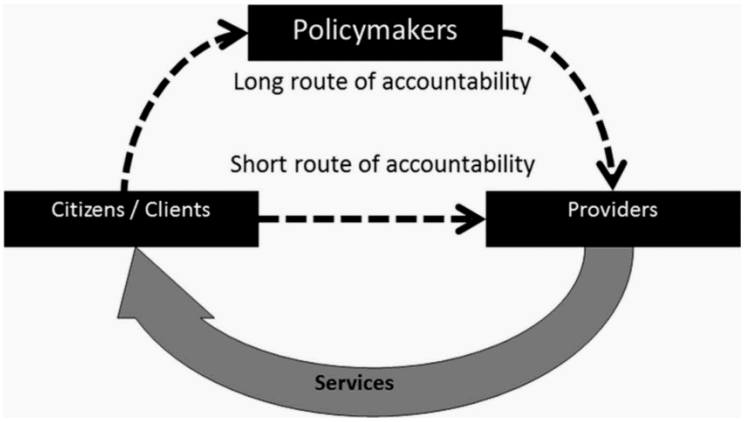
[3] See also the USAID Vision for Health Systems Strengthening's definition of responsiveness: the way health services are delivered must ensure dignity, confidentiality, autonomy, quality, and timeliness of services for poor and marginalized people. USAID's focus is on improving the satisfaction of poor and marginalized people with essential services provision.

[4] WHO Health System Strengthening Glossary. World Health Organization. http://www.who.int/healthsystems/hss_glossary/en/index4.html

[5] See also Mikkelsen-Lopez et al. 2011: "Transparency is therefore not just about performance indicators but also about roles and responsibilities, available resources and their use."

appropriate action.[6] Accountability can take both "long" and "short" routes that engage institutions, citizens/clients, and service providers in different forms (see Figure 1.3; Brinkerhoff 2014).

Figure 1.3 The Routes of Accountability



*Voice and empowerment***.** Voice is defined as the possibility for all stakeholders to participate in decision-making, either directly or through legitimate institutions that represent their interest.[7] Empowerment may be a social, cultural, psychological, or political process through which individuals and social groups are able to express their needs, present their concerns, devise strategies for involvement in decision-making, and achieve actions to meet those needs.[8]

Rule of law and anticorruption. Legal frameworks pertaining to health and institutional effectiveness, transparency, and accountability are fair and enforced impartially.

Equity. Equity is a measure of the degree to which government policies and regulations and their implementation ensure the fair distribution of services across the population for the wellbeing of all. For health systems it can refer to equity in access to care, fair financing for public health services, and or the absence of systematic or remediable differences in health status or access to health care.[9]

SUMMARY OF FINDINGS

The TWGs found consistent evidence of positive impacts of governance interventions on health system performance. A summary of the main findings is discussed below, including additional analysis where findings overlapped. More-specific findings from each TWG report, including citations, are detailed in Section V.

1. **Governance interventions work.** Improved governance appears to universally lead to more effectively implemented policies and increased achievement of intended UHC outcomes. In contrast, health programming that ignored governance dynamics consistently underperformed, or in some cases exacerbated underlying issues and caused harm. Two points to be kept in mind:

[6] See also Travis, et al., 2002: "Accountability includes ensuring that the state governs institutions and service delivery in an ethical and conducive manner. For the health sector this involves: establishing shared values and ethical base for health improvement, enhancing clarity in roles and responsibilities of health system actors, reducing duplication and fragmentation, and ensuring mutual accountability and transparency. Indicators for accountability include: existence of rules, publication and dissemination of these rules, existence of independent watchdog committees, access to political representatives, self-audit of professional bodies, free press etc."

[7] See also European Commission 2004: "There should be balanced and adequate representative participation; space for the voicing of expectations and concerns and taken [sic] them into consideration; and costs of participation accounted for and included in operating budgets."

[8] Health Promotion Glossary. World Health Organization 1998. http://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf

[9] WHO Health System Strengthening Glossary. World Health Organization. http://www.who.int/healthsystems/hss_glossary/en/index4.html

a. **Governance is both a contextual factor and an intervention strategy.** Quicker governance results can be achieved in settings with good governance, where interventions do not depend upon more-complex, systemic change. The relationship between governance interventions, health system components, and UHC outcomes is not linear, and these are often mutually reinforcing.

b. **Governance interventions are not standalone actions.** They are rarely successful when they are treated as a "widget" and transferred without considering context.

2. **Participation, voice, and empowerment increase equity in and responsiveness of health services.** The TWG literature reviews identified a number of policy and programming mechanisms as increasing voice and empowerment of citizens and local communities. Each had impact on equity, responsiveness, accountability, and effectiveness and efficiency of health services. Some key points include:

   a. **Social accountability efforts work most effectively under certain conditions.** These efforts —including citizen scorecards, user committees, participatory budgeting, pay-for-performance financing, and financial audits—improve accountability and health system performance, but only when they are 1) used together, 2) developed in a way that incorporates community dialogue and capacity-building, and 3) implemented over a long enough time period to evolve from answerability to sanctions. Social accountability interventions face challenges of scale and sustainability when donor-led. Sustainable results are more likely to be achieved when demand-side and supply-side interventions are pursued in tandem in ways that are mutually reinforcing (Wetterberg et al. 2016, Fox 2016). Incorporating formal citizen participation as part of an integrated and institutionalized policy and program framework enhances the prospects for sustainable social accountability impacts at scale. While health outcomes can improve through decentralization and mechanisms for greater participation, these approaches face challenges in capacity, power, data quality, and incentives. Support from capable NGOs can translate complex budget and procedural information to more-concrete accountability targets around which citizens can mobilize demand.

   b. **Improved health policy dialogue comes from more-participatory approaches.** Positive results came when space for civil society input was created and proactively encouraged, which in turn resulted in better representation, equity, and accountability. Studies by Coelho (2013), Kaseje (2010), and Gomez (2012) showed improved health policy dialogue when space for civil society input was created and proactively encouraged, which resulted in better representation and accountability. In other instances, civil society used advocacy and strategic litigation to challenge government policy that was in conflict with the law, particularly laws establishing UHC. In this regard, greater freedom of information and press freedom can contribute to improved health policy dialogue.

3. **Decentralization, if designed properly, can improve responsiveness in the health sector**. Much of the research treated the topic of decentralization as homogeneous, failing to distinguish between important forms and characteristics—e.g., delegation v. de-concentration v. devolution, the processes through which the implementation takes place, or the socioeconomic and financial context of decentralization. Despite this lack of specificity in the analysis, lessons emerged on decentralization and health systems governance. Decentralization of service delivery shows improvements in transparency and responsiveness when there is the right balance of centrally retained authority (pooled funding levels and protection for minority groups) and local decision-making. Authority of central governments may positively influence local policy-making and implementation, but should not compromise the autonomy of local decision-makers. However, in countries with a high degree of fiscal decentralization for

collecting revenues and setting priorities for expenditures, and in the absence of a strong equity-based mechanism of redistribution, pooling may become fragmented and jeopardize the objectives of financial and social health protection—for example, as observed in Tajikistan, where a post-Soviet rapid devolution of both revenue and expenditure authority to local governments led to poor risk pooling and a high degree of inequity (Cashin 2017).

4. **Performance-based mechanisms increase effectiveness and reduce corruption.** Findings under performance-based mechanisms covered three principal areas: 1) results-based financing, 2) performance-based financing, and 3) pay for performance. Complementary analysis from different TWGs found that performance-based payments have the potential to bring positive results, but depend on many other factors, such as the management capacity of institutions implementing these reforms, recipients' awareness of performance measures, compensation directly to front-line workers for high performance, transparent and public data, and collaborative working arrangements between the many stakeholders involved in these types of management reforms. A combination of approaches is the most effective. For example, introducing performance-based payments while also introducing citizen scorecards, empowering health facility committees, and providing forums for dialogue between communities, providers, and government increases effectiveness and reduces corruption.
5. In addition to performance-based mechanisms, **other PFM approaches can have positive effects on health system efficiency,** but only when there is capacity to implement and opposing incentives do not derail.
    a. **Introduction of multi-year budgeting/medium-term expenditure frameworks** in relation to poverty reduction strategies encouraged better planning, but governance structures and PFM systems must be sound, or in the process of reform, for such frameworks to be effective.
    b. **Gender-sensitive budgeting** showed promising results to improve health outcomes, particularly when it was part of program-based budgeting, as opposed to the more standard input-based budgeting.
    c. Though evidence overall is limited, **financial audits** seem to improve transparency, reduce corruption, and contribute to improvements in efficiency, though their value for money may be variable. Open contracting also appears to improve transparency as expected, and to reduce corruption, albeit with variable changes to timeliness.
    d. **Consumption taxes** that reduce the ability of the poor to afford essential goods were associated with increased rates of post-neonatal, infant, and under-5 mortality rates. In contrast, pro-poor tax policies, such as progressive income taxes and taxes on capital gains and profits, were associated with positive health results.
6. **Removal of user fees** does not adequately address supply- and demand-side health financing issues, and therefore does not have the desired impact on health outcomes. Similarly, formalization of user fees does not have the desired positive effect on health outcomes, because of other, more- powerful external factors—such as informal payments, or geographical barriers to care. Earmarking for health expenditure is effective only when employed as softer earmarking with broad expenditure purposes and more-flexible revenue sources.
7. **Some services are more responsive to accountability interventions.** Attributes of particular health services (the micro-context) can make accountability interventions more or less likely to succeed. For example: accountability interventions are more likely to succeed where users can see tangible outputs and benefit directly from service (e.g., improved water supply versus improved disease vector control).

SPECIFIC FINDINGS

The following section details the specific findings for each TWG. Further detail can be found in the individual TWG reports. These results, including the specific academic citation, are organized according to the Marshaling the Evidence Governance Framework in Annex 1.

Accountability Working Group[10]

The Accountability TWG analyzed accountability interventions and strategies according to six sub-categories. Vertical and horizontal accountability refer to the state-citizen structures that create potential dynamics of accountability. Vertical generally refers to relationships between citizen and state. Horizontal refers to internal state institutional relationships. The Accountability TWG found that there is a solid evidence base on the variety of accountability interventions that have been tried and tested; however, the extent and nature of impacts depend greatly on *how* interventions are carried out. A key message is that the individual interventions selected may be less decisive than the result of their interactions with contextual factors such as power dynamics, institutional mandates, and sociocultural histories.

Social accountability efforts, for example, have benefitted from the greater collective experience of researchers pursuing studies of those interventions. Tools such as citizen report cards, service charters, multi-stakeholder committees, participatory budgeting, and pay-for-performance have been studied across a wide range of contexts. It is likely that other areas of accountability interventions with mixed evidence will be clarified by greater research efforts with an emphasis on context, which can help to nuance the understanding of the conditions under which those interventions achieve outcomes in health governance. Simon O'Meally's (2013) study of accountability dynamics defines six characteristics of context that can shape accountability—political society capacity and willingness, civil society capacity and willingness, the political settlement among elites, the social contract of the state, inequality and relations within society, and global dimensions around the state.

From this body of evidence come a number of key findings:

- Social accountability efforts are associated with improved accountability and better health system performance when multiple techniques are used together and when the overall effort is well tailored to fit the social and institutional context, through dialogue created by the interventions, and over a long enough time period to move from answerability to sanctions. To enhance impacts for social accountability interventions, analysts and practitioners recommend variations on Fox's (2015) sandwich strategy, which marries bottom-up advocacy and collective action from below with top-down bureaucratic pressure and support from above.
- The attributes of particular health services (micro-context) make accountability interventions more or less likely to succeed (Batley and Mcloughlin 2015). Predictable and regular use of a service can make it easier for users to organize to demand accountability around that service (e.g., primary schooling versus hospital health care). Accountability is more likely in the following contexts:
  - when benefits go to private users (e.g., household water connections versus mains sewerage)
  - where users benefit directly (e.g., water supply rather than disease vector control)

[10] See https://www.hfgproject.org/accountability-health-governance-health-systems-uncovering-linkages/

  - where the provided service is visible (e.g., construction of schools or clinics rather than improving maintenance)
  - when the information about the service is widely understandable and involves less discretion (e.g., vaccinations rather than obstetric care)
- There is little robust evidence around activities that use ombudsman offices, engage parliamentary committees or members of parliament, or use litigation and court intervention specifically to achieve better health governance.
- More research is needed on specifying the conditions under which social accountability contributes to governance and service delivery results, and on the complementary investments that enhance those results.
- There is some empirical support for the utility and effectiveness of performance-based contracting and related pay-for-performance schemes, with an emphasis on which conditions facilitate impact.

Laws and Regulations Working Group[11]

This TWG focused on the processes involved in developing, implementing, and enforcing policies, and the effects of policies themselves. The TWG examined evidence on the factors that led to a particular policy being more or less effective than an alternative policy in a similar context.

Studies pertaining to health financing dominate the identified evidence base. Most reforms associated with achieving UHC do not focus on governance, per se, but on raising revenues through tax-based financing, increasing insurance coverage, or addressing demand-side financing, such as conditional cash-transfers and vouchers. Other areas of policy focus included reduction of informal payments through increased transparency and accountability initiatives; reforms to implement a single-payer system; reforms creating a split between purchaser and provider; accountability and fighting corruption in supply chain management; and policies to promote better human resources for health.

Specific findings from the TWG include:

- Improved governance appears to universally lead to more-effectively implemented policies and increased achievement of intended UHC outcomes.
- The majority of the policies reviewed were related to structural and financial reforms whose impact was to reduce corruption through increased transparency and accountability—an essential focus, as many health programs, like free provision of drugs at public facilities, unintentionally create avenues for corruption.
- Policy instances focused on decentralization initiatives came up frequently as a basis for strengthening capabilities and performance at each level of the health system by increasing responsiveness at the local level—and tended to be more successful when they incorporated strong accountability measures.
- Many governance-related effects can be mutually reinforcing in the way policy changes impact health systems. For example:
  - Reforms that improve transparency of health-related rules (e.g., for user fees and exemptions/waivers) may also help to increase the accountability of providers to patients.

[11] See https://www.hfgproject.org/better-laws-regulations-promote-universal-health-coverage-review-evidence/

  - Reforms that increase accountability (e.g., opening consumer redressal mechanisms for health services, or seeking survey-based opinions on quality of care) may also support reduced corruption and increased responsiveness across the system.

- Policies were identified that worsen equity, affecting health outcomes for the poor and other socially excluded populations. For example, as stated above in the summary of findings:
  - Consumption taxes that reduce the ability of the poor to afford essential goods were associated with increased rates of post-neonatal, infant, and under-5 mortality.
  - Removal of user fees does not adequately address supply- and demand-side health financing barriers that inhibit access, and therefore does not have the desired impact on health outcomes when used in isolation.
- Provider-purchaser split and new provider payment mechanisms are often implemented in tandem as part of major health financing reforms. However, without effective monitoring and oversight from the purchaser and regulators, an unintended focus on curative and hospital-based care can drive inefficient spending at the expense of higher-quality primary, preventive, and promotive care.
- Governments may face political and process constraints on the number of legal and regulatory changes they can make as part of health sector reform. However, it is important to consider when multiple changes that target different health system stakeholders may be necessary to make any one, overarching reform effective. For example:
  - Task-shifting policies, aimed at increased efficiency in the use of clinical health staff, were often ineffective if they were not implemented as part of a suite of policy reforms related to pre-service and in-service training, and accreditation and regulation by medical and nursing bodies.

PFM Working Group[12]

The PFM TWG defined public financial management according to the following categories:

1. Resource Mobilization and Revenue Management

2. Budgeting and Public Expenditure Management

a. Budget Planning and Prioritization

b. Budget Formulation

c. Budget Execution

d. Budget Monitoring and Reporting

e. External Audit and Parliamentary Oversight

3. Fiscal Decentralization and Local Governance

The PFM TWG concluded that the evidence shows a positive association of strong financial management with stronger, more effective health systems, but that the evidence is variable depending on the type of intervention, overall governance structure, and country context. Further research is needed, as causality is still largely inconclusive.

[12] See https://www.hfgproject.org/public-financial-management-report/

Specific findings from the review include:

- More tax revenue does not necessarily translate into more health spending or better health results. The evidence shows that domestic tax revenue is integral to achieving UHC, but results depend on the type of tax levied and the overall administration and governance structures. To achieve health results, tax policy must be specifically engineered not to adversely affect the poor. One study shows a strong association between health spending and taxes on capital gains, profits, and income, but not between health spending and consumption taxes on goods and services.
- Formalization of fees, for example by publishing a fee schedule and introducing systems for reinvesting fee revenue into the facility to benefit patients, can improve service quality and governance and therefore health outcomes. However, studies show that the formalization (much like removal) of user fees alone does not have the desired positive effect on health outcomes, because of other powerful external factors—such as informal payments or geographical barriers to care—that confound the positive effect of removing user fees.
- Earmarking has been more effective when practices come closer to standard budget processes —that is, softer earmarks with broader expenditure purposes and more-flexible revenue.
- Introduction of multi-year budgeting/medium-term expenditure frameworks in relation to poverty reduction strategies encouraged better planning, but governance structures and PFM systems must be sound, or in the process of reform, for medium-term expenditure frameworks to be effective.
- Results-based financing on the whole had mixed results, but was more effective when paired with significant domestic financing and nationwide training and reform rollouts. Government buy-in through domestic financing to support a results-based financing program before implementation was shown to have a positive effect on such programs.
- Reduction of gender inequality through gender-sensitive budgeting showed promising results to improve health outcomes. Program budgeting tends to lend itself better than traditional input-based budgeting to the incorporation of gender-oriented objectives into the budget process.
- Areas where there was insufficient evidence to reach a conclusion:
  - Very few studies had been conducted on the effect on the health sector of integrated financial management information systems and other PFM budget execution solutions.
  - A study of e-procurement in India and Indonesia found no evidence that e-procurement reduced prices that the government paid, but e-procurement was associated with quality improvement—e.g., average road quality, reduced delays in the completion of public works projects.
  - There is inadequate research on the impacts of improved financial reporting on misalignment between budget structure, expenditure management, and reporting systems (how expenditure are made and reported).
- Formal auditing processes for both the public and private health sector had positive impacts on delivery of service.
- Effects of fiscal decentralization in health were mixed to negative. In some cases, fiscal decentralization interventions may be linked to improved decision-making on the distribution of resources according to local needs. In other cases fiscal decentralization contributed to the fragmentation of risk pool financing, which can contribute to adverse outcomes for health system performance.

Uses of Knowledge Working Group[13]

The Uses of Knowledge TWG identified a total of 53 articles from 1999 through 2016 that considered institutionalization of knowledge in health policymaking. The majority of articles in this review used research findings, and to a lesser extent, technical reports, routine health systems data, and survey data aimed at informing policymaking.

The TWG concludes there is growing evidence on the multiple uses and institutionalization of knowledge for policymaking. There is limited evidence on corresponding health systems outcomes and health impacts of these processes in LMIC health systems. Most of the articles centered on domestic public sector employees and their interactions with civil society representatives, international stakeholders, or academics. There was little evidence about how think tanks and the media contribute to this process in LMICs.

Health impacts of knowledge use and institutionalization were reported for a small number of articles with varying levels of specificity. Nearly half of the articles reviewed (n = 24) described health systems outcomes of varying specificity, but mostly policy formulation through the establishment of guidelines, provision of care, or organizational development. Few articles (n = 7) described health impacts, with the majority (n = 47) either focusing on health systems outcomes or not explicitly identifying any outcomes or impacts. Thus, while there remains evidence of how different uses and institutionalization of knowledge can strengthen health systems, the evidence on how these processes can improve health outcomes remains unclear.

Other specific findings from the review included:

- Knowledge utilization to enhance the quality of service delivery was noted in research on integrated community case management in Malawi (Rodriguez et al. 2015), non-communicable disease service delivery in five Asian countries (Rani et al. 2012), multiple primary care services in Nigeria (Onwujekwe et al. 2015), and male circumcision for HIV prevention in Uganda (Odoch et al. 2015).
- It is difficult to determine the extent to which the results can be directly attributed to institutionalization of knowledge use. For example, though alcohol consumption and tobacco use in youth dropped over the first few years of the Thai Health Promotion Foundation (ThaiHealth), it is difficult to determine the extent to which the results can be directly attributed to knowledge use within institutions.
- Zida et al. (2017) argue that for institutionalization of knowledge use, attention should be devoted to incorporating the perspectives of high-level policy elites that are in a better position to know the intricacies of social dynamics in the health sector.
- Institutionalization of knowledge use for health policymaking is politically and socially contingent on identifying success in fulfilling its mandate to provide timely knowledge for use by policymakers while securing financing mechanisms to ensure its long-term sustainability.
- Institutionalization of knowledge for health policymaking in LMICs is an emerging area of interest for HPSR scholars. While the exact nature of this process is still poorly understood, or at least in its infancy, there is clearly a need to devote more research and attention to furthering this particular process of knowledge utilization in LMIC health systems.

[13] See https://www.hfgproject.org/scoping-review-uses-institutionalization-knowledge-health-policy-low-middle-income-countries/

EVIDENCE GAPS

As noted by most TWGs, the research on governance for health outcomes is severely lagging that of other research topics, such as health finance. Thus, one of the important goals of this exercise is to identify the conceptual and evidence gaps in the literature. In some cases TWGs identified complete gaps where governance intervention areas had received no research attention to date. In other instances, the evidence base was incomplete and thus hampered consensus or the use of evidence for tailored policy recommendations. Key gaps the TWGs identified include:

- **Effect of democratic deficit on health governance and outcomes.** Most studied countries are democracies, whereas many health programs target countries with non-democratic systems or democratic systems with large deficits in accountability and transparency to citizens.
- **Role of parliamentary oversight and policy environment.** Executive action in health, particularly in developing countries, remains one of the executive's top priorities. But—as we have often seen despite the planning and even execution of health budgets—many priority measures are never fully implemented. It is, therefore, the parliament's responsibility to oversee budget formulation and the implementation of policies to ensure that health remains a top priority.
- **Role and effects of external review mechanisms, such as audit agencies and anti-corruption commissions, on the health system.**
- **Improvements in the budget classification system**, such as removing duplicates, recoding, and consolidation of off-budget transactions, are a fundamental aspect of budget management, providing a normative framework for decision-making, accountability, and day-to-day administration. While improved budget classification systems are a key PFM intervention in many settings, no research was found regarding the relationship between such improvements and health.
- **How think tanks and the media contribute to the process of capturing and using knowledge for health policy decision-making in LMICs.**
- Ways in which knowledge is effectively used and institutionalized to advance collective understanding of the governance of health systems to strengthen policy formulation.
- Deeper understanding of the interactions between accountability mechanisms and specific contextual features.

This set of gaps can serve as the foundation of a comprehensive research agenda for further advancing understanding of the role governance plays in health system strengthening.

POLICY IMPLICATIONS AND ACTION POINTS

The evidence identified in the reports supports the conclusion that governance is important to health systems and outcomes. There is also growing consensus on how this happens and what governance interventions, or combination of interventions, yield positive results. The results presented here and in each TWG report can be used by policymakers and health system actors to ensure that health systems incorporate mechanisms for reducing corruption, increasing efficiency, and promoting transparency, voice, accountability, and equity in service delivery. However, the other overarching conclusion is that still more research is needed, including how to effectively build research and evaluation into health sector actions so that local stakeholders learn what works in different contexts. There are key evidence gaps in our greater collective understanding of governance and health dynamics; filling these gaps can reduce costs, improve quality, and expand UHC.

From the compiled evidence and subsequent discussions with stakeholders, a few key themes have emerged that offer concrete guidance and actionable steps to international and domestic policymakers:

1. **Social accountability approaches**—including citizen scorecards, user committees, participatory budgeting, and financial audits—reduce corruption and improve accountability and health system performance when used in concert with each other. Governments and donors should support the integration of social accountability mechanisms into all community health services, ensuring community input. This should be accompanied by building local capacity over a long enough time period to have communities making demands and tracking the improvement of services.

2. **Tackling corruption**. It is essential that policies increasingly focus on anticorruption, as several policies, like free provision of drugs at public facilities, unintentionally create avenues for corruption. Policymakers should consider oversight and audit mechanisms as an indicator of overall strength of internal controls, but should also ensure a high quality of data being used or reviewed for audit. More research is needed on modalities for reducing corruption and patient empowerment.

3. **Civil society inclusion**, **citizen engagement,** and pro-poor policies improve equity of health service delivery. Proactive space for civil society policy input (including freedom of information and press freedom) will create more-effective health policy dialogue, which in turn results in better representation, equity, and accountability.

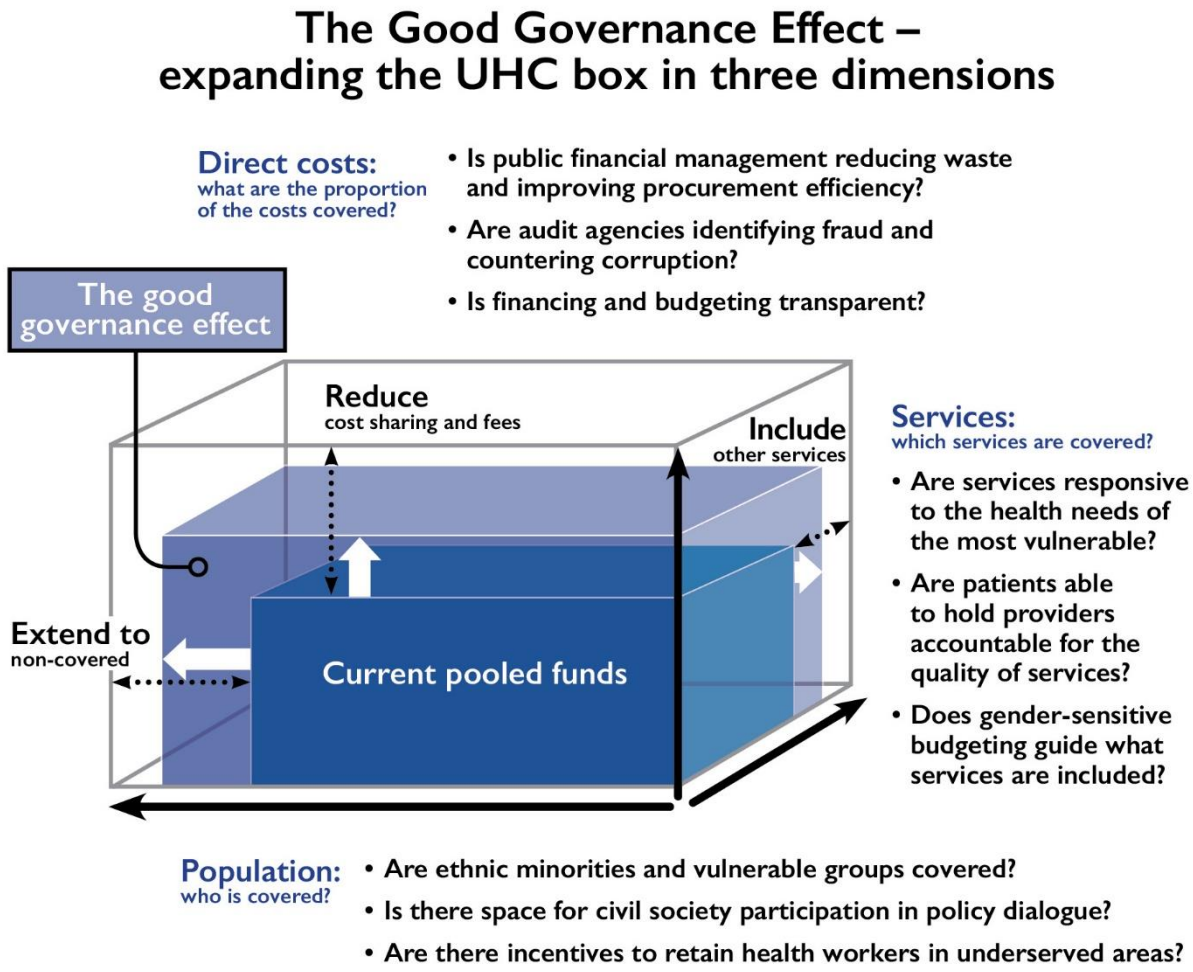
4. **Gender-sensitive and program-based budgeting** is effective in improving health outcomes for vulnerable populations, particularly where health goals are centered on gender-related issues such as STDs, maternal and child mortality, and contraception.

5. **Public financial management interventions** improve efficiency, reduce costs, and enhance quality of health services. Governments and donors should create performance-based financial incentives for health services, with significant attention to operational detail, sufficient technical support, and sufficient capacity. This should include building awareness of recipients, compensation directly to front-line workers, and transparent and public data.

6. **Domestic tax revenue** is integral to achieving UHC, but results depend on the type of tax levied and the overall administration and governance structures. To achieve health results, revenue generation policies must be specifically engineered not to adversely affect the poor, such as through regressive taxes (sales tax, “sin” taxes, or flat income taxes). When considering revenue policy, lawmakers should trend toward pro-poor tax policy and administration if they are looking to achieve health coverage goals, as well avoid revenue generation activities that undermine the socioeconomic conditions of vulnerable populations.

7. **Understand and promote the "Good Governance Effect" on UHC.** Donors and policymakers need to engrain understanding of the need for better health system governance to achieve UHC, and incorporate governance considerations into the UHC efforts in order to maximize the effect of limited funds, as captured in the UHC Cube graphic in Figure 1.4.

Figure 1.4 The Good Governance Effect



- Population dimension:
  - Social accountability interventions with marginalized and vulnerable populations lead to demands for better and equal coverage of health services.
  - Inclusive policies based on evidence and civil society engagement expand population coverage and target subsidies to the poor.
- Cost dimension:
  - Improved public financial management raises domestic revenue for health, improves procurement, and reduces waste and corruption.
  - Decentralization of service delivery increases accountability and responsiveness of health services, and eliminates under-the-table payments.
- Service dimension:

- Evidence-based benefit packages prioritize high-value, essential services.
- Social accountability creates citizen/user engagement mechanisms that demand quality services and patient safety.

8. **Develop and adopt a common Development Hypothesis and Theory of Change** on using governance to improve and expand access to essential health services. Through a Theory of Change model, establish intermediate health governance results and impact, and related output and outcome indicators, including process indicators. Integrate the Theory of Change into donor health strategies and programming models.
9. **Develop a "Thinking and Working Politically" guide** for health programming—to include applied political economy analysis tools—that can help national and civil society actors construct strategies and messages toward improving health system governance.
10. **Mobilize civil society networks,** and create advocacy tools and materials that identify reforms that can facilitate civil society's role in promoting good governance for health outcomes.

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ANNEX 1: MARSHALLING THE EVIDENCE SYNTHESIS DATA

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
Accountability	**Access to information (FOI)**	Fox, 2015	Depends on availability - Few studies that relate these interventions to service delivery improvements, whether in health or other sectors. It is important to discriminate between access to information and availability. The existence of FOI laws may, in principle, provide access. However, availability—as the studies reviewed here indicate—is mediated by institutional and social factors that limit the extent to which average citizens can obtain timely and comprehensible information that they can, or may be motivated to, use for accountability purposes. ....; some support in the literature for the value of independent media in supporting accountability in some instances, and the studies of FOI initiatives cited above usually addressed the role of the media.		**X**	**X**	**X**			
	ICT-enabled accountability	Peixoto and Fox, 2016	Review of 23 ICT platforms to distinguish between the roles that information and transparency platforms can have in informing upwards accountability and bolstering downwards accountability through either individual feedback or collective action.			**X**				

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			Among their findings related to vertical accountability is that ICT platforms can contribute both to upwards accountability, helping senior managers to address service delivery issues, and to downwards accountability. This latter result depends upon whether the ICT feedback was shared publicly among citizens. A second finding is that institutional capacity to respond to citizen input can be usefully distinguished from motivation. In several of the cases, senior officials were personally committed to acting upon the ICT-enabled feedback, but it is a challenge to craft institutional incentives to encourage all officials to care about responding to citizen input.						
	Performance-based contracting and related pay-for-performance scheme	Key Informant Randolph Augustin; Eichler et al., 2009	Some empirical support for the utility and effectiveness of performance-based contracting and related pay-for-performance schemes - work when there are clear and appropriate expectations, compensation directly to frontline workers, and transparent and public data around performance. Not whether performance incentives can change behaviors and improve services, but rather under what conditions do they fulfill their potential - select service providers and beneficiaries, the results to be	**X**	**X**	**X**				

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			rewarded, and the mechanisms to monitor performance. Terms of contractual arrangements, including how recipients will be monitored and performance rewarded, need to be clearly specified. Staff and systems to administer performance-based payments need to be organized, and both technical and financial resources need to be dedicated to assessing, learning, and revising the approach (failure examples: failure to tailor pay-for-performance schemes to the levels of capacity, poor understanding of financial incentives and personal incentive structures embedded in the health system							
	Public expenditure tracking	Tolmie, 2013	Public expenditure tracking can support improvements in transparency and reduced corruption, though studies indicate that citizen engagement in public expenditure tracking faces capacity, power, data quality, and incentives issues - a focus on budgets and financial flows provides concrete accountability targets around which citizens can mobilize demand, particularly if they are supported by capable NGOs that can serve as translators and simplifiers of complex budget and procedural information		**X**		**X**	**X**		

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
	Participatory budgeting	Gonçalves, 2014; Boulding and Wampler, 2010	Participatory budgeting increases citizen voice in decision-making and leads to greater responsiveness in resource allocation in line with citizen preferences, but it is not clear the extent to which these increases in participation lead to improvements in service-delivery efficiency.				X			X
	Financial audits	Goryakin et al., 2017; Cantarero and Pascual, 2008	Evidence overall is limited with respect to improving health outcomes, but financial audits seem to improve transparency, reduce corruption, and contribute to improvements in efficiency, though their value for money may be variable.		X			X	X	
	Political decentralization	Smoke, 2015; Gilson et al., 1994; Bossert and Mitchell, 2011; Avelino et al, 2013; Pruce, 2016	Showed mixed results tied to health governance. While some instances showed decreased corruption, others showed that reductions in decentralization correlated with greater investments in health. The politics of decentralization, the characteristics of particular health services, and the intent of donors that support country decentralization seem to explain to a large extent these mixed results.	X	X	X	X	X		X
		Mitchell and Bossert, 2010	Mitchell and Bossert (2010) apply decision-space analysis to six countries (Bolivia, Chile, India, Pakistan, the Philippines, and Uganda). The authors map patterns of discretionary						X	X

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			autonomy across health system functions. They discuss how the balance of authorities and responsibilities between central and local health officials can promote achievement of health system outcomes: improved health status, financial risk protection, consumer satisfaction, and equity. However, they also argue that from a perspective that foregrounds health system performance, decentralization can produce some negative outcomes – improvement is not automatic, and depends on how the decision space is structured.							
	Fiscal and financial decentralization	Avelino et al., 2013; Transparency International, 2017	Some evidence that under the right conditions, fiscal and financial decentralization can improve responsiveness, increase efficiency, and limit corruption. Avelino's study shows that higher capacity health councils had less corruption than lower-quality ones according to the metrics of the study.	**X**				**X**		**X**
	Recentralization	Malesky et al., 2014	Recentralization improved the delivery of services favored by central government, which included health. This improvement resulted from the reform's impact on limiting the power of local elites to dominate investment and spending decisions and profit from corruption.	**X**				**X**		

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
	Coupling demand and supply-side accountability	Wetterberg et al. 2016; Fox, 2016; O'Meally et al., 2017	Analysts and practitioners recommend variations on Fox's (2015) sandwich strategy, which marries bottom-up advocacy and collective action from below with top-down bureaucratic pressure and support from above - demand-side and supply-side interventions are pursued in tandem in ways that are mutually reinforcing.	X						X
	Social accountability	Holland et al, 2016	Social accountability is effective in improving local-level service delivery, but has a limited effect at scale. Adding formal, invited citizen participation, as part of an integrated and institutionalized policy and program framework enhances the prospects of social accountability impacts at higher levels of service delivery. Social accountability can contribute to improving access to services for marginalized populations, but for sustained impact it needs to be accompanied by supply-side measures that directly target these populations.			X	X			
	Service charters; Health facility committees	McIntosh et al., 2015	Accountability tools - service charters and quality assurance reviews to reinforce accountability between levels of government, while also using the same charters, health facility committees, and integrated supportive supervision to embed vertical accountability.		X	X				X

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
	Citizen involvement in the health policy process	Rodriguez, 2015; Onwujekwe, 2015; Rani, 2012; Coelho, 2013; Drake et al, 2010; Becerra-Posada et al, 2014; Nabyonga-Orem et al, 2016; Cash-Gibson et al, 2015; El-Jardali et al, 2015; Rizk et al, 2015	Knowledge utilization to enhance the quality of service delivery was mentioned in research on integrated community case management in Malawi, non-communicable disease service delivery in five Asian countries, multiple primary care services in Nigeria, and male circumcision for HIV prevention in Uganda. Institutionalization of lessons learned from citizen involvement heavily present in Brazil, three NGO case studies in policymaking, and West Africa.				**X**			**X**
	Institutionalization of knowledge use - political will	Zida, 2017 (policymaking); Zida, 2017 (institutionalization); Barth, 2013	Institutionalization attention should be devoted to incorporating the perspectives of high-level policy elites who are better positioned to know the intricacies of social dynamics in the health sector. Similarly, political will of key bureaucratic and political figures, as well as a robust civil society, help to enforce the regular use of and production of data to inform policymaking.	**X**				**X**		

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			Elements include existence of an institutional framework (policy unit's government mandate), consistent data production and report preparation, adequate financial and human resources, and infrastructure capacity to routinely produce and use data in policymaking.							
	Institutionalization-regulative aspects	Liverani et al, 2013; Tapia-Conyer et al, 2012; Becerra-Posada et al, 2014; Jirawattanapisal et al, 2009; Teerawattananon et al, 2009	Three review articles reflect on the regulative aspects of instituionalization of knowledge, and two more discuss regulations around using this knowledge in policy design. Still, there appears to be a gap in the health literature on regulative forms of institutionalization that adhere to binding rules and structured incentives for the purpose of expedient knowledge transfer.	**X**						**X**
	Creation of specialized units	Zida, 2017; Banta and Almeida, 2009; Gomez-Dantes and Frank, 2009; Teerawattananon et al, 2009; Buasai et al, 2007;	These papers use institutionalization language to analzye the creation of specialized health system units, such as a health policy rapid response unit. They outline five steps to institutionalization, including awareness, experimentation,	**X**						**X**

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
		Rani et al, 2012; Renzi, 1996; World Bank, 2010	expansion, consolidation, and maturity. Authors frequently illustrate the political and socially contingent process of institutionalization knowledge use for health policymaking, identifying success in fulfilling its government mandate of providing timely knowledge that could be used by policymakers, but questioning the extent to which financing mechanisms exist to ensure its long-term sustainability. Further research needed into addressing these resource constraints.							
	Processes of accreditation or certification	Zielinski et al, 2014; Rutta et al, 2015	The literature is largely focused on creating an ideal environment for facilitating knowledge transfer, exchange, and dialogue to better inform policymaking. Unlike regulative institutionalization, which seeks to induce knowledge utilization through binding agreements, the literature suggests that greater emphasis in LMIC health systems has been placed on developing norms and best practices. Few sources focus on	**X**		**X**				**X**

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			accreditation or certification processes in these contexts as methods of insitutionalization.							
	Regulatory policy design	Jirawattanapisal et al, 2009; Teerawattananon et al, 2009	These sources also focus on regulatory instances of instituionalization (see above).	**X**						**X**
	Deliberative policy making through exchanges between domestic governments, international stakeholders, and civil society	Coelho, 2013; Kaseje 2010; Gomez 2012; Rodriguez et al, 2015; Ade et al, 2016; Beesley et al, 2011; Gomez and Atun, 2012; Koduah et al, 2016; Hawkes et al, 2016	Literature regarding multi-country efforts to strengthen individual, organizational, and institutional capacity to use research for policymaking. Relative consensus that deliberative modes of policy governance through engagement with civil society organisations which resulted in better representation and accountability.				**X**		**X**	**X**
	Agenda setting for policy process	Gilson and McIntyre, 2008; Koduah et al, 2016	Difficult to link use of knowldege with improvements in specific health outcome categories. Many studies reported knowledge use that resulted in macro-level health system changes that didn't fit neatly into specific categories. This included the incorporation of research findings into national level policy and	**X**						**X**

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			strategy documents, the creation of new state agencies or units, and agenda-setting for the policy process.							
	Incorporation of research findings into policy and strategies	Nabyonga-Orem, 2014; Knaul FM, Arreola-Ornelas H, 2006; Contreras-Hernandez, 2012; Rutta et al, 2015; Drake et al, 2015	Many examples in the literature of use of research and routine system information informing drug policy, essential medicines, andother pharmaceuticals. Utilization of knowledge to improve financial protection was illustrated in research from Mexico which resulted in a reduction in out-of-pocket expendituresand research from Colombia that noted a decline in spending for oncological treatment by users. Access, quality, and financial protection regularly discussed with respect to institutionalization in the literature, with equity less represented.	**X**					**X**	**X**
	Increased resilience of health systems	Knaul FM, Arreola-Ornelas H, 2006; Nabyonga-Orem J, Ssengooba F 2014; Drake, Hutchings, 2010; Rutta	Some research suggested that health impacts were achieved indirectly through health systems improvements such as improved malaria treatment in Uganda, reduced catastrophic expenditures in Mexico, improved drug availability							**X**

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
		E, Liana J, 2015	in Tanzania [75], increased access to emergency contraception in multiple countries. Gap in evidence as to which health system governance interventions trigger these improvements and causality.							

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
Public Financial Management	**Spending and health outcomes**	D Rao, 2014	Overall economic growth and revenue mobilization on its own does not necessarily amount to more health spending or health outcomes. This casts doubt on the argument that PFM interventions in revenue mobilization could have the capacity to improve health outcomes by facilitating greater allocations towards health spending.	**X**	**X**	**X**				
	Domestic revenue mobilization	Elovianio, 2017	This study associates low domestic health spending and high dependence on out-of-pocket payments with poor health outcomes.	**X**					**X**	
	Consumption taxes	Reeves, 2015	This study argues that consumption taxes reduce the ability of the poor to afford essential goods, and are associated with increased rates of post-neonatal mortality, infant mortality, and under-5 mortality rates. These adverse associations were not found with taxes on capital gains, profits, and income.						**X**	
	Removal of user fees	Meessen et al., 2011	This study finds the removal of user fees does not adequately address supply and demand side health financing issues and therefore does not have the desired impact on health outcomes that recommend the practice. The study looks across several countries in sub-Saharan Africa and found, in most countries, that there was no comprehensive approach in addressing all the barriers (financial and non-financial) that households encounter in their utilization of health services	**X**					**X**	**X**

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
	Earmarking	Soe-Lin et al, 2015; Cashin, 2017	Empirical data in 188 countries over 18 years shows that found that increased tax revenues do not necessarily translate to increased health spending. Further, Cashin's study of several countries in Sub-Sarahan Africa show that between 10-30% of allocated budgets go unspent, reinforcing the perception that public spending on health can be inefficient.	X					X	
	Medium-term expenditure financing (MTEF)	Bevan and Palomba, 2000; Foster, 2002	Introduction of an MTEF reform in Uganda did not prevent a decline in the proportion of budgets being allocated to health. The study mentions, however, that the Ugandan health sector was very reliant on donor financing at this time.This example could have mixed implications for government spending.	X		X				
		Wilhelem, Vera, et al, 2008	Review of case studies that documented the status of MTEF in a sample of nine low-income countries found that the introduction of MTEF, in close relation with poverty-reduction strategies, encouraged higher prioritization, enhanced country ownership and customization. The introduction of MTEF also more fully encapsulated poor and vulnerable groups by linking them to domestic decision-making processes – particularly in health.	X	X			X		X
	Gender-responsive budgeting	Durojaye, Ebenezer, et al. 2010	A study of GRB in several African countries notes that investments in girls and women (including						X	X

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			reproductive health investments) offer a "double dividend" because they have pay-offs in terms of women's reproductive roles, as well as their (economic) productive roles.							
	Strategic purchasing	Annear, 2015	This study analyzes a number of middle-income and low income countries (particularly in the Asia Pacific region) that are introducing or considering the implementation of Diagnosis-Related Groups (DRGs) to contain inpatient costs. Annear's study finds that DRGs tend to affect the non-hospital sector by shifting costs from inpatient to out-patient. Other trends include a decrease in the length of hospital stays. Volume of hospitalizations tended to increase in countries that use DRGs to set hospital budgets, while volume tends to decrease in countries that shifted from a cost-based reimbursement system to a DRG-based payment.	**X**	**X**					**X**
	Results-based financing/PBF	Vian and Bicknell, 2014	This study, based in Lesotho, found that RBF did not have the desired effect at the hospital level because staff lacked the capacity to implement the reform. The authors of the study noted that the policy goals in Lesotho were also not adequately translated from the national to facility level – which contributed to the lack of adoption.	**X**	**X**	**X**				**X**
		Ilse, 2016	This study, conducted in Cameroon, found concerns that RBF may inadequately address inequalities in access to care. After testing the PBF intervention targeting the poorest in		**X**				**X**	**X**

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			communities in Cameroon, the study concluded that a system of targeting the poorest of society in PBF programs may help reduce inequalities in health care use, but only when design and implementation problems leading to substantial under-coverage are addressed							
		Petrosyan, Varduhi, et al, 2014	A study conducted in Armenia found that the RBF program contributed to a substantial increase in the utilization of PHC services and improved provider performance. This intervention, however, was coordinated with well sequenced reforms and supported by nationwide training and bonus payments to keep participants motivated. Researchers hypothesized these factors may have significantly contributed to the success of the program. They also cited domestic finance as a major source of success because it encouraged country buy-in and ownership		X					X
	Auditing	Powell-Jackson, 2007	This study reviewed National Health Accounts (NHA) noted that NHAs are at most a framework, and therefore can do little to address the underlying problem of weak government public expenditure management and information systems that provide much of the raw data. The emergence of budget support aid modalities poses a methodological challenge to health resource tracking, as such support is	X				X		X

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			difficult to attribute to any particular sector or health program.							
	Fiscal decentralization	Goryakin, 2017	A literature review that finds that municipalities which implemented participatory budgeting reforms were more likely to allocate increased funding to health and sanitation services after controlling for municipal fixed effects and a range of other control variables.	**X**						**X**
		Sumaha, 2016	A systematic review of the effects of decentralization on health-related equity, Most or all cases did not isolate differente aspects of decentralization but, rather the studies examined decentralization as a broad concept with an implication for overall governance - implications of decentralization are varied and often depend on pre-existing socio-economic and organizational context, financial barriers to access, the form of decentralization implemented and the complementary mechanisms executed alongside decentralization.	**X**					**X**	
		Village Reach, 2016	A study highlighting a supply chain issue in Mozambique - the district-level government funding the immunization supply chain is often managed through a single person, the district secretary, who may quickly become a bottleneck if many departments are submitting requests simultaneously resulting in cash flow problems. The author concludes that harmonizing treasury operations and cash processes can potentially	**X**	**X**	**X**		**X**		

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			improve the budgeting and planning processes of health. However, if treasury operations are inefficient, and rely on old outdated processes, then these operations can become entrenched. Inefficient treasury operations are also subject to a lack of transparency, and are often unreliable to the communities it needs to service.							
		Robalino, 2001	A cross-country analysis that concludes that if central governments retain some authority to influence local policy and implementation without compromising the autonomy of local decision-making, it is more likely that the benefits of a devolved system will be realized. The study also concludes that countries which achieve a more fiscally decentralized system is associated with lower mortality rates and improving health outcomes in environments with high levels of corruption.				X			
		Cashin, 2017	In countries with a high degree of fiscal decentralization for collecting revenues and setting priorities for expenditures, pooling is more fragmented if there is not a strong equity-based mechanism for redistribution. This lessens equity and financial protection in the health sector. In post-Soviet Tajikistan, rapid devolution of both revenue and expenditure authority to local governments led to poor risk pooling and a high degree of inequity.	X					X	

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
	Deconcentration	Kwamie, 2016	Deconcentration defined as revenue and expenditure management through local administration. This study finds that, in Ghana, the lack of coherence in district financing, mandated managerial responsibilities, and strong vertical accountabilities has negatively influenced the authority of district health managers, thereby deterring deconcetration. This has resulted into a limited transfer of autonomy fomr national to sub-national levels.			**X**				**X**
		Mohammed, 2016	In Fiji, decentralization has had an inconclusive effect on empowering local actors (with most of the power and authority staying centrally located) and on health systems and outcomes. Decentralization has caused a 300% increase in the utilization of health services at the health center level since its introduction, but a decline in funding for ambulatory care.	**X**						**X**
	Devolution	Bossert, 2003 (Zambia)	In Zambia, a country with declining health budgets where district health officials exercise a moderate degree of choice for many key functions, devolution did not worsen inequalities among districts or reduce the utilization of health services. It allowed the districts to make decisions on the internal allocation of resources and on user fee levels and expenditures. However, districts choices were quite limited over salaries and allowances and they did not have control over additional	**X**		**X**	**X**		**X**	

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			major sources of revenue, like local taxes							
		Bossert, 2003 (Colombia, Chile)	Decentralization can contribute to, or at least maintain, equitable allocation of health resources among municipalities of different incomes - data from Colombia shows that a population-based formula for national allocations is an effective mechanism for achieving equity of expenditures. Successful budget autonomy can be seen in Colombia and Chile, where equitable levels of per capita financial allocations at the municipal level were achieved through different forms of intergovernmental transfer of public funds (i.e. allocation formula, local funding choices, and horizontal equity funds).			X	X		X	

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
Policy and Regulation	**Decentralization policies**	Kelsall, T., T. Hart, and E. Laws, 2016	This study finds that lack of competition and corruption in procurements related to the pharmaceutical sector could undermine the benefits of an increase in coverage of health financing mechanisms. It focuses on exmaples of monopolistic drug markets in Vietnam resulting in few options to purchase affordable drugs, while in China corruption in the bidding process for drug procurements allowed certain providers to receive bribes.			X		X		
		OECD Reviews of Health Systems: Mexico, 2016	In the early stages of decentralization in Mexico under the National Decentralization Agreement, funding was channeled through the states (provinces), which gave them the incentive to increase enrolment of population into the program. However, this system had weak accountability; states had decision-making responsibility on how to spend their funds but without central oversight that set efficiency or quality targets. As a result, there were variable achievements in quality of care.	X		X				
		Cortez, R. and D. Romero, 2013.	This study describes the functioning and performance of Argentina's Provincial Maternal and Child Health Investment Program, commonly referred to as Plan Nacer. Though overall evidence of the health impacts of decentralization is mixed, this program successfully promoted fiscal autonomy to local health	X						X

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			centers, allowing for greater health coverage of its target population.							
		Chao, S., World Bank, 2013	Jamaica decentralizes the functions of its Ministry of Health by making four Regional Health Associations responsible for healthcare delivery but retains the central functions of "policy, planning, regulating, and purchasing" to increase efficiency and responsiveness of the system. Core finding of this study is that decentralization needs to be accompanied by clear, transparent allocation of responsibilities.	X	X	X				X
		Gottret, P.E., G. Schieber, and H. Waters, 2008	Estonia sought to rapidly decentralize both its financing system and the healthcare provider system. However, this was not accompanied by an increase in capacity of the regional providers. This led to a situation of uncoordinated planning and funding, combined with fragmented revenue collection; with an overall outcome of more inefficiency and inequality				X		X	
		Francke P., 2013	Peru attempts to decentralize health management functions to different regional offices, while maintaining control over core policy and decision-making matters. However, without clearly understood accountability across levels, citizens were unable to ascribe performance to the relevant authority that has jurisdiction, diluting overall responsiveness towards improved performance.		X	X				

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
		Aantjes, C., T. Quinlan, and J. Bunders, 2016	Efforts in Zambia to decentralize its health system to regional and specialized health units successfully improves quality, expands coverage, and cuts costs.	X					X	X
		Fernandes, A.M., et al., 2016.	Study in Portugal suggests that stronger local health governance may be vital for improving health services effectiveness and health outcomes in a decentralized health system.	X			X			X
	Voice and citizen empowerment	Ham, C. and M. Brommels, . 1994.	Analysis of citizen choice and empowerment in the Netherlands, Sweden, and the United Kingdom. UK has less choice in terms of providers and insurers, and therefore relys more on medical training and professional bodies to ensure patient rights. The Netherlands and Switzerland have more choice and citizen participation, with similar health outcomes.		X		X			X
		Key informant interview August 2017; (pg 20/34)	Uganda presents an example of where strategic litigation has been used effectively by civil society to bring about much needed improvements in maternal health. Similarly, in Indonesia, civil society-led legal challenges against the government for not implementing single-payer health insurance reform within the stipulated timeline of the related act spurred the eventual rollout.		X	X	X			X
		Atun, R., et al., 2013	Community participation can help define goals for the healthcare system and to hold providers			X	X			

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			accountable to attaining them. In Turkey, annual household surveys are undertaken by Turkish Statistical Institute to gauge patient satisfaction with health care services.							
		Gottret, P.E., G. Schieber, and H. Waters, 2008	Costa Rica has promoted citizen involvement by legal means which established Health Boards that comprise of democratically elected community leaders who oversee the delivery of services. However, despite the existence of a policy regarding community participation in health in Costa Rica, community activists may still not have voice and influence due to lack of capacity in such citizen bodies.		X		X			
	Transparency policies	Balabanova D, 2013	Investments in transparency and accountability enabled the success of reforms laid out in Kyrgyzstan's Manas and Manas Taalmi plans to be successful in reducing informal payments and improving financial protection from effects of ill-health.		X					
	Uniform service pricing	Key informant Interview (page 12/34)	Uniform service pricing for inpatient services within five specified regions under the Jaminan Kesehatan Nasional (JKN) system were helpful in increasing transparency and reducing corruption in Indonesia.		X			X		
	Published fees	Ensor T, 2017	A study based in Cambodia finds that published user fees are a useful tool to increase transparency. To be effective in promoting transparency, fees need to be formally published and clearly communicated to patients, with defined exemptions in place for those who need them.		X		X			

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
			These would need to be alongside other mechanisms to reduce financial barriers to patients at point of care.							
	Accountability frameworks	Governing Mandatory Health Insurance: Learning from Experience, 2008, World Bank	In Estonia, appropriate accountability frameworks were implemented when restructuring their single-payer system. Efficiencies were therefore generated through a single-payer healthcare system, unlike other instances where lack of these frameworks caused reduced responsiveness and corruption.		**X**	**X**				
	Responsiveness through split between purchaser and provider	Lagomarsino G, 2012	One of the fundamental rationales for the split between purchaser and provider is to promote the ability for funding to follow the patient, who can register at a facility of choice; and hence providers must compete on access and quality to earn revenue, which improves the responsiveness of the system and health outcomes. This overview of health systems in nine countries in Africa and Asia finds that funding often does not fully follow the patient, and local registration requirements can limit choice and entry points for patients. It also takes more than just the purchaser-provider split, as strategic purchasing mechanisms need to be implemented to create the right incentives for providers along with effective monitoring and oversight from the purchaser.				**X**			**X**

TWG	Governance interventions	Sources	Immediate Governance Effects	Expected Governance Outcomes						
				Efficiency & Effectiveness	Transparency	Accountability	Voice & Empowerment	Rule of Law/ Anticorruption	Equity	Responsiveness
	Transparency and responsiveness in Supply Chain Management	Mano L, 2013; Agyepong I.A., 2014; Hughes, 2007; Lagarde M., 2008; Ravindran T.S., 2012; Honda A., 2015; Honda A., 2012	Policies introduced targeting the supply chain management (SCM) component of the health system are typically aimed towards increasing equity, coverage, and financial risk protection. However, there are many instances of these policies relying on transparency and responsiveness to operate effectively. In Ghana for example, the fee schedule for medicines is based on the NHIS medicine list and undergoes periodic revision. In Argentina, Bolivia, Peru, and Uruguay, physicians are required to prescribe generic brands of medicines whenever possible, and this is well understood by pharmacists, who can then question the use of brand name medicines when there is a cheaper alternative available.		**X**	**X**				**X**

ACCOUNTABILITY, HEALTH GOVERNANCE, AND HEALTH SYSTEMS: UNCOVERING THE LINKAGES

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EXECUTIVE SUMMARY

This report presents findings and analysis related to accountability, its connections to health governance, and links to health system performance. As part of a series on governance interventions that contribute to health system performance, this report aims to increase awareness and understanding of the evidence of what works and why. The report categorizes and reviews evidence from the literature, further informed by several technical experts across a several types of accountability interventions.

The extent and strength of evidence varies considerably by category and intervention type. Nevertheless, some clear patterns and findings emerge. A major implication of this evidence review is that accountability interventions matter considerably to health governance. However, the extent and nature of their impacts depend greatly on *how* interventions are carried out. Numerous studies confirm that increased access to information, social accountability efforts (e.g. citizen scorecards, user committees), increased effective health reporting, pay-for-performance financing, and financial audits, and others are associated with improved accountability and health system performance. This is more often true when multiple techniques are used together and when the overall effort is tailored (through dialogue created by the interventions) to fit the social and institutional context and is sustained over a long enough time period to move from answerability to sanctions.

Across the report, the most consistent findings are the importance of context and how it influences particular intervention designs and their implementation. These interactions hold at the macro-context level, where political economy and power dynamics as well as institutional incentives and structures dictate why and how specific interventions may operate. They also hold at the micro-context level, where particular features of local actors' interactions shape outcomes. Success may require longer engagement, although in settings with good governance, quicker results may be obtained from particular accountability interventions. Critically, this should inform how policymakers understand and describe their own efforts, as framing has independent effects and often entails reaching beyond the health sector.

The evidence points to effective ways to integrate contextual considerations into accountability efforts by using multiple tactics and techniques, understanding change as systemic, expecting to iterate and adjust, and leveraging local meanings of accountability to inform programming. This report should assist policymakers to consider these issues, both generally and in relation to particular types of accountability intervention. There remains ample room for further research on accountability and health governance, particular where interventions' interaction with context is more deliberately examined as part of an explicit theory of change.

CONCEPTUAL FRAMEWORK

Weak or failed accountability is frequently cited as contributing to dysfunctional governance and the inability of national health systems to deliver services and protect the health of citizens. Yet calling for more and better accountability provides few clues on the specifics of what to do and how to do it, and often a precise definition of accountability is missing from these demands. All health systems contain multiple accountability relationships, which can be characterized by two core elements. The first is answerability: the obligation to answer questions regarding decisions and actions. The second is sanctions: some form of punishment for transgression or failure, or of positive reward for proper behavior and actions (Brinkerhoff 2004).

Three theoretical frames are relevant to mapping and understanding accountability relationships. The first of these is principal-agent theory, whose key premise is that goals of principals and agents are divergent and conflicting. Agents seek to maximize their interests at the expense of principals' aims, while principals seek to increase their control over agents (Brinkerhoff and Bossert 2014). Principal-agent dynamics drive the parameters of answerability and sanctions (whether "hard" or "soft") in a given accountability relationship. The second is collective action theory, which argues that getting groups to cooperate to achieve a shared objective of benefit to all must deal with "free riders," those who profit from the actions of the group but do not contribute to those actions. The capacity to deal with "free riders" is dependent upon the size of the group; the larger the group, the tougher it is to craft an objective that all members feel strongly committed to, and the harder it is to prevent "free riding." A key collective action problem for accountability is the often-misplaced assumption that accountability principals share common interests (Booth 2012). The third is the institutionalist perspective, whose relevance here is the focus on how institutional structures and processes distribute power, roles, and responsibilities among accountability actors to manage principal-agent relationships and collective action problems (Brinkerhoff and Bossert 2014, Abimbola et al. 2017).

Clarifying accountability requires determining what health system actors and/or institutions are accountable for. We relied on a broadly applied taxonomy that includes: democratic (political), performance, and financial accountability. For each category, accountability can be divided into policies, practices, and mechanisms that connect the government to society and citizens—so called vertical accountability—and those that operate within the confines of state institutions, from one part of the state to another, which is termed horizontal accountability (Schedler 1999, cited in Brinkerhoff 2004). Vertical accountability directly addresses the state being accountable to the society, while horizontal accountability reflects the way that roles and functions within government are balanced to ensure accountability as part of regular performance, even absent direct citizen engagement.

The vast accountability literature identifies a broad range of governance results relevant for health systems and health outcomes, both instrumental and normative (Brinkerhoff and Bossert 2014, Abimbola et al. 2017). In this study, we focused on the following: transparency, responsiveness, voice, empowerment, reduced corruption, efficiency and effectiveness, improved service delivery, and equity (cf. Siddiqi et al. 2009). For evidence mapping purposes, we created a matrix that arrays the accountability categories (democratic/political, performance, and financial), distinguishing between vertical and horizontal, along with particular policies, practices and mechanisms; and the expected health governance results (see Annex 1). This matrix provided us with the cells that guided our literature search, the intent being to identify studies that addressed as many of the cells as possible. The stylized theory of change reflected in the matrix is that the accountability policies, practices, and mechanisms contribute to one or more of the health governance results, which in turn contribute to health system

strengthening and ultimately to health outcomes. The nature and degree of such contributions are mediated by:

- Logics of how accountability policies, practices, or mechanisms work, whether primarily through sanctioning bad behavior, through creating or making transparent information in ways that change incentives for future action (principal-agent and collective action models), or other logics (for example, norms and values)
- Contextual factors at various levels (national to local)
- Interactions between the context (e.g., actors inside and outside the health system, power dynamics) and accountability policies, practices, and mechanisms (issues of fit)
- The implementation of specific accountability policies, practices, and mechanisms

METHODOLOGY

We conducted a literature review during January–June 2017 to identify publications and reports that addressed accountability in the health sector primarily (though not exclusively) in countries falling into the World Bank's low-income and lower middle-income groupings. We used the categories and terms in the evidence matrix as input to key word searches, complemented by sources suggested by members of the accountability technical working group. The emphasis in the review was on empirical studies—both quantitative and qualitative—though we did not exclude conceptual and applied theoretical work. We focused on relatively recent sources from the past 10 to 15 years, though again this was not exclusive. While we comment to some extent on the type of study and analysis, we do not assess the details of study designs and did not use type of research design as a criterion for inclusion or exclusion. Our analysis is qualitative and does not include the kinds of metrics included in formal systematic reviews. The limitations of the literature reviewed were considered and are reflected in the discussion below.

Besides the literature review, the team conducted 19 key informant interviews with a mix of academics, donor agency staff, country health officials, and nongovernmental organizations (NGOs) (see Annex 2). Key informants were selected based on the TWG's recommendations of people with knowledge of and experience with accountability and the health sector. Interview questions focused on evidence of the impacts of accountability interventions, lessons learned from practical application or analysis, contextual factors influencing successful accountability efforts, and knowledge gaps (see Annex 3). Several key informants also suggested relevant sources from the literature. Key informant comments that bear on the discussion of evidence are incorporated into the report to add detail and nuance to the review.

STRUCTURE

For each of the six categories in this review, a compilation of evidence is presented. Under each category, we review evidence around relevant accountability mechanisms, policies, or interventions, including relevant insights from key informants. Where there are sub-categories with large amounts of research, those sub-categories are identified and literature clustered under a heading for each. All six sections close with a short discussion of "what works, what doesn't" that describes strong findings from the literature and assesses what can be said about that category overall.

MAJOR FINDINGS

The following sections present a distillation of the major findings from our review, organized by the categories in our evidence matrix (Annex 1). Commentary from selected key informants is included as well.

Vertical Democratic Accountability

Accountability mechanisms: Elections, Freedom of Information laws, open government initiatives, public interest lawsuits, demonstrations and protests, media and investigative journalism

Elections are the classic democratic accountability mechanism, but they are well recognized as a relatively blunt instrument in targeting feedback or punishment to public officials regarding particular services or issues. To the extent that governance systems protect basic democratic freedoms such as freedom of expression and of assembly, the media, civil society, and public interest lawyers can engage in actions that seek to enforce accountability. Freedom of information (FOI) laws serve as a foundation of the transparency necessary for accountability to function effectively. Open government initiatives move beyond FOI to actively promote increased information transparency as a routine practice and to facilitate easier exchange between citizens and public actors. Literature in this category that connects to health issues is relatively rare.

Elections

Though elections are not commonly analyzed in terms of their impacts on health outcomes, one study in Brazil traced the effects on health spending and selected health service indicators of enfranchising the poor in municipal elections. Taking advantage of the natural experiment created by the Brazilian federal government's phased introduction of new municipal electronic voting systems, Fujiwara (2015) used regression analysis to examine the effects of the new system on electoral participation of poor and illiterate voters, election outcomes, health spending, and maternal and child health services. He found that electronic voting increased numbers of valid ballots cast by poor populations whose votes had been uncounted in cases where their paper ballots had errors or blanks. The resulting enfranchisement of the poor led to the election of left-of-center candidates who increased health spending in their municipalities. The increased spending led to statistically significant increases in prenatal visits by healthcare professionals and reductions in low-weight births among less educated women. This case demonstrates the accountability impacts of increased political participation by poor voters on redistributive policies and programs.

Freedom of Information Laws

Of the studies identified for this literature review, the type of intervention most broadly researched within this category of accountability is access to information through FOI laws. FOI laws establish legal/policy frameworks that define the rights of the public to access categories of information and the requirements on information holders associated with those rights. Often these interventions are not specifically evaluated with respect to health outcomes, but focus on service delivery across sectors and on government responsiveness. It is common for access to information to be considered from two sides: supply of and demand for information. FOI studies identify several intermediary factors that influence whether information legislation ultimately can yield positive impacts on transparency and accountability. These factors include the quality and specifics of the FOI law, existing levels of relevant

knowledge, accessibility or complexity of the shared information, levels of civic participation, quality and functioning of local governance, degree of trust in public institutions, and perceptions of public services. Societal divides (e.g., power, income, social class, education, gender, geographic location) are found to play an important role in the extent to which citizens actually use FOI laws and engage in activities intended to hold government actors to account.

Calland and Bentley (2013) examine two cases where community groups used FOI laws to gain access to services. In India, they summarize the efforts of the Association for the Empowerment of Workers and Farmers to use FOI to uncover corruption anti-poverty schemes (minimum wage payments on public works projects and distribution of subsidized food and commodities). The Association mobilized poor communities to conduct group social audits that exposed local officials to "naming and shaming." Early success was followed by increased bureaucratic resistance, demonstrating the limits of demand-driven accountability efforts, though Indian civil society activists have persisted in efforts to use FOI to address corrupt practices. In South Africa, the Open Democracy Advice Centre used provisions in the constitution to mobilize the poor to use FOI to lobby public officials to honor socio-economic rights and access to services. Unlike the India example where the early success of the Association spawned a variety of grassroots FOI movements, the Centre has struggled in South Africa to generate momentum from its local democracy efforts to continue to press for public access to information. The authors conclude that the following variables are key to success or failure of FOI as an accountability tool: the scale and intensity of grassroots mobilization, skills and resources of civil society groups supporting citizens, accessibility and affordability of information, and the power of public officials to pose resistance.

Michener (2015) provides an analysis of case studies from 16 Latin American countries that have adopted FOI laws since the early 2000s and offers insight as to whether the de jure laws and de facto responsiveness and operability align and further how these affect transparency and corruption. While the transparency outcomes identified are not explicitly tied to health, there are implications for when FOI laws may and may not be most effective within a set of political circumstances. Michener (2015, 96) argues that "the strength of FOI Regimes tends to be inversely related to majority control under single-party or small-coalition governments, but positively so under large-coalition majorities."

Skoufias et al. (2014) report on the findings of a World Bank-supported pilot project to raise awareness of the Access to Information (ATI) law in seven poor municipalities in the Dominican Republic. On the supply side, the project worked with local government agencies to raise awareness of the importance of complying with the law and helped them to set up management information systems to enable compliance. On the demand side, the project engaged with local community organizations to teach awareness and offer training on how to use the ATI law to request information and hold local governments accountable. To evaluate the results of the pilot, researchers selected seven treatment and seven control municipalities across five provinces, using a sample-matching methodology, and collected quantitative and qualitative data in all sites.

Their evaluation found that the ATI awareness-building project increased government consultation of citizens regarding investment decisions, and those decisions led to expenditures that matched citizens' preferences. It increased trust in local government, as citizens perceived mayors and other local officials to be more responsive to their concerns. Regarding impacts on services, the project positively affected satisfaction with public parks, but no statistically significant effects were found on other sectoral services. The interpretation was that citizens valued highly visible services and saw their major targets for accountability to be local budget decisions. The study identified the demand-side awareness building through community organizations as explaining more of the outcomes than the supply-side interventions. The authors note that in the Dominican Republic, community organizations have received

good governance capacity-building support for the past decade and have been the main conduit for demand for accountability and responsiveness. Awareness of the ATI law on the part of average citizens may enhance empowerment, they conclude, but its impact is secondary to increased capacity of community organizations to exercise voice.

Open Government/Open Data

Open government initiatives refer to efforts to make government data more easily available to the public, and/or make public input to decision-making processes easier to provide, through various channels. They function to improve accountability primarily by enabling citizens to act on information. They can also improve the accuracy of information available to higher-level government decision makers, though this is more of a horizontal than vertical accountability tool and generally a secondary rather than primary causal logic of interventions. Several studies look at both open data and open government initiatives and a few trace their effects on health outcomes. Young et al. (2016) offer several case studies. Uruguay's program *A Tu Servicio*, for example, based on provision of open government data, allows citizens to access information about health services so citizens can better hold health care providers accountable. The government of Uruguay seems on board and has encouraged other ministries to implement similar projects. The authors also acknowledge the challenges; because *A Tu Servicio* provides information about healthcare providers, the users only opt to use the open data platform when they can change service providers and are trying to decide to whom to switch, rendering it useful to a subset of the population and during only a small window of time. Outreach and communication constitute another challenge; certain portions of the population lack access to internet, and it is estimated that less than one percent of all Uruguayans access *A Tu Servicio*. However, the tool serves to demonstrate the potential of open government platforms.

Young et al.'s Sierra Leone case study looks at the country's response to Ebola using open data. Prior to the outbreak, there had been limited information sharing across national government, aid agencies, and health facilities. The country adopted three open data initiatives that were especially critical in its response to Ebola. These were: the National Ebola Response Centre, the United Nation's Humanitarian Data Exchange, and the Ebola GeoNode. Each used data transparency to try to accelerate and improve Ebola response, and each played a different role in making data accessible and actionable: sharing information, visualizing information that could then be digested by citizens and the media, and arming decision makers with evidence based in data. This type of response was then modeled in other situations, such as Nepal post-earthquake response in 2015. The open data initiatives led to better coordination among responders to the Ebola crisis, with more lives saved and fewer outbreaks. A final case study (discussed further in vertical democratic accountability) details how Singapore used open data to track dengue clusters on a publicly available online map as part of the fight to prevent dengue fever by conveying to users which parts of the country may be most vulnerable to outbreaks. In Singapore, the data enabled vector control programs to target mosquito breeding sites and to inform citizens in affected areas of necessary precautions to avoid dengue infections.

Grossman et al. (2017) report the results of an evaluation of an open-government intervention conducted by the USAID/Uganda-funded Governance, Accountability, Participation, and Performance (GAPP) project to use a cell-phone platform (U-Bridge) to enable citizens to send free and anonymous messages to local government officials regarding their priorities and concerns about services. Despite robust interest, the study did not find statistically significant impacts on outcomes, defined as increased monitoring, increased effort, and increased resources, although it documented examples of targeted improvements and evidence of increased responsiveness. Interestingly, they did find that information about U-Bridge and use of the platform tended to flow through village networks to a much greater

extent than foreseen. The authors' recommendations for the use of information and communication technology (ICT) platforms for open government initiatives emphasize making the information that is shared more actionable (citizens to identify specific issues or concerns for remediation), and sharing information with citizens on government responsibilities so that they can better target messages to the appropriate officials. On the supply side, assisting local officials to develop standard protocols to triage messages and follow up also is suggested.

Madon (2014) compares four interventions in Karnataka state in India to increase the use of information to improve primary health care accountability: two ICTs and two non-ICTs. The first ICT intervention leveraged Karnataka's integrated health management information system (HMIS) that in 2008 created a Web-based portal to enable aggregation of information from the facility level to the central level to facilitate evidence-based decision-making. The second ICT intervention was the beneficiary verification system (BVS) launched in 2012, whose accountability objectives included building capacity that would strengthen monitoring and management for results, and enable local voices to be heard by local governments regarding services and outcomes. The BVS pilot tested multiple technologies: touch screens, smart cards, fingerprint authentication, GPS systems, voice input and recognition, and cameras. The two non-ICT interventions were community monitoring scorecards and the creation of village health and sanitation committees (VHSCs). The VHSCs are an official committee of the gram panchayat (village council), mandated to include 15 members composed of a mix of state, political, and civil society representatives. All VHSCs in the country receive three monthly allocations of Rs 10,000 (US$167) in untied funds from central government.

Madon's findings point to several features relevant to the contribution of open data and open government to accountability and governance. First is the importance of data quality; the HMIS suffered from incomplete and inaccurate data, with changed reporting formats over the years so that aggregation was difficult. Data were usually entered manually, which led to numerous errors. Second, use of the data for learning and decision making was poor. Third, the BVS technologies led to some increases in data transparency in primary healthcare that enhanced service delivery, as real-time data on performance outputs and outcomes saw use by health supervisors to ensure that services reach the intended beneficiaries. Fourth, the VHSCs offered the strongest opportunities for local engagement and empowerment related to accountability for services. Madon concludes that by noting the interpenetration of ICT and non-ICT interventions and observing that in terms of the factors that enable ICTs to contribute to accountability and empowerment, the technology itself is the least relevant factor.

Case reviews by Hrynick and Waldman (2017) point to potential for ICT-informed approaches to improve accountability, generally when building on good relationships and supported by other stakeholders such as health workers, and when complemented by offline work in support of the same objectives. They note that the specific expectations and framework for accountability in each of the seven cases studied are meaningfully different, though often sharing an underlying assumption that ICTs automatically enhance accountability by making data more accurate and timely. In the cases that worked, the programs took advantage of pre-existing structures for discussion and coordination. Further, some successful efforts proved to be limited by the enabling conditions at higher levels – for example, in Indonesia, the SMS Gateway was integrated into the district government's own agenda to reduce maternal mortality. It was supported initially, but support waned when political shifts at the national level restricted district government funding.

Peixoto and Fox (2016) provide a meta-analysis of ICT's contribution to accountability and government responsiveness. They review evidence from 23 ICT platforms to distinguish between the roles that information and transparency platforms can have in informing upwards accountability and bolstering downwards accountability through either individual feedback or collective action. They assess the cases

in terms of citizen uptake of the ICT platforms and institutional response, rating user uptake high in eight cases, institutional response high in seven cases and medium in three. In the remaining 13 cases, response was low or non-existent. Regarding vertical accountability, they found that ICT platforms can contribute both to upwards accountability (frontline to higher officials), helping senior managers to address service delivery issues, and to downwards accountability (frontline to citizens). This latter result depends upon whether the ICT feedback was shared publicly among citizens. A second finding is that institutional capacity to respond to citizen input can be usefully distinguished from motivation. In several of the cases, senior officials were personally committed to acting upon the ICT-enabled feedback, but it is a challenge to craft institutional incentives to encourage all officials to care about responding to citizen input.

Top-down open government policies can serve as one source of incentives to communicate with citizens. Key informant Mohammed Lamine Yansané noted the impact of government policies in Guinea on information sharing and transparency. He reported that each ministry is required to conduct press briefings, which are televised and broadcast on the radio. For the Ministry of Health, this communications outreach has helped establish a foundation for democratic accountability for health.

What Works, What Doesn't in Vertical Democratic Accountability

As demonstrated by the above studies, when it comes to FOI, there are likely to be disparities in who accesses the information, and changes in legal status or promotion of use of these mechanisms will interact with several other political-economic factors in ways that influence impact. Theories of change that plan to leverage increasing information availability to improve accountability should therefore be nuanced by more explicit incorporation of power dynamics relative to information and responsiveness. Even advanced industrial countries with democratic governance systems place restrictions on access to information. Some scholars have investigated these power dynamics and its ability to motivate collective action to improve public service delivery (Booth 2012).

As will be apparent throughout this report, what does not work is treating accountability interventions of any sort as contextually independent and readily transferable tools. This point is made in most of the sources reviewed for this study and in the wider accountability and governance literature (Bukenya et al. 2012, Brinkerhoff and Wetterberg 2016a, Brinkerhoff and Bossert 2014, Edstrom 2015, Fox 2015 and 2016, Grandvoinnet et al. 2015, Joshi 2013 and 2014, O'Meally et al. 2017, Wetterberg et al. 2016).

Passing FOI laws and increasing access to information, from a governance perspective, contribute to establishing a democratic enabling environment that can support accountability actions on the part of citizens. As Fox (2015) points out and our review confirms, there are few studies that relate these interventions to service delivery improvements, whether in health or other sectors. It is important to discriminate between access to information and availability. The existence of FOI laws may, in principle, provide access. However, availability—as the studies reviewed here indicate—is mediated by institutional and social factors that limit the extent to which average citizens can obtain timely and comprehensible information that they can or may be motivated to use for accountability purposes. Citizen action is based on wider sets of norms and expectations, as well as their ability to understand the particular information shared. This may mean that increasing legal or actual access to information may yield widely different accountability outcomes—sometimes catalyzing change, but being heavily dependent on other factors besides information access.

Open government initiatives and ICT platforms for increased transparency and accountability offer tantalizing possibilities for enhancing service delivery accountability. As Madon (2014) shows, ICT tools can be combined with non-ICT ones, which may enhance their utility across a wider range of

institutional settings. As Peixoto and Fox (2016) point out, we need to take care in making assumptions about the causal links between voice, enhanced through open government and ICT platforms, and government response. This is a subset of the question of unpacking the relationship between transparency and accountability. As Grossman et al. (2017) remind us, the specific qualities of the information and of government management of citizen feedback are often decisive in what effects an ICT platform can yield, and so narrower specification of how the information sharing is expected to change behaviors is required for any such effort to lead to increased accountability. The Making Voices Count case studies reinforce the importance of linking ICT-enabled accountability mechanisms to supportive public officials at local and national levels (Hyrnick and Waldman 2017).

An implicit assumption in the studies reviewed is that democratic state-society relations are foundational for accountability in health systems. For this sample of studies, this assumption is an instrumental one, linking to health system performance; but in the wider literature there exists a normative version of this assumption that addresses good health governance (Brinkerhoff and Bossert 2014). Key informant William Savedoff commented on this issue and offered this perspective that questions the extent to which democratic governance can automatically be assumed to enable service-delivery accountability:

> *One thing that used to be settled, but is now questioned, is the conviction that more democratic institutions are uniformly better for health system performance and accountability. The tendency to define good governance in terms of performance drives this. But if we look at China's performance as a metric, what does this say about whether democracy and health services go together?*

Many of the performance accountability interventions discussed might prove effective in autocratic or hybrid regimes, but clearer articulation of the dependence of performance accountability efforts on state structure or other macro-contextual factors would strengthen understandings of the evidence in this area. Below, we discuss the implications for policymakers and highlight the links between accountability interventions and their macro-context as conditioning the potential for achieving intended objectives and for sustainability.

Horizontal Democratic Accountability

Accountability mechanisms: *Parliamentary oversight, ombudsman offices, courts, political decentralization*

Horizontal accountability refers to the structure of the state that ensures checks and balances across branches of government (legislative, executive, judicial) and among state institutions. Decentralization can serve this function by distributing authorities and responsibilities across central to local levels of government. Most states include public institutions whose mandate is to curb abuses by other public agencies and branches of government; these are called "agencies of restraint." Courts, audit commissions, and ombudsman offices are common examples, and when effectively connected to civil society organizations and the media, they can play an important role in giving "teeth" to social accountability, discussed below.

Political decentralization can reinforce democratic accountability and improve health governance, but the drivers of decentralization decisions usually combine a mix of agendas and motivations that involve a range of actors, which in many cases includes the donors that fund reforms. Smoke (2015) argues that treating decentralization as a discrete governance intervention with uniform features across sites or countries ignores the multiplicity of goals, diversity of forms, and the variations in integration of its

political, administration, and financial dimensions. Thus, comparing decentralization experiences to seek causal effects is problematic, and drawing conclusions requires caution.

Besides analyses focused on decentralization, we found relatively few studies within the horizontal democratic accountability category that addressed the health sector in terms of explicit causal inferences. One explanation is that many of the mechanisms and processes within this category may be difficult to evaluate as outcomes using quantitative methods. Mechanisms such as parliamentary oversight or ombudsman offices are not typically amenable to randomized controlled trials, although they can and have been extensively analyzed in the public administration, law, and political science literatures (e.g., Scott 2000).

One health-specific analytic stream that includes attention to horizontal democratic accountability structures and processes is research on corruption in the health sector (see the section below on horizontal financial accountability). DiTella and Savedoff's (2001) book on hospital corruption in Latin America is one well-known example. Various chapter contributors note the importance of horizontal accountability exercised through effective government oversight and enforcement to combatting corruption in health facilities.

Another example in this category is a study published by the Varieties of Democracy Project, which uses a newly collected dataset covering 173 countries over the years 1900–2012 to parse the effects of democratic accountability on health and identify causal mechanisms that could bear on accountability interventions (Wang et al. 2014). Their results suggest that across governance models with various specifications, democratic regime type has a more consistent effect than measures of quality of government on health outcomes throughout the period. They find that the positive effects of democracy on services are especially salient once the level of democracy has achieved a certain threshold, and further, that the positive effects of democracy are especially stable when both vertical and horizontal accountability are improved. Their findings suggest a positive answer to Bill Savedoff's question (quoted above) regarding the link between democracy and health system performance: democracy matters in aggregate, but its significance in any particular instance depends on the details of accountability within the state rather than just the topline attribute of being a democracy.

Decentralization

The literature on decentralization is voluminous, and a substantial stream of analysis concentrates on decentralization in the health sector. We are necessarily selective here in our choice of sources. Mills (1994), for example, offers a review of decentralization options with a focus on accountability relationships. Mills notes that the balance between accountability upward to the center versus downward to local entities and citizens depends upon how authorities and resource generation and allocation are distributed and what incentives that distribution creates. A case in point is Gilson et al.'s (1994) study of health-sector decentralization in Tanzania, where local public health services faced multiple and confusing accountability relationships with higher levels of government. Also, public health services had limited authority to take the managerial actions necessary to fulfill the decentralized responsibilities that had been assigned to them. Numerous studies have explored this analytic terrain; a recent example is Bossert and Mitchell's (2011) analysis of accountability in decentralized health structures in Pakistan.

A few studies identified examine the effects of decentralization on health outcomes; these fall under the category of horizontal financial accountability and are discussed below. In terms of democratic accountability, the studies reviewed focus on oversight mechanisms and local political dynamics. Avelino et al. (2013) examine the role of municipal health councils in overseeing disbursements from federal

grants for health services, with the outcome variable being level of corruption. Creation of the councils was a requirement for those municipalities receiving grants, and once formed they were charged with basic financial management tasks such as monitoring health budget and expenditures. The study found that the management capacity of the council, as proxy-measured by council age, to exercise horizontal accountability was significantly related to levels of corruption. Municipalities with higher-capacity health councils had less corruption.

Another study related to local management capacity is Kim et al. (2016), which examines the influence of decentralized structures in promoting community-based health interventions from the perspective of the role of leadership in promoting social capital. In their study of six villages in Lao DPR, they found that local leaders who were perceived to be fair and transparent strengthened social capital and enhanced participation in community-based health interventions. In villages where leaders were perceived to be corrupt or did not engage communities in participatory planning, social capital and community participation in health interventions were lower. In this case, improving capacity of local leaders in participatory planning and communication was considered valuable to community-based health programing.

Pruce (2016), summarizing the results of a study conducted by the University of Manchester's Effective States and Inclusive Development (ESID) research program, reports on the impacts of district-level political dynamics on a set of maternal and child health outcome measures. The study looked at two districts: one where political rivalry led to dysfunction, tensions, and citizen dissatisfaction, and one characterized by unified and harmonious local leadership and cooperation with citizens. In the latter district, officials formed a health coalition involving representatives from different social groups. Performance on the outcome measures was much worse in the conflict-ridden district as compared to the collaborative one. The conclusions are that the politics of decentralization can have an important impact on service delivery, and the particulars of individual contexts can affect governance and accountability mechanisms, as other studies have pointed out (Joshi 2014, Brinkerhoff and Wetterberg 2016a, Wetterberg et al. 2017).

The debates in the health-sector decentralization literature and among practitioners are whether the presumed benefits of decentralization—in terms of preference matching, allocative efficiency, and local accountability—necessarily produce desirable health outcomes for society. Mitchell and Bossert (2010) apply decision-space analysis to six countries (Bolivia, Chile, India, Pakistan, the Philippines, and Uganda). The authors map patterns of discretionary autonomy across health system functions. They discuss how the balance of authorities and responsibilities between central and local health officials can promote achievement of health system outcomes: improved health status, financial risk protection, consumer satisfaction, and equity. However, they also argue that from a perspective that foregrounds health system performance, decentralization can produce some negative outcomes—improvement is not automatic, and depends on how the decision space is structured.

Malesky et al. (2014) also call into question the automatic assumption about decentralization's beneficial results. Their study took advantage of a natural experiment to assess the effects of recentralization where the government of Vietnam undertook a staged process of abolishing District People's Councils (DPCs) in 10 provinces prior to national rollout of the institutional change. DPCs were assigned important fiscal and administrative authorities including a horizontal accountability relationship with District People's Committees (DPCOMs). The recentralization reform left the DPCOMs in place, but substituted provincial-level oversight. The sophisticated empirical analysis demonstrated that recentralization improved the delivery of services favored by central government, which included health. This improvement resulted from the reform's impact on limiting the power of local elites to

dominate investment and spending decisions and profit from corruption. In essence, the reform reallocated accountability to the center, away from the local level.

Several key informants cited the importance of efforts to overcome coordination challenges related to decentralization. That is, rather than decentralization serving as a form of intervention, more helpful was support to make decentralization function better within whatever terms it had been rolled out. Examples included a Joint Annual Health Sector Review process in several countries which brings together local and district actors with central-level decision makers across multiple ministries, noted as having a significant effect on health system performance where the annual sector review was well-run.

What Works, What Doesn't in Horizontal Democratic Accountability

There is little robust evidence around activities that use ombudsman offices, engage parliamentary committees or MPs, or use litigation and court intervention specifically to achieve better health governance. Key informants did give one example where pressure from parliament was part of a larger story of improvements in health governance. And clearly there is evidence that more consolidated democracies achieve better health outcomes over time.

There has been much more work around political decentralization, with mixed results tied to health governance specifically. While some instances showed decreased corruption, others showed that reductions in decentralization correlated with greater investments in health. The politics of decentralization, the characteristics of particular health services, and the intent of donors that support country decentralization seem to explain to a large extent these mixed results (see Smoke 2015).

Vertical Performance Accountability

Accountability mechanisms*: Citizen scorecards/report cards, citizen-provider committees, civil society watchdogs, professional associations, media: awareness and citizen education*

This category of accountability contains the literature on what is called social accountability, defined as those actions and mechanisms—short of elections and voting—that citizens employ to hold state actors and their designates to account. This literature is extensive, and includes a range of studies that seek to connect social accountability with performance and several types of outcomes: service delivery, governance, and citizen empowerment (see the reviews in Fox 2015, Edstrom 2015, and Marsten et al. 2013). Differing taxonomies seek to categorize social accountability actions and mechanisms. Fox (2007) distinguishes between soft and hard accountability, with soft accountability requiring answerability while hard accountability includes answerability plus sanctions for violations. Brinkerhoff and Wetterberg (2016b) develop a continuum of actions: transparency-related, collaborative/co-production-focused, collaborative/compliance-focused, contentious/confrontational.

Citizen Scorecards

Studies assessing the use of report cards or scorecards to monitor health providers or facilities have documented a number of successes. Research employing RCTs to report on successful outcomes has been widely cited, and has garnered both kudos and criticism. Among the most widely cited studies is Björkman and Svensson's (2009) randomized experiment with community participation in monitoring of public primary health providers in 50 facilities in Uganda revealed important health and accountability results. Supported by local NGOs, researchers engaged an NGO to conduct a review of services in the form of a report card, which compared facility performance with national standards and averages. Then the report card data was shared in three meetings. First meeting was with community members alone,

second meeting was with health facility providers alone, and the third meeting brought the two groups together to do planning that was based on the report card. Representatives in treatment villages worked with health providers to develop community "contracts" for service improvements and then used subsequent report cards to monitor progress. After a year, treatment and control communities were compared. The study documented a 33 percent reduction in child under-five mortality, as well as several other positive impacts on service utilization and health outcomes. Treatment communities were more engaged in holding providers accountable through monitoring, and health worker behaviors changed to be more responsive to serving community health needs. Notably, communities that were more homogeneous in terms of ethnicity had larger effects, likely indicating that collective action is harder in heterogeneous groups.

Bauhoff et al. (2015) brought in community members in Tajikistan to help identify which indicators should be used on scorecards, with the goal of improving health provider performance. The authors used qualitative research methods to learn about citizens' health care concerns and priorities for giving feedback. They considered both parties involved (citizens and providers) as well as feedback and information channels between them. Though this study did not test the effectiveness of score cards developed with citizen and provider participation against other scorecards, the authors emphasized the importance of localized priority setting on scorecards to accommodate differences in population preferences (e.g., for equipment and service priorities) and factors such as gender and access to transportation.

A study in the education sector investigated the impact of training citizens on how to use scorecards (Zeitlin et al. 2011). The findings could reasonably be extrapolated to the health sector. The research team conducted an evaluation in Uganda of scorecard effects on education outcomes that compared two different approaches to use of the scorecards and found that participatory training in using scorecards for community monitoring led to statistically significant effects on teacher and student absenteeism and on student scores beyond the use scorecards without the participatory training.

Gullo et al. (2017) examine a social accountability initiative in Malawi, implemented by CARE, a large international NGO. CARE introduced community scorecards to track maternal and reproductive health services through three main processes: empowerment of the service receiver (women in particular), empowerment of the service provider (health workers), and safe space for negotiation. Community members and service providers developed 12 indicators to track progress, for example, reception of clients at the facility, level of male involvement in maternal newborn health (MNH) issues, and availability of transportation for referrals during labor and delivery. Citizens and service providers generated similar issues, but from their different perspectives. For example, "relationship with providers" was an indicator for both: from the community side this referred to how providers treated them, whereas from the provider's side, it referred to things like patients not listening to them, or following their guidance. The service providers also generated one additional indicator—availability of supervisory support—for a total of 13 Score Card indicators. In an open discussion, participants agreed on scores for each indicator using a scale from 0–100. Thus, the development and discussion around the scorecard was itself the primary form of intervention.

The researchers measured effects on outcomes including modern contraceptive use, antenatal and postnatal care service utilization, and service satisfaction; they also evaluated changes in indicators developed by community members and service providers in the intervention areas. In terms of outcomes, a significantly higher proportion of pregnant women received a home visit during pregnancy in the intervention area, and there was an estimated 57% greater use of modern family planning in the intervention area. No other health outcomes appeared to be different between intervention and control areas at endline, possibly also reflecting strong underlying health outcomes at baseline. With respect to

the community score card indicators, upon the conclusion of the cluster-randomized trial of community scorecards, all 13 indicators saw improvements over the course of the study. This improvement occurred through the deployment of locally developed solutions. Notable strengths of scorecards were the relationship they built between community members and health care providers, and their contribution to enabling responses to the self-identified community needs. Sara Gullo a key informant, commenting on her research, noted that:

> *CARE has reconceptualized performance accountability as depending on three interacting factors: approaches need to empower communities and citizens (knowledge, willingness to voice needs, collective action behavior), need to cultivate service provider responsiveness and accountability (listening to communities), and need to create spaces for dialogue and negotiation between communities and providers. The framework came out of CARE's experience to distill key domains of work necessary to social accountability. CARE finds that all three ingredients need to be cultivated to effect changes in accountability relationships.*

Key informant Asha George described an initiative that worked on both the supply and demand sides of accountability and made good use of scorecards. The NGO facilitated community- based action addressed demand and supply side constraints through three key strategies: raising awareness, community monitoring, and dialogue with government health providers and authorities based on report cards, including participatory development of project tools and facilitated community monitoring using those tools and dialogue with authorities around results. She observed that:

> *Constant dialogue is needed with government providers and authorities. Tensions particularly with frontline providers whose performance is being monitored and called into question need to be negotiated so that, leaving aside egregious errors, the structural constraints that inhibit service delivery and its quality be addressed. Community and NGO initiative in monitoring access to services with the express intent of addressing marginalized women's needs and entitlements proved to be an important starting point for dialogue with providers on how to improve service delivery. Acknowledgement and cooperation from government health providers and authorities is critical for these dialogues to translate into effective action.*

Citizen-provider Committees

A commonly used mechanism to implement citizen accountability is a committee that combines community members with providers and/or health facility managers. These are sometimes formally created under government auspices, and sometimes formed informally through the efforts of providers, citizens, or other civic actors (often subsumed in scorecard or report card process as discussed above). In many if not most of these structures, citizen participation fulfills a service-delivery enhancement role as well as an accountability function. Goodman et al. (2011), in their study of 30 health facilities in one province in Kenya, report on the experience of Health Facility Committees (HFCs), which have been set up as part of a 1998 government policy to engage citizens in health care. The HFCs' roles and responsibilities combine facility oversight, community representation and resource mobilization, and outreach. With the advent of direct district funding for health facilities, the HFCs took on an additional role of budget management. The establishment of such committees is often a feature of donor-funded health projects: for example, Quality Assurance Partnership Committees (QAPCs) in the Philippines (Brinkerhoff and Wetterberg 2016a), and Community Partnerships for Quality Improvement (PAQs) in Rwanda (Lipsky 2016), and Multi-stakeholder Forums (MSFs) in Indonesia (Wetterberg et al. 2017). Our country-level key informants also mentioned them: for example, district health committees in Guinea include community representatives, elected officials, and providers. A study of corruption in South

Africa by Rispel et al. (2016) similarly found that while participatory committees existed in paper at different levels, they were not in meaningful use.

Common themes from the findings of these studies include lack of clarity and/or consistency regarding roles responsibilities, conflicting perspectives among stakeholders of those roles and responsibilities, difficulties in maintaining engagement of community volunteer members, insufficient resources, skill requirements for community members and providers, and weak connections between committees and the larger community. In the case of the QAPCs, for example, community members were uncomfortable with their oversight role, and much preferred to consider the committees as facilitating the delivery of health services rather than exercising accountability. The Indonesia study, conducted in 15 health centers in four districts, found substantial variation across the centers in how facility staff and members of the MSFs perceived the role of citizens in accountability. The study found that even in centers where staff felt that citizens should have a relatively minor role in enforcing accountability, interviewees reported service delivery improvements.

Motivation emerged as a concern in several of the studies. Interviews with PAQ members revealed disappointment when facility staff did not respond to PAQ concerns and suggestions. Interestingly, in the Indonesia study, past negative interactions between facility staff and citizens was not a consistent predictor of the adoption and use of social accountability mechanisms. Resource issues for committees were discussed particularly in the context of donor-funded initiatives, where it was unclear how committees would be sustained absent external sources of funding. Concerning skills, in the case of the PAQs, health service quality tended to be defined by facility staff in medical terms, and community members felt ill-equipped to engage in this domain.

Key informant Cathy Green commented on the narrow accountability reach of citizen committees, echoing the consensus in the literature that bottom-up accountability mechanisms are insufficient in sustaining changed citizen-provider relationships without broader governance changes. She observed that:

> *Despite limitations (such as few women representatives), Health Committees led to visible improvements and the solving of small problems, were useful in nudging providers to respond and the community to express needs. However, they only changed incentives at the facility level – you can promote and achieve positive change at the facility level, but if problems are systemic there will be limited impact.*

Media

Though the accountability role of the media did not appear as part of many evaluations, several case studies offer some findings. El-Jardali et al. (2015) conducted a media review, key informant interviews, and a validation workshop in an examination of health reporting and its influence on health policy in Lebanon. Several themes emerged from the study. First, health journalism was not necessarily prioritized in the culture the way other journalism topics may be. Second, the quality of health care reporting was low, and health care media stories were not necessarily informed by evidence. Finally, journalists felt distance between themselves and policymakers limited their access to relevant information. The findings acknowledged barriers between media and journalists. Further, the authors recommend instituting a link between researchers, media, and policymakers to minimize the disconnect among them and increase the use of evidence in informing policy action.

Young et al. (2016) document an example of collaboration among journalists, policymakers, and citizens using an open data mechanism. As part of its response to record outbreaks of dengue fever, Singapore's government began using open data to track clusters of dengue outbreaks on a publicly available map to

minimize new infections. Citizens communicated information on new cases to the government, at which point it was added to the map. Citizens then had access to the map, enabling them to track outbreaks in their communities and take precautionary measures. The authors estimate an average of 1,000 hits on the dengue website each day. Singapore's context is exceptional in that its citizens generally have a high rate of internet connectivity and access to technology, so they may be more able and likely to seek information. Such an initiative may not work in a less technologically advanced country. The government's responsiveness to outbreaks improved. However, the authors note that for such a tool to be relevant, the data it captures need to be accurate and timely, particularly if they are informing government action. Journalists have come to rely on the website for accurate information about outbreaks.

Where investigation and free media are more commonplace, there are examples of publications that disseminate information on even hidden topics related to accountability and health governance. For example, Anticorruption Action Centre Ukraine (2013) was able to publish a detailed report on "Who makes money on HIV/AIDS and tuberculosis in Ukraine" describing particular practices used to corrupt the drug procurement system and linking these techniques to limited availability and high cost of medicines.

What Works, What Doesn't in Vertical Performance Accountability

This category of accountability has been the strongest focus of research employing RCTs to evaluate outcomes, which in the views of some researchers has led to treating social accountability mechanisms as "widgets," transferrable tools that will produce similar results wherever they are applied (Joshi and Houtzager 2012). As key informant Lynn Freedman cautioned:

> *There's a lot of "faux" accountability efforts out there; think of suggestion boxes in facilities where there are never any entries submitted, and if there are, no one in the facility reads them. We think we've done accountability programming when we do accountability "widgets" like complaint boxes, maternal death audits, etc. There's a tendency to accept form over function; it looks like accountability but doesn't act like it—isomorphic mimicry.*

Fox offers an instructive caveat on interpreting what works in social accountability. Rather than asking does it work, we should question "the degree to which – and the conditions under which – an institutional change initiative would work" (2015, 348). He also cautions that the does-it-work question implies that social accountability interventions are assumed to yield tangible results absent other governance reforms.

Taking Fox's advice, researchers have sought to identify the contextual factors that influence social accountability to achieve intended outcomes. O'Meally's mapping of contextual factors is probably the most comprehensive treatment (2013). Incorporating context and identifying contingencies regarding social accountability impacts, along with the variation in how mechanisms are defined and implemented, has led researchers to be cautious regarding causality and attribution (see, for example, Edstrom 2015). In addition, as Grandvoinnet et al. (2015) note, determinations of whether social accountability works or not is conditional in one sense on the value placed on the results achieved. Sector specialists tend to privilege service delivery and sector-specific outcomes, and treat other results, such as governance and citizen empowerment, as instrumental.

To the extent that there is a consensus on how to enhance the prospects for social accountability to achieve results (service delivery, governance, or citizen empowerment), analysts and practitioners recommend variations on Fox's (2015) sandwich strategy, which marries bottom-up advocacy and collective action from below with top-down bureaucratic pressure and support from above. Sustainable

results are more likely to be achieved when demand-side and supply-side interventions are pursued in tandem in ways that are mutually reinforcing (Wetterberg et al. 2016, Fox 2016). O'Meally et al. (2017) make the point that combining the top-down/supply and bottom-up/demand pressures calls for bringing together often disparate and unconnected activities and resources, which lead them to characterize the task as "making sandwiches out of spaghetti."

There is some support in the literature for the value of independent media in supporting accountability in some instances, and the studies of FOI initiatives cited above usually addressed the role of the media in successfully publicizing information regarding government programs and actions. Several of our key informants mentioned media capacity building initiatives to increase health literacy. Often, however, the degree of press freedom and dynamism is treated as one element of context rather than as a target for intervention to improve accountability in the health sector, and so the evidence over the value of such interventions is limited.

More work is needed on specifying the conditions under which social accountability contributes to governance and service delivery results, and on the complementary investments that enhance those results. An important step in that direction is a macro study of social accountability conducted for the UK's Department for International Development that used qualitative comparative analysis (QCA) to explore this issue (Holland et al. 2016). The study analyzed 13 cases and sheds some light on the specifics of top-down and bottom-up intervention strategies. Among their findings are the following. Social accountability, on its own, is effective in improving local-level service delivery, but has a limited effect at scale. Adding formal, invited citizen participation, as part of an integrated and institutionalized policy and program framework enhances the prospects of social accountability impacts at higher levels of service delivery. Social accountability can contribute to improving access to services for marginalized populations, but for sustained impact it needs to be accompanied by supply-side measures that directly target these populations.

Horizontal Performance Accountability

Accountability mechanisms: Standard-setting and accreditation, regulatory enforcement, self-policing/codes of conduct, performance-based budgeting, and internal management control systems, performance contracts, performance audits, and parliamentary oversight

In this category the largest number of sources are from the extensive and growing literature on pay-for-performance as a donor tool for programming and as a health sector-specific tool (Eichler et al. 2009), which tends to be the most evaluable mechanism of horizontal performance accountability. We review here selected studies on pay-for-performance, performance-based budgeting, performance contracts, and performance audits. We look at two analyses of accreditation and one study of regulatory enforcement that overview the issues for developing countries. To the extent that state-centric mechanisms can also be implemented by non-state actors, either as complements to these mechanisms or as alternatives to them, vertical performance accountability can overlap with this category.

Performance-based Mechanisms

In the Philippines, Peabody et al. (2010) conducted a study of the effect of financial incentives on physicians' delivery of health services to children under five. In 10 provinces in the Visayas and Mindanao regions, 30 district public hospitals were surveyed, with a total study population of 617 doctors. Hospitals were randomly selected for two forms of performance-based financial incentives. At bonus intervention hospitals, salary bonus payments went directly to physicians based on clinical competence scores, facility caseloads, and average patient satisfaction measures. At expanded

insurance intervention hospitals, facilities received increased revenue from the national health insurance scheme for treating patients for a set of common conditions; in these sites physicians' financial incentives were indirect. Surveys were conducted every six months for 3.5 years. The researchers found that quality of care, as measured by clinical performance vignette scores, was improved by both the direct bonuses to doctors and the indirect facility-level expanded insurance incentives. They also found that after three years, performance scores at the control group hospitals improved as well, suggesting the possibility of delayed dissemination effects of the interventions.

In Lesotho, Vian and Bicknell (2014, summarized in Brinkerhoff and Bossert 2014) examined accountability and performance incentives in performance-based financial management reforms in four hospitals. They measured implementation progress in terms of four factors: existence of performance-based plans, existence of performance-based budgets, evidence of performance monitoring and reporting, and evidence that management decision making used performance data for resource allocation and accountability. Implementation in the four hospitals was overall quite weak; managers made the most progress in developing performance-based plans and the least in using performance data for decision making and oversight. The authors identified several factors that explained reform failure. First, the reforms called for capacities in data collection, information processing and costing of services that were beyond those available in the hospitals or the health ministry. Second, the technical components of the reforms conflicted with the informal governance practices that enabled the hospitals to deal with their capacity deficits. Third, dysfunctions in the principal–agent relationships among ministry and hospital actors (lack of trust, professional silos and weak leadership) weakened incentives to pursue the reforms. The reform design took best practices from similar reforms, but did not adjust them to Lesotho's context.

Ssengooba et al. (2012) conducted a study of performance-based contracting in Uganda, which assessed whether the provision of financial bonuses resulted in improved performance. The study found that the bonuses had little to no impact on performance. The authors attributed the failure of the intervention to poor design and faulty adaptation during implementation. To improve the design of performance-based contracting, they proposed addressing four issues: capacity of participants to achieve performance targets, perceived value of the bonuses, quality of performance audits, and extent and quality of communication regarding performance requirements and evaluations. They concluded that performance-based contracting interventions require significant attention to operational detail, sufficient financial and technical support and capacity within local systems, and systemic incentive structures that motivate performance improvement.

Similar to the Uganda experiment, a pay-for-performance scheme was introduced in Afghanistan to improve five dimensions of maternal and child services. The cluster-randomized trial found no significant results in the maternal and child services, but the pay-for-performance scheme did have a significant effect on other indicators, such as time spent with patients (Edward et al. 2011). The authors identified the following factors as explaining the negative results: lack of understanding related to the financial incentives on the part of recipients, and general lack of communication with providers about the quality of care they provided.

Afghanistan has seen success with the use of a balanced scorecard as an internal organizational performance tool, distinct from citizens' use of scorecards (Peters et al. 2007). Actors in the health sector (Ministry of Public Health, NGOs, etc.) relied on balanced scorecards developed by the Ministry of Public Health to assess performance of health facilities across the country and measure the ministry's progress against its strategy. Afghanistan's health ministry incorporated the scorecard into its monitoring and evaluation system, and NGOs used the results to inform decision making. The indicators gave insight into how provinces were performing on an individual level—some succeeding in areas

where others had failed—and suggest the importance of scorecards tailored to each specific region to account for challenges in infrastructure and geography unique to those places.

Accreditation and Regulation

Accreditation as a tool for service delivery quality assurance has a long history of application in developing countries, with USAID being among the donors supporting such programs. Rooney and van Ostenberg (1999) outline the role of licensure and accreditation in providing the basis for assessing and improving health services quality through the development, monitoring, and application of standards. They cite several country examples of accreditation projects from the 1990s, such as Egypt's Gold Star system for family planning facilities and Zambia's Health Accreditation Council. While the discussion does not explicitly address accountability, the authors present principles and programs revealing that licensure and accreditation create a transparent and systematic information base that can serve the twin accountability dimensions of answerability and enforcement.

Mate et al. (2014) provide a more recent discussion of accreditation, and these authors raise issues of governance directly, noting the importance of collaboration between licensing authorities and accreditation bodies to reinforce regulatory compliance and assure sustained attention to performance standards and quality of services. Citing other research, they note that in developing countries ministries of health tend to fulfill accreditation functions, whereas in the industrialized world it is usually non-governmental bodies that do so. They discuss the importance of effective management of accreditation programs, citing transparency of standards, objective application of those standards by surveyors, and the integrity of the accreditation process, along with data validity and quality. Incentives for accreditation are also recognized as key to the effective use of this mechanism for accountability and service quality purposes.

Mok et al. (2010) offer a tour of regulatory mechanisms and approaches with commentary on the issues that developing countries face in applying them. Among traditional approaches are administrative searches and inspections, plus licensing, in conjunction with penalties for non-compliance. Searches and inspections call for trained inspectors, time and travel commitments, and documentation costs. Licensure similarly can be administratively costly and can require inspections for monitoring and enforcement. These mechanisms also create opportunities for rent-seeking and corruption, which are serious drawbacks and undermine their accountability function. The authors suggest several lower cost options that may be useful, including formal notices of violations and public disclosure of improper and/or illegal behavior. As substitutes for recourse to the court system in cases of violations, the authors suggest alternative dispute resolution, ombudsmen, negotiated rule-making, and self-regulation as potentially more effective, given the capacity and performance constraints of most developing country legal systems. In a comparable vein, Brinkerhoff (2010) discusses regulatory strategies that seek to offset state capacity deficits by offering regulatory alternatives to punitive enforcement as the default and engaging non-state actors as partners in regulation.

Mackintosh et al. (2016) discuss the role of the private sector in health provision and offer considerations of when the characteristics of health provision (and related accountability) will be shaped more by the private sector than by public provision, with implications for efforts at regulation. They compare unlike country cases and identify three key metrics that shape a mixed health system: private share in total health expenditure, private share in primary and secondary care episodes, and extent of reliance of the public sector on private fee payment. They suggest that because private sectors cannot be understood except within their context of mixed health systems, efforts to promote particular policies and secure accountability for their application will need to be adjusted to fit the mixed health system and attend to these metrics in particular.

Regulation of the private sector and questions about the interface between government regulation and private service provision are addressed in Leonard et al. (2013) in their review of asymmetric information and health services. They emphasize the importance of the macro-institutional context as a form of path dependence, which shapes the possibilities for solutions that can work at a micro level. They argue that a distinction between public and private sectors is not helpful, as in most developing countries it is common for informal fees to be charged in public sector settings and for much of the health services accessed to be bought in a private sector setting. As a result, the public and private sectors face similar and overlapping institutional issues related to information, access, and quality. Within the micro-context, the authors search for institutional arrangements that have best mediated the relationship between service providers and recipients to ensure the quality of goods and services purchased by recipients. They find that no single set of institutional arrangements is consistently effective, but they do find that organizations with "other-regarding institutional values" as well as an investment in their reputation and some degree of devolved control are best placed to create and support arrangements that serve the poor.

Bloom et al. (2014) examine mixed health markets and suggest that questions of regulation of complex health systems through licensing and other administrative controls has not been effective at ensuring end-user safety and access. Since much regulation focuses on the supply of products and services, the efficacy of the approach depends on the value chain beyond the point of regulation where supplies reach the end user. This chain includes many informal sector actors and weak linkages in many developing countries. They offer a conceptual framework that looks across health goods and services at supply and demand, mediated by providers and payment, to inform efforts to improve health value chains. They introduce the idea of health goods and services being provided through a lengthy value chain that exists as a complex adaptive system, suggesting that "the design and implementation of effective and efficient regulation requires that the broad set of actors within markets for health products and services are brought together in processes of structured learning and coalition-building." Successful regulations would thus need to be co-created by diverse health market actors, which the authors note is challenging to do in practice without capture by interest groups. They categorize several regulatory strategies that go beyond input regulation and argue that a multi-tiered approach freestanding of a single type of regulation is more likely to prove effective.

What Works, What Doesn't in Horizontal Performance Accountability

The broader literature as well as the studies cited here demonstrates some empirical support for the utility and effectiveness of performance-based contracting and related pay-for-performance schemes. As key informant Randolph Augustin summed up:

> *There is enough experience over the last ten years that results-based financing and pay-for-performance, while in different models, clearly work when there are clear and appropriate expectations, compensation directly to frontline workers, and transparent and public data around performance. It's not just around funding, but around institutional processes that generate results. The mutual accountability effect in facilities with community engagement is well proven.*

The literature and our key informants caution that successful implementation of performance tools is subject to numerous caveats. The Augustin quote identifies some of these. Eichler et al.'s comprehensive review (2009) captures the essence of these warnings, arguing that the question is not whether performance incentives can change behaviors and improve services, but rather under what conditions do they fulfill their potential? To answer this question, they propose the following:

> The first step is a diagnostic: to understand and determine the major problems affecting performance and to identify incentives that have the potential to inspire the changes in behavior and systems needed to generate positive results. The second is to select service providers and beneficiaries, the results to be rewarded, and the mechanisms to monitor performance. Terms of contractual arrangements, including how recipients will be monitored and performance rewarded, need to be clearly specified. Staff and systems to administer performance-based payments need to be organized, and both technical and financial resources need to be dedicated to assessing, learning, and revising the approach (Eichler et al. 2009, 51-52).

The Uganda performance-based contracting case and the pay-for-performance scheme introduced in Afghanistan demonstrated the price to be paid in failing to follow these steps. In these two cases, problems that limited achievement of desired outcomes included failure to tailor pay-for-performance schemes to the levels of capacity, poor understanding of financial incentives, and personal incentive structures embedded in the health system. One of our key informants noted that pay-for-performance schemes, while holding promise, are often imported in ways that are too fully formed or too scripted to match health system functions on paper rather than health systems as they actually are. The Lesotho performance budgeting example is a case in point.

Notably, many of the examples of effective programs cited by practitioners addressed multiple areas of performance accountability, spanning vertical and horizontal simultaneously. For example, effective approaches combined working on service charters and quality assurance reviews to reinforce horizontal accountability between levels of government, while also using the same charters, health facility committees, and integrated supportive supervision (including community representatives and local government representatives on supervision teams) to embed vertical accountability (e.g., Mackintosh et al. 2016). An emphasis on using accountability tools to foster dialogue between communities, providers, and government at different levels also was a hallmark of well-regarded practitioner efforts. In parallel, the analyses of regulatory strategies also included collaboration between state and non-state actors. These success features are echoed in the social accountability literature reviewed above.

Many of these studies of regulation identified the blurred boundaries in practice between the public and private sectors, which can introduce ambiguities and opacity into regulatory strategies as instruments of increased oversight and accountability (e.g., Leonard et al. 2013). Since most health systems combine a mix of public and private providers, these considerations of factors that constrain effective accountability are critically important. As Bloom et al. (2014) highlight, viewing regulation from a systems perspective can enhance its effectiveness as an accountability tool.

Vertical Financial Accountability

Accountability mechanisms*: Public expenditure tracking surveys, participatory budgeting and planning, budget transparency initiatives, citizen-led anti-corruption campaigns*

Involving citizens in accountability for finances requires their understanding of processes that determine what expenditures are expected, enabling them to follow up regarding whether funds are allocated, used, and documented in line with their expectations. Some of the interventions, such as participatory budgeting and planning, involve citizen input into these plans, while other efforts focus on making budgets and financial flows more transparent or increasing citizens' demand for greater financial accountability.

Boulding and Wampler (2010) investigated whether a participatory budgeting (PB) program in Brazil led to increased social spending, such as on health or education programs. The authors expected to see greater budget allocations (and consequently improved service delivery) in places where PB had been adopted compared to those using traditional budgeting. Based on statistical analysis of data from 220 of Brazil's largest cities, they found spending on health was higher in municipalities that had adopted PB than those that had not. Because increased spending did not necessarily correlate with improved health outcomes, they also looked at indicators of well-being. The authors found that municipalities using PB spend more of their budget on health and education programs, but also found that those municipalities benefit more from increased per capita government budgets, making it unclear if PB was the reason for the improved spending. They found the average per capita budget rather than the presence of PB may be a more accurate indicator of improvements in human well-being. Although human well-being as these authors consider it is not explicitly a health outcome within our framework, it may be tied to intermediate outcomes such as improved service delivery, efficiency and effectiveness, or equity. Certainly, participatory budgeting enables increased transparency and responsiveness to citizens' needs and demands.

Gonçalves (2014) offers results from her analysis of the same participatory budgeting in Brazil in which she too found differences between municipalities where PB was and was not being used. She presents information as to why participatory budgeting would lead to increased spending allocated to health and sanitation (rather than education) and tests whether health outcomes improved. She found a two-three percentage point increase in spending on programs such as health and sanitation in municipalities that had adopted participatory budgeting.

Another vertical financial accountability intervention is public expenditure tracking. Reinikka and Svensson (2011) examined whether availability of information (published in newspapers) regarding how much money a school should be receiving in capitation grants has any impact on enrollment and educational attainment. The authors found that with granting the public access to that financial information, local corruption decreased, and enrollment in local schools increased. There was also a slight improvement in students' test scores, though it was not as significant as the other results. Their intervention was in an educational context, and still there are certainly lessons that may be worth extracting to draw on in a health setting, although as various analyses have warned, information transparency alone is insufficient to produce accountability increases (Fox 2007).

As Olken (2007) demonstrates, some accountability interventions complement each other well. His randomized controlled field experiment in Indonesia involved components of both vertical and horizontal financial accountability. Olken examined the effect of potential external audits by the central government audit agency, in combination with a grassroots monitoring campaign (discussed more in horizontal financial accountability), on corruption levels in village infrastructure projects. For some villages, the results of those audits may then be read aloud during a village meeting, and this did reduce corruption; missing expenditures decreased by eight percentage points. He concluded that, overall, central-level audits were more effective than community monitoring in addressing corruption.

What Works, What Doesn't in Vertical Financial Accountability

Interventions in the vertical financial accountability category yielded mixed results in the sense that while there was typically some improvement, the magnitude of the results was not as significant as was expected. The evidence suggests that to some degree, public expenditure tracking can support improvements in transparency and reduced corruption, though studies indicate that citizen engagement in public expenditure tracking faces capacity, power, data quality, and incentives issues (Tolmie 2013). These issues notwithstanding, a focus on budgets and financial flows provides concrete accountability

targets around which citizens can mobilize demand, particularly if they are supported by capable NGOs that can serve as translators and simplifiers of complex budget and procedural information. Key informant Sue Cant reinforced this point:

> *Information about government processes and standards is often a critical missing piece in moving from simple community-driven development and participatory programming to something more robust.*

The evidence suggests that participatory budgeting is an important health governance mechanism. It increases citizen voice in decision making and leads to greater responsiveness in resource allocation in line with citizen preferences. It is not clear the extent to which these increases in participation lead to improvements in service-delivery efficiency, but they are associated with expanded citizen empowerment. Several of our key informants stressed that power and capacity dynamics are especially central to budgeting and spending systems and that citizens, either as individuals or collectively, are limited in their ability to push for accountability. As key informant Simon O'Meally said:

> *For me the bottom line – if I had to choose one factor – is power. How it is shared, distributed, marshalled, etc. makes or breaks any accountability initiative. I have no knowledge of a "technical" intervention being sufficient.*

Horizontal Financial Accountability

Accountability mechanisms*: Fiscal decentralization, government-led anti-corruption campaigns, financial audits, improved public procurement systems, budget autonomy for health providers*

Horizontal financial accountability is another category where most studies explore governance issues, and relatively few studies seek to directly relate accountability interventions to health outcomes. However, within the fiscal financial literature, there are some analyses that make this latter link. For example, Cantarero and Pascual (2008) conduct a regression analysis to assess the impact of decentralization on health in Spain. Using data from 1992–2003, with infant mortality and life expectancy as the dependent variables, they find that decentralization, income, and health resources each had a significant impact on health. The literature review in Goryakin et al. (2017) identifies six studies on low-income countries that offer corroborating empirical findings on the link between fiscal decentralization and health outcomes, with the caveat that the relationship is mediated by local institutional capacity. The same review found limited evidence that improvements in public procurement improved health outcomes, primarily through cost reduction, but the tradeoff was lead times to complete procurement. Several of these studies also use infant mortality as the dependent variable.

A financial audit, either top-down by a formal independent audit office or its contractor or bottom-up by a community monitoring scheme, can serve as a strong deterrent for the misuse of funds. The studies reviewed here found some improvements in addressing corruption as a result of audits. Fiscal decentralization and improved public procurement systems too have been shown to decrease corruption, as the literature reviewed by Goryakin et al. (2017) demonstrates.

In addition to external audits, Olken's field experiment in Indonesia (mentioned above in the section on vertical financial accountability) looked at monitoring of investments in village projects at the grassroots level. The monitoring initiative successfully increased community participation by approximately 40% in village-level meetings where project spending was reported, though there was no (statistically significant) reduction in corruption associated with that change. Olken cautions that there may still have been some corruption in other forms, as workers may have chosen to employ their family members. He

suggests that similar grassroots monitoring may see greater success in instances such as health or education, "where individual citizens have a personal stake in ensuring that the goods are delivered and that theft is minimized" (2007, 244).

Avelino et al. (2013), using data from audit reports, assessed management of health resources in Brazilian municipalities. They found that more decentralized management of health resources by municipal health councils led to reduced corruption at the local level. The findings "suggest that the experience of health municipal councils is correlated with reductions in the incidence of corruption in public health programmes" (695). They also found a statistically significant relationship between the age of the health council (used as a proxy for experience) and likeliness of corruption, meaning the more experienced the health council was, the less corruption there was likely to be.

Transparency International (2017) examined several case studies on open contracting in the health sector, and of note were Honduras, Nigeria, and Ukraine. The study provided evidence on how open contracting has influenced procurement in the health sector. In Honduras, a social movement, “Transformemos Honduras,” used FOI laws to expose corruption in the procurement of medicines. In both Nigeria and Ukraine, open contracting has been used to improve transparency in bidding for contracts, as well as procurement. All three cases saw positive results from open contracting in the forms of increased transparency and reduced corruption, resulting in cost savings in the health sector.

What Works, What Doesn’t in Horizontal Financial Accountability

Though evidence overall is limited, financial audits seem to improve transparency, reduce corruption, and contribute to improvements in efficiency, though their value for money may be variable. Open contracting also appears to improve transparency as expected, and to reduce corruption, albeit with variable changes to timeliness. Among the caveats is that information transparency is insufficient on its own to increase accountability; where and how the information is made available, who has access to the information under what circumstances and governed by which rules are all important issues.

Decentralization studies, as noted earlier, offer mixed evidence for the effectiveness of horizontal financial accountability. Much depends upon the features of individual subnational governments, their allocation of delegated responsibilities and authorities, along with intergovernmental relations and resource transfers. The Brazil municipal health council study points to the importance of the quality and capacity of local government in influencing what works. There is some evidence that under the right conditions, fiscal and financial decentralization can improve responsiveness, increase efficiency, and limit corruption.

IMPLICATIONS

Interventions aiming to improve accountability can have positive results on health governance, which can contribute to strengthening health systems.

A major implication of this evidence review is that accountability interventions matter considerably to health governance. However, the extent and nature of their impacts depend greatly on *how* interventions are carried out. A key message is that the individual interventions selected may be less decisive than their interactions with contextual factors such as power dynamics, institutional mandates, and sociocultural histories. As key informant Judith Edstrom noted:

> *As Tolstoy’s Anna Karenina said when referring to families, successful (social) accountability efforts are all alike; each unsuccessful effort fails in its own way. Relative success is not based on*

> *one particular silver bullet mechanism, but on a range of positive conditions and factors all being present: conducive enabling environment, a reasonably well-executed accountability approach or technique, a sense of empowerment by citizens, and commitment **and** capacity of public officials and health service providers to respond. Failure of any one of these is enough to result in ineffectiveness of an accountability effort.*

The findings of this study confirm that countries interested in improving health governance have a relatively solid evidence base on the variety of accountability interventions that have been tried and tested, and on the factors that affect the prospects for achieving health governance and health system results. Certain areas of programming and research on accountability have a stronger evidence base than others. Social accountability efforts, for example, have benefitted from the greater collective experience of researchers pursuing studies of those interventions. Tools such as citizen report cards, service charters, multi-stakeholder committees, participatory budgeting, and pay-for-performance have been studied across a wide range of contexts. Components of governance systems' architecture as they affect the health sector have also been extensively studied, including for example, decentralization, agencies of restraint (especially with regard to anti-corruption), and state-society relations both national and local. It is likely that other areas of accountability interventions with mixed evidence will be clarified by greater research efforts with an emphasis on context, which can help to nuance the understanding of the conditions under which those interventions achieve outcomes in health governance.

We have acknowledged those areas where the evidence of what works and what does not is inconclusive and have stressed that studies do not provide straightforward or simple guidelines to follow. Nevertheless, the literature and our key informants concur in finding that accountability interventions can contribute to robust improvements in health governance and health systems, and indirectly to health outcomes.

Accountability and the Macro-Context

Context matters and must be considered when planning and implementing accountability interventions.

Distinct from meta-studies of clinical trials, the assumption that treatments are invariant across applications does not hold for investigations of sociotechnical interventions like accountability mechanisms and governance reforms. These interventions are affected by contextual factors whose influence looms large in conditioning the prospects for initial success, scale-up, and sustainability.

The significance of context means that the evidence for the impacts of discrete accountability interventions is often mixed, making it difficult to draw relevant lessons for a country's own program.

Our findings thus direct policy and program decision makers to prioritizing a more profound understanding of the macro- and micro-contexts when planning and executing any accountability intervention. In practice, this means that more resources and attention need to be spent on understanding and constantly probing the factors that matter in the setting where accountability interventions are located. Regular questioning and reformulating the key issues around the target intervention, as well as the target interventions themselves, require flexibility, which can be a major constraining factor in donor-funded projects. Similarly, government policymakers may not find it easy to pursue flexible programming and implementation within rigid bureaucratic structures.

The challenge with paying attention to the macro-context is deciding which features to accord analytic prominence among the myriad factors relevant to accountability interventions. Checklists lead to oversimplification and one-size-fits-all generalizations. However, the literature and several of our key

informants suggest according priority to a few key aspects of the macro-context across most efforts to improve accountability. Foremost among these is the power dynamics that shape existing governance structures and state-society relations. These delimit the change spaces available to both public sector actors and civil society. Many successful efforts explicitly aim to shift power dynamics as a precursor to improving accountability or to build on such changes in power dynamics from other sources, and so effectively embed their work in the macro-context. Relatedly, civil society capacity to exploit the available change space and the state's capacity to respond positively are two additional macro-contextual elements commonly identified with successful accountability interventions (see, for example, Holland et al. 2016).

Political economy and power dynamics are crucial components of context.

Simon O'Meally's (2013) study of accountability dynamics defines six characteristics of context that shape the prospects for vertical or social accountability: political society capacity and willingness, civil society capacity and willingness, the political settlement among elites, the social contract of the state, inequality and relations within society, and global dimensions around the state. Political settlements, or the ways in which elites informally agree in practice on the distribution of power in a state, are a critical power structure that shapes how a country's formal governance system operates. The role of political settlements was referenced in various forms by many of our key informants. Several also highlighted the role of national-level ideologies that informed accountability efforts. State-society relations, legitimacy of the state, and perceived fairness of its actions set expectations that frame the social construction of accountability and shape the roles and relationships of actors in the health system.

Key informants also highlighted the role of national-level ideologies that informed accountability efforts. State-society relations, legitimacy of the state and perceived fairness of its actions set expectations that frame the social construction of accountability and shape the roles and relationships of actors in the health system. As key informant Walter Flores stated:

> *We know that a technocratic approach to accountability and health systems doesn't work. Politics and power are important, but just recognizing that isn't enough. We need better frameworks for understanding, and better tools to support actions that make horizontal accountability/checks and balances work better. We need structures that address conflicts of interest. A lot of corruption derives from lack of rules and regulations, which enables discretionary power at various levels. Authorities don't have an interest in closing these pockets of discretion. Every place where decisions about resources are possible, the possibility of conflicts of interest and corruption arises. We need to put in place governance structures at multiple levels*.

Health policymakers seeking to improve accountability must reach beyond the health sector.

Mr. Flores' comment demonstrates how considering politics and power affect health will lead reformers to focus beyond the health sector. Promoting accountability calls for awareness of these broader structures and processes, and for engagement and collaboration with other sector actors. Sustainable reforms require building relationships across stakeholder groups and sectors. Key informant Nils Mueller offered:

> *It's a bit strange to talk about "health governance," as governance that leads to health outcomes is not just health governance. This can be a factor for why certain activities do not achieve the results that we want them to. At the local service level in particular, you cannot separate actors in the health system (e.g., the district health officer or supervisors of facilities) from integrated local government structures. Efforts to do training and strengthening of just those ones does not work because they are still just a cog in a wider system of governance at*

> *district level…The wider system shapes time, budget, and other allocations that cannot be dealt with solely from a health perspective.*

Systems perspectives highlight the importance of networks inside and outside the health system to understand accountability relationships and identify intervention pathways.

Halloran (2016) notes that using the lens of an "accountability ecosystem" can help us to see the complexity of roles and relationships that are the backdrop in which interventions are staged. Use of this lens also introduces ideas from systems thinking that can contribute to the design of more effective accountability programs. Among the applicable systems concepts is emergence, the notion that relationships and behaviors are a product of the interactions among system actors and cannot be fully predicted prior to those interactions. This is meaningful because it implies that agents' roles cannot be held constant over time or defined purely by functions within the health system, given the web of other relationships that connect them. As key informant Judith Edstrom noted*:*

> *A recent integrated health project in the Democratic Republic of Congo demonstrates the multiple pathways to improved health outcomes. Social accountability initiatives aimed at strengthening health services—along with supply of physical inputs and staff training-- are stimulating increased use of health facilities. At the same time, user groups have encouraged community members to directly improve their own health-seeking behaviors, which in turn incites them to visit health centers and to independently improve their own health practices and outcomes.*

Actors in a health system are simultaneously involved in numerous relationships with each other, including many beyond the health system, in ways that cause new behaviors to emerge as accountability interventions are tried. Interventions featuring deep understanding of those ecosystems, and/or anticipating and reacting to emergent behavior in them, show promise of greater effectiveness. Key informant Walter Flores commented on the systemic nature of effective accountability work:

> *The biggest changes we've seen in Guatemala are the creation of new channels of engagement that didn't exist before, and how the process has moved up from local to provincial level. It's currently moving up to the national level. Our data are showing that discrimination has been reduced, illegal payments have almost disappeared, and resource transfers to the local level from the center have increased. We see evidence of increased responsiveness by local and provincial authorities, increased collective action among community members, and better local planning that is linked to the center…At the beginning, we tried to work only within the MOH, but we realized that we were blocked by conflicts of interest in addressing bottlenecks. So we started to engage with parliament, the ombudsman office, and the judiciary. We learned how to use the system of checks and balances to address the conflicts of interest.*

Human relationships are molded by social factors that may shape providers' accountability to service users/consumers. Berlan and Shiffman (2012) identify consumer power and information levels, and provider beliefs related to accountability. Several key informants highlighted the social aspects of accountability:

> *What is neglected in the current state of the art of accountability programming is attention to the construction of social meaning as the basis for accountability. Current thinking on accountability forgets that politics defines what officials will be held accountable for, and what citizen expectations are. So, for example, if officials take steps to address health provider absenteeism, but don't do anything improve services, citizens may not be positively inclined toward them since their focus is on the services they receive* (William Savedoff)*.*

> *We've known it but haven't articulated or categorized it well: social cohesion and reciprocity outcomes are vital to the work [on accountability] but have been left as intangible byproducts* (Sue Cant).

Linked to webs of relationships and their influence on accountability is Tembo (2013)'s identification of "interlocutors," defined as individuals or organizations who play a crucial role in overcoming obstacles to collective action that limit transforming citizen-state accountability relationships. Interlocutors build on existing trust relationships as a primary driver of change and work within the power dynamics of local political systems. He draws upon the experience of a DFID-funded multi-country social accountability program in Ethiopia, Ghana, Malawi, Sierra Leone, Uganda, and Zambia to document how a power-sensitive approach to collective action that focuses on shifting incentives can gradually move accountability logics from responsiveness to answerability. Tembo's examples demonstrate how accountability relationships can move beyond Fox's (2007) soft accountability to harder forms. The health governance outcomes achieved by an accountability intervention can evolve over time, from improving responsiveness to imposing sanctions; as trust increases, costs for collective action are lowered, and incentives are modified.

The pathways to positive outcomes are not always clear. One of our key informants, Gerry Bloom, offered an example of the difficulties in mobilizing effective collective action:

> *In Bangladesh, the government sought to bring informal providers into the health system. First they tried training, but this didn't work. Then they tried accreditation through an association of informal providers, but that didn't work well either. They found they needed to look at the pharmaceutical industry's role in supplying informal providers with their medicines. Most treatments involved providing a couple of antibiotics and a steroid; this is what people expect. So even if you convinced some providers not to offer these, people would simply go to another provider until they found a willing one. The underlying incentive structure needs to be addressed if you're going to have an impact on accountability*.

From a principal-agent perspective on social factors and the web of human relationships, expected sanctions and incentives for enforcement of accountability work are often informal. Key informant Simon O'Meally summarized it succinctly by commenting:

> *"Teeth" often reside in the informal practices of elite bargaining, patronage, and kinship, as well as in locally specific values of legitimacy and social justice*.

Attending to the Micro-Context

The local contextual features of interactions among accountability actors contribute to shaping accountability and health governance outcomes.

Beyond the characteristics that shape the macro-context, attributes of the particular health services being examined and the associated politics often play a key role in the degree and scale of success of an effort to enhance accountability. For example, the past history of citizens' engagement with healthcare providers influences the capacity and incentives of both citizens and providers to adjust to new accountability mechanisms, and can inform how reforms are designed and implemented.

Among the salient features of the micro-context for accountability are the characteristics of the services being delivered. Batley and Mcloughlin (2015) examine the politics of public services through a service characteristics approach. They identify critical aspects such as the nature of the good, type of market failure, tasks involved in delivery, and demand for a service, all of which directly affect political commitment, provider control, and user power in ways that can strongly shape accountability. Their

work suggests that the political incentive to provide or improve a service is greater in particular situations: when benefits go to private users (e.g. household water connections versus mains sewerage), where users benefit directly (e.g. water supply rather than disease vector control), in cases of monopolies with greater control (e.g. urban water supply over decentralized rural systems), where the provided service is visible (e.g. construction of schools or clinics rather than improving maintenance) and where there is high demand and provision can be targeted at selected populations. They also take note of how the predictable and regular use of a service can make it easier for users to organize and demand accountability for that service (e.g. primary schooling versus hospital health care). Finally, they also note that accountability is easier when the information about the service is widely understandable and involves less discretion (e.g., vaccinations rather than obstetric care).

Joshi (2014) writes on the interplay between macro-level factors such as those outlined by O'Meally (2013), and micro-level factors similar to those identified by Batley and Mcloughlin (2015). She outlines a process of devising causal chains or a set of mini-causal pathways that shape the accountability intervention. She recommends breaking apart the discrete aspects of an accountability intervention (e.g. awareness raising, information demands, etc.) and learning more intentionally from how those efforts have fit into the context previously. Along a similar line of inquiry, Wetterberg et al. (2017), in their study of accountability mechanisms in district health facilities in Indonesia, investigated how citizens' prior experiences with holding health facilities accountable influenced facility motivation to use social accountability tools and affected facility responsiveness to citizens' concerns.

Time Horizons

Be patient; successful accountability interventions call for long time periods and long-haul engagement.

Those who promote increases in accountability must adjust their expectations of time horizons to match a strategic and dynamic reform process. Most case examples of change at scale where increased accountability has both taken hold within the health system and led to improvements in health outcomes have played out over several years. Even effective accountability interventions that may yield relatively quick results seem to need a broader, sustained set of changes over a longer period of time to ensure that those gains are not lost. Our key informants' perspectives reinforced the need for extended horizons and emphasized that achieving and sustaining improvements in accountability is a long-term endeavor:

> *Only foolish people think that solving accountability problems is a short-term issue. People will always find ways around whatever rules are put in place, so you need to learn, to identify innovative approaches. The answers will come from experimentation and learning, not necessarily from research. We need to encourage donors to learn in dialogue with national government and localities* (Gerry Bloom).
>
> *Donors need more patience for the long-term, and more recognition of the non-linear nature of social change. In projects, we get results measured on a timeline that doesn't match what's required for genuine accountability* (Lynn Freedman).

This point on longer time horizons for accountability interventions is clearly linked to other lessons coming out of this study: it takes time to understand the political context and the various roles and relationships between health stakeholders. Being flexible and changing course based on new insights mean rethinking a new intervention or restarting an old one, all of which take time. Being context-sensitive means adjusting and adapting to moments of stagnation and periods of pause when the situation may not be conducive for continuing the work as planned. Embedding implementation

research into accountability interventions means trying and testing them through iterative interrogation of emerging results among stakeholders. This kind of adaptive action research is often constrained by donor needs for presentation of tangible and "sellable" results in the short term.

Quicker results can be achieved in settings with good governance, where accountability interventions do not depend upon systemic changes.

The Young et al. (2016) study of open data usage in Singapore took place within an environment of relatively mature accountability structures and incentives. In such cases where effective governance systems exist, short-term interventions can lead to measurable impact. However, in less conducive settings, the timespan for transformational change is longer because accountability depends on so many contextual constraints to be addressed. Key informant Cathy Green, in discussing introduction of facility health committees in Northern Nigeria noted:

> *When there is a total absence of redress and accountability, introducing one is a major step…You can't go from nothing to perfect too quickly, you need to go step-by-step.*

Achieving systemic change seems to be closely linked to deploying multiple accountability approaches over an extended time horizon. Accountability interventions are most effective when they are integrated, using and adapting different tools as incentives and context change. Key informant Joy Aceron contrasted the relative ease of localized social accountability efforts with broader, long-term accountability changes:

> *Voice and monitoring initiatives in Philippines are somehow easy – getting community engagement and dialogue is not hard because of the long history of citizen engagement and national standards make it fairly simple to monitor compliance. Systemic change is the problem. How do you ensure good policies are adopted and implemented and those violating laws and/ or abusing powers are sanctioned? For example, family planning medicines had to be constantly asserted by advocates. Medicine distribution was highly contested. There was a need to combine monitoring efforts with advocacy from other citizen groups. This speaks to the importance of a combination of interventions.*

In practice, attempting to influence the macro policy level while simultaneously conducting projects at the grassroots and regional levels seems to be necessary to sustain the potentially quicker gains made in communities and districts. Likewise, working with a broad set of stakeholders and ensuring platforms for dialogue at all levels can help institutionalize mechanisms which can facilitate more sustainable change and harness the synergies from gains made on individual interventions. This process will surely experience setbacks and periods of inaction. However, working on different interventions at different levels at the same time means that progress can likely still be made on some accountability issues while others are put on the backburner until a new window of opportunity arises.

Framing

The way an accountability effort is framed influences its potential to achieve results.

As noted previously, there are multiple frames through which accountability can be defined and analyzed, including principal-agent, collective action, and institutionalist perspectives. Ensuring that roles are considered holistically and that multiple frames are used can reinforce a planned accountability intervention to make it more robust. The multiple relationships among health system actors also imply that the framing of accountability and efforts to enhance it will have an influence on effectiveness of those efforts. The evidence seems to support this idea.

Beyond analysis, the way accountability itself as an intervention goal (or as a tactic to achieve other goals) is discussed and disseminated by those intervening will have an influence on prospects for implementation. Framing shapes how the actors involved think about what it is they are doing and why, and affects whether accountability reforms are accepted as desirable or necessary. A proposed reform contains an embedded perspective on what is meant by accountability and a normative rationale for why behaviors should change. As Koon et al. (2016) note, frames provide the cognitive means of making sense of the social world, but discord among them can foment policy contestation.

Every effort to improve health governance outcomes and then to leverage improvements in one or more areas of accountability begins with normative statements relevant to the situation to be affected (in terms of core health models focused on stewardship and health system). While this is useful in defining goals, such framing, particularly if it results from a donor-led exercise, may not align with how country actors understand accountability and the rationale for intervention. The social meaning of accountability depends on contextual factors and citizens' beliefs, which may differ from or reinforce the goals set by health policymakers.

For effectiveness, then, this "purpose statement" that outlines the rationale for attempting to increase accountability should be open for modification, based on analysis of contextual factors. This openness and flexibility will allow for selecting and tailoring intervention(s) to context, including appropriate framing. Key informant Judith Edstrom commented on this issue:

> *To achieve accountability improvements that support health outcomes, it is vital to promote a shift in the mindset of health service providers from viewing involvement of citizens as "utilitarian participation" to one of active engagement to improve their health outcomes. The traditional health mentality around stewardship tends to think of citizen engagement as inducing behavioral change by "telling them what they need or should have" rather than by listening. No one would dispute that some behaviors, such as respecting child vaccination timetables, must be based not on community consensus but on medical science. But more often, improvement of overall health outcomes requires that citizens becoming genuinely engaged.*

Key informant Mohammed Lamine Yansané offered a country-specific example of framing:

> *When Guinea had a polio epidemic, most health stakeholders did not seem to see it as their responsibility to deal with it, including development partners. Finally the MOH, together with development partners and local health administrators, put together an "accountability framework." The discussions around this framework as well as all parties' signed commitment to it led to more efforts being made on all sides to ensure that each vaccination campaign led to 95% of targeted children receiving the immunization.*

CONCLUSIONS

This review offers significant indications that accountability interventions can contribute greatly to improved health governance and stronger health systems. The evidence for the impacts of specific accountability interventions, however, is often mixed. The preponderant consensus in the literature and among practitioners is that contextual factors loom large in affecting the prospects for initial success, scale-up, and sustainability. We have distilled from the review a set of implications for policymakers that contains some actions that could be undertaken to inform the design, implementation, and/or

evaluation of accountability interventions. Resonating throughout the studies reviewed and from our key informants is the familiar mantra in all international development sectors that context matters.

Politics and power and institutional incentives and structures were among the contextual factors mentioned with the most frequency. Key informants provided illustrative anecdotes of how these can make or break an accountability intervention. Our African informants located in health ministries highlighted institutional and legal frameworks and the pivotal role of government leadership in ensuring sustainability in accountability gains. National/district health councils, coordination/steering committees, dialogue forums, ministry monitoring committees, annual health sector reviews, and facility oversight missions were among the entities cited whose functioning (or failing) contributed to what works for accountability and health governance.

For policymakers, a serious challenge to more successful accountability interventions remains the perpetual pressures of results-based programming and management. The drive for results leads in many cases to overly simplistic theories of change that hold everything constant save for a limited number of reforms and associated behavior changes linked to improved accountability. Inevitably, these fail to describe the multiple ways in which accountability interventions, even when narrowly defined, interact with and are influenced by their context. Our review offers food for thought to fuel discussion about elaborate theories of change for accountability interventions that are context-sensitive and focus on contribution to intended outcomes rather than direct cause-effect attribution.

Many donor-funded accountability initiatives operate within a three- to five-year project cycle. Our study confirms that accountability reforms must be long-term from the outset, with slow and careful steps founded on purposeful reflection on the previous steps, leading to iterative adaptations. This characteristic is also problematic for many country governments seeking rapid and visible results before the next budget cycle or election.

Accountability interventions are more likely to achieve concrete and sustained impacts on health governance and health systems when they employ multiple tactics and techniques, understand the change process as systemic rather than tinkering at the margins, seek to go to scale over time, expect to iterate and learn, and link to local framings relevant to accountability rather than imposing frames defined by external actors. Health system actors' understanding of how accountability advances is itself an area for improvement. Accountability reformers can improve the efficacy of their interventions and reduce unrealistic expectations by avoiding the oversimplified perspective that imagines accountability as the product of a discrete project, an isolated change in information availability, or the use of a particular accountability mechanism.

For researchers, this picture points in the direction of continued effort to identify and specify how particular aspects of accountability interventions work in a given setting, learning against that specific theory of change, and supporting better and more granular articulation of theories of change based on empirically proven findings that query context as well as intervention technique. Research that can better measure empirically the importance of interactions between tactics of accountability, and between those tactics and specified contextual features, will help unpack similarities or differences across contexts that can better explain why particular dynamics of accountability interventions yield the results they do. Theory-building research, rather than theory-testing research, is in demand around accountability for health governance.

More implementation research is crucial to narrowing down context-sensitivity in accountability interventions to a manageable set of factors that can feasibly be taken into consideration. As we mentioned, taking context into account requires flexibility to reprogram and reorient intervention details. Flexibility in course redirection is linked to empirical observations and an attempt to objectively

understand the situation. This suggests the need for implementation research to be embedded in accountability programming.

It is difficult to attribute changes in health outcomes at the population level to changes in accountability, although this review uncovered a few studies that sought to make this link. However, the cumulative weight of the evidence supports the conclusion that there is real value in effective accountability interventions, and the interviews with key informants suggest that there is broad interest in such approaches at multiple levels. The search for credible evidence of the links among accountability, health governance, health systems, and health outcomes will continue. We hope that this study has made a contribution to that search.

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ANNEX 1: ACCOUNTABILITY EVIDENCE MAPPING FRAMEWORK

Types of Accountability by Category		Accountability Policies, Practices, & Mechanisms	Expected Health Governance Results								Health System Effects & Health Outcomes
			Transparency	Responsiveness	Voice	Empowerment	Reduced corruption	Efficiency & Effectiveness	Improved Service Delivery	Equity	
Democratic Accountability	Vertical-External	Elections									The stylized TOC is that the accountability policies, practices, and mechanisms contribute to one or more of the health governance results, which in turn contribute to health system strengthening and ultimately to health outcomes. System effects discussed by TWG: Sustainability UHC Stewardship Resilience (e.g., Ebola) Disaster preparedness Health outcomes: Various service delivery measures (availability, access, quality, distribution, utilization) Disease-specific (e.g., epidemics, HIV, TB, NTDs, NCDs, etc.)
		Freedom of information laws									
		Open government initiatives*									
		Public interest lawsuits									
		Demonstrations and protests									
		Media: investigative journalism									
	Horizontal-Internal	Parliamentary oversight*									
		Ombudsman offices									
		Courts**									
		Political decentralization									
Performance Accountability	Vertical-External	Citizen-provider committees									
		Satisfaction surveys/report cards									
		Service charters									
		Civil society watchdogs									
		Professional associations									
		Media: awareness, citizen education									
	Horizontal-Internal	Standard-setting, quality assurance, accreditation									
		Regulatory enforcement**									
		Self-policing, codes of conduct**									

Types of Accountability by Category		Accountability Policies, Practices, & Mechanisms	Expected Health Governance Results								Health System Effects & Health Outcomes
			Transparency	Responsiveness	Voice	Empowerment	Reduced corruption	Efficiency & Effectiveness	Improved Service Delivery	Equity	
		Program-based budgeting*									Sector-specific (MCH, FP/RH, pharmaceuticals, etc.)
		Internal management control systems*									
		Performance contracts									
		Performance audits*									
		Parliamentary oversight*									
Financial Accountability	Vertical-external	Public expenditure tracking surveys									
		Participatory budgeting and planning									
		Budget transparency initiatives									
		Citizen-led anti-corruption campaigns									
	Horizontal-Internal	Fiscal decentralization*									
		Government-led anti-corruption campaigns									
		Financial audits*									
		Improved public procurement systems*									
		Budget autonomy for health providers (e.g., hospital autonomy)*									

Note: * Denotes overlap with Public Financial Management TWG
** Denotes overlap with Policy and Regulation TWG

ANNEX 2: ACCOUNTABILITY KEY INFORMANTS

Name	Affiliation
Joy Aceron	Government Watch Philippines
Randolph Augustin	USAID/Kenya
Gerry Bloom	Institute of Development Studies, University of Sussex
Victoria Boydell	International Planned Parenthood Federation
Sue Cant	World Vision International
Judith Edstrom	Partnership for Transparency Fund
Walter Flores	Center for the Study of Equity and Governance in Health Systems
Lynn Freedman	Mailman School of Public Health, Columbia University
Asha George	School of Public Health, University of the Western Cape
Cathy Green	Health Partners International
Sara Gullo	CARE International
Hippolyte Kalambay	WHO Inter-Country Support Team for Central Africa
Nils Mueller	USAID/Uganda
Simon O'Meally	World Bank
Farba Lamine Sall	Ministry of Health, Government of Senegal
William Savedoff	Center for Global Development
Ahadi Simbi	Ministry of Health, Government of Democratic Republic of Congo
Mohammed Lamine Yansané	Ministry of Health, Government of Guinea
Shannon Young	USAID/Tanzania

ANNEX 3: ACCOUNTABILITY KEY INFORMANT INTERVIEW QUESTIONS

Purpose: To gather information from those with more tacit and experiential knowledge regarding the state of the art in programming to promote accountability and how it affects broader health governance/health outcomes.

Biographical information (role in accountability and health governance, countries of work experience, etc.)

1. Our starting point is a hypothesis that interventions aiming to enhance accountability can improve the governance of the health sector, and ultimately health outcomes, in developing countries. What are some of the efforts to promote accountability around health governance that you've supported or examined (from direct experience working on, evaluating, or other engagement, or similar in-depth study)?
2. Can you tell me about documented evidence that you have of the impact of accountability interventions? What have been the most meaningful changes they've achieved? What have been the biggest setbacks or disappointments?
3. What lessons do you have around how accountability programming works in practice? Why do they succeed? Why do they not succeed?
4. *If context raised in answer to 3/4:* From your experience, how are effective accountability programs made to fit to their context? What sorts of lessons do you have from this aspect of the work?
5. What else should we know about the state of the art in accountability programming?
6. From your experience, are there aspects of accountability for health governance where you think there is clear evidence and the debates are settled?
7. What do you consider to be the most important unanswered questions around accountability and health governance?

A SCOPING REVIEW OF THE USES AND INSTITUTIONALIZATION OF KNOWLEDGE FOR HEALTH POLICY IN LOW AND MIDDLE INCOME COUNTRIES

Prepared by Adam Koon, Lauren Windmeyer, Maryam Bigdelli, Jodi Charles, Fadi El Jardali, Walter Flores, Jesse Uneke, Sara Bennett

EXECUTIVE SUMMARY

There is growing interest in the ways different forms of knowledge can be used to strengthen policymaking in low- and middle-income country (LMIC) health systems. Additionally, health policy and systems researchers are increasingly aware of the need to design effective institutions for supporting knowledge utilization in LMICs. In order to clarify the use and institutionalization of knowledge as well as effects on health systems, a scoping review was conducted using the Arksey and O'Malley framework. The following research question guided our analysis: "What is known from the existing health literature about how actors use and incorporate knowledge into health system policymaking and what sorts of institutional arrangements facilitate this process in LMICs?" The literature on knowledge utilization in LMIC health systems was reviewed using six public health and social science databases. Articles were included that described the process for how knowledge was used in policymaking, specified the type of knowledge used, identified actors involved, (individual, organization, or professional), and were set in specific LMICs. A total of 53 articles, from 1999-2016, and representing 56 countries, were identified. The majority of articles in this review presented knowledge utilization as utilization of research findings, and to a lesser extent routine health system data, survey data, and technical advice. Most of the articles in this review centered on domestic public sector employees and their interactions with civil society representatives, international stakeholders, or academics in utilizing epistemic knowledge for policymaking in LMICs. Furthermore, nearly all of the articles identified normative dimensions of institutionalization. While there is some evidence of how different uses and institutionalization of knowledge can strengthen health systems, the evidence on how these processes can ultimately improve health outcomes remains unclear. Further research on the ways in which knowledge can be effectively utilized and institutionalized is needed to advance collective understanding of the governance dimensions of health systems strengthening and enhance appropriate policy formulation.

INTRODUCTION

Background to TWG

Within health policy and systems research (HPSR), a growing body of literature assesses the multiple ways in which actors, particularly health system stewards, use various types of knowledge to inform the health policy process in LMICs [1]. Different forms of knowledge and the processes by which these are utilized are central to achieving universal health coverage (UHC) [2]. Work in this area likely originated from the evidence-based policy movement, but there is a growing recognition that evidence can inform, but not determine, political decision making [3,4]. Much of the work in HPSR is associated with the overlapping concepts of "knowledge management," "knowledge utilization", and "knowledge translation," which have been criticized as being overly rational and technocratic [5]. Terminological debates aside, there remains a need to understand more about how different forms of knowledge are used, via formal and informal channels to shape policy in ways that align with social values and societal preferences [6]. In this way, the growing body of scholarship on the use of knowledge transcends divisive strategic debates in global health [7] and focuses instead on a foundational element of health system strengthening.

Despite much attention in the academic literature, gaps persist in the knowledge requirements of government officials in fulfilling their roles as health system stewards [8]. Further, it is not well understood how different forms of knowledge are used in the health policy process [9]. Little is known about how to develop institutions and processes in LMICs to support evidence use in policy and decision making and how such institutional arrangements can support the exchange of knowledge for health sector stewards [10]. Finally, as an aspect of health system governance, it is unclear how evidence-use contributes to health system performance or health outcomes [11].

Types of Knowledge

There is an extensive body of work seeking to define the core routine indicators that health systems should seek to collect and analyze [12]. Yet, such information helps to describe the current situation and health and health system trends, rather than provide information that may be relevant to strategic decision making concerning health systems [6]. Some researchers have proposed further investigation into three types of "intelligence" for health systems: 1) health systems performance, 2) context and actors, and 3) policy options [13]. The existing literature on informational requirements typically focuses on empirical measures of a country's health systems (likely focused on the national level), rather than broader global evidence addressing the effectiveness of alternative health system strengthening strategies [14]. For this reason, the research presented here identifies different types of knowledge that are useful for policymaking in LMICs health systems.

Several models have been proposed to characterize the flow of knowledge between knowledge producers (researchers) and users (policymakers). This includes "researcher push" models whereby researchers are responsible for packaging empirical research in ways that are intelligible to policymakers [15]. By contrast, "user pull" models focus on generating demand for high quality, policy-relevant research among policymakers [16,17]. Another way that knowledge flows in the policymaking process is through exchange efforts, such as "linkages and exchanges" [18]. A fourth model brings together elements of each of the previous models through large-scale knowledge translation platforms [14]. Despite research on these linkages between researchers and policymakers, much remains unknown about how these relationships are structured [19] and the extent to which experience is transferable

across contexts [20]. As a result, this paper harnesses a body of work on the various ways in which knowledge is used in the policy process in an attempt to further clarify constructive engagement between researchers and policymakers.

Researchers working in a political science tradition often argue that knowledge in its various forms serves a range of political purposes and is seen to mean different things in different contexts [21]. Research outside of HPSR suggests that policymakers value expert knowledge because it can lend authority to their predetermined policy positions and signal to others their capacity for sound decision-making, particularly in risky areas of policy [22]. Research in HPSR has further demonstrated the symbolic value of knowledge utilization in the policy process [23], but to a limited extent in LMICs [24]. There remains a need to consider the political dimensions of knowledge utilization, particularly in LMIC health systems where the literature seems less developed.

Actors, Organizations, and Institutions

A knowledge gap also exists with regard to alternative institutional modalities for generating policy-relevant knowledge and applying this to policymaking in LMICs health systems. Some research has attempted to classify these types of institutions and the qualities that facilitate knowledge sharing [25]. Yet, research is patchy, disorganized, and tends to focus more narrowly upon institutions specific to knowledge translation [26]. Moreover, little is known about how existing institutions, including think tanks, health policy and planning units, advocacy groups, and the media currently fulfill this role [6,27]. For these institutional structures to be effective, they entail the involvement of civil society organizations and non-state actors in supporting socially-constructed stewardship functions. This is akin to what Parkhurst calls the "evidence advisory system" which promotes the good governance of evidence [28]. Still, much remains unknown about the character of these institutions, their arrangement in health systems, and the process by which knowledge is institutionalized. This report explores these themes and how they relate to the various uses of knowledge highlighted above.

Institutionalization

A particularly salient gap in HPSR is not just the location or identity of institutions that produce and share knowledge, but the process by which knowledge is institutionalized for policymaking purposes. According to Scott [31], *"Institutions are comprised of regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life."* Thus institutions are characterized by a multidimensional basis of compliance, order, and indicators of their presence and are largely resistant to change [29]. Institutionalization is a process that emphasizes this affinity for stability and can be simply understood as, *"to infuse with value beyond the technical requirements of the task at hand."* [30]. Regulative dimensions of institutionalization highlight the role of incentives for motivating efficient behavior. Normative dimensions of institutionalization occur by increasing commitments of individuals to behave according to established order (identity). Cultural-cognitive dimensions of institutionalization entail the conversion of shared beliefs into routines, protocols, language, and other artifacts [31]. Thus these three elements of institutionalization reflect the multifaceted nature of institutions, elements of which are emphasized and explored by different disciplines. It is unclear to what extent the health system literature on institutionalization accommodates different forms of knowledge for policymaking purposes, other than through the creation of formal semi-autonomous government agencies such as the UK's National Institute for Clinical Excellence (NICE) [32]. For this reason, this research seeks to analyze all three dimensions of institutionalization in the HPSR literature.

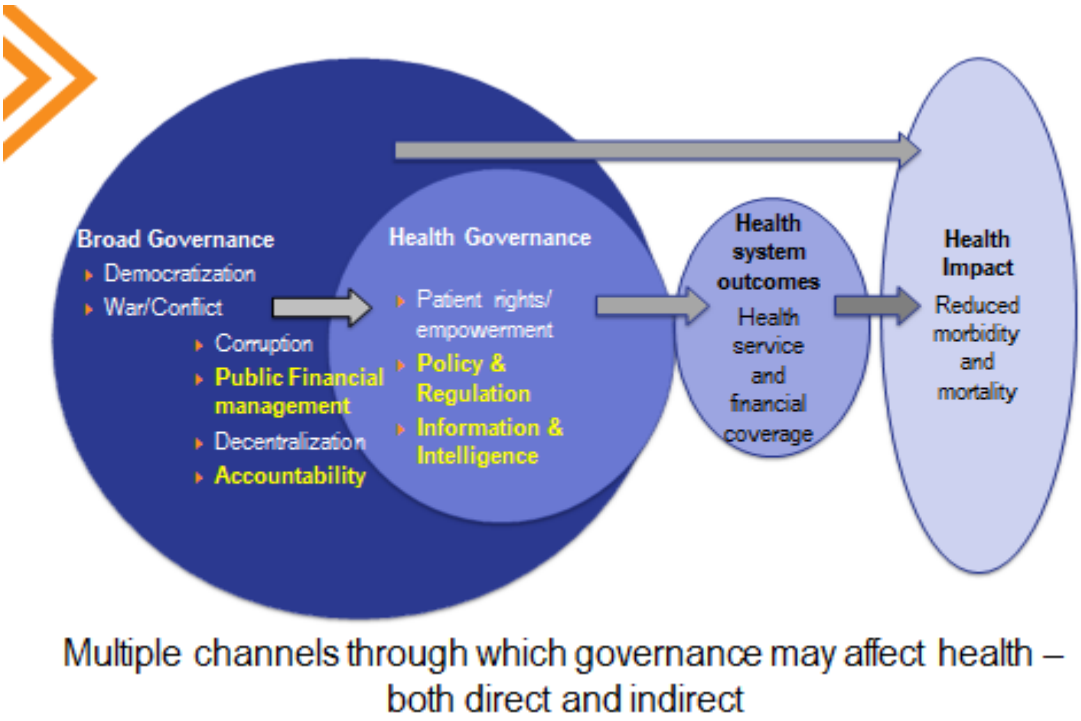
Health System Performance and Health Outcomes

This report assesses the scope of HPSR scholarship on the uses and institutionalization of knowledge for policymaking in LMICs. This review is an attempt to identify a coherent corpus of work that describes the types of knowledge and the ways they are used to inform policy. In the following section, the methods for our scoping review are presented using a well-established framework by Arksey and O'Malley [33]. This literature is then collated, characterized, and critically appraised, highlighting the insight gained through research on knowledge and institutionalization and its relative merits/shortcomings. Potential lines of inquiry are suggested to help further this important dimension of HPSR, especially as it relates to health system governance.

CONCEPTUAL FRAMEWORK

This report makes use of the Marshalling the Evidence conceptual framework to broadly orient understandings of how governance might contribute to health system outcomes and health impacts (Figure 3.1, below). In this way, we understood research related to uses of knowledge to directly impact health system performance and for this to result in health impacts. Our findings, as we discuss below, are somewhat inconclusive as there were few studies that explicitly identify health system outcomes and even fewer that convincingly link uses of knowledge and institutionalization to health impacts.

Figure 3.1: The Marshalling the Evidence Framework



The TWG discussed an inductive approach, whereby a framework will be developed as a result of this work, through discussions at a global dissemination event with participants and members of other TWGs. At this time, our understanding of the subject matter is not sufficient to adequately develop, test, or validate a preconceived conceptual framework for knowledge use and institutionalization in LMIC health systems.

METHODOLOGY

This research used scoping review methods to characterize the range of research on knowledge utilization processes, the institutionalization of these processes, and the effects of these processes within health systems. This includes the content of the literature and any potential gaps that require further exploration. The scoping review methodology [33] has been discussed in key methodological texts [34–37] and is increasingly used in HPSR [38–41].

This approach was selected because of its emphasis on flexibility and its affinity for narrative driven summation. Like all qualitative research, this approach involves some degree of interpretation. Quality parameters are not typically present in scoping reviews. The Arksey and O'Malley framework [33] is presented as an iterative, qualitative review with five distinct stages: 1) identifying the research question, 2) identifying relevant studies, 3) study selection, 4) charting the data, and 5) collating, summarizing and reporting the results.

The following research question was developed collectively based on our experience and understanding of HPSR: 'What is known from the existing health literature about how actors use and incorporate knowledge into health systems policymaking and what sorts of institutional arrangements facilitate this process in LMICs?' This question drew important distinctions related to knowledge utilization and its institutional basis within health systems. In the context of the Marshalling the Evidence Initiative described above, the researchers also sought to assess how these social phenomena are transformed into health system outcomes and health impacts.

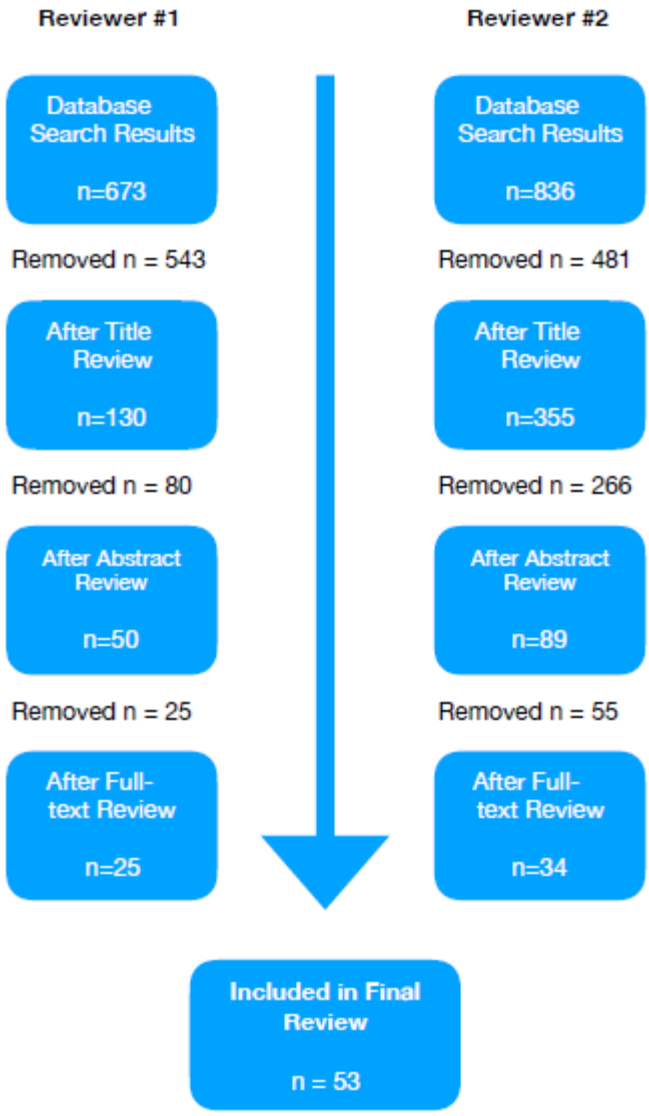
A search of the peer-reviewed literature was conducted for original research articles that described in detail the uses of knowledge and/or their institutionalization in health systems. Eight different social science and health databases (PubMed, Web of Science, PsychInfo, CINAHL, JSTOR, ProQuest, EBSCO, EMBASE) were searched in February and March 2017. A basic search criteria incorporated the terms (knowledge OR Evidence OR Information) AND ("Health Policy" OR "Health Systems") and ("low or middle income country" OR list of relevant country names OR list of relevant country regions). This search strategy was executed in tandem by two researchers (ADK and LW). The only difference between the two search strategies was that one reviewer included "institutional*" as an additional search criteria to narrow the search results. Articles were screened separately by both researchers based on title, abstract, and then full-text. Upon full-text review, both researchers read all articles, discussed each one, and came to a joint determination about which articles to include in the final review. Articles were included that describe a process for how knowledge was used in policymaking, specified the type of knowledge used, identified actors involved, (individual, organization, or professional), and were set in LMICs.

Articles were excluded by ADK and LW based on their title, abstract and full-text. Articles were excluded that were published in a language other than English, Spanish, or French and published before 1995. Articles were also excluded if they focused on uses of knowledge outside of the health sector, focused above the nation-state or in high-income countries, and focused largely on clinical interventions, service management, or procurement. In addition, all comments, editorials, and advocacy outputs were excluded. Co-authors MB, SB, and JC were consulted initially for questionable exclusions and strategies for handling articles other than original research, such as review articles.

See Figure 3.2 for an overview of the review process.

Akin to data extraction, data 'charting' was initiated by LW, consistent with the Arksey and O'Malley framework [33]. The charting fields were developed in consultation with all co-authors, and ADK provided support throughout the process. A master database was created that included article details, geographic location, level of analysis (national, state, district, community), urban/rural designation, actors involved, legislation, process of institutionalization, type of knowledge used, and links to the MtE Framework on how governance affects health system outcomes and health impact. This process was systematic. Yet, charting involved a degree of interpretation, appraisal, and assessment on the part of the data charting researcher (LW) to classify ambiguous fields such as the process of institutionalization and linkages to the MtE framework. ADK provided consistent advice throughout the charting process. This included clarifying the charting fields, capturing information in adequate detail, and determining how to assess otherwise problematic entries.

Figure 3.2: Scoping Review Flow Diagram



Many research studies were initially screened based on inclusion/exclusion criteria. The results of both researcher search strategies are presented before the common pool of final research articles are characterized. A total of 673 and 836 articles were returned from the initial search by each researcher (ADK and LW), respectively. From these, a title review, supplemented with cursory abstract review, further narrowed the number of articles to 130 and 355. The exclusion/inclusion criteria were applied in the next round of review to all abstracts and when necessary, a cursory full-text review. This reduced the total number of remaining entries to 50 and 89. The combined pool of articles was closely reviewed by AK and LW, and each article was discussed at length between the researchers. Finally, following this review of all full-text articles, 53 articles were determined to adequately include all of the study research criteria and remain in this study. See Additional file 2 for an overview of all 54 articles, which are characterized in greater detail below.

The final stage of the scoping review process involved collating, summarizing and reporting the findings. Collated articles were characterized by charting field, with emerging trends identified for multiple variables. The scope of existing knowledge was emphasized in characterizing the pool of collated articles as were gaps in the literature. Key considerations for further research on knowledge utilization and institutionalization are discussed in detail below. Finally, the limitations of the study design, review process, and interpretations are presented.

Author reflexivity is important because interpretation and narrative summation are central to the Arksey and O'Malley scoping review framework [33]. The authors of this manuscript represent a variety of geographical locations and come from different disciplines. They are united by a common focus on HPSR as an applied problem-solving area of inquiry in global health. The study design and review process operates under the assumption that this HPSR can contribute to strengthening the basis for policymaking in LMICs in addition to pooling a unique body of research to advance scientific inquiry in the field. Though we make no claims to objectivity, we have attempted to provide a fair and balanced account of the various strands of research and their representation in the health literature. Thus, the work bridges and embodies a plurality of ontological and epistemological positions on knowledge and research, consistent with moves towards analytical eclecticism in policy studies [42].

MAJOR FINDINGS

Relevant research articles are increasing rapidly in volume and geographic coverage over time, from 1999 to 2016: 1995–1999, n = 1 article / 53 total articles; 2000s, n = 13 articles / 53 total articles; 2010s, n = 40 articles / 53 total articles. Studies were reported from several LMICs (n = 56), Uganda (n = 11), Nigeria (n = 9), and Bangladesh (n = 7) representing the highest number of articles. Over half the studies focused on a single country (53%, n = 30), whereas 24 involved more than one country (n =18 multi-country studies; n = 6 regional studies). Studies were located at different administrative tiers of the health systems with the majority of research conducted at the national level (n = 39), followed by regional studies (n = 7), district (n = 2), state (n = 1), and studies that operated at multiple levels (n = 4). The majority of studies (87%, n = 47) were conducted in urban areas, while only one was conducted exclusively in a rural area. In summary, this review found that most research was published in the last eight years from a variety of LMICs. Roughly half focused on a single country, using research conducted at the national level and in urban areas.

Nearly all of the studies were written in English (n = 52) while one was in Spanish. The search and selection criteria returned original research articles (n = 49) and review articles (n =4). Research was published in a variety of public health journals (n = 26), with nine journals having more than one citation. Relevant articles were published most frequently in the journal *Health Research Policy and Systems* (n = 9), *Health Policy and Planning* (n = 5), *BMC Health Services Research* (n = 4), *BMC Public Health* (n = 4), and *International Journal of Health of Technology Assessment in Health Care* (n = 4).

Types of Knowledge

Different types of knowledge were used to inform policymaking in the HPSR literature. Research was oriented around scientific (epistemic) knowledge (n = 38 articles), pragmatic skill-based (technical) knowledge (n =10), or unspecified (n = 10) usage. There was a single example of deliberative value-based ethics (phronesis) which relied on principles of reflective practice, akin to auto-ethnography [43]. Research was categorized by the type of knowledge used for policymaking purposes. Nearly half of the articles (n = 27) highlighted the use of research to inform policymaking. Many also illustrated the use of

routine epidemiological or health system data (n = 15), survey data (n = 12), advice (n = 12), economic evaluations (n = 4), reports (n = 4), or civic participation (n = 4). Several articles (n =10) referred to multi-faceted forms of knowledge without clearly differentiating them. The majority of research from this review presented epistemic uses of knowledge as represented by research findings and to a lesser extent technical advice, routine health systems data, and survey data.

Actors, Organizations, and Institutions

A variety of actors, organizations, and institutions were represented by this cohort of HPSR research. Across this literature an average of 3.67 actors (n = 198 actors / 53 articles) were explicitly identified in the process of knowledge utilization. This represented a mix of organizational and institutional entities. The most frequently mentioned actors in the policy process were domestic government employees, mostly health officials (n = 43), civil society (n = 21), international stakeholders including donors, bilateral and multilateral representatives (n = 19), academics (n = 17), in-country programs or projects (n = 13), and technical advisory groups (n = 11). Think tanks (n = 2), media (n = 2), and unspecified actors (n = 2) were represented to a lesser degree. In summary, most of the articles in this review concentrate on domestic public sector employees and their interactions with civil society representatives, international stakeholders, or academics in utilizing epistemic knowledge for policymaking in LMICs.

Institutionalization

The process of institutionalization was determined interpretively to identify emerging themes across articles reviewed for this analysis. The vast majority of articles identified normative dimensions of institutionalization (n = 47). Cultural-cognitive dimensions of institutionalization (n = 16 articles) were represented more frequently than regulative dimensions (n = 8 articles). In most of the articles represented in this review, the process of institutionalization was characterized by social obligation as the basis of compliance, binding expectations as the basis of order (which relied on a logic of appropriateness), and frequently mentioned accreditation or certification as indicators of institutional design. For example, many articles referred to the creation of technical committees or government programs such as health technology assessment programs. On the other hand, legislation was explicitly mentioned in five articles, and very few articles focused on expedience as a basis of compliance and regulative rules as the basis of order, or were governed by a logic of instrumentality.

Health System Performance and Health Outcomes

Finally, articles were mapped to the MtE Framework to assess the extent to which research supplied evidence of health systems performance and impacts on health. It is important to note that the use of different kinds of knowledge is not always a governance intervention. However, the ways in which knowledge is used for policymaking reveals how health programs are governed and thus the influence of knowledge use on health system outcomes and health impacts is of interest. Nearly half of the articles reviewed (n = 24) described health system outcomes of varying specificity, but mostly policy formulation through the establishment of guidelines, provision of care, or organizational development. In contrast, there were few articles (n = 7) that described health impacts, with the majority (n = 47) either focusing on health system outcomes or not explicitly identifying any outcomes or impacts. While there remains evidence of how different uses and institutionalization of knowledge can strengthen health systems, the evidence on how these processes can improve health outcomes remains unclear.

IMPLICATIONS

In this section, we discuss the findings above in greater detail, noting conspicuous gaps in the literature where necessary. First, we discuss the different types of knowledge used for policymaking purposes. Second, we reflect on the various actors (individual, organizational, and institutional) represented in these studies. Third, we illustrate the processes by which knowledge is institutionalized for policymaking in these articles. Fourth, we explain how knowledge usage and institutionalization appear to influence health system outcomes and health impacts in LMIC health systems. In this way, the following section points to general trends and notable gaps in how knowledge is used and institutionalized and to what extent, for this particular body of literature.

Types of Knowledge

Several important observations were made when analyzing the types of knowledge used to support policymaking in LMICs. Nearly half of the articles (n=27) articulated specific examples of research being used to inform policymaking. This included multiple examples of strengthening policymakers' capacities to incorporate research in policymaking process in Nigeria [44–46]. In other ways, research on catastrophic health expenditures was used to inform the design of a new health insurance program in Mexico [47]. Similarly, an analysis of the policy process for the introduction of male circumcision for HIV prevention in Uganda illustrated how research (particularly randomized controlled trials) was used to inform the national policy agenda in 2007 [48]. Two multi-country studies demonstrated how efforts to enhance research capacity [49] and develop policy dialogues [50] resulted in research-informed policymaking. In this way, much of the literature included in this review focuses on the use of research as a particularly helpful, if not persuasive, form of knowledge to inform policymaking.

An interesting finding of this review is that less-structured types of knowledge such as advice (n=10) and inputs from civil society (n = 2) were used for policymaking purposes. The role of advice, particularly in the form of technical guidance, was pronounced in studies concerning vaccine [51,52], health technology assessment [53–55], and pharmaceutical policy [56]. WHO seems to be well-positioned in this process as some studies focused on its ability to establish technical guidelines and convene diverse groups of stakeholders [56–59]. On the other hand, input from civil society organizations was seen as a crucial element of forming deliberative policy dialogue [60–63]. In this way, technical advice and civic participation were considered essential and arguably overlooked forms of knowledge for policymaking in health systems.

Actors, Organizations, and Institutions

In general, articles were characterized by an array of actors, including domestic government officials, civil society, international stakeholders, and academic researchers. The largest number of different types of stakeholders (n = 10) engaged in knowledge translation for policymaking in a single study were identified by multiple articles from an ongoing research effort in Nigeria [45,46,64]. Most of the articles (n = 43) focused on domestic governments, a stated emphasis of this review. Many articles (n = 21) included civil society participation, usually in the form of non-governmental organizations (NGOs) [65], but also directly with communities themselves [66]. International stakeholders (n=19) and academics (n = 17) were also well-represented in the pool of literature. Surprisingly, no study illustrated the various uses of knowledge among the four groupings of actors simultaneously (domestic government officials, international stakeholders, civil society, and academics). Just three articles explicitly mentioned

knowledge exchanges among government officials, international stakeholders, and academics [48,49,54].

The most frequent interaction among these four entities were studies that highlighted exchanges between domestic governments, international stakeholders, and civil society (n=6). This included research on integrated community case management in Malawi [67], coordination of policy dialogue in Guinea [68], aid coordination and policy formulation in South Sudan [69], policy dialogues in three West African countries [50], Global Fund financing in Brazil [70], and the policy process for maternal health in Ghana [71]. In this way, the body of research suggests that it is widely acknowledged that many actors are involved in the process of exchanging knowledge in LMICs, with the engagement of civil society, international stakeholders, and domestic government officials central to this dynamic.

While some articles highlighted the role of key individuals in positions of authority, most articles did not distinguish between individual actors, organizations, and institutions. Instead, most research focused at the organizational level, which is composed of individuals acting in their professional capacity. The lone exception to this was a multi-country effort to strengthen individual, organizational, and institutional capacity to use research for policymaking by Hawkes and colleagues [72]. The authors noted, however, that none of their study countries were *fully* engaged in institutional capacity development despite its widely acknowledged importance for sustainability. Rather, the authors posited that *"developing individual and organizational capacity is a pre-requisite for seeing long-term institutional change"* [72] Therefore, it is plausible that processes of knowledge use in the authors' study countries might be heading towards full institutionalization, but the groundwork has yet to be sufficiently established to build regulative, normative, and cultural-cognitive platforms to do so. This conclusion seems to be broadly supported by the scoping review presented here.

Institutionalization

Collectively the articles in this review roughly illustrate an understanding of the three dimensions (regulative, normative, and cultural-cognitive) of institutionalization of knowledge for policymaking purposes. Three review articles [24,52,57] reflected on regulative aspects of institutionalization of knowledge use, while some research highlighted regulatory policy design [73,74], especially the formation of specialized state agencies responsible for knowledge transfer. Still, there appears to be a gap in the health literature on regulative forms of institutionalization that adhere to binding rules and structured incentives for the purpose of expedient knowledge transfer.

Articles varied significantly in the level of detail regarding how knowledge was institutionalized, though most of them focused on normative processes of institutionalization (n = 47). Indicators of normative institutionalization were through recurrent mention of processes of accreditation or certification [59,75]. For example, the literature is largely focused on creating an ideal environment for facilitating knowledge transfer, exchange, and dialogue to better inform policymaking. Unlike regulative institutionalization, which seeks to induce knowledge utilization through binding agreements, the literature suggests that greater emphasis in LMIC health systems has been placed on developing norms and best practices.

Cultural-cognitive dimensions of institutionalization were represented more frequently than regulative dimensions, but less so than normative dimensions. Notably, cultural-cognitive institutionalization was never fully documented in any of the studies. Yet, aspects of it were present in studies on citizen involvement in the health policy process in Brazil [63], in three case studies of NGO involvement in policymaking [65], and in creating effective policy dialogues in West Africa [50]. In fact, it could be argued that most of the policy dialogue literature focuses on cultural-cognitive institutionalization,

whereby individuals interact through shared routine without questioning basic assumptions. This is also particularly true for studies that were conducted at regional level [57,58,76–78], seek to develop a common understanding, and establish modes of practice that can be shared across contexts.

The boundaries between these dimensions of institutionalizing knowledge for policymaking are not always clear. Vaccine advisory committees [51,52,79], health technology assessment programs [53–55,74], and drug policy [56, 73, 75, 80] are established with normative aims. However, they appear at times to have a regulative (legislative) basis for their formation, even if their recommendations are not binding. Similarly, a great deal of research on policy dialogues is largely normative in nature, but also overlapping to a limited extent with the cultural-cognitive processes of institutionalization. There was no specific example of research (i.e., discourse analysis, ethnography, deconstruction) conducted on cultural-cognitive dynamics, however, virtually all of the policy dialogue and policy exchange literature seems to imply that this is an ultimate goal [46,50,61,68,81].

Post the March 2017 search for this study, one of few examples specifically focusing in detail on the processes of institutionalization in LMIC health systems was published. It is a body of work devoted to the formation of institutionalized structures for knowledge-informed policymaking in Burkina Faso. It includes research on the policy process leading to the formation of a General Directorate of Health Information and Statistics and Coordination of performance-based financing [82] and factors affecting institutionalization of a National Health Accounts Unit and Program for Fighting Non-Communicable Diseases in the Ministry of Health (MOH) [83]. In addition, case study analysis on the actual process of institutionalization for a health policy rapid response unit to supply policymakers with relevant health system information, including research evidence [84], is another focus. This work is notable for the extent to which it implicitly addresses all three dimensions of institutionalization (regulative, normative, and cultural-cognitive) as well as its practical implications for health system development. While it does not describe health system outcomes or health impacts (focus of the subsequent section), it does provide an unusually detailed view of institutionalization as a dynamic social process.

Several notable findings carry implications for policymakers and future research. In their first paper, Zida and colleagues [82] noted that key factors that appear to influence institutionalization are perhaps capably handled by analyzing agenda-setting processes through established policy frameworks. Kingdon's three streams [85], which includes a well-understood problem, viable set of policy proposals, and conducive politics, illustrates this. They argue that for institutionalization attention should be devoted to incorporating the perspectives of high-level policy elites who are better positioned to know the intricacies of social dynamics in the health sector [82].

In the second paper, Zida and co-workers [83] adopted a World Bank framework to analyze elements of policy unit institutionalization. Elements include existence of an institutional framework (policy unit's government mandate), consistent data production and report preparation, adequate financial and human resources, and infrastructure capacity to routinely produce and use data in policymaking [86]. Again, the authors argue that political will—namely the direct involvement of key politicians—is a central feature of institutionalization and that a broad coalition of stakeholders, especially civil society, is likewise important [83]. Future research should be conducted to further develop certain elements of the framework and reflect on how processes of institutionalization develop over time.

In their third paper, Zida and coworkers [84] used the same institutionalization framework to look at the creation of a health policy rapid response unit. This time, they analyze the framework's elements by five phases of institutionalization: awareness, experimentation, expansion, consolidation, and maturity [87,88]. The authors illustrate the political and socially contingent process of institutionalization of knowledge use for health policymaking, identifying success in fulfilling the government mandate of providing timely knowledge for policymakers' use, but questioning the extent to which financing

mechanisms exist to ensure long-term sustainability [84]. Future research that seeks to identify novel solutions for addressing the resource constraints may help similar policy units move beyond the expansion and consolidation phases to reach full maturity.

This work suggests that institutionalization of knowledge for health policymaking in LMICs is an emerging area of interest for HPSR scholars. While the exact nature of this process is still poorly understood, there is clearly a need to devote more research and attention to furthering this particular process of knowledge utilization in LMIC health systems. This extends to institutionalization of a variety of forms of knowledge that have been the focus of research that were not included in this review, such as national health accounts [89] and service delivery for maternal, newborn, and child health [90]. Refinement of existing frameworks to understand the process, generate political will for exploring their development, and develop long-term financing strategies to ensure their sustainability are all of paramount importance if the wealth of various types of knowledge are to be harnessed to inform policy deliberation and debate in LMICs.

Health System Performance and Health Outcomes

In assessing the extent to which articles illustrated health system outcomes and health impacts, we used the MtE Framework for broad conceptual guidance. The first section discusses health system outcomes categorized by financial protection, equity, access, and quality. The second section describes the few articles that illustrated health impacts. We were somewhat surprised to find studies linked to both health system outcomes and health impacts, with the former being more prevalent. These were qualitatively reported in vague detail and specifically documented using process-oriented indicators and outcomes. Still, while there were a few examples of knowledge utilization, particularly research findings and routine health system data informing policymaking, the majority of research included in this review did not document health system outcomes and health impacts. Moreover, virtually all of the research followed a similar form whereby knowledge informs policy and health system improvements or health impacts are claimed to be linked. There were no experimental studies isolating systems of knowledge usage to separate their impacts in a rigorous manner. The ability of governance research to accomplish these types of outcomes remains debatable.

Health outcomes were reported for numerous studies and organized according to UHC principles of financial protection, equity, access, and quality. This was not always easy to accomplish, as some studies reported knowledge use that resulted in macro-level health system changes that did not fit neatly into specific categories. This included the incorporation of research findings into national-level policy and strategy documents [49], the creation of new state agencies or units [53,54,74,91,92], and agenda-setting for the policy process [43,71]. Nevertheless, the utilization of knowledge to improve financial protection was illustrated in research from Mexico which resulted in a reduction in out-of-pocket expenditures [47] and research from Colombia that noted a decline in spending for oncological treatment by users [80]. Equity was a dimension of health system performance outcomes that perhaps was not fully represented. The exception to this was arguably the focus on deliberative modes of policy governance through engagement with civil society organizations which resulted in better representation and accountability [63,66,70]. Access was represented primarily through several articles which reflect on the use of research and routine system information to influence drug policy, essential medicines, and other pharmaceuticals [53,56,64,73,75,80,93]. Knowledge utilization to enhance the quality of service delivery was mentioned in research on integrated community case management in Malawi [67], non-communicable disease service delivery in five Asian countries [92], multiple primary care services in Nigeria [44], and male circumcision for HIV prevention in Uganda [48]. In this way, the review identified

numerous studies that could loosely be characterized as corresponding to UHC- related health system improvements.

Health impacts of knowledge use and institutionalization were reported for a few articles with varying levels of specificity. Some research suggested that health impacts were achieved indirectly through health system improvements such as improved malaria treatment in Uganda [56], reduced catastrophic expenditures in Mexico [47], improved drug availability in Tanzania [75], increased access to emergency contraception in multiple countries [65]. There were just three studies that explicitly mentioned indicators of health impacts, including reductions in prevalence of hypertension in Cambodia and diabetes in Fiji [92], reduced alcohol consumption, tobacco use and increased exercise in Thailand [91], and a reduction in TB prevalence in Brazil [70]. Thus a very small body of literature suggests any health impacts related to increased knowledge use and institutionalization for policymaking in LMIC health systems.

Much like the literature on health system outcomes, the literature is vague on the nature of any health impacts. For example, though alcohol consumption and tobacco use in youth dropped over the first few years of the Thai Health Promotion Foundation (ThaiHealth), it is difficult to determine the extent to which the results can be directly attributed to institutional development [91]. At minimum, other socio-political conditions played a role in reducing harmful behaviors among Thai youths. Thus, it seems that the evidence of health impacts related to knowledge use and institutionalization is at best weak or underdeveloped.

Measuring health system outcomes seems to be more tractable because of its focus on process-level indicators. Arguably, health impacts are more difficult because the analytic focus blurs incommensurable research paradigms and also shifts from dynamic macro-level considerations to narrow individual-level biological changes. Some social science scholars argue that the principles of inquiry for social phenomena are always inadequate to investigate causal features of the natural world [94]. For these scholars, context, judgement, and timing render human behavior unpredictable; therefore, complex social processes such as knowledge utilization and institutionalization will always yield incommensurable and insufficient causal explanations for biological processes, such as disease etiology [95]. This is perhaps one reason for the paucity of research on health system outcomes and health impacts. Another possible reason is that it either is too difficult to accomplish from a research standpoint or, more simply, little attention has been paid to it until relatively recently.

STUDY LIMITATIONS

There were several limitations to this review. The search strategies conducted by two researchers differed, with one reviewer including an additional search term. Still rigor was pursued by reading every full-text result from both pools of articles, discussing them, and making a joint determination about which articles to include in the final review. Another limitation was that the abstract nature of both knowledge and institutionalization proved difficult to reconcile in a systematic way. For example, institutionalization is a complicated process that involves a degree of nuance that was difficult to adequately capture in the charting stage. Similarly, the outcomes and impacts of knowledge utilization were less clear and not readily identifiable. Furthermore, the inclusion/exclusion criteria were such that it resulted in title review of a lot of articles, which may have led to some articles being unfairly excluded. This was offset to some extent by the use of multiple reviewers, but the boundaries of knowledge utilization remain fuzzy at best. In fact, all research can be considered an exercise in the production, use, or sharing of knowledge and thus identifying how this occurs in context presents researchers with a

somewhat circular argument to follow. In addition, deliberative forms of knowledge such as the participation of civil society, including media, were not adequately reviewed. This suggests a larger limitation in that only literature with a health sector focus was reviewed and salient research on the policy process might exist in other social sectors that remain outside the purview of our original research question. Nonetheless this salient research would further our understanding of the social phenomena in question. This is perhaps not surprising since tacit knowledge is by nature unacknowledged or difficult to articulate, but further efforts should be made, perhaps by focusing on different bodies of research, to try to harness this form of knowledge and how it can be used or institutionalized for policymaking

CONCLUSION

This review found growing evidence on the multiple uses and institutionalization of knowledge for policymaking as well as limited evidence on corresponding health system outcomes and health impacts of these processes in LMIC health systems. A total of 53 articles, from 1999-2016 and representing 56 countries, were identified. The majority of articles in this review used research findings and (to a lesser extent) technical advice, routine health system data, and survey data to inform policymaking. Most of the articles in this review centered on domestic public-sector employees and their interactions with civil society representatives, international stakeholders, or academics. There was little evidence about how think tanks and the media contribute to this process in LMICs. Nearly all of the articles identified normative dimensions of institutionalization and a few reflected on cognitive-cultural elements. There were few articles that provided examples of regulative institutionalization and much remains unknown about the role of legislation in facilitating this process. While there remains some evidence of how different uses and institutionalization of knowledge can strengthen health system, the evidence on how these processes can generate health impacts remains unclear. Additional research on the ways in which knowledge can be effectively utilized and institutionalized is needed to advance collective understanding of the governance dimensions of health system strengthening and enhance appropriate policy formulation.

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PUBLIC FINANCIAL MANAGEMENT, HEALTH GOVERNANCE, AND HEALTH SYSTEMS

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INTRODUCTION

Conceptual Framework

A conceptual framework for health governance was adopted by the larger Marshalling the Evidence (MtE) for Health Governance Initiative (Figure 4.1). This framework was mapped to a table depicting a causal pathway to guide the four TWGs in the development of a framework specific to each TWG's theme. As depicted in the overall Health Governance framework, PFM is a sub-section of broad country governance.

The PFM conceptual framework represents a culmination of research on the dichotomy of PFM, health systems and governance and the best way to frame the issues associated with PFM and health. In addition, the framework reflects a series of discussions among the TWG members to identify areas that best represented PFM and health interventions. The TWG began with the following research questions to develop the PFM conceptual framework:

1. How is PFM defined?
2. What are the PFM areas?
3. What are the PFM interventions?
4. What are the immediate (desired) PFM effects?
5. What are the health system effects?

The TWG defined public financial management as all systems dealing with public revenue (PFM Area 1) and budgeting, expenditure management, and oversight (PFM Area 2). In addition to the traditional PFM topics of revenue and expenditure, we also sought evidence on decentralization (PFM Area 3) which is a common governance reform that may have positive or negative effects on PFM, the health system, and health outcomes. Decentralization is also addressed by the TWGs for Accountability and Policy and Regulation.

The framework was the basis for defining the search terms for the digital literature search. Our research database and summary findings (Section 4) follow this framework, looking at the evidence available on PFM/governance interventions that developing countries undertake and their impact on the health system, health service delivery, and health outcomes. Our framework has been marked in grey where we found no evidence for the section.

Figure 4.1: Overall Health Governance Framework (S. Bennett, 2014)

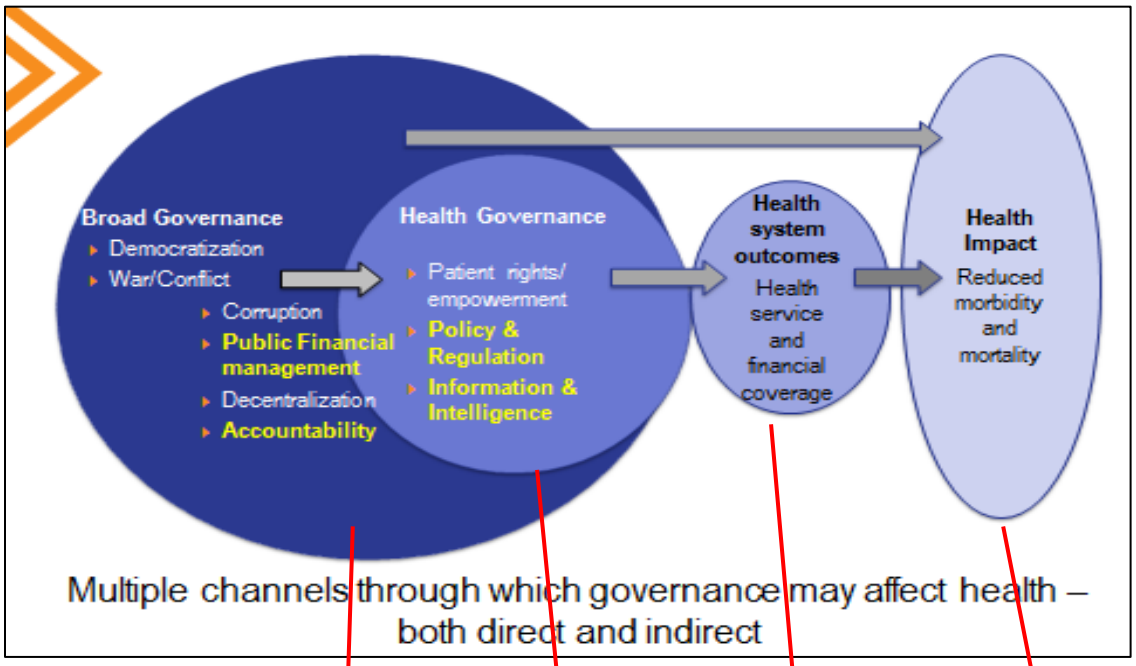

Table 4.1: Causal Pathway of Health Governance Activities

	Indicators likely to be unique to and need to be defined by each TWG		Indicators common to all TWGs	
Inputs/ Resources	**Processes**	**Outputs: Health system performance**	**Outcomes: Service and financial coverage**	**Impacts: Improved health status**
● Donor or domestic funding ● Technical assistance ● Country stakeholder engagement	Implementation of health governance strategies: ● policy, regulatory changes ● accountability mechanisms ● public financial management ● health system intelligence	● Accountable, transparent policy processes ● Evidence-based decision-making ● Strengthened institutions ● Adequate physical and financial resources allocated efficiently/ effectively ● Better operational processes across all HS functions	● Increased provision of high-quality services ● Increased patient demand for, access to, and utilization of health services ● Improved health behaviors adopted ● Increased financial protection	● Reduced morbidity and mortality ● Improved nutritional status ● Reduced disability-adjusted life year (DALY) ● Reduced total fertility rate (TFR)

Adapted from Laurel Hatt, Ben Johns, Catherine Connor, Megan Meline, Matt Kukla, and Kaelan Moat, June 2015. *Impact of Health Systems Strengthening on Health.* Bethesda, MD: Health Finance & Governance Project, Abt Associates

Table 4.2: PFM Conceptual Framework: Mapping PFM Interventions to Health System Performance

	PFM Areas	PFM Interventions	Immediate (desired) PFM effects	Governance Results	Health System Effects
1. Generating and Managing Revenue for Health	**1.1 Resource Mobilization and Revenue Management**	Government revenue (tax) policy	More adequate, predictable, sustainable government resource envelope	Effectiveness and efficiency (of institutions to make and implement health policy)	**Hypothesis:** PFM interventions have an effect on health service delivery and health outcomes measured through: a) Quality of health service b) Level of patient demand c) Access to health services d) Utilization of health services e) Adoption of health behaviors f) Financial protection g) Sustainable Financing Literature scoping will:
		Tax Administration Modernization	More efficient, effective, and transparent revenue collection	Rule of law/anti-corruption, effectiveness and efficiency (of institutions to make and implement health policy)	
		Improved contributions and collection methods (i.e. retention of user fees at the facility/local level)*	Improving benefit adequacy, cost recovery and fiscal health of programs	Effectiveness and efficiency (of institutions to make and implement health policy)	
		Earmarking revenues for health*	Increasing revenue sources specifically for the health sector	Responsive Policies, effectiveness and efficiency (of institutions to make and implement health policy)	
2. Budgeting and Public Expenditure Management of Health Goods and Services	**2.1 Budget Planning and Prioritization**	Policy and strategic planning (medium-term expenditure framework(MTEFs)); fiscal responsibility and fiscal targets	Multi-year planning that reflects policy priorities in a more stable and predictable environment	Rule of law/anti-corruption, effectiveness and efficiency (of institutions to make and implement health policy)	
		Expenditure policy; prioritization; participatory budgeting	Resource Allocation: Better matching of health spending needs and priorities	Voice and empowerment, transparency, responsive policies	
	2.2 Budget Formulation	Budget classification and government accounting; adopting accrual accounting and International Public Sector Accounting Standards (IPSAS)	Consistent nomenclature and budget classification, captures implementing institutions (administrative), purpose of expenditure (functional) and use of expenditure (economic)	Rule of law/anti-corruption, effectiveness and efficiency (of institutions to make and implement health policy)	
		Program-based budgeting (PBB)(results-oriented budgeting (ROB)); Improvements to line-item and input-based budget formulation	Improved budget justifications and budget formulation based on objectives, activities and outputs.	Responsive policies, effectiveness and efficiency (of institutions to make and implement health policy)	

		Costing techniques, budget justifications	Improved budget submissions from Ministry of Health (MOH) to Ministry of Finance (MOF)	Responsive policies, effectiveness and efficiency (of institutions to make and implement health policy)	Identify currently available and ongoing research and field experience that evaluate the effect of PFM interventions on health outcomes listed above, with the aim to identify areas where further evidence is needed. Capture findings of these effects (positive, negative, no effect, undetermined) to improve collective understanding of how PFM/governance contributes to health system outcomes.
		Gender responsive budgeting	Improved gender equity and gender prioritization	Equity and inclusiveness	
	2.3 Budget Execution	Cash management and treasury operations; treasury single account (TSA)	Consolidation of funds, planned and timely fund release, avoiding payment arrears	Rule of law/anti-corruption, effectiveness and efficiency (of institutions to make and implement health policy)	
		Integrated Financial Management Information System (IFMIS)	Real time financial information, automates, integrates PFM processes for effective, budget formulation, execution and reporting	Rule of law/anti-corruption, transparency, effectiveness and efficiency (of institutions to make and implement health policy), accountability	
		Improving public procurement systems including e-procurement	Sound, flexible procurement rules and purchasing arrangements	Rule of law/anti-corruption, transparency, effectiveness and efficiency (of institutions to make and implement health policy), accountability	
		Strategic purchasing of health goods and services (provider payment) methods such as capitation, case-based	Selective contracting and payment methods/rates that create incentives for providers to manage expenditure based on performance metrics. Linking incentives to results; targeting resources for specific outcomes, especially vulnerable populations.	Responsive policies	
		Results-based financing (RBF)*	Linking financial incentives to results; targeting resources for specific outcomes will increase the likelihood of achieving those results/outcomes.	Transparency, anticorruption	
	2. 4 Budget Monitoring and Reporting	Internal controls and internal Audit	Ensuring public sector integrity by preventing, detecting irregular activities	Rule of law/anti-corruption, accountability	
		Financial reporting; performance reporting; fiscal transparency; Open Government Initiatives	Actions properly documented and reported	Rule of law/anti-corruption, transparency, accountability	
	2. 5 External Audit and Parliamentary Oversight	Strengthening Supreme Audit Institutions (performance audits)	Actions can be subject to independent, professional, and unbiased audit and review	Rule of law/anti-corruption, accountability	
		Parliamentary Oversight (budget analysis capacity;	Raising and explaining PFM issues, empowerment to oversee budget formulation, appropriation,	Voice and empowerment, rule of law/anti-corruption, transparency, responsive policies, accountability	

		stronger finance committees)	implementation of policies and outcomes of budget allocations		
		PFM oversight through media and civil society	Broader, more effective engagement and oversight on budget issues for improved transparency and accountability	Transparency, accountability	
3. Localization of Health Services	**3.1 Fiscal Decentraliza-tion and Local Governance**	Revenue and expenditure management through local administration (Deconcentration)	Transfer of administrative responsibility for specified functions to lower levels within the central government bureaucracy	Voice and empowerment	
		Revenue and expenditure management through parastatals, non-governmental organizations (NGOs), faith-based organizations (FBOs) (Delegation)	Central authorities provide grants or subsidies to parastatal organizations, NGOs or FBOs to deliver health services on behalf of the central government	Voice and empowerment, equity and inclusiveness	
		Revenue and expenditure management through local governments (Devolution)	Transferring fiscal responsibilities to lower levels of government to empower communities through local governments	Voice and empowerment, equity and inclusiveness, accountability	
		Intergovernmental Transfers (General)	Provide predictable, adequate financing for local service provision	Effectiveness and efficiency (of institutions to make and implement health policy)	
		Health specific transfers*	Provide predictable, adequate financing for local health services based on spending needs	Effectiveness and efficiency (of institutions to make and implement health policy)	
		Budget autonomy for local governments (decentralized decision-making, full or within a framework)	Local governments decide, independently, or within a framework, the categories, quantity and quality of services that it intends to offer	Voice and empowerment, accountability	
		Strengthening subnational PFM systems	Strengthening local PFM systems such categories under budget formulation, execution and monitoring and reporting	Effectiveness and efficiency (of institutions to make and implement health policy)	
		Budget autonomy for health providers (i.e. hospital autonomy)*	Form of decentralization focusing on a specific institution rather than a political unit. Provides autonomy on governance, operations and management, and finances.	Effectiveness and efficiency (of institutions to make and implement health policy)	
Notes: /* Denotes health sector specific PFM interventions; others are broad categories of PFM interventions.					

Scoping Review Methodology

As part of the larger Marshalling the Evidence for Health Governance Initiative, it was agreed that all four TWGs would use the *scoping review* methodology for the literature review. Peer-reviewed journals have generally moved to have all review articles explicitly structured using established and validated methods. The scoping review methodology is good for looking at the breadth and depth of the literature for a pre-defined domain. These reviews are typically used to map the terrain of a given area of inquiry while identifying any gaps in the current pool of knowledge. The approach is flexible without narrow parameters such as causality, quality, or effect size which may, for example, feature in systematic reviews.

As explained in Section 2 Conceptual Framework, the broader initiative has an overall framework for health governance which guided the development of specific thematic conceptual frameworks by all four TWGs.

The PFM TWG was tasked with:

1. Identifying, compiling, and analyzing the evidence of the effects of PFM interventions on health systems and health outcomes within developing nations
2. Presenting the evidence of PFM effects including positive, negative, or inconclusive effects
3. Identifying areas where further evidence is needed.

To begin the review, the following research questions were considered:

1. How is PFM defined?
2. What are the PFM areas?
3. What are the PFM interventions?
4. What are the immediate (desired) PFM effects?
5. What are the health system effects?

Based on the overarching Health Governance framework, the PFM TWG formulated the following hypothesis: PFM interventions have an effect on health service delivery and health outputs measured through:

a) Quality of health service
b) Level of patient demand
c) Access to health services
d) Utilization of health services
e) Adoption of health behaviors
f) Financial protection.

To help guide and structure the literature search, the TWG created a PFM-specific framework to list and group PFM interventions and map how they affect health system performance, governance, and if possible, health outcomes. The PFM framework organized PFM interventions into three areas 1) Generating and Managing Revenue for Health, 2) Budgeting and Public Expenditure Management of Health, and 3) Localization of Health Services.

Literature Search

Before we began the literature review we set some clear goals to help understand the process. These included:

1. Use a literature review to identify currently available research and field experience that evaluates the effect of PFM interventions on health system outcomes and population health, with the aim to identify areas where further evidence is needed.
2. Capture findings of PFM effects (positive, negative, inconclusive) to improve collective understanding of how PFM/governance contributes to health system outcomes.

Figure 2 displays a flow chart summarizing the literature review process. From October 2016 to July 2017, the TWG conducted a literature search with the following exclusion criteria:

- Language: English (Spanish, French, Portuguese optional)
- Time: after 1990
- Geography: at least one low- and middle-income country (LMIC)
- No duplicate references.

The following search terms were used based on the PFM conceptual framework (see Section 2):

- "PFM and health"
- "governance and health"
- "Decentralization and health"
- "Results based financing for health"
- "Gender responsive budgeting and health"
- "sector budget support and health"
- "budget and health"
- "financing health"
- "expenditure policy and health"
- "financing universal health coverage"
- "health sector priority setting"
- "deconcentration and health"
- "strategic purchasing of health services"
- "health resource tracking"
- "resource allocation for health"
- "audit and health outcomes".

The following databases, websites, and organizations were accessed to search for articles/studies:

- Google Web Search
- Google Scholar
- The Lancet
- Overseas Development Institute (ODI)
- Health Policy and Planning
- International Monetary Fund (IMF)
- The World Bank
- ELSEVIER
- Organization for Economic Cooperation and Development (OECD)
- World Health Organization
- International Journal of Social Sciences and Information Technology
- Social Science and medicine
- International Journal of Health Policy and Management

- The Cochrane Collaboration
- European Journal of Social Sciences
- Policy and Practice.

There were 165 references identified from digital searches. The first step in the review process consisted of reading the title and abstract for meeting the inclusion criteria and relevancy. Of the 165 references, 110 were excluded because PFM and health were not referenced in the research (i.e. the article dealt with PFM interventions, but not their effect on the health sector), or the full article was not publicly available. In the second step, the 55 remaining articles were read in full. An additional 15 articles were excluded because the interventions either did not apply to developing countries (i.e. there is a large database of interventions in OECD countries), the interventions did not relate to our established framework, or the methodology of the study was found faulty or questionable.

For all 40 articles found relevant, the full article was read and data extracted and input into an Excel database. Each article is a row in the database with its data organized into the following columns:

1. PFM Focus Area based on TWG's PFM framework
2. PFM Interventions based on TWG's PFM framework
3. Measured effect of the study
4. Authors of the study
5. Year published
6. Journal name
7. Article title
8. Abstract
9. Countries included in study
10. Level where the research was conducted (national, district etc.)
11. Whether the study was urban or rural focused
12. Language of study (English for all)
13. Study Design
14. Grading of measured impact of intervention (positive, negative, inconclusive)
15. Type of publication/study (original research, working paper, etc.)
16. Overview of important findings
17. Links to MtE Framework—how it describes PFM interventions
18. Identifies studies description of governance issues, particularly health governance
19. Identifies studies description of health system outcomes
20. Identifies studies description of health impact
21. Identifies studies description of other outcomes or effects
22. Date the information was extracted
23. Name of extractor
24. Notes (i.e. link to the study)
25. Number of observations (this varied by study and could be left blank)
26. Study time period.

Based on the 40 articles in the database, preliminary findings were drafted and circulated to the PFM TWG for technical review. In parallel, the TWG conducted key informant interviews with World Bank, OECD, and CABRI experts. These efforts identified an additional 12 articles that were added to the database and the report.

Figure 4.2: Literature Flow Chart

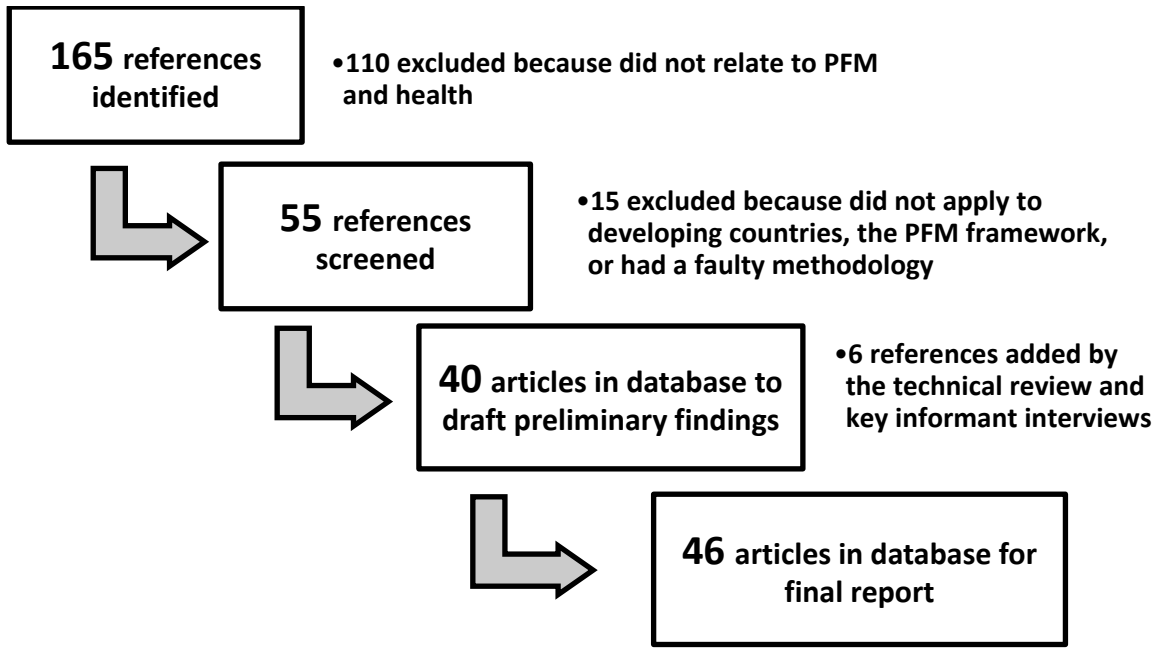

Table 4.3: Distribution of Articles by PFM Area

PFM Area per PFM Framework	Number of Articles
Resource mobilization and management	9
Budgeting and public expenditure management	20
Localization / Fiscal decentralization	19
Total	40

MAJOR FINDINGS

What is PFM?

Public financial management refers to the systems by which government revenue is collected, administrated, allocated, and utilized. PFM policy and legislation will typically cover tax law, budget management and expenditure policy, debt management, subsidies and state-owned enterprises (parastatals). The PFM cycle begins with revenue collection and management and then moves to budget planning expenditure management and oversight and monitoring. Each country is different, but the budget planning process (either program- or inputs-based) usually involves collecting ministry needs from all agencies and departments (MDAs) and then prioritizing those needs and cutting them to fit within the budget ceiling. PFM systems—when driven by effective policy, strong institutions, and good governance—set the stage for robust health service delivery by allowing for effective health spending. As PFM interventions improve, health officials and donors are emphasizing the importance of a good underlying PFM system in the enablement of efficient delivery of health services and improvement of quality of care.[14,15,16] Strong budget execution systems and controls also contribute to smooth flow of funds to the health sector, allowing for timely delivery of care, administration, and procurement. Furthermore, audit and oversight structures can contribute to lower levels of corruption and more transparency which, down the line, can drive effectiveness and efficiency within the health sector.

Generating and Managing Revenue for Health

As availability of direct aid assistance decreases and need proportionately increases, the importance of domestic resource mobilization in developing countries becomes a focus for many international donors. The topic has gained attention in the Addis Ababa Action Agenda and has been touted as the key to sustainable development. Revenue mobilization is the processes involved in collecting and managing government revenue mainly through tax and customs and should have a direct tie to the provision of service, whereby citizens pay taxes and therefore expect services. Revenue mobilization is an important issue for donors to consider the sustainability of an investment, such as whether the country has the capacity to generate and manage revenue to support ongoing service delivery or reforms. This section examines the evidence of the effects of specific revenue mobilization interventions on overall governance, health systems, and health outcomes. The hypothesis is that higher levels of revenue mobilization at the country, state/province or local levels will improve health outcomes through increased funding for health. Our Framework organizes several interventions that are hypothesized to have some desired effect on health outputs. These categories include tax administration and modernization, improved collections and contributions methods, results-based financing, and earmarking revenue for health.

[14] WHO : Public financing for health in Africa : from Abuja to the SDGs, 2016

[15] Cashin C, Bloom D., Sparkes S., Barroy H., O'Dougherty S. : Aligning Public Financial Management and Health Financing, WHO, 2016

[16] Rajan D., Barroy H., Stenberg K.: Budgeting for health, Chapter 8 in Strategizing for national health in the XXIth century, WHO, 2016

Tax Administration and Modernization

Desired effects: More adequate, predictable, and sustainable government resources and more efficient, effective, and transparent revenue collection

PFM interventions in revenue mobilization could have the capacity to affect health outputs by helping to increase funds that benefit the health sector and by enhancing conditions that facilitate greater allocations towards health spending. However, as Krishna D Rao shows in his 2014 study, overall economic growth and revenue mobilization on their own do not necessarily amount to more health spending or health outcomes. As a proportion of Gross Domestic Product (GDP), government tax revenue is significantly below its potential in low- and middle-income countries (Table 4.4). In addition, total government spending in Brazil, Russia, India, China and South Africa (BRICS) is still markedly less on health—8.1–12.7%—than many countries in the Organization for Economic Cooperation and Development which in 2016 spent upwards of 17.2% (United States) of its expenditure on health.[17] There remains considerable potential for expanding health's share of the governmental budgets in all five of the BRICS countries, especially as the countries grow economically and health becomes a greater priority.[18] There is an opportunity to increase the tax effort and focus and consequently increase tax revenues allocated to health.

Table 4.4: Country Tax Capacity, Effort, and Corresponding Revenue Collected by Country Income Level

Country groups*	Tax capacity (x)	Tax effort (y)	Total revenue[D] (x)*(y) = (z)
Low-income	26.0	0.65	17.0
Middle-income	37.2	0.64	24.1
High-income	45.1	0.76	34.2

*Based on per capita GDP (PPP, 2005): Low = $642-$4,752; Middle = $4,249-$17,855; High = $18,807-$68,459

Note: Tax capacity and total revenue in percent of GDP terms

Domestic Tax

One multi-country study showed increasing domestic tax revenues is integral to achieving universal health coverage, particularly in countries with low tax bases. The study shows pro-poor taxes (taxes which do not disproportionately burden the poor, usually indirect taxes such as taxes on corporate gains versus a direct tax, such as sales tax) on profits and capital gains seem to support expanding health coverage. Extra revenue from tax reform corresponded to a yearly increase in government health spending of $9.86 for every $100 additional revenue collected (95% CI 3.92–15.8), adjusted for GDP per capita. This association was strong for taxes on capital gains, profits, and income ($16.7, 9.16 to 24.3), but not for consumption taxes on goods and services (−$4.37, −12.9 to 4.11).

[17] OECD. Stat. Health Expenditure and Financing. (2017) <http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT> August 10, 2017.

[18] Rao, Krishna et al. "Progress towards Universal Health Coverage in BRICS: Translating Economic Growth into Better Health." *WHO* (2014).

Consumption Tax

Consumption taxes—taxes on goods and services such as a sales tax or value add tax (VAT)—form of taxation that might reduce the ability of the poor to afford essential goods, were associated with increased rates of post-neonatal mortality, infant mortality and under-5 mortality rates. These adverse associations were not found with taxes on capital gains, profits, and income.[19] This evidence suggests pro-poor taxes might accelerate progress toward achieving major international health goals.

Another study highlights the importance of government health spending on health outcomes. The study found low domestic spending on health and high dependence on out-of-pocket payments contributes to poor health outcomes.[20] Supporting this conclusion, the study also reiterated an often cited finding that limited financial protection may lead to poor health outcomes.

Improved Contributions and Collection of User Fees

Desired effect: Improving Cost Recovery

The method used to collect payment from users is an integral part of many public health systems which ties directly to the budgeting and policy systems. Various methods of collections and contributions have been shown to have positive and negative effects on health outcomes. In this section, we examine the effect of user fees, whereby patients pay a fee for the use of public health facilities and services, a potential revenue generation method.

Removal of user fees is sometimes promoted as a method to improve access and equity in a health system,[21] although it cuts off a revenue stream for the health sector. Further, once removed, the user fee often isn't replaced with another funding mechanism. The removal of user fees theoretically would increase access and allow for the poorest populations to use free healthcare. However, Meessen et al. found the removal of user fees does not adequately address supply and demand side of health financing issues and therefore does not have the desired impact on health outcomes that recommend the practice. The study looked across several countries in sub-Saharan Africa and found, in most countries, that there was no comprehensive approach in addressing all the barriers (financial and non-financial) that households encounter in their utilization of health services. For example, user fee removal could lead to lower quality of care and limit the increase in utilization if needed revenue previously provided by user fees is not replaced. This study did not however take into account how the user fee revenue was used, for example if the retained revenue was effectively reinvested into improving health services. The study also noted that demand-side barriers such as physical distance and transport challenges to access care are not sufficiently addressed by the removal of user fees. Those living close to health facilities become the main beneficiaries of the free healthcare.[22] A summary of Meessen's findings show removal of user fees, though a common intervention to improve equity, does not alone achieve this goal because of other barriers that inhibit access.

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[19] Reeves, Aaron et al. "Financing Universal Health Coverage—effects of Alternative Tax Structures on Public Health Systems: Cross-National Modelling in 89 Low-Income and Middle-Income Countries." *The Lancet* 386.9990 (2015): 274–280

[20] Elovainio, Riku et al. "Raising and Spending Domestic Money for Health" *Chatham House* (2013); Web. 13 Aug. 2017.

[21] https://blogs.oxfam.org/en/blogs/17-05-18-will-new-who-director-general-commit-end-crushing-healthcare-user-fees

[22] Meessen, Bruno et al. "Removing User Fees in the Health Sector: A Review of Policy Processes in Six Sub-Saharan African Countries." *Health Policy and Planning* (2011): 16-29

Another approach to improve the collection of user fees is the formalization of user fees with the aim of reducing unauthorized payments. Often officials or health workers collect unauthorized fees from patients and their families. Formalization of fees—for example publishing a fee schedule and introducing systems for reinvesting fee revenue into the facility to benefit patients—would theoretically improve service quality and governance and therefore health outcomes. To mitigate the rising cost of healthcare, particularly amongst the poor, the Cambodian government with support and advice from international agencies introduced a series of financing mechanisms including formalizing user fees. Ensor et al. found the user fee policy in Cambodia had no significant detectable impact on the utilization of public (or private) facilities. A summary of these findings are inconclusive on whether formalizing user fees improve utilization and therefore overall health outcomes. Meessen's study neither supports nor refutes the potential positive effect of formalization. Rather, his study identifies that the formalization (much like removal) of user fees alone do not have the desired positive effect on health outcomes because of other powerful external factors—informal payments or geographical barriers to care—that confound the positive effect of removing user fees.[23]

Earmarking for Health

Desired effect: Increasing revenue sources specifically for the health sector

Earmarking revenues for health has been a controversial topic with many economists and health officials. Some economists argue it decreases efficiency and introduces unnecessary rigidity into the revenue system.[24] The other side of the argument is that earmarking revenue for health (such as sin taxes on cigarettes and alcohol, value added taxes (VATs), payroll taxes or other specific levies) creates a consistent reliable source of financing for a vital public service and potentially improves health outcomes. For example, Ghana's national health insurance program is funded primarily on earmarks.[25] Ghana allocated 2.5% of the national VAT to its health insurance program and the VAT contribution has grown from 62% to 72% of total funding. Despite the benefits seen in some countries' health sectors (as demonstrated in the Ghana example above), earmarking can interfere with resource allocation and negatively impact social welfare by eroding the equity of general taxation and disproportionately taxing consumers. In another study in Gabon, Karima Saleh et al. found that increases in earmarked revenues through mobile phone and monetary transfers taxes were offset by reductions in general budget revenues in the following years.[26] Earmarking has been more effective when practices come closer to standard budget processes, that is, softer earmarks with broader expenditure purposes and more flexible revenue.

Budgeting and Public Expenditure Management (PEM) in Health

Public expenditure management encompasses budget planning, preparation, and execution. The three PFM outcomes expected of PEM systems are fiscal discipline (spend what you can afford), allocative efficiency (spend on the 'right' things), and operational efficiency (provision of public services at a

[23] Ensor, Tim et al. "Impact of Health Financing Policies in Cambodia: A 20 Year Experience" *Social Science and Medicine* (2017).

[24] Wilkinson, Margaret. "Paying for Public Spending: Is There a Role for Earmarked Taxes?" *Fiscal Studies* 15.4 (1994): 119–135

[25] Soe-Lin, Shan et al. "Tax Reform and Resource Mobilization for Health" *Health Finance and Governance Project* (2015).

[26] Cashin, Cheryl et al. "Aligning Public Financial Management and Health Financing: Sustaining Progress Toward Universal Health Coverage" *WHO* (2017). Web. 13 Aug. 2017.

reasonable quality and cost). From a sector standpoint, a country's PEM system also affects its ability to produce health system outputs (health service and financial coverage) as depicted in the overall Health Governance Framework adopted by the Marshalling the Evidence Initiative. Although sector-specific PFM literature is limited, there is empirical evidence (e.g. PFM case studies, Public Expenditure Tracking Surveys (PETS), public expenditure reviews (PERs), etc.) that weaknesses in PEM systems affect health sector results.

Similarly, in Ghana, a survey concluded that only 20% of non-wage public health expenditure reached the frontline facilities. In Senegal in 2004, Health Decentralization Funds took on average 10 months to be at the disposal of the providers, leaving only two months for the facility to absorb those resources.[27] There is often a communication break down between health and finance professionals. The lack of measurable, immediate results from public spending on health can reinforce perceptions that the sector is ineffective and inefficient.

Budget Structure

Desired effect: improve alignment between sector priorities and budgetary allocations and allow more flexibility and accountability in public spending

Budget planning and prioritization are essential parts of the PFM process and dictate where and how much money the health sector will be allocated. There is a shift away from input-based budgeting—a process of budgeting which assigns a number to each of the major inputs, for example, 9 million dollars for salaries and 2 million for vehicles, $200,000 for office equipment etc. Instead, the trend is to plan budgets according to overall strategic goals—organizing the budget by PBB. This along with other methods in budget planning could improve health service delivery by focusing on health goals rather than yearly inputs. The effects of such a transition are unclear from a health system perspective.

PBB as a PFM intervention is intended to improve good governance by making the MOH accountable for an achievement of objectives (did you achieve the expected goals effectively?) rather than simply budget execution (did you spend the money we gave you for stationery?).[28]

Adopting PBB is difficult, and evidence is mixed. In Lesotho for example, a study of PBB found that policy makers and advisors did not fully appreciate the complexity and labor intensity of PBB, or the human resource realities of many developing countries like Lesotho. The Lesotho study concluded that less complex designs for budget reform, better adapted to the context and realities of health sectors in developing countries, may be needed to improve overall governance.[29]

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[27] Leruth, Luc et al. "A Principal-Agent Theory Approach to Public Expenditure Management Systems in Developing Countries" *IMF* (2006). Web. 13 Aug. 2017.

[28] Lakin, Jason et al. "Understanding Program-Based Budgeting: Toward Improved Budget Transparency in Kenya" *International Budget Partnership* (2014).

[29] Vian, Taryn and William J. Bicknell. "Good Governance and Budget Reform in Lesotho Public Hospitals: Performance, Root Causes and Reality." *Health Policy and Planning* 29.6 (2014): 673–684

Multi-Year Budgeting (MTEF)

Desired effect: multi-year planning that reflects policy priorities in a more stable and predictable environment

The introduction of MTEF and health specific-MTEF in some contexts was aimed at improving predictability in funding with the idea that MTEFs would ultimately affect the health sector's ability to spend and achieve results in a more predictable manner. A review of case studies that documented the status of MTEF in a sample of nine LMICs found that the introduction of MTEF—in close relation with poverty-reduction strategies—encouraged higher prioritization and enhanced country ownership and customization. The introduction of MTEF also more fully encapsulated poor and vulnerable groups by linking them to domestic decision-making processes, particularly in health.[30] However, contrary evidence suggests that MTEF is ineffective unless implementation is supported by other governance measures. For example, Bevan and Palomba (2000) observed that the introduction of an MTEF reform in Uganda did not prevent a decline in the proportion of budgets being allocated to healthcare; this may, however, been due to the fact that the Ugandan government considered it acceptable to leave the health sector more reliant on donor financing than on governmental spending.[31]

Costing Techniques, Budget Justifications

Desired effect: Improved budget submissions from MOH to MOF

In countries around the world, Ministries of Health and Ministries of Finance play essential roles in how health systems function and when and to whom health services are delivered. While MOHs are responsible for defining the overall direction of national health policy and the day-to-day delivery of public health services, they are dependent upon MOFs that establish overall annual funding levels and release funds necessary to finance MOH operations. In order to justify health budget requests, MOHs employ costing techniques to improve the accuracy and justify budget figures. Examples were found of MOHs using cost and benefit data to justify budget requests for disease-specific interventions (HIV/AIDS[32,33] and family planning[34]).However disease-specific budget justifications sometimes are not well understood by the MOF because the disease programs often do not align to budget categories or divide cleanly into geographic regions. No studies which reviewed the effectiveness of costing techniques to increase general health budgets and consequently increase access and improve health outcomes were identified.

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[30] Wilhelm, Vera et al. "Minding the gaps: integrating poverty reduction strategies and budgets for domestic accountability." *The World Bank* (2008).

[31] Foster, Mick et al. "How, When and Why Does Poverty Get Budget Priority?: Poverty Reduction Strategy and Public Expenditure in Uganda" Overseas Development Institute (2002).

[32] HIV and AIDS Data Hub. Investment Cases. (2013). 13 August 2017 http://www.aidsdatahub.org/Thematic-areas/Investment-cases . Web. 14 Aug. 2017.

[33] UNAIDS. Smart Investments. (2013). 13 August 2017 http://www.unaids.org/en/resources/documents/2013/20131130_smart-investments

[34] Family Planning 2020. Costed Implementation Plans: Strengthening Investments in Family Planning. (2017). 13 August 2017 http://www.familyplanning2020.org/microsite/cip

Gender Responsive Budgeting (GRB)

Desired effect: Improved gender equity and gender prioritization

Gender budgeting involves analyzing a budget's impacts on men and women and allocating money accordingly, as well as setting targets—such as equal school enrollment for girls—and directing funds to meet them.[35] The World Bank (2011), Duflo (2012), and Elborgh-Woytek et al. (2013) present evidence on the many ways in which the reduction of gender inequality leads to more rapid economic growth, improved labor productivity, healthier children, and more responsive government.[36] A study of GRB in Africa notes that investments in girls and women (including reproductive health investments) offer a "double dividend" because they have pay-offs in terms of women's reproductive roles, as well as their (economic) productive roles. As a tool for intervention, GRB involves a comprehensive process which includes inputs, activities, outputs, assessment of government interventions, and monitoring of the effectiveness and efficiency of public expenditure. This in turn leads to the optimal utilization of limited resources and good budget performance.[37] An IMF survey[38] of gender budgeting efforts throughout the world found that:

- A wide variety of institutional arrangements exist. In most countries, the MOF leads the gender budgeting initiative and establishes requirements for other ministries and agencies within the government to follow. When the MOF leads these efforts, gender budgeting has tended to have more influence on budget policies.
- Countries should prioritize gender-oriented health goals such as reducing maternal mortality and sexually transmitted diseases and providing contraception services to guide budgeting.
- Program budgeting tends to lend itself better than traditional input-based budgeting towards the incorporation of gender-oriented objectives into the budget process. **Ukraine and Rwanda** provide good examples, where governments are integrating gender budgeting into a PBB approach.

Overall, GRB is seen as a positive intervention when done correctly and complemented by gender-specific key performance indicators and a monitoring and evaluation (M&E) framework for results-oriented budgeting.

Budget Execution

Budget Execution is the process by which revenue collected is allocated and disbursed to the relevant MDAs. The execution process begins with a disbursement from the MOF or central bank down to the line ministries with the direction to spend money on services. There are many processes and controls

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[35] The Economist. What is Gender Budgeting? (2017). 13 August 2017 https://www.economist.com/blogs/economist-explains/2017/03/economist-explains-2

[36] Stotsky, Janet "Gender Budgeting: Fiscal Context and Current Outcomes" *IMF* (2016). 13 August 2017 https://www.imf.org/external/pubs/ft/wp/2016/wp16149.pdf

[37] Durojaye, Ebenezer et al. "Gender Budgeting As a Tool for Advancing Women's Health Needs in Africa." *European Journal of Social Sciences* 17,1 (2010): 18-27

[38] Stotsky, Janet "Gender Budgeting: Fiscal Context and Current Outcomes" *IMF* (2016). 13 August 2017 https://www.imf.org/external/pubs/ft/wp/2016/wp16149.pdf

needed to track and safeguard money through this process to ensure adequate service delivery. Available data from sub-Saharan African countries indicate that between 10% and 30% of allocated health budgets go unspent.[39]

Cash Management and Treasury Operations

Desired effect: Consolidation of funds, planned and timely fund release, avoiding payment errors

Cash management and treasury are areas of PFM that include cash planning, cash forecasting, Treasury Single accounts, bank account management, controls for per diems and other non-salary payments, and arrears management. Harmonizing treasury operations and cash processes can improve the budgeting and planning processes of health. If treasury operations are inefficient and reliant upon old outdated processes, then the system can become entrenched. Inefficient treasury operations are also subject to a lack of transparency, enforcement and are often unreliable to the communities it needs to service. It is therefore important for the MOH to work closely with the MOF to develop a detailed forecast of MOH cash flow (spending) to allow for timely releases of funds for services and procurements, and manage expenditures within budget.[40] For example, in Mozambique the district-level government funding the immunization supply chain is often managed through a single person, the district secretary, who may quickly become a bottleneck if many departments are submitting requests simultaneously resulting in cash flow problems. [41] Thus, [vaccine] program managers must anticipate funding needs days or weeks in advance, potentially even for small funding requests like fuel or maintenance. When an unexpected need arises, they may be unable to mobilize the cash in a timely manner. Funding delays and cash flow problems such as these are some of the most widely-reported challenges among on-the-ground practitioners across LMICs, in countries like Nigeria, Sri Lanka, and likely many others. The results are delays of the implementation of health activities which can negatively affect the quality of care and performance.

Integrated Financial Management Information Systems

Desired effect: Real time financial information, automates and integrates PFM processes for effective budget formulation, execution and reporting

Integrated financial management information systems computerize and automate key aspects of budget execution and accounting operations across line ministries such as the MOH. International best practice calls for increased reliance on electronic transactions.[42] IFMIS can enable prompt and efficient access to reliable financial data and help strengthen government financial controls, improving the provision of government services, raising the budget process to higher levels of transparency and accountability, and expediting government operations. IFMIS is an accounting system configured to operate according to the needs and specifications of the environment in which it is installed. The system uses information and communications technology to support management and budget

[39] WHO: Public financing for health: from Abuja to the SDGs, Geneva, 2016

[40] Mu, Yibin "Government Cash Management: Good Practice & Capacity-Building Framework" *World Bank* (2006).

[41] Village Reach. "Delivering The Money: The Importance of Efficient Financial Flows for Vaccine Distribution." (2016).

[42] Mu, Yibin "Government Cash Management: Good Practice & Capacity-Building Framework" *World Bank* (2006).

decisions, fiduciary responsibilities, and the preparation of financial reports and statements. An analysis of IFMIS in five developing countries found that the extensive requirements for successful implementation were particularly demanding on these countries' administrations.[43] Unfortunately, no research has been conducted regarding IFMIS' effect on the health sector, but it is routinely used as an overall PFM solution especially for conflict countries with an obsolete or destroyed administrative and economic infrastructure.

Improving Public Procurement Systems

Desired effect: Sound, flexible procurement rules and purchasing arrangements

As public procurement accounts for a substantial portion of the taxpayers' money, governments are expected to ensure that it is undertaken with sufficient oversight in order to ensure that it safeguards the public interest and delivers high quality goods and services. Improved public procurement systems can benefit the health sector by preventing waste (e.g. high prices for drugs), preventing fraud (e.g. vendors paying bribes to win contracts[44]), and reducing transaction time. For example, needed medical equipment is available more quickly.

A study of e-procurement used by a joint purchasing system for a network of seven university hospitals in Brazil found e-procurement was successful in achieving real savings. A decrease in price > 10% was observed in 47% of the medications analyzed. A decrease > 20% was recorded in 32% of the 37 items. Overall, the unit price for 26 items (70%) had an average reduction of 23%[45].

Kenya implemented an automated public procurement process known as procure-to-pay (P2P)[46]. The procure-to-pay system is an electronic procurement tool that implements streamlined process from requisition, tendering, contract award to payment. A review of adoption of P2P by Kenyan parastatals (16% of which are in the health sector) observed reduced lead times, minimal paperwork, low tender costs, reduced redundancy, and reduced bureaucracy[47]. The government of Kenya intended to fully implement the procure-to-pay systems by mid-2017 with the goal of enhancing accountability and transparency in the procurement of goods, works, and services in the public sector.

Strategic Purchasing of Health Services

Desired effect: Selective provider contracting and payment methods that create incentives for efficiency, quality, and equity.

Strategic purchasing is the process by which funds are allocated to healthcare providers to obtain services on behalf of identified groups (e.g. insurance scheme members) or the entire population (Kutzin 2001). It is usually broken into identification of goods and services to be purchased, selection of

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[43] Diamond, Jack and Pokar Khemani "Introducing Financial Management Information Systems in Developing Countries" *IMF* (2005).

[44] http://www.americasquarterly.org/content/corruption-network-guatemalan-health-system-exposed

[45] Sigulem F, Zucchi P. E-procurement in the Brazilian healthcare system: the impact of joint drug purchases by a hospital network. Rev Panam Salud Publica. 2009;26(5):429–34.

[46] http://supplier.treasury.go.ke/site/tenders.go/index.php/pages/about

[47] Kalau, Mwenga Esther 2016. E-Procurement Strategies and the Performance of Kenya Owned Parastatals. MBA Research Project. School of Business, University of Nairobi.

service providers, service quality, efficiency and equity, and determining the contractual and financial elements of the purchase. Strategic purchasing in this context refers to a country's provider payment system, defined as the payment method combined with all supporting systems, such as contracting, accountability mechanisms, and management information systems.[48] Purchasing strategies that can help improve efficiency typically require flexibility to contract and pay healthcare providers for outputs, as well as up-front investments in capacity.[49]

In Mongolia for example, the MOH identified strategic purchasing—in particular, provider payment—as an important way to direct limited funds to priority services. Yet strategic purchasing has been limited by the continued flow of all public funds through facility-based line-item budgets that are tightly managed by the national treasury. Some new output-oriented payment systems have been used in the social health insurance system, but it remains difficult to create incentives for providers because all funds are planned, disbursed, and accounted for using input-based line-item budgets.

Payment systems should help achieve health policy objectives by encouraging access to necessary health services for patients, high quality of care, and improved equity. Payment systems should also promote the effective and efficient use of resources and, where appropriate, cost containment. Payment systems function better when they are transparent, allow for participation, and assure accountability. Yet public purchasers, such as the MOH and insurance agencies, continue to rely solely on conventional payment methods such as line-item budgets and fee-for-service.

In fee-for-service methods, the provider is reimbursed for each individual service provided. When there is no fixed-fee schedule and services are not bundled (that is, where healthcare services are not grouped into a higher aggregated unit), providers bill purchasers for all costs incurred. While fee-for-service has advantages (easy to implement, thought to improve access and utilization for underserved populations), the incentives to provide more services (and drive up costs) and use more expensive inputs makes this type of payment method unsustainable in most health systems.

To help establish strategic payment methods that incentivize the better management of expenditures, purchasers need to link payment to outputs. Evidence was found for two strategic purchasing methods that are more output driven: diagnosis-related group (DRG) and results-based financing.

Diagnosis-Related Groups (DRGs): Several low- and middle-income countries (particularly in the Asia Pacific region) are introducing or considering the implementation of DRGs to contain inpatient costs. DRG is a system of classifying patients (usually hospital patients) into groups based on their diagnosis for the purposes of payment. The system also acts as a method for managing hospital funding arrangements by using a broader category of case-based or activity-based funding (ABF) arrangements to increase the efficiency of hospital services. In practice, DRG-based hospital payment systems are supposed to adopt a standard pricing framework that provides equality in payments across healthcare providers for services of the same type. DRGs can also be linked with social health insurance and government funding mechanisms to help set reasonable and equitable payment amounts. DRGs, in theory, are supposed to provide a means for the management and financing of public and/or private

[48] Langenbrunner, John et al. "Designing and Implementing Health Care Provider Payment Systems: How-to Manual. *World Bank* (2009).

49 Cashin, Cheryl et al. "Aligning Public Financial Management and Health Financing: Sustaining Progress Toward Universal Health Coverage" WHO (2017). Web. 13 Aug. 2017.

hospital services. Yet, evidence regarding the impact of DRG-based payment systems on efficiency and quality, however, is limited and mixed.

When assessing studies that looked at the impact of DRG-based hospital payment systems, a few common themes emerged. Length of hospital stays tended to decrease and volume of hospitalizations tended to increase in countries that use DRGs to set hospital budgets, while volume tended to decrease in countries that shifted from a cost-based reimbursement system to a DRG-based payment. Annear et.al found DRGs tended to affect the non-hospital sector by shifting costs from inpatient to outpatient.[50] Despite these inconclusive results, the introduction of DRGs must be seen in the context of a country's wider health system. A study looking at DRGs in LMICs noted that DRG systems have to be understood as evolving. The introduction of a DRG system may just be part of the long path of continuous provider payment development and adjustment, and direct results may not be able to be measured. If DRGs are seen as an intervention in line with larger system wide changes then it is understandable that as a provider payment mechanism it should be implemented in line with larger contextual changes of professional ethics and increased focus on quality of care.[51]

Results-Based Financing

Desired effect: Linking financial incentives to results and targeting resources for specific outcomes will increase the likelihood of achieving those results/outcomes.

Results-based financing is an intervention which links payments to results. RBF is also known as performance-based financing (PBF) or pay-for-performance (P4P). A portion of the funding for health facilities becomes dependent on results, as opposed to just standard budget allocations. While not a PFM intervention itself, RBF requires changes in public financial management to operationalize in public health facilities. The idea of linking performance to financing is to reward providers that achieve results, such as compliance with clinical protocols or increased immunization.

Many studies have found RBF results to be uncertain. In Lesotho, one study found that RBF did not have the desired effect at the hospital level because staff lacked the capacity to implement the reform. The authors of the study noted that the policy goals in Lesotho were also not adequately translated from the national to facility level, which contributed to the lack of adoption.[52]

Another study conducted in Cameroon found concerns that RBF may inadequately address inequalities in access to care. After testing the PBF intervention targeting the poorest in Cameroon communities, the study concluded that a system of targeting the poorest of society in PBF programs may help reduce inequalities in healthcare use, but only when design and implementation problems leading to substantial under-coverage are addressed.[53] It therefore remains inconclusive if RBF interventions can address inequities in access to care.

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[50] Annear, Peter Leslie and Dale Huntington "Case-base Payment Systems For Hospital Funding in Asia: An Investigation of Current Status and Future Directions." *Comparative Country Studies* (2015).

[51] Mathauer, Inke and Friedrich Wittenbecher "DRG-based Payment Systems in Low and Middle Income Countries: Implementation Experiences and Challenges." *World Health Organization* (2012).

[52] Vian, Taryn and William J. Bicknell. "Good Governance and Budget Reform in Lesotho Public Hospitals: Performance, Root Causes and Reality." *Health Policy and Planning* 29.6 (2014): 673–684.

[53] Ilse JE Flink et al. "Targeting the Poorest in a Performance-Based Financing Programme in Northern Cameroon" *Health Policy and Planning* 31,6 (2016): 767-776

There are concerns regarding the validity of the indicators, privacy and administrative burden, when implementing RBF, making it a controversial intervention. One study examined the effect of P4P in Tanzania on internal and external accountability mechanisms. P4P had some positive effects on Tanzanian hospitals' internal accountability, with increased timeliness of supervision and the provision of feedback during supervision, but a lack of effect on supervision intensity. P4P also reduced the interruption of service delivery due to broken equipment, as well as drug stock-outs due to increased financial autonomy and responsiveness from managers. Furthermore, P4P affected management practices in Tanzania by making them less hierarchical and with less emphasis on bureaucratic procedures. However, effects on external accountability were mixed. Health workers treated pregnant women more kindly, but outreach activities did not increase. Facilities were more likely to have committees, but their role was largely limited. P4P did, however, improve internal accountability measures through improved relations and communication between stakeholders that were incentivized at different levels of the system and also enhanced provider autonomy over funds.[54]

Additionally, Petrosyan and Melkomian found that Armenia's RBF program contributed to a substantial increase in the utilization of PHC services and improved provider performance. This intervention was coordinated with well sequenced reforms and supported by nationwide training and bonus payments to keep participants motivated. Researchers hypothesized these factors may have significantly contributed to the success of the program. They also cited domestic finance as a major source of success because it encouraged country buy-in and ownership.[55]

Budget Monitoring and Reporting

Throughout the budget planning and execution processes, it is vital to have sound monitoring and reporting systems in place. The efficacy of these systems can be a big determinant of how efficiently and effectively funds are used. Budget monitoring and reporting can also contribute to anticorruption efforts, as well as potentially increase level of service through safeguarding funds against fraud waste and abuse.

Internal Controls and Internal Audit

Desired effect: Ensuring public sector integrity by preventing and detecting irregular activities

The necessity for ensuring safe, quality, and cost effective services is more often done through an audit process. The audit process certifies that all financial practices comply with PFM procedures and informs providers about any issues or irregularities, promoting transparency and health sector integrity. A study examining East and Southern Africa found that a lack of regulation combined with no formal auditing process and mixed messages from the MOF created an uncertain and fragmented policy environment across the region. Countries which had formal regulating policies on the private sector and an auditing process, such as Botswana, Kenya and Uganda, however, did not encounter these issues. The study pointed out that the lack of control may be due to the fact that most regulatory authorities do not have the capacity—finances, human resources, and logistics—to carry out all their responsibilities, especially when faced with an expanding private sector. Professional councils in Africa

[54] Mayumana, Iddy et al. "Effects of Payment For Performance on Accountability Mechanisms: Evidence From Pwani, Tanzania." *Social Science and Medicine* 179 (2017): 61-73

[55] Petrosyan, Varduhi et al. "National Scale-Up of Results-Based Financing in Primary Health Care: The Case of Armenia" Health System & Reform 3,2 (2017): 117-128

face enormous responsibilities as they are often charged with registering, licensing, inspecting, and re-licensing health professionals as well as facilities across both the public and private sectors.

Financial Reporting; Performance Reporting; Fiscal Transparency Open Government Initiatives

Desired effect: Expenditure properly documented and reported; better accountability

Financial reporting should address possible misalignment that may emerge between budget structure (how allocations are made) and expenditure management and reporting systems (how expenditures are reported). Weak financial reporting creates distortions and missed opportunities for monitoring performance in a consistent manner.

Timely, reliable, and complete financial reporting in the health sector is critical for sound policy making and planning, particularly in developing countries where a history of corruption and scarce resources makes transparency even more necessary. Historically, developing countries have attempted to accurately record spending on health services via health resource tracking. More recently, they have shown renewed interest in health resource tracking as pressure has mounted to improve accountability for the attainment of the sustainable development goals (SDGs). Health resource tracking in developing countries has advanced substantially over the years in the standardization of methods and provision of more reliable information to influence decision-makers in the improvement of health system performance. The System of Health Accounts introduced by the OECD in 2011 (SHA 11) tracks financial health data provided by countries and has seen important advances in countries' health accounts:

- Disaggregation of funding sources for public expenditure on health (external versus domestic)
- Delineation of all sources of revenues, as well as expenditure of schemes/agents (e.g. insurance schemes)
- Disaggregation of capital versus current expenditure.

A study which reviewed National Health Accounts (NHA) noted that NHAs are at most a framework and therefore can do little to address the underlying problem of weak government public expenditure management and information systems that provide much of the raw data. The emergence of budget support aid modalities poses a methodological challenge to health resource tracking; such support is difficult to attribute to any particular sector or health program.[56]

External Audit and Parliamentary Oversight

In addition to internal controls, it is important to have external monitoring bodies that act as a second check on the established internal controls. Effective external monitoring and oversight can add up to increased transparency and less fraud and corruption which could theoretically lead to more effective use of funds and better service delivery. These external monitoring bodies, however, must be independently financed and should ideally adhere to global best practice to ensure adequate oversight

[56] Powell-Jackson, Timothy and Anne Mills "A Review of Health Resource Tracking in Developing Countries." *Health Policy and Planning* 22,6 (2007): 353-362

is achieved. Civil society and elected officials can also play an important part in monitoring PFM systems and budgets.

Strengthening Supreme Audit Institutions

Desired effect: Actions can be subject to independent, professional and unbiased audit and review

Supreme Audit Institutions (SAIs) are governmental entities that are established by law to act as an external auditor, traditionally known for their oversight of public expenditure and operations. Unfortunately, no literature regarding the role of SAIs in the health sector was found. Researchers conducted a systematic review assessing the effects of audit and oversight (general SAI practices) on healthcare professionals and patient outcomes and examining the factors that explain the variated effectiveness of audit and feedback. However, the review focused on healthcare professional practices and not budgetary concerns; thus the review could not be compared with the intervention of SAIs.[57]

PFM Oversight through Media and Civil Society

Desired effect: Broader, more effective engagement and oversight on budget issues for improved transparency and accountability

It is important to involve Parliament and the media and civil society. A study, which analyzed setting healthcare priorities in Kenya, noted that there is no systematic and effective mechanism to elicit and incorporate community values in the budgeting and planning processes. The study observed that if hospitals (and the health sector) are perceived to be a social institution, then the lack of a mechanism to incorporate community values limits the legitimacy and responsiveness of the hospital budgeting and planning processes. The study concluded that to help overcome this issue, county hospitals in Kenya must incorporate participatory community engagement mechanisms such as the incorporation of community members in hospital planning committees and the use of citizen juries or planning cells. The selection of community representatives in these mechanisms must, however, be seen to be transparent and fair.[58] This study highlights that the involvement of non-governmental players can enhance the transparency, accountability, and even the legitimacy of the health sector. Similarly, using municipal-level data from Brazil spanning the period 1990–2004, Gonçalves (2014) found that municipalities which implemented participatory budgeting reforms were more likely to allocate increased funding to health and sanitation services. This finding was confirmed even after controlling for a range of other variables.[59]

Fiscal Decentralization and Local Governance

The “localization” of health services is the process of redistributing or dispersing finances, functions, powers, people or things away from a central location or authority to the local level, known as decentralization. It is both a political and administrative intervention as it moves power and decision making from central authorities to localities and local authorities. Fiscal decentralization, as a PFM

[57] Ivers, Noah et al. “Audit and Feedback: Effects On Professional Practice and Healthcare Outcomes.” *The Cochrane Collaboration* (2012).

[58] Barasa, Edwine et al. “Setting Healthcare Priorities: A Description and Evaluation of the Budgeting and Planning Process in County Hospitals in Kenya.” *Health Policy and Planning* 32,3 (2016): 329-337

[59] Goryakin, Yevgeny et al. “Public Financial Management and Health Service Delivery: A Literature Review” *Overseas Development Institute* (2017).

intervention, shifts revenue raising and/or expenditure of monies to a lower level of government who will maintain financial responsibility. In health, fiscal decentralization is a mechanism by which the control of the financing of health procurement, services, and funding is given to local authorities.

Specific PFM interventions include deconcentration, delegation, devolution, intergovernmental transfers, health-specific transfers, budget autonomy for local governments or health providers, strengthening subnational public financial management systems, and budget autonomy for health providers. Only the subsections where evidence was found are included in this report. The section below reviews the overarching assumption of decentralization within the specific interventions mentioned above and examines the positive or negative effects of decentralization on overall governance, health systems and health outcomes. Of the articles reviewed, most or all cases did not isolate the seven interventions mentioned on our framework, but rather the studies examined decentralization as a broad concept with an implication for overall governance frameworks.

The implications of decentralization are varied and often depend on pre-existing socio-economic and organizational context, financial barriers to access, the form of decentralization implemented, and the complementary mechanisms executed alongside decentralization.[60]

Revenue and expenditure management through local administration (Deconcentration)

Desired effect: the transfer of administrative and fiscal responsibilities to lower levels of government resulting in the empowerment of communities and local authorities.

Deconcentration's aim is to localize decision making in hopes of achieving greater efficiency and effectiveness. A major concern is that deconcentration may lead to the capture of decision-making processes by local elites rather than by the communities they represent, thereby promoting rather than preventing corruption. [61] Another concern is that poorer regions may suffer if the redistributive powers of central government are reduced.[62.]

The rhetoric of deconcentration does not always mirror actual implementation, nor does it always result in empowered local actors.[63] For example, in Ghana the lack of coherence in district financing, mandated managerial responsibilities, and strong vertical accountabilities has negatively influenced the authority of district health managers, thereby deterring deconcentration. After an initial process of administrative decentralization was completed in Ghana, followed by a century of administrative decentralization reforms, the result was only a limited shift of power from national to sub-national levels. While the origins of district health system development were in fact bottom-up, the broader governance tendencies towards centralization destabilized the implementation of decentralization,

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[60] Sumaha, Anthony Mwinkaara et al. " The Impacts of Decentralisation on Health-Related Equity: A Systematic Review of the Evidence." *Health Policy* 120,10 (2016): 1183-1192

[61] Vian and Collins, 2006. "Using financial performance indicators to promote transparency and accountability in health systems. U4Brief No. 1. U4 Anti-Corruption Resource Centre. CHR Michelsen Institute. October 2006

[62] Goryakin, Yevgeny et al. "Public Financial Management and Health Service Delivery: A Literature Review" Overseas Development Institute (2017).

[63] Kwamie, Akuet et al. "The Path Dependence of District Manager Decision-Space in Ghana." *Health Policy and Planning* 31,3 (2016): 356-366

resulting in an intervention which failed to empower local actors. The subsequent limited shift of power from national to sub-national actors seen in Ghana is not an isolated example of decentralization not reaching its full potential of empowering local authorities.

Decentralization is also sometimes theorized to encourage yardstick competition among local governments and to potentially lead to better quality public services (Adam et al., 2008). However, a cross-country analysis concluded that if central governments retain some authority to influence local policy and implementation without compromising the autonomy of local decision making, it is more likely that the benefits of a devolved system will be realized.[64] Many of the studies reviewed in the cross-country analysis seemed to reiterate this theme that decentralization without some central direction appears to undermine health system effectiveness—which demonstrates that pure deconcentration may not be attainable. The cross-country analysis also concluded that countries which achieve a more fiscally decentralized system are associated with lower mortality rates and improving health outcomes in environments with high levels of corruption. All the studies concluded that the implementation of decentralization policies has varied effects and is governed by context.

In Fiji, decentralization efforts in health have resulted in a shift of patients visiting tertiary hospitals to more visiting peripheral health centers. This has been accompanied by a limited transfer of administrative authority, suggesting that Fiji's deconcentration interventions reflect the transfer of workload (and patients) only, while decision-making has remained mostly centralized. A study which analyzed decision space in Fiji in five functional areas (finance, service organization, human resources, access, and governance rules) identified that the Fijian health systems remain largely centralized with limited decision space at subnational levels. According to one study of deconcentration efforts in Fiji, decentralization has had an inconclusive effect on empowering local actors (with most of the power and authority staying centrally located) and on health systems and outcomes. The results remain vague due to a 300% increase in the utilization of health services at the health center level since the introduction of decentralization, but a decline in funding for ambulatory care. This decline in funding, despite an increase of utilization, could suggest a decline in quality, thereby affecting outcomes. However, more research is needed in this area to confirm. [65]

Revenue and Expenditure Management through Local Governments (Devolution)

Desired effect: Transferring fiscal responsibilities to lower levels of government to empower communities through local governments

Evidence from a study in Zambia demonstrated that in a poor country with declining health budgets, allowing district health officials a moderate degree of choice for many key functions did not worsen inequalities among districts, nor had it reduced the utilization of health services.[66] On the positive side, deconcentration efforts in Zambia have allowed the districts to make decisions on the internal

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[64] Robalino, David "Does Fiscal Decentralization Improve Health Outcomes? Evidence from a Cross-Country Analysis." *The World Bank* (2001).

[65] Mohammed, Jalal et al. "Decentralisation of Health Services in Fiji: A Decision Space Analysis." *International Journal of Health Policy and Management* 5,3 (2016): 173-181

[66] Bossert, Thomas et al. "Decentralization in Zambia: Resource Allocation and District Performance." *Health Policy and Planning* 18,4 (2003): 357-369

allocation of resources and on user fee levels and expenditures. However, districts' choices were quite limited over salaries and allowances, and they did not have control over additional major sources of revenue, like local taxes. Bossert et al. concludes that the Zambian health sector differs from other cases of 'devolution' in that its capacity to generate significant additional revenue sources, such as local taxes, is quite narrow. The Zambian case therefore demonstrates that decentralization can have a positive impact on overall governance in terms of empowering local decision making, but can remain inconclusive about the impact on the health system and health outcomes. In contrast, in Tajikistan, post- soviet rapid devolution of both revenue and expenditure authority to local governments led to poor risk pooling and a high degree of inequity.[67]

Budget Autonomy for Local Governments or Providers

Desired effect: Local governments decide, independently or within a framework, the categories, quantity and quality of services that it intends to offer.

Budget autonomy frees local governments from waiting for central-level approvals and gives them discretionary decision making over health budgets to manage the quality, quantity, and delivery of health services under their jurisdiction.

Examples of successful budget autonomy can be seen in Colombia and Chile, where equitable levels of per capita financial allocations at the municipal level were achieved through different forms of intergovernmental transfer of public funds (i.e. allocation formula, local funding choices, and horizontal equity funds).[68] Evidence from these countries suggests that decentralization can contribute to, or at least maintain, equitable allocation of health resources among municipalities of different incomes. There were also positive effects seen in Colombia and Chile on health systems. The study describes how poorer communities being given new responsibilities for health via decentralization encouraged local communities to put sufficient resources into their health systems to provide an adequate basic minimum. No evidence of health outcomes was reviewed, but data from Colombia shows that a population-based formula for national allocations is an effective mechanism for achieving equity of expenditures. When the Philippines decentralized in the early 1990s, the share of total tax revenue allocated to local governments doubled from 20% to 40% and was distributed based on a formula of 25% equal share, 50% population, and 25% land area. This was followed by an increase in local health spending. Local government expenditures increased 11% in 1992 and 52% in 1993, with health services accounting for 66% of the total cost of devolved national functions. [69]

Decentralization can also adversely affect risk pooling, a health finance mechanism frequently implemented as national health insurance. A study in Peru found fiscal decentralization at odds with efforts to increase pooled health funds. Efforts to improve risk pooling by channeling a larger share of health budgets through the national health insurance fund have been thwarted because officials were

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[67] Cashin, Cheryl et al. "Aligning Public Financial Management and Health Financing: Sustaining Progress Toward Universal Health Coverage" *WHO* (2017). Web. 13 Aug. 2017.

[68] Bossert, Thomas et al. "Decentralization and Equity of Resource Allocation: Evidence From Colombia and Chile." *Bulletin of the World Health Organization* 81 (2003): 95-100

[69] Bossert, Thomas et al. "Decentralization and Equity of Resource Allocation: Evidence From Colombia and Chile." *Bulletin of the World Health Organization* 81 (2003): 95-100

concerned it would conflict with the decentralization policy.[70] In countries with a high degree of fiscal decentralization for collecting revenues and setting priorities for expenditures, pooling is more fragmented if there is not a strong equity-based mechanism for redistribution. This lessens equity and financial protection in the health sector.[71]

IMPLICATIONS

This section highlights selected PFM interventions that were found to have the strongest evidence of impact on health system performance and health outcomes for policymakers. The discussion is organized from the perspective of relevancy to policymakers rather than PFM area or intervention. Some interventions were shown to be more effective than others in increasing health outputs with certain caveats and considerations for policymakers to be aware of when seeking the desired end.

How to increase funding for health

Policymakers can increase funding for health through PFM by increasing tax revenue, prioritizing health financing, and increasing efficiency in health spending.

Improving tax policy and collection has **increased government tax revenue** overall. Pro-poor taxes, such as taxes on corporate gains, tailored personal and corporate income levels paired with and avoiding taxes on consumption can contribute to health results. However, even if taxes are increased or introduced, expected revenue can fall short due to inadequate administration, antiquated collection methods, and weak enforcement mechanisms. Policymakers should adopt PFM interventions that increase the efficiency and effectiveness of tax administration by reducing cost of compliance, increasing ease of compliance, and reducing corruption with system automation and adoption of a-risk based approach to enforcement.

Policymakers need to **make health a priority** for public financing. In many cases, increased general government revenue does not guarantee a proportionate increase in health funding. There are several ways policymakers can prioritize health spending:

- Policy advocacy which includes making the economic case for health in terms of impact on educational attainment, employment, and economic growth (advocacy complements the options below).
- Budget planning and budget justifications to make health financing a priority.
- Creation of a tax fund specifically for health such as dedicating a portion of tax revenues to health services.
- Introduction of taxes or fees earmarked for health, such as taxes on mobile phone calls, financial transactions, alcoholic beverages, and tobacco, although there is debate among experts as to the efficacy of earmarks.
- Decentralization of spending to the subnational level to increase local pressure and

[70] Francke, Pedro "Peru's Comprehensive Health Insurance and New Challenges For Universal Coverage." World Bank (2013).

[71] Cashin, Cheryl et al. "Aligning Public Financial Management and Health Financing: Sustaining Progress Toward Universal Health Coverage" *WHO* (2017). Web. 13 Aug. 2017.

accountability to fund health, albeit the evidence is mixed.

Thirdly, policymakers can support efforts to **increase the efficiency of health spending**. Even if there is increased allocation of public funding to health, those funds may not be spent efficiently. The elements of effective expenditure include effective planning, controlled expenditure, and effective oversight. There were PFM-related areas to increase the efficiency of health spending:

- Policymakers may consider several interventions to improve planning such as introducing a Medium-Term Expenditure Framework (MTEF) or multi-year sector budgeting plan to improve predictability in health funding and consequently the health sector's ability to spend and achieve results in a more predictable manner. They may also consider better yearly planning—looking at gaps in the needs collation, prioritization, and allocations processes.
- Automation of systems has shown effective to improve control of spending. The introduction of two interventions—IFMIS and e-procurement—have potential to reduce waste and fraud by increasing transparency and accountability. Procurement is often a source of corruption and ineffective political spending. E-procurement can reduce fraud and waste and reduce transaction costs as well as the cost of drugs, medical supplies, and other commodities. Integrated financial management information systems often are used to introduce greater control, transparency, and accountability into the expenditure process, reducing human error and corruption through a series of automated checks and controls enforced for all transactions. Although no research has been conducted on IFMIS' effect on the health sector, it is a proven PFM intervention that raises the budget process to higher levels of transparency and accountability and expedites government operations.

How to make government health spending more accountable and responsive

As stewards of the health system and representatives of civil society, policymakers should take steps to improve oversight and increase accountability of health spending. Policymakers may consider several PFM interventions:

- Improving the analysis, visualization, and communication of health financing data to enhance understanding and use.
- Automation of some reports to increase transparency and accountability.
- Increased oversight via audit and reporting for better accountability within health systems and more transparency.
- Fiscal decentralization, the act of decentralizing control of health procurement, services and funding to local authorities to increase accountability and responsiveness and to create a tighter feedback loop for oversight.

GAPS

More research is needed on the role of parliamentary oversight and policy environment. Our research did not unearth any results in these areas. Parliamentary oversight is a hallmark of democracy. It is able to hold the executive branch accountable for its actions and ensure that it implements policies in accordance with the laws and budget passed by the parliament. This is predominantly true in health.

Executive action in health, particularly in developing countries, remains a top priority for government. However the research shows that despite the planning and even execution of health budgets, many priority measures are never fully implemented. It is, therefore, parliament's responsibility to oversee budget formulation and the implementation of policies to ensure that health priorities are fully funded and addressed.

More research is also needed on the role and effects of a Supreme Audit Institution on the health system. No research on the topic was found.

Improvements in budget classification—removing duplicates, miscoding, reducing the number of lines, or reducing the number of off-budget transactions—are seen to be key PFM interventions in many settings. While acknowledged as critical interventions for broader PFM outputs (budget transparency and clarity), no research regarding budget classification and its direct contribution to health was found. This could be a potential area for more research.

More research is also needed on e-procurement such as the procure-to-pay tool used in Kenya. As seen in one study, this is a good option for health system managers and procurement agencies to improve PFM and health outcomes simultaneously by reducing corruption time lag and increasing transparency.

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ANNEX 1: PUBLIC FINANCIAL MANAGEMENT KEY INFORMANTS

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DO BETTER LAWS AND REGULATIONS PROMOTE UNIVERSAL HEALTH COVERAGE? A REVIEW OF THE EVIDENCE

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EXECUTIVE SUMMARY

The importance of policies, laws, and regulations (referred to collectively below as “policy instances”) as instruments to support progress towards Universal Health Coverage (UHC) in low- and middle-income countries cannot be understated. However, there has been insufficient focus in the literature on the role of these instruments, leading to a lack of evidence as to what constitutes a supportive legal environment that can consistently provide a strong basis for UHC reform processes. In this review, we explore how policies implemented in different country contexts have had an impact on their achievement of UHC goals.

In order to better differentiate the effect of various policy instances on the achievement of UHC goals, we developed a typology for policy instances and then ascribed the different aspects of governance to the instances identified in the literature, based on how they were designed and implemented. Finally, we considered the success of each policy instance identified, in terms of achieving intended UHC-related outcomes.

A literature review was performed and supplemented by interviews with international governance experts, to understand the additional context around the implementation of several key health system reforms. Experts spoke to the critical enablers for good governance in policy instance implementation, the roles of institutions, and the evidence for subsequent impact on intended UHC outcomes.

We compiled 234 unique policy instances across countries that were relevant to this analysis. Primary legislation was the dominant form of policy instances found in the review, and these were mostly national (88%) in contrast to regional (7%) or local (5%) laws. The majority of policy instances were designed to take effect through improved responsiveness and accountability. This seems appropriate given the number of policy instances focused on making progress towards UHC goals of increased coverage (212 instances), improved equity (191) and increased financial risk protection (186), in other words, designed to be responsive to the general population’s needs. When policy instances were focused on increasing coverage, the majority of these sought to expand services to new population segments and vulnerable populations (125 instances). The remainder focused on expanding service coverage geographically (87 instances).

Most of the reforms linked to the policy instances and associated with achieving UHC tended to have a health financing focus, such as; raising revenue through tax-based financing, increasing insurance coverage, or addressing demand-side financing. There were also several linked reforms that sought to address user fees and implement subsidies. Promoting greater accountability of actors in the health system, insurance agencies and providers in particular, and improving transparency, especially regarding fees and subsidies, were critical aims in many of these policy efforts. Policy instances focused on drugs and supply chain issues aimed to increase accountability and reduce corruption in the sector. Human resources for health was also a major policy focus with efforts to increase accountability and responsiveness at the regional and local levels. There was relatively less frequency of policy instances focused on health information systems. Those found focused on improving quality and access through more accountable and transparent systems.

Policy instances focused on decentralization initiatives came up repeatedly as a basis for strengthening capabilities and performance at each level of the health system across a country. These policy instances appeared more likely to be noted as a success when they included strong accountability measures, while allowing for increased responsiveness at the local level.

Key informants emphasized the role of citizens' voices in enabling major health system reforms towards UHC. This role is often less documented as the impact is harder to isolate. It is nevertheless critically important in the policy formulation and implementation process.

Countries on the cusp of undertaking major health system reforms through the drafting and implementation of relevant policy instances will have to prioritize their governance interventions based on the risks specific to their existing health system contexts. At a minimum, they should do all that is possible to avoid some of the negative or unintentional aspects of sub-optimal policy instance design, that can reduce efficiency and quality. Where possible, emphasis should be placed on capturing synergies in governance interventions that increase responsiveness, accountability and transparency, as this review has found an abundance of evidence that these governance results can be mutually reinforcing and lead to step change improvements in the functioning of the health system.

Governments may have political and process constraints on the number of policy instances they can design and implement in a period leading up to and during health sector reform. In terms of which health system component to focus such change on, we have more evidence for policy instances focused on health financing, given that designing effective financing mechanisms can shape the entire health sector. Following this, policy instances that address human resources for health and supply chain management should be prioritized as they appear to have key strengthening effects on the provision of health care by increasing efficiency, equity, and quality.

This review of the evidence to date of governments' policy-making experience highlights the importance of effective policy design and implementation with a clear orientation towards better governance, and in particular increased responsiveness and accountability.

INTRODUCTION

Policy and Regulation TWG: Conceptual Approach

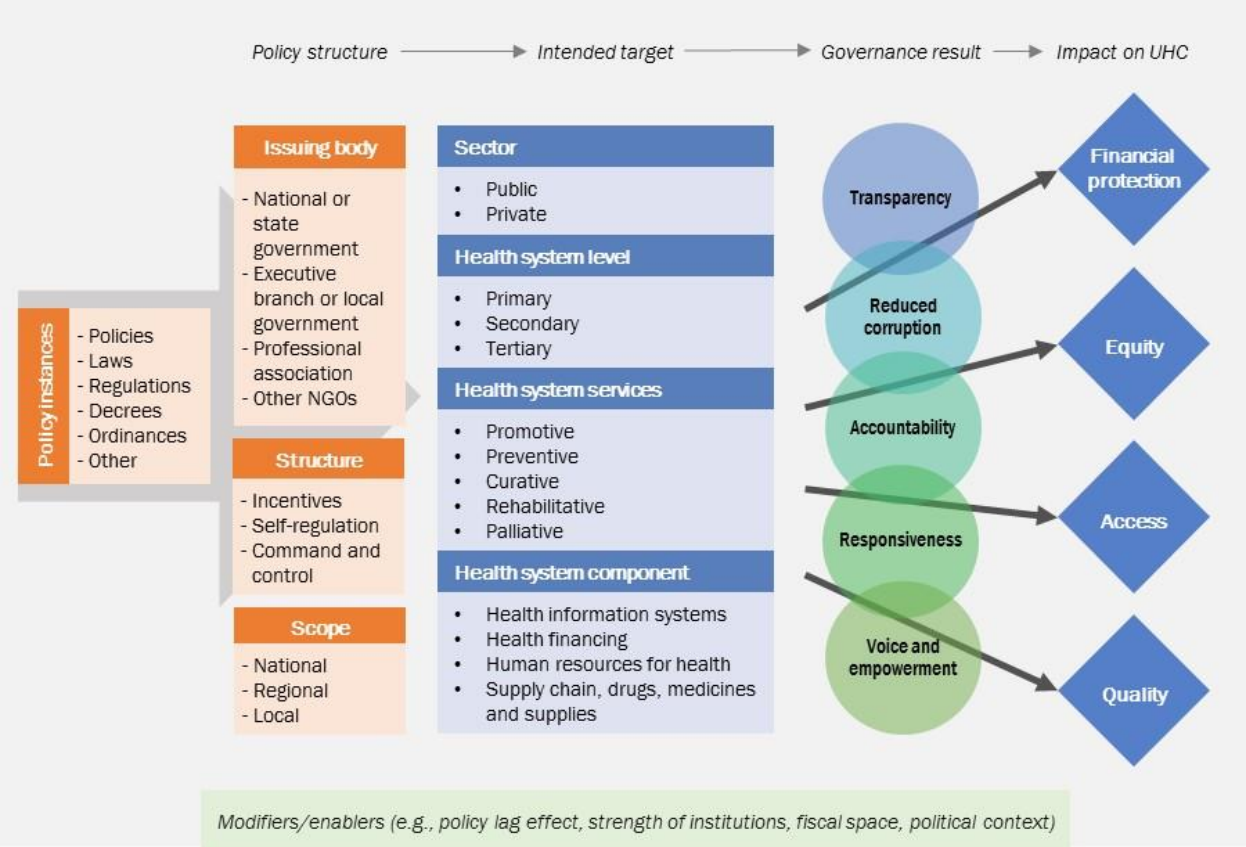
Policies, laws and regulations (defined individually below and hereafter referred together as 'policy instances') are critical instruments to support the achievement of UHC in low- and middle-income countries, and best practices related to their development and implementation have been relatively neglected in the literature [1].

Due to insufficient focus on these instruments, there is a lack of evidence as to what constitutes a supportive legal environment that can consistently provide a strong basis for UHC-related reform processes. As a result, global efforts to implement health system reform and move towards UHC may not be achieving maximum impact. In this review, we explored how policies, laws and regulations implemented in different country contexts have had an impact on the achievement of UHC goals.

This review focused on both the processes involved in developing, implementing, enforcing and monitoring policy instances, and the effects of these. We looked deliberately at policies, laws and regulation as tools of governments and other bodies to influence the system and examined the factors that led to a particular policy instance being more or less effective than an alternative from a similar context. Key informant interviews were especially helpful in revealing the often undocumented contextual factors surrounding success or failure for a particular policy instance. Extending analysis towards the effects of policy instances requires an assumption that they were adequately developed, implemented and enforced. Any instances which are developed through good design practice [2], but are poorly enforced through insufficient commitment, coordination and cooperation [3] were less able to support our understanding of the effect of health governance on UHC. However, to the extent possible, this review captures the influences of different policy instances on UHC aspirations with a specific focus on inherent aspects of governance that served as enablers.

Figure 5.1 illustrates the conceptual framework for this review, linking the impact of policy changes on the achievement of UHC goals. This framework aligns with guidance received from the MTE Secretariat on an overall health governance framework (adapted from Bennett, 2015). In order to better differentiate the effect of various policy types on the achievement of UHC goals, we first propose a typology for policy instances, also covering the enforcement and intended target. We then link the aspects of governance that are expected to be directly related, given how the policy instance was designed and implemented. Finally, we consider how successful a policy instance can be in achieving intended UHC-related outcomes, based on the main components of UHC as established by the WHO. The intermediate "governance result" provides a lens through which each policy instance operates from a governance perspective, and guides thinking on a pathway through which the policy instance was effective in enhancing UHC outcomes.

Figure 5.1: Conceptual framework for impact of policies on UHC



Given the potentially vast scope of relevant policy instances and the general definition of UHC-relevant progress, we applied a rigorous definition for policies, laws and regulations; the governance result area; and other key terms involved in the framework. This helped ensure consistency in our approach and application across review steps. The following section on definitions of key terms mirrors the Policy and Regulation TWG's approved scope of work, as drafted in consultation with the TWG members.

Policies, Laws and Regulations

Policies when distinguished from laws and regulations are any guiding documents or frameworks in which governments or other institutions outline objectives, guiding principles and strategies for achieving those objectives; and give authority to undertake actions in pursuit of those objectives. Policies are often developed through consultative processes. There could be different levels of policies. *Global policies* can be normative guidelines; health sector development frameworks and goals; health-related conventions, agreements, or financial commitments; health and human rights instruments; and treaties developed by global bodies. To maintain focus on the impact of the policy, this review only considered global policies to the extent these have been ratified, adopted, and implemented by national governments. *National or provincial* policies include health sector development strategies, strategic action plans, executive branch directives, and budgets. Finally, *institutional or agency policies* are documents issued by line ministries and departments that specify how laws, decrees, and other high-level policies should be implemented. Policies also include documents issued by ministries of health

defining the roles of actors and expected outcomes for key processes, such as public-private partnerships, pharmaceutical sector development, and others. Also, there can be *operational policies* which are rules, codes, guidelines, plans, budgets, and service and administrative norms that governments, organizations, professional associations, and health facilities use to translate national laws and policies into programs and services. Generally, in this work we are concerned with policies at a level above the operational, in order to limit the scope of a potentially vast inquiry.

Policies act as guidance for the actions of organs of the public health system. A key distinction between policies and laws/regulations is in the latter's greater legal significance. Policies can be considered norm-setting documents that stop short of being law. They are produced as a part of the routine role of key institutions engaged in stewardship of the health sector and can be informed by consultations with different actors, including those outside government. While there may be enforcement action for non-compliance with policies, action would likely preclude legal consequences that would fall within the court system and rather would be enforced through consequences as defined and implemented by the issuing body.

The distinguishing feature of *laws* are that they are the product of the policymaking activity of government and include primary legislation (i.e., acts passed by legislature); secondary legislation issued by the national executive or local government action, e.g., decrees, ordinances; and laws made by judicial action through binding precedent in common law systems. Laws can be promulgated at multiple levels of the health system. For example, laws can be passed by supra-national bodies like the European Union, as well as national, state, and local governments. In many contexts, statutory and common laws must co-exist with customary laws. For the purposes of this review, we focused on statutory and common laws only.

Finally, we defined the term *regulation* to mean the promulgation of rules by government accompanied by mechanisms for monitoring and enforcement, usually assumed to be performed through a specialist public agency, as well as, rules made by non-state actors in the health sector (e.g. various forms of self-regulation).

Together, laws and regulations constitute the legal bedrock on which many processes of the health system lie. For example, legislative action may define the rights of individuals to a certain standard of healthcare or institute a new/reformed health insurance system.

Structure for Policies, Laws and Regulations

As part of the process to define and implement policies, laws, and regulations, there has to be consideration of the enforcement mechanisms to be employed to address non-compliance by the actors subject to the policy instance. Various enforcement mechanisms could be employed to detect and incentivize behavior that complies with the intent of the policy, law or regulation. Our review seeks to assess which broad category of enforcement strategies seems to lead to effective implementation of policies, laws, and regulations. The three enforcement strategies considered are outlined in Box 5.1.

Box 5.1: Enforcement Strategies

Incentives are inducements to do or not to do something, such as a tax credit for locating a clinic in a rural area.

Self-regulation is regulation put forth by a professional association, as well as by internal motivations, such as a desire to attract more patients, for example.

Command and control consists of mechanisms established by law, such as a licensing requirement or the authority of a ministry to issue safety or quality standards and enforce compliance with them.

Governance Results

There are several operating definitions for each of the five governance areas of effect we considered in our review. We adapted these definitions to provide a more objective approach to assessing if a particular policy instance flowed through a particular governance result area. There may be overlap between some of these governance areas. For example, "transparency" may reduce the scope of corruption by increasing the availability and accessibility of information and thus reducing information asymmetries that could have previously been exploited. Similarly, the government and the private sector tend to be responsive when they are likely to be held "accountable" for their policies and actions. We define the five governance result areas in Box 5.2.

Box 5.2: Definitions of Governance Results

Transparency: policy instances that lead to increased documentation requirements related to health sector processes, mandated requirements to share data or documents from government and private sector to citizens and civil society, or improved accessibility of information shared by government to civil society, citizens and other non-state stakeholders.

Responsiveness: policy instances that require or incentivize the government or the private sector to pursue citizen's needs by collecting information on satisfaction and expectations or be more flexible in their ability to react to citizen's needs, or act in response to citizens' needs.

Accountability: policy instances that require justification for behavior by duty holders (government, providers etc.) and/or impose sanctions/costs on duty holders on non-performance or underperformance of portions of the health system they have influence over, particularly against a political backdrop that has been actively promoting UHC outcomes.

Reduced corruption: policy instances that reduce systemic problems in the health system that lead to embezzlement, bribes or other leakages, or that reduce costs/risks to citizens for reporting such incidences (whistleblower protection).

Voice and empowerment: Citizens' participation in policymaking, service design, and provision is key to promoting good governance. Involvement can go beyond citizen consultation practices to active citizen participation in the co-production and co-delivery of public policies [4]. However, the data shows this is a nascent area for governments at the forefront of these participatory initiatives. Thus for the purposes of this review we have focused on policy instances that embed consultative processes as follows: a) require an increase in citizens' level of information about the health system, their benefits and own care, and b) provide citizens with the capacity to act on this information and

inform their own decision making, or c) provide a forum to report on health sector performance regarding this information.

Intended UHC Outcomes

UHC is defined by the WHO as ensuring that all people have access to needed promotive, preventive, curative, and rehabilitative health services, of sufficient quality to be effective, while also ensuring that people do not suffer financial hardship when paying for these services [5]. For the purposes of the review undertaken for this paper we provide interpretations of the key components of UHC in Box 5.3.

Box 5.3: Definitions of Key UHC Outcomes

Financial protection: Financial protection is achieved when direct payments made to obtain health services do not expose individuals to financial hardship and do not threaten living standards. Therefore this review focused on policy instances that aim to reduce the number of people exposed to financial hardship due to direct out-of-pocket payments made to obtain needed health services at point of service. The removal of user fees or the implementation of health insurance (with subsidized contributions for those unable to afford premiums) are key policies to promote financial protection as health systems need to have a predominate reliance on public revenue sources: mandatory, pre-paid, and pooled to achieve financial protection.

Equity: Equity in health involves more than just equality with respect to health determinants, access to the resources needed to improve and maintain health, or health outcomes. It also entails a failure to avoid or overcome inequalities that infringe on fairness and human rights norms. Groups that commonly experience inequalities can be defined socially, economically, demographically, or geographically and commonly include poor or marginalized persons, racial and ethnic minorities, and women. For the purposes of our review, policy instances that had a pro-poor orientation were the focus, in other words, how effective were the policy instances in improving equity in access to health services. We defined improved equity for key populations and geographically under Access.

Access: Access has three dimensions: physical accessibility, in terms of the availability of quality health services within reasonable reach; financial affordability, in terms of people's ability to obtain services without financial hardship; and acceptability, where patients perceive services to be effective and they are not discouraged from using them by social or cultural factors. For the purposes of this review, we sought to identify policy instances that improve access to care for specific populations whether defined by geography (e.g. urban vs. rural) or population group (e.g. sex workers, migrants). We also attempted to identify policy instances that improve access to better services whether an increased number of services available or improved technology or drugs for existing services.

Quality: There are six aspects that pertain to the quality of healthcare services: safe, effective, patient-centered, timely, efficient, and equitable. Our review focused on policy instances that promote the provision of safe (avoiding unnecessary injury or complication), effective (using proven interventions, and only as necessary), and timely (limiting harmful delays to receiving care and reducing wait times) services as the other aspects were adequately covered under our definitions of access and equity.

METHODOLOGY

Literature Review Methodology

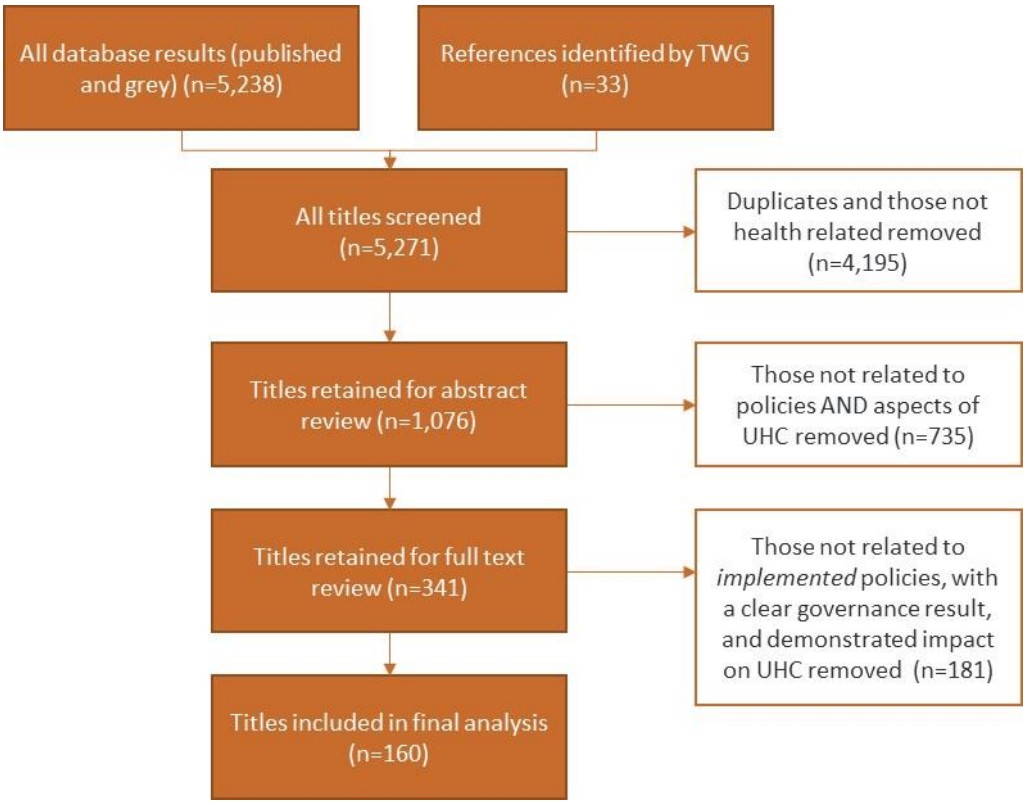
A scoping review methodology [6] was adopted, given its flexible approach, lack of narrow parameters, and suitability for examining the breadth and depth of literature (both published and grey) in the policy space. The evidence found was predominantly in the form of reviews and case studies. As expected, we did not find any randomized control trials in this subject area. The search strategy covered the peer-reviewed literature as well as published book chapters, project reports, and academic dissertations. For published literature, the following databases were used: EMBASE, Medline/PubMed, POPLINE, Care & Health Law, Global Health, and Cochrane Library. For grey literature, we relied on NYAM Grey Literature Report, DocuTicker, general Google searches. The search was conducted in English only and focused on papers published since 1990.

Several search terms were used in various combinations, including: 'universal health coverage', 'universal health care' 'stewardship and governance in health', 'health insurance and regulation', 'UHC policies', 'impact of policies on health systems', 'effect of policies on UHC', 'policies that promote UHC', 'policies that inhibit UHC', 'impact of new health policies', 'health policy assessments', 'Sustainable Development Goal 3.8', 'legislation', 'Act', 'Code', 'mandate', 'jurisprudence', 'decree', 'access to health care', 'health equity', 'service delivery', 'failures', 'pharmaceuticals', 'health care delivery', 'health service delivery', 'primary health care', 'access to health care', and 'maternal health care'.

As the search relied on general keywords, many results were returned, and a strong and multi-stage exclusion process was required. The title review excluded documents pertaining to policy instances that were clearly unrelated to the health sector, were published before 1990, or were not in English. The abstract review was conducted independently by two reviewers. The inclusion criteria required that the abstract provided evidence of policy instance effects on the health system and related to a relevant measure of UHC. The exclusion criteria required that the abstract did not relate to a policy, regulation, or law or did not relate to a relevant measure of UHC. The abstract reviews were conducted independently by two reviewers who marked each paper as either included, excluded, or 'for further assessment'. Once the abstract review was complete, a third reviewer made a final determination on those papers where the first two reviewers disagreed, or that were marked for further assessment. For the full paper review, a data extraction table was used to guide the reviewers in their assessment of whether the paper should be included or excluded. For inclusion, the paper had to pertain to a policy instance that had already been implemented, had a clear governance result or governance results, and demonstrated impact on UHC. Papers that proposed policy reforms or that could not be linked to an impact on a relevant UHC measure were excluded.

Figure 5.2 displays a flow chart summarizing the review process. In total there were 5,271 results identified and screened through the search. We retained 1,076 titles for the abstract review and 341 for a full paper review. We included 160 papers in the final analysis.

Figure 5.2: Literature Review Flow Chart



Key Informant Interviews Methodology

TWG members identified experts based on their area of academic expertise and professional experience to supplement the findings of the literature review and to share their views on key gaps in current practice. This list of experts was vetted by the Secretariat to avoid multiple TWGs requesting the time of the same expert. Using semi-structured key informant interviews, nine interviews were conducted during July–August 2017. The interview protocol focused on key UHC successes and gaps in countries relevant to the interviewee's expertise, then explored the influence of different governance interventions on that success or failure. Lastly, the interviews addressed the critical enablers for good governance in policy implementation, the roles of institutions, and the evidence for policy instances' impact on intended UHC outcomes. Findings from these interviews are documented anonymously within the results that follow.

RESULTS

Summary of Evidence

We summarize the pattern of evidence pertaining to the type of the policy instance, the conditions in which they have been implemented, and their intended targets for the 160 relevant studies identified through the literature review. While the majority of studies focus on a single policy instance implemented in a country, some of the studies present evidence from a cluster of countries or a cluster

of policy instances within a country and hence the number of unique policy instances exceeds the number of studies. We have 234 such unique policy instances.

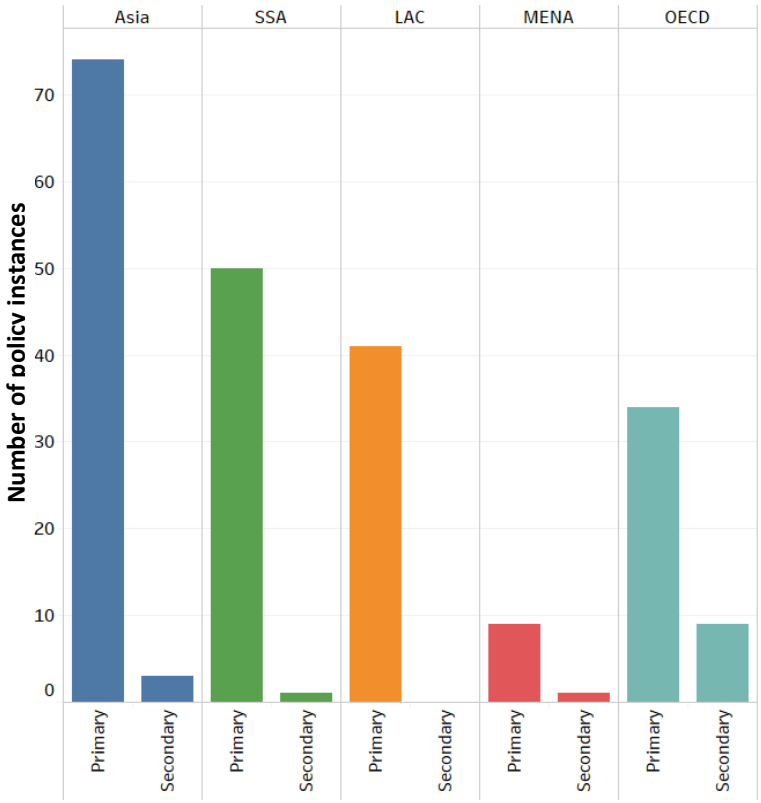
Distribution of Evidence by Type of Policy Instance

All UN member states have agreed to work towards UHC, as captured in the targets set through the Sustainable Development Goals (SDGs). The resolution, adopted on December 12, 2012, urges governments to move towards providing all people with access to affordable, quality health-care services. Accountability for progress toward the SDGs lies with national governments and the nature of the reforms has necessitated action at the national level. Figure 5.3 illustrates that primary legislation issued by national governments was the prominent form of policy instances. Primary legislations were the dominant form of policy instances found in the review, and these were mostly national (88%) in contrast to regional (7%) or local (5%) laws. This was an expected result, as formalized laws were more likely to be codified and studied in the literature than policies or other instruments that may not have been fully ratified or implemented.

Implemented by national governments and covering a wide range of institutions, very few policy instances were of the kind that would modify incentives of health system actors (13%) or promote self-regulation (1%); rather the majority were policies structured as command and control. As most of the policies instances pertaining to UHC were intended to increase health service coverage over wide geographical areas, it is relatively easier for governments to do so through command and control in comparison to incentive-based policies [key informant, July 2017].

The nature of the policies reviewed involved some that were designed to radically overhaul the healthcare delivery system while others involved a step-wise approach, with a focus on primary healthcare and maternal and child health services delivered through the public sector featuring prominently. Finally, the policies analyzed through our review covered both private and public sectors, with a slightly larger emphasis on public sector entities delivering primary healthcare.

Figure 5.3: Number of Policy Instances by Policy Structure (Issuing Body) and Region



SSA: Sub-Saharan Africa, LAC: Latin America and the Caribbean, MENA: Middle East and North Africa, OECD: Organization of Economic Cooperation and Development

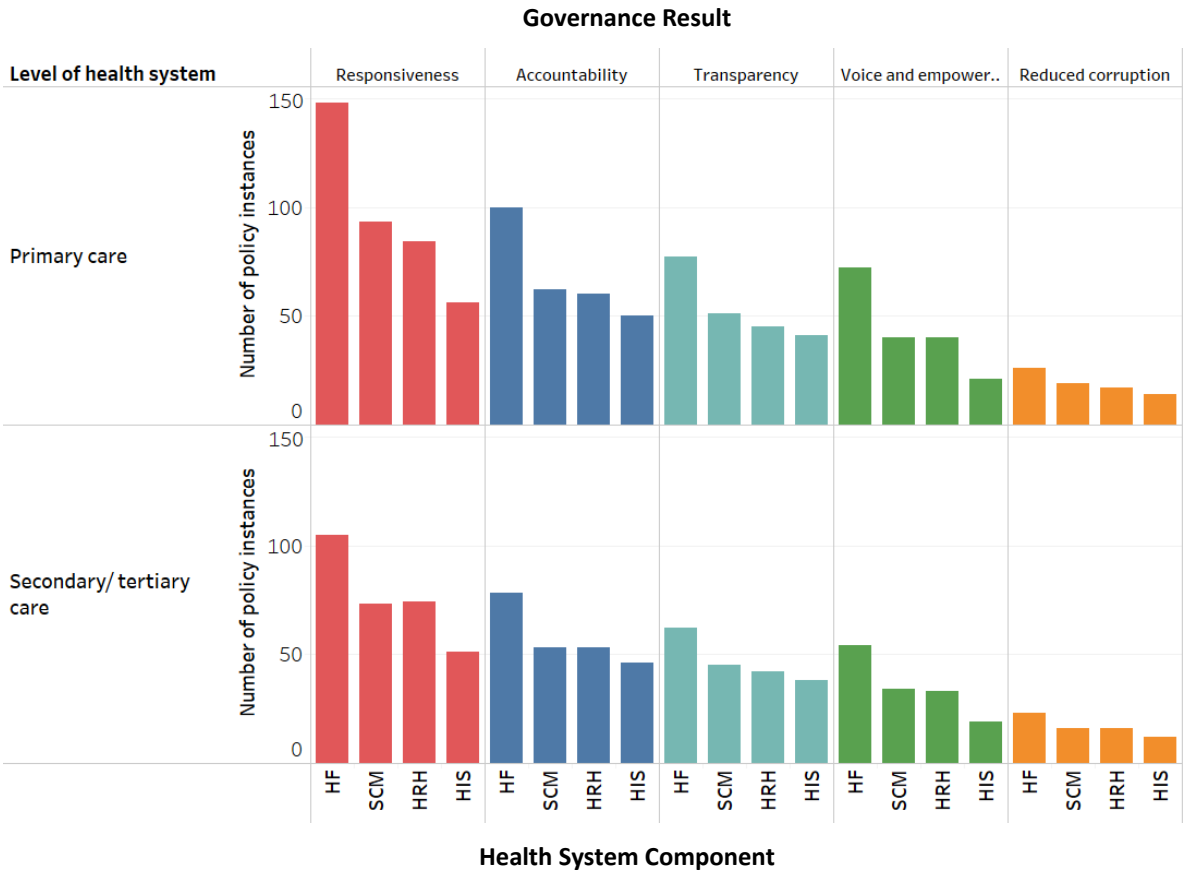
Distribution of Evidence by Four Main Health System Components

The five governance result areas defined in Box 2 are not mutually exclusive, and any policy instance aimed at achieving UHC could flow through a combination of governance areas. We found the most evidence for “responsiveness” and “accountability” with 197 and 129 references, respectively, among the 234 policy instances. This is consistent with the premise that responsive and accountable governance at national and sub-national levels is critical; a cross-cutting enabler of development towards the SDG goals, including UHC [7]. Policy instances that aimed to improve “transparency” and “voice and empowerment” were found in 108 and 101 references, respectively. Policy instances that aimed to “reduce corruption” to improve governance and move towards UHC had the least evidence with only 33 policy instances. Figure 4 illustrates the distribution of studies by level of the health system, the targeted component of the health system, and the governance result area. The charted values represent the relative frequency of policy instances within a governance result area at the level of the health system, disaggregated by the health system component. We assessed which governance area(s) was most relevant to the policy instances’ design and implementation. Several policy instances applied

to both levels of the health system and multiple health system components and were designed to flow through multiple governance result areas. Across all governance results there appears to be a greater number of policy instances that focus on strengthening primary health care.

Policy instances in several countries, including Brazil through their Unified Health System, Nigeria through their National Health Act, and Thailand through their UHC Policy, emphasized the importance of primary healthcare as the target for improvement within the health system, coupled with an effective referral system to secondary and tertiary care for managing higher-level facility capacity and costs [8-22]. Many country governments face the major challenge of establishing an essential package of services at the primary level that can be reliably funded and would promote access to essential interventions for the majority [key informant, July 2017]. Acknowledging the critical role of primary care for its communities, the Ministry of Health in Nigeria increased financial autonomy for primary care facilities to revitalize its previously inefficient primary care services.

Figure 5.4: Number of Policy Instances by Health System Level, Health System Component and Governance Result



HF: health financing, SCM: supply chain management, HRH: human resources for health, HIS: health information systems

Health Financing

Studies related to health financing dominate the identified evidence base. This fact was re-emphasized during a key informant interview where it was noted that to operationalize the various policies, laws and regulations required to achieve UHC, countries first need a robust health financing strategy [key informant, July 2017]. Our results suggest that most health sector reforms associated with achieving UHC tended to focus on either raising revenues through tax-based financing [14, 23-29], increasing insurance coverage [17, 23, 30-38], or addressing demand-side constraints through conditional cash-transfers [14, 39], and vouchers [40, 41]. There were also several reforms that sought to address user fees [11, 23, 25, 26, 28, 42-50] and implement subsidies reducing the cost of care for the poor and vulnerable [12, 23, 38, 51-58]. Several of the government-funded subsidy schemes (including subsidized insurance premiums), like the National Drug Policy Act in Bangladesh and the 30 Baht Scheme, had a focus on primary healthcare for their provision of free or heavily subsidized drugs or for affordable access to care for a pre-defined list of conditions [16, 38, 59].

(a) Informal payments and user fees

Even in situations where user fees had been reduced or eliminated, especially for the poor, the continuation of informal payments to physicians and other clinical providers suggests reduced transparency and accountability in the system. Such informal payments contribute to inequality in access and increased financial burden on poorer patients. We found evidence of health sector reforms which addressed this. Significant investments in transparency and accountability underpinned reforms laid out in Kyrgyzstan's *Manas* and *Manas Taalmi* plans, which were successful in reducing informal payments and improving financial protection related to effects of ill-health [60]. Under its healthcare reforms, China attempted to reduce informal payments to physicians by increasing reimbursements to providers for labor-intensive services, thereby allowing hospitals' wage structure to adjust. China also attempted to lower incentives for undesirable behavior in the form of supplier-induced demand for drugs and diagnostic services [61]. In Indonesia, uniform hospital-based case reimbursements for outpatient and inpatient services within each of five specified regions under the *Jaminan Kesehatan Nasional* (JKN) scheme were set. In order to increase transparency and eliminate informal charges, these reimbursement rates are officially published and recirculated after every revision [Key Informant, July 2017].

User fees at the health facility in low- and middle-income countries are understood to create a barrier to utilization, particularly for lower-wealth quintiles, and so can be problematic for achieving UHC. Many health facilities rely on these for essential revenue to finance services, especially when government tax-funded or other financing is inadequate. User fee or cost-sharing policies, laws and regulations need to be implemented carefully and targeted to reduce undesired effects. In this context, where they exist, increased transparency is required with how user fees will be levied and any available exemptions or waivers. As this is a continuing issue which also contributes to informal payments, to be effective in promoting transparency these fees need to be formally published and clearly communicated to patients, with defined exemptions in place for those who need them, as in the case of Cambodia [41]. There is voluminous literature on user fee introduction and removal/reduction policies. We found cases where follow-up policies may require to be viewed through the transparency lens as well. In Thailand, while the country currently does not have any health-related user fees for those covered under the government-supported schemes, there is strong advocacy for the reintroduction of some co-payments (which were eliminated in 2006) to co-exist with the various reimbursements providers receive, e.g., bundled

payments for inpatient care. Co-payments can play a role in reducing supplier-induced demand, as it makes patients more inquisitive as to the necessity for certain procedures [Key Informant, August 2017]. Generally, we find that increased transparency and accountability around the managed introduction of co-payments is important to reduce opposition and ensure patients' understanding, as long as these changes are to promote scheme sustainability, and will be channeled towards increasing resources available to deliver priority health services.

(b) Reforms moving towards single-payer system

Countries considering pathways to increase coverage of pre-payment systems and consolidate risk pools could design and implement a single-payer health insurance system. These reforms are often predicated on projected efficiency and access gains in a single entity purchasing care for a majority of the population, and driving improved quality through its purchasing and agenda-setting power. The governance arrangements and the administrative structures of the single payer agency are critically important to ensure adequate regulatory oversight and to follow principles of strategic purchasing, which among other benefits, would align incentives of providers towards higher efficiency, quality, and responsiveness to demand. In Indonesia, the single payer agency BPJS-K (Bahasa acronym) was created from separate for-profit, social security institutions administering formal sector schemes as a public entity to oversee JKN, the national health insurance scheme. Realizing the benefits of a single payer in this context was a critical aspect of Law 24 of 2011, especially with regard to two objectives: first, to make BPJS-K subject to the government's accountability office on the submission of audited financial statements, and second, to turn the entity into a non-profit, run solely for the benefit of insured members [Key Informant, July 2017]. Without effective regulation and government oversight of such a single national insurance payer, the related reform risks cost escalation in scheme operation, inadequate controls, and poor responsiveness of the payer to emerging trends in utilization and quality. In Thailand, managing the competing goals of various institutions has proven challenging at times. The National Health Security Office (the purchaser - whose aims include controlling health care expenditure) and the Ministry of Health (the provider - whose aims include securing sufficient funding for public facilities) are both politically influential institutions that are in tension when it comes to setting appropriate reimbursement levels. To date, this has resulted in overall cost escalation, placing additional financial burden on the scheme [Key Informant, July 2017]. However, the case of Estonia shows that by implementing appropriate accountability frameworks, efficiencies can be generated through a single-payer healthcare system [62].

(c) Reforms enforcing a split between purchaser and provider

Many countries on the path towards UHC introduce policy changes that distinguish and then enforce a split between the purchaser and the provider of health services. This is a basis of most policy instances we found that instituted or scaled up health insurance, i.e., through the establishment of a health insurance agency to act as a purchaser of services from both public and private health facilities. Many countries have successfully implemented this type of reform, including Thailand under the Universal Coverage Scheme, the Philippines through PhilHealth, and others. A fundamental rationale for the split between purchaser and provider is to promote the ability for funding to follow the patient, who can register at a facility of choice. This incentivizes providers to compete on access and quality to earn revenue. This competition, if well-designed and fostered, should improve the responsiveness of the system and ultimately health outcomes [63]. In practice, in health insurance schemes funding is seldom fully tied to the patient as public facilities often receive additional general budget funding for expenses

such as salaries and overhead. In addition, to ease scheme administration there are often requirements to only register with facilities in the patient's residence area (vs. near the place of employment) for a minimum period (e.g. at least three months), limiting portability and ultimately choice and healthcare entry points for patients. Our review suggests that reaping the full benefits of reform here takes more than just the initial separation of purchaser and provider, and strategic purchasing mechanisms need to be implemented additionally to create the right incentives for providers to deliver quality and efficiency, alongside effective monitoring and oversight from the purchaser. For example, the implementation of strategic purchasing contracts between insurers and providers in Colombia, Costa Rica, and Peru, compared to previous general budget funding, enabled the subsequent implementation of incentives to improve performance [64]. The methods for contracting services from providers could be linked more specifically to national and regional healthcare needs to enhance responsiveness.

A purchaser-provider split and strategically procuring care from diverse providers–public, private commercial, and non-profit–will encourage increased access through improved choice for consumers. Growing the total healthcare market through improved procurement should encourage private investment in health infrastructure in less developed areas, which also aids access. Bringing private providers into a government-supported financing scheme can improve financial risk protection in mixed health systems, as experience from Ghana shows. Before private providers were included in Ghana's National Health Insurance Scheme (NHIS), they charged relatively high user fees, placing a burden on the patients across socioeconomic categories that relied on these facilities [48]. The introduction of contracting from the private sector under the NHIS also featured increased transparency, as patients only paid co-pays when required, and according to an itemized, published fee schedule. As these examples show, to be effective, purchasing mechanisms used within an overall reform towards separating purchasers and providers should be based in a fully developed policy, legal and regulatory architecture. This architecture should envision the impact desired and establish and enforce the rules, performance criteria, audit framework, and penalties required [65].

Supply Chain Management

Health financing reforms were closely linked in the review with policy instances related to the provision of free or subsidized drugs at the primary care level. The programs were often focused by health area, e.g., vaccines or drugs for essential health conditions, and by socio-economic and demographic status, often for the poor and elderly. Similarly, some policy instances that targeted the supply chain management (SCM) component of the health system were aimed at increasing equity, coverage, and financial risk protection. The impacts on UHC outcomes here also flow through specific governance result areas. For example, policymakers intend that drugs should be made available according to population need to ensure equitable distribution of resources, and patients are typically provided clear information on which drugs they have access to within the system. In this context, we found SCM-related policy instances which flow through responsiveness and transparency to attain several UHC goals [38, 48, 59, 66-69]. In Ghana, the fee schedules for medicines at facilities is based on the published prices on the NHIS Medicines List that undergoes periodic review and revision [48]. In Argentina, Bolivia, Peru, and Uruguay, physicians are required to prescribe generic brands of medicines whenever possible, and this is well-understood by pharmacists who then can query the use of branded medicines when there is a cheaper alternative available, thereby improving access and financial protection [70].

Accountability is a critical aspect of a successful SCM-related policy instance, especially through quality assurance of the clinical aspects of care. Such policy-making manifests in the authorities assuming

responsibilities for unintended effects of pharmaceutical policies. In the absence of appropriate policies, laws and regulations, risk-averse citizens who do not trust the quality and efficacy of generic medicines supplied preferentially through government facilities may shift towards branded medicines, which imposes a higher cost on the poor and vulnerable. This shift, exacerbated by corruption and leakages rooted in mislabeling, poor pharmacy behaviors, and lack of quality (perceived or real) of medicines—can lead to high out-of-pocket costs and inequity, as was noted in a study in the Philippines [71].

Lack of competition and biases in procurement related to the pharmaceutical sector could also undermine the other benefits of an increase in coverage of health financing mechanisms. In the past, the near monopolistic structure of the Vietnamese drug market resulted in few options for community health centers to purchase affordable drugs, while in China corruption in the bidding process for drug procurements meant certain providers received kick-backs despite the government's attempt to implement a more competitive process [9, 72]. Corruption in the supply-chain management of drugs in South Africa was linked to reduced supply at the health facility level [73]. Similarly, in Indonesia local government hiring practices for facility-level staff are seen to be influenced by personal connections more so than competence, and as a result, stock-outs are common due to poor quantification and purchasing system management [key informant, July 2017]. In Vietnam, as with other countries undergoing UHC-oriented reforms, drugs are distributed based on government drugs formularies. However, the process to determine the inclusions and exclusions in the formulary suffered from irregularities, resulting in significant increases in the prices of drugs [9]. Hence, policy instances tackling corruption and instituting improved transparency and accountability in the process of determining drug formularies, conducting pharmaceutical procurement, and strengthening systems and competencies for distribution are needed to achieve the aims of UHC.

Human Resources for Health

Progress on UHC is associated with increasing capacity of the health system to provide a larger share of the population access to a defined list of services, with schemes offering financial protection in the context of utilizing these services across geographic areas, and improved quality. In this context, a major constraint is the availability of skilled human resources for health across public and private providers. The health workforce in low- and middle-income countries can lack sufficient in-service or pre-service training; at the service delivery level the skills mix is often inadequate, and there can be insufficient use of task-shifting and task-sharing to achieve more efficient and responsive care. Hence, policies, laws and regulations geared towards increasing the number of healthcare providers and their competency and related management practices form the third largest group of policy instances in our review [11, 12, 14, 19, 38, 57, 73-78]. An increased number of medical professionals was associated with increased responsiveness of the system in a few instances, especially when they were deployed in a manner able to cater to local health needs [79, 80]. We observed that several health sector reforms were accompanied by additional policy instances focused on human resources, e.g., increasing the supply of skilled healthcare staff in key areas through expanded training, providing incentives for relocation to priority areas, and through providing in-service training to improve quality [19, 57, 78, 81-84].

Appropriate policy, legal and regulatory frameworks are needed to promote the recruitment of competent clinical and health administrative staff and to retain them with good incentives. Poor hiring criteria can ultimate impact the quality of care. In Indonesia, healthcare quality improved when recruitment decisions for healthcare and administrative staff were made based on competence rather than personal connections [key informant, July 2017]. If there is lack of transparency and accountability

in the hiring system, such that healthcare workers are more interested in cultivating a patron in hope of career benefits, then the system will not be responsive to the effort required in implementation of new healthcare delivery policies [85]. Incentives for performance, both monetary and non-monetary, should be provided to retain staff, improve service quality and reduce the incidence of seeking informal payments and moonlighting. A governance response here can involve policy instances ranging from instituting performance management systems to orient staff to service priorities, to developing a patient-centered models of care, and even to orienting staff to delivery of specific health outcomes [key informant, July 2017].

A reorientation to value-based healthcare is linked with improving quality, however it is important to be aware of unforeseen effects. In Colombia for example, where public sector physicians are paid hourly rates (to be revised in 2017), there is concern that emphasis on efficiency and value-based care will reduce the incentive for physicians to train as specialists, thereby affecting long-term quality of complex care and access to secondary and tertiary care [key informant, July 2017]. It is also important to recognize that there can be intrinsic motivations unrelated to any formal health workforce frameworks that play a role in clinical performance. Policy-making needs to be aware of culture and tradition in order to be effective. In Thailand, physicians garner significant respect from their patients, and reciprocate this by their levels of dedication and low rates of absenteeism even in remote areas [key informant, July 2017].

Policies which limit delivery of specific types of services to a particular cadre of clinical staff are a recurring aspect of healthcare systems in low- and middle-income countries. Implemented well and for the correct objectives, such policies support effective use of the health workforce, reinforce quality of care, and protect health outcomes [key informant, July 2017]. However, relaxing rigid policies which restrict which cadres can provide clinical care may be warranted at times. Change in related policy instances to allow a nurse-driven clinical model in appropriate health areas, partnered with continuing education for nursing staff, showed the potential to increase overall access to care, especially in settings where the nurse-doctor ratio is high. Providing autonomy and decision-making power to local medical teams, as under the Client-Oriented, Provider-Efficient (COPE) program in Kenya, was also found to be beneficial. COPE enabled the facility teams to resolve local staffing and service delivery issues without central intervention and improved staff working conditions and efficiency. The overall effect was reduction in patient waiting time, increase in coverage and access as measured by increase in attendance and the immunization rate, and quality of care [70]. In contrast, more restrictive guidelines around clinical care seen in Colombia, prevented primary care physicians from providing basic services like screening for blood pressure or ordering related diagnostic tests [135]. As a result, patients were referred to secondary care institutions, increasing the total time for a course of treatment as well as cost for patients and for the system. The Colombian guidelines also restrict the maximum consultation time and physician's ability to prescribe medicines, thereby inhibiting flexibility and reducing quality of care. In Thailand, the implementation of the UHC policy resulted in an increase in demand for curative services, and without policies or incentives to counteract this, physicians' focus shifted away from delivering preventive and promotive care. [85].

Expansion and strengthening of primary care requires an increase in human resources at lower-level facilities. In many contexts there is excess demand for health services that physicians are unable to satisfy. As a result, we found several policy instances that instituted task-shifting at the primary care level, whereby certain clinical tasks are moved or transferred from physicians to nurses. With many countries facing an aging population and increase in non-communicable diseases, routine monitoring of chronic conditions and managing repeat prescriptions can be led by nurses with little additional training.

Task-shifting in Thailand was critical in promoting access to care and reducing waiting time for patients [key informant, July 2017]. In some contexts, task shifting policy instances can be implemented through guidance put forth by medical and nursing accreditation bodies. In Turkey, primary care physicians, in addition to an expanded role in preventive care services, were also required to provide mobile health services to increase reach and responsiveness [86].

Human resources for health policy can also affect staff at the administrative level in central or local government levels. Constructive policy instances would set their roles to plan, prioritize, and implement health sector policies, laws and regulations; and define the incentives for them to do so effectively. This is because administrative capacity of the government is critical to set up and oversee broad health sector reforms [key informant, July 2017]. An administrative system with rewards based on merit, a wage structure commensurate with work-effort, and clearly defined rules across performance and benefits is more likely to successfully implement health sector reforms [87]. In addition to providing adequate training, resources, and incentives, it is essential that proper accountability mechanisms are set up within the administration structure. For example, to improve accountability and efficiency, Costa Rica via its Law 7852 on decentralization eliminated lifetime tenure for hospital administrators and instead instituted incentives for performance management [51].

Health Information Systems

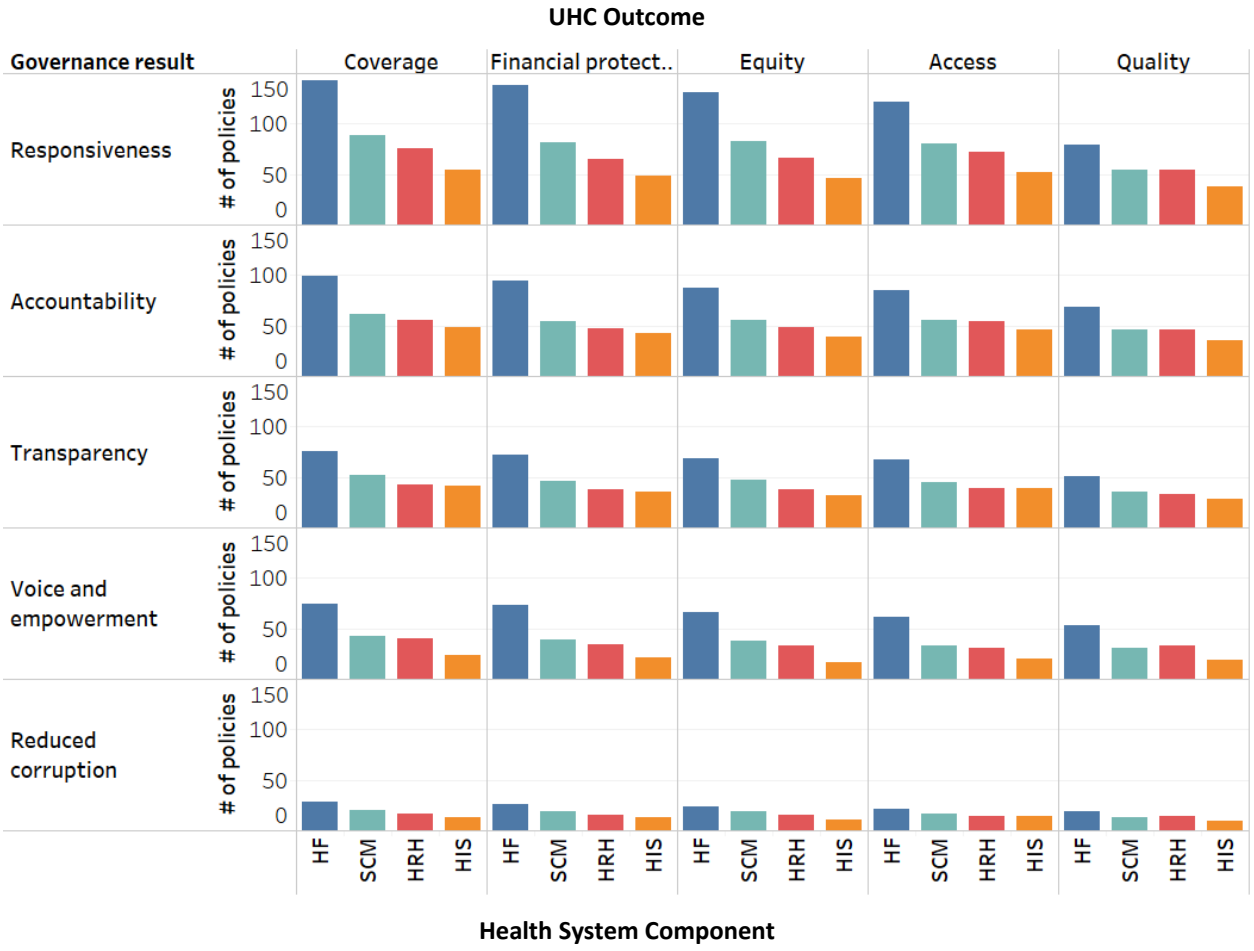
The literature offered less evidence about the role of health information systems and the policies, laws and regulations that support this area in achieving UHC goals. There were a wide range of policy instances about implementing and enhancing health information systems. These included basic interventions that require health workers to maintain records of treatment provided in their catchment area [88], to more complex systems of recording the results of means-testing potential beneficiaries [47, 77], or extensive epidemiological and socio-economic databases and electronic health records [89]. Overall, these policy instances were associated with improved quality and increased access to care. Policy instances requiring health units to base their healthcare intervention decisions on local data showed improved responsiveness.

Information systems are necessary for any tracking and rewarding of performance and hence are associated with increased accountability within the health system [83, 90]. In this category, there were policy instances covering interventions like establishing databases with local demographic, epidemiological, and economic indicators; monitoring and evaluation systems; electronic health records; and national health accounts systems that document the overall expenditures and sources of spending and can help track evolving trends in resource allocation and mobilization [11, 12, 14, 38, 52, 86]. Health information systems also have a role to address corruption. Issuing identification cards required for accessing subsidized healthcare are often based on means testing, i.e., using various measures to triangulate household income and assets, including soliciting community input. These systems, choosing from a variety of means testing procedures, have been challenging to implement, and hence the impact of these policy instances on ultimate UHC outcomes can take time. Without appropriate systems and processes to verify means testing output related to identifying the poor, inclusion and exclusion errors can occur, and the increased discretion of officials in making the appropriate determination can open avenues for side payments [91]. Further, providing an identification card was not seen as synonymous with increased access, especially if recipients were not well-informed about what the card entitles them to receive.

Distribution of Evidence by Five Governance Result Areas and Intended UHC Outcomes

We reviewed a high number of policy instances that were designed to take effect through improved responsiveness and accountability. These instances can be related to the finding that the majority were aimed at achieving the UHC goals of increased coverage (212 instances), improved equity (191 instances) and increased financial risk protection (186 instances). When policy instances focused on increasing coverage, the majority sought to expand services to new population segments and vulnerable populations (125 instances). The remainder focused on expanding service coverage geographically (87 instances). Figure 5.5 illustrates the disaggregation of policy instances by UHC outcomes, governance results and health system components.

Figure 5.5: Number of Policy Instances by Health System Component, Governance Result and Intended UHC Outcome



HF: health financing, SCM: supply chain management, HRH: human resources for health, HIS: health information systems

Distribution of Evidence by Regions

Since 2010, the WHO, the World Bank Group (WBG) and several other bilateral donors have provided financial support and technical assistance to more than 100 countries in implementing UHC-related reforms. However, the summation of the progress and challenges from a governance as well as geographic perspective is not well documented. We summarize our findings by region in Table 1.

Table 5.1: Number of Policy Instances by Region

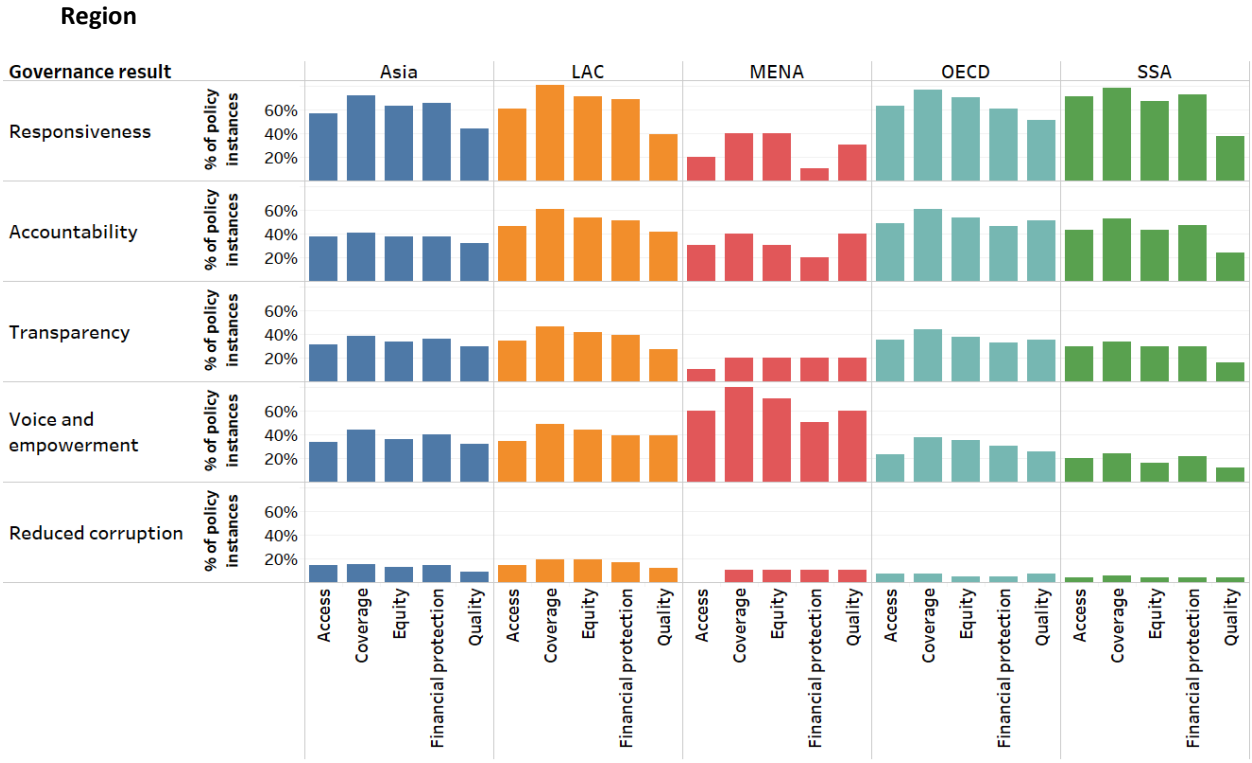
Region	Number of Policy Instances
Asia	81[1]
Sub-Saharan Africa	51[2]
Latin America and the Caribbean	39[3]
OECD countries	42[4]
Middle East and North Africa	7[5]

[1] [9, 10, 13, 16, 20, 23, 25, 33-35, 41, 43, 45, 54, 56, 59, 61, 71-73, 76, 77, 85, 90, 92-119]
[2] [11, 15, 19, 21, 26-28, 32, 44, 46, 48-50, 57, 58, 66, 68, 69, 80-83, 120-130]
[3] [8, 14, 17, 30, 39, 42, 47, 51-53, 67, 74, 75, 79, 88, 89, 91, 131-138]
[4] [12, 16, 18, 31, 36-38, 48, 49, 53, 78, 120, 139-163]
[5] [24, 55, 84, 86, 140]

We found that the majority of the policy instances were from Asia, where most countries seemed further along in the implementation of UHC-related reforms. There were also several studies from sub-Saharan Africa (SSA) and Latin America and the Caribbean (LAC). The LAC region is one where citizens have increasingly demanded greater accountability in the health sector from their governments. Our review focused on the low- and middle-income countries, however it did not exclude evidence from Organization for Economic Cooperation and Development (OECD) countries that have made significant progress towards universal health coverage, as their experience could be instructive for middle-income country contexts. There was only a small set of results from the Middle East and North Africa (MENA) region (predominantly from Turkey and Israel, which are also OECD countries), as the volume of results may have been limited by the constraint on searching for studies written only in English. Figure 5.6 shows the disaggregation of policy instances by region, governance intervention, and intended UHC outcome.

Within Asia, the evidence base strongly focuses on policy instances that increase coverage through financial risk protection. Equity was the second most common intended UHC outcome. Thailand with its Universal Coverage Scheme has been well-documented [10, 51, 59, 67, 76, 85, 91, 100, 103, 106, 109, 110, 113, 116, 117], as have India with its various state-based schemes [67, 92-94, 96, 104, 105, 111] and the Philippines regarding the PhilHealth scheme [54, 71, 91, 101, 108]. These countries contributed a significant base of evidence, given the relative maturity of their health financing systems and progress in large-scale efforts to achieve UHC.

Figure 5.6: Proportion of Policy Instances by Region, Governance Result and UHC Outcome



For countries in LAC, we note the focus on increasing access, closely followed by improving equity. Like the *Seguro Popular* in Mexico and *Sistema General de Seguro da Salud Social* in Colombia, reforms in the region were focused on increasing coverage to the majority of the population [30], with heavily subsidized care for 90% of the medical interventions and associated drugs in outpatient departments [67]. Apart from responsiveness, accountability has been a major enabler of reforms in countries from the LAC region. For example, in Brazil, implementation of UHC came through modification of the constitution, as the country's large population and regional disparities required concerted decentralization efforts. Five thousand municipalities were given decision-making power to be more responsive to local needs, and strong accountability features were built in to the program [134].

Our review had the least number of studies from MENA. Some studies covered reforms in Israel [24, 55], Tunisia [51], and Turkey [84, 86, 140]. Improving equity and quality of care appear to be the focus of the reforms in this region with the health interventions employing a voice and empowerment governance tool as a major enabler of reforms [84].

The studies pertaining to OECD countries show that responsiveness and accountability were the primary governance interventions in these countries to achieve coverage and equity [12, 18, 36, 37, 78, 101, 139, 141-146, 148-159, 161, 163, 164]. Separation of provider and purchaser function in Georgia and Sweden was closely associated with increasing accountability of the providers [37, 160].

Several countries in SSA have implemented reforms to attain UHC goals. Increasing coverage, improving equity [127], and access to care were the primary aim of these reforms. Most of the schemes like the

National Health Insurance Scheme in Ghana and *mutuelles* (community health insurance) in Rwanda were about increasing financial protection, often through the removal of user fees, among other interventions [26, 28, 48-50, 81, 124, 125, 129], extending maternal and child healthcare [126, 130, 165], and ensuring a minimum set of services [15, 28, 48, 82]. Responsiveness and accountability were the major features of these interventions.

Other Findings

In this section we summarize some other themes that occurred frequently in the reviewed studies and the key informant interviews. In the literature, there was frequently discussion about or associated with decentralization as an initiative to improve health system functions through increased autonomy at the regional and facility levels, thereby increasing accountability and responsiveness. Similarly, through the key informant interviews, "voice and empowerment" was mentioned as an often overlooked but critical governance intervention that could promote advocacy towards improvements in health system performance.

Promoting Accountability and Responsiveness through Decentralization

Some of the studies reviewed described approaches to reorganize delivery of care, including decentralization in the health system. Centralization of any kind of decision-making power in one branch of government was linked to corruption and rent-seeking [9]; decentralization was justified on the basis of strengthening capabilities, performance, and responsiveness at each healthcare level. While China moved towards centralized procurement of equipment to ensure quality and cut costs [72], policy instances from Argentina, Brazil, Peru, Rwanda, Spain, Zambia, among others, suggest a move towards a more decentralized system and devolving procurement functions to local administrative units [11, 12, 47, 52, 128, 134]. In Brazil, the Organic Law for the health system defines the separation of responsibilities between the state (province) and municipal authorities, provides the framework for transfer for funds, and also enables participation by the community [64]. A study used econometric methods to assess the Brazilian reform in the context of primary healthcare, especially the relationship between the *Estratégia de Saúde da Família* (Family Health Strategy) and mortality, and whether this association varied by governance arrangements across a sample of municipalities. The findings suggested that stronger local health governance may be vital for improving health services effectiveness and health outcomes in a decentralized health system [93]. Similar to Brazil, decentralization in Cuba, Uruguay and Venezuela was accompanied with community participation to increase accountability and responsiveness to local populations and their needs [39, 166].

Policy instances that aimed to manage the process of decentralization were seen as attempting to harness its full benefits. Setting the speed of decentralization is critical to maintaining solvency and sustainability across the health system. Under the Health Service Organization Act (1994), Estonia sought to rapidly decentralize both its financing system and the healthcare provider system. However, this was not accompanied by an increase in capacity of the regional providers. This led to a situation of uncoordinated planning and funding combined with fragmented revenue collection with an overall outcome of more inefficiency and inequality [51]. Successful health sector decentralization maintained a role for the ministry of health at the central level for oversight, coordination, and regulation. Decentralization can spell welcome levels of autonomy for local administrative units, but must be accompanied by performance targets for these units that will be closely monitored [65]. In the early stages of decentralization in Mexico under the National Decentralization Agreement, funding was

channeled through the states (provinces), which gave them the incentive to increase population enrollment into the program [65]. However, this system had weak accountability; states had decision-making responsibility on how to spend their funds but without central oversight that helped set efficiency or quality targets. As a result, there were variable achievements in quality of care.

A deliberative process of resource allocation is needed, based on principles of equity and a desire to increase access, and this process should be transparent to local bodies [key informant, July 2017]. France has autonomy for local administrative units, but some health sector planning is conducted centrally and via regional plans, which influences the goals and funding for hospitals for a defined time-period. Similarly, under the National Health Services Act of 1997, Jamaica decentralized the functions of its Ministry of Health by making four Regional Health Associations responsible for healthcare delivery. However, it retained the central functions of "policy, planning, regulating, and purchasing" to increase efficiency and responsiveness of the system [42]. Policy instances reviewed suggest that such division of responsibility among the federal/central vs. local/state/regional bodies must be clear and transparent to all actors, as well as citizens. Without such clearly understood accountability across levels, citizens are unable to ascribe performance to the relevant authority that has jurisdiction, and this dilutes overall responsiveness towards improved performance [47]. Additionally, to improve accountability, autonomous sub-national units could also be given incentives such as additional resources to improve timely reporting and record-keeping, as was implemented in Italy [65].

Voice and Empowerment: Citizens/Patients' Role in Health Policy

A stated right to health for citizens can underscore a motivation to amend or introduce new legislation to achieve universal healthcare in several countries. In drafting related legislation, policymakers could ascertain whether their proposed policies meet the four norms of availability, accessibility, acceptability, and quality and provides for principles of participation, accountability, and equality [key informant, August 2017]. For example, laws enacted in Turkey (Directive on Patient Rights and Patient Rights Legislation) clearly articulated the right to health insurance and services, stated the responsibilities of the providers (with respect to patients' rights, information provision, privacy, and right to choose a provider), and defined the citizen's expectations from the healthcare system.

Although the fundamental right of citizens to health as the basis of legal process can instigate necessary policy changes, legal challenges overall on the basis of right to health should only be formulated and used with caution [key informant, July 2017]. Uganda presents an example of strategic litigation used effectively by civil society to bring about much needed improvements in maternal health. Similarly, in Indonesia, civil society-led legal challenges against the government for not implementing single-payer health insurance reform within the stipulated timeline of the related act spurred the eventual rollout [key informant, July 2017]. However, in Latin America the tool of litigation yielded mixed results in some countries as disparate cases were held up in the court system rather than generating momentum for more systemic reform [key informant, July 2017]. In Colombia, for example, restrictive clinical guidelines alongside a lack of competition and irregularities in the insurance sector have severely limited access to certain drugs for conditions like cancer; the only recourse left to patients is to petition the courts [key informant, July 2017]. The practice became widespread as NGOs supported citizens with services to draft and submit numerous petitions. The result is that the judicial system became overwhelmed by petitions and critical cases in this group were severely delayed in adjudication. Such governance through ad-hoc judicial action may divert political and legal resources from other healthcare priorities, and may limit the ability and will of the government to systematically plan and provide for services.

Community participation can help define goals for the healthcare system and hold providers accountable to attaining them. Routinely collecting data from citizens on their healthcare use and related barriers is one modality. In Turkey, annual household surveys are undertaken by the Turkish Statistical Institute to gauge patient satisfaction with healthcare services [86]. Costa Rica has promoted its citizens' involvement through Law 7852, which provided for establishment of Health Boards that comprise of democratically elected community leaders who oversee the delivery of services [51]. However, despite a policy regarding community participation in health in Costa Rica, there is not much evidence that community activists have voice and influence, possibly due to lack of capacity in such citizen bodies [key informant, August 2017]. Community members' ability to exert influence was seen in studies to be limited if citizens do not have adequate knowledge and their organizations cannot find individuals who understand legal issues, or financial and medical terms, and the groups were not well-acquainted with methods of organizational governance. In response to these weaknesses and due to their own incentives, hospitals and local governing bodies can attempt to limit the influence of citizens to token participation.

Finally, citizen choice is a contentious issue in determining the priorities of the healthcare system. In the United Kingdom's National Health Service, there is an explicit split of provider and purchaser functions, and the role of general practitioners (GPs) as gatekeepers to the health system is given a high priority. The system is highly reliant on the quality of medical training and the role of professional bodies around these providers. Patient's rights therefore revolve around choosing the GP based on established rules, registering with them, and then being subject to that GP practice's own charter [37]. In the Netherlands and Sweden, citizens' voice and preferences were assigned a higher priority in policy formulation, reflective of an expectation of increased transparency and accountability of professional and government bodies that regulate health systems [37].

STUDY LIMITATIONS

Our study has certain limitations. First, we restricted our review to English language literature and English-speaking key informants, due to the time and resources available for this study. However, we acknowledge that Spanish- and French-speaking countries are a rich source of data on health governance interventions, particularly civil law countries that tend to codify much more of their health system policy instances and interventions.

Second, the relationship between health system interventions, governance areas of effect, and ultimate UHC goals is inherently complex and multi-faceted. The conceptual framework (Figure 1) provides a useful visualization of how instances of policy, law and regulation can translate into UHC impact in a linear fashion. However, we were unable to directly ascribe attainment of any specific UHC goal to a particular governance intervention or mix of interventions, nor conclusively to a particular policy type, given the mix of UHC goals and governance interventions, and multiple avenues of the health system, that any given policy instance may be intended to affect.

Third, a health financing policy instrument related to a change such as introduction of user fees may or may not define specific governance elements in how it will be implemented and regulated. Therefore, the governance area of effect is open to interpretation based on definitions of what constitutes improvement in each area. Hence, it is also challenging to delineate the effect of any one governance feature. Overall, the interventions at the heart of most policy instances are directed towards a health system need, for example, increasing the number or quality of physicians, and rarely toward improving a

particular governance area such as accountability. The subjective evaluation of the reviewer to attach a particular governance result area to a given policy instance is based upon description of the policy instance, its features, implementation approach, and reviewers' experiences with similar policy instances.

Fourth, the reviewers had to grade the relative impact of various governance results on UHC outcomes on the basis of 'number of policy instances'. This metric will be biased towards the countries and reforms with a relatively larger number of publications in the literature and does not speak fully to the success of any particular policy instance in generating the desired health outcomes relative to other similar policy instances.

Fifth, the majority of the studies reviewed were descriptive, such that they enumerated the process of healthcare reform in a country or compared the features of reforms in several countries. Our final review did not include a significant number of studies that were randomized control trials of enacting changes in a policy, law or regulation in the health sector; or a related governance intervention, such that we could report conclusive evidence on the effect sizes of such interventions.

CONCLUSIONS

Governments' efforts to increase coverage, access, equity, quality, and financial protection for their populations are likely to continue to expand as the SDGs and the UHC agenda draws into focus in the coming years. This review summarized the evidence on the effects from designing and implementing effective policies, laws and regulations with a clear orientation towards better governance, and in particular increased responsiveness and accountability.

Experience across countries and regions varied with the maturity of their UHC efforts and political context. More effectively implemented policy instances had a greater likelihood of being associated with improved governance functions which can together lead to increased achievement of intended UHC outcomes. Progress towards UHC involves a mix of policy changes which can significantly benefit from a channel of governance-related effects for their greater success. The expansion of the insured population was a common UHC-related reform effort, and requires clearly defining and legislating a core package of services and communicating it effectively to members and providers. This reform agenda thereby relies on increased transparency in the system to enhance the improvement in coverage and equity. Similarly, emphasizing the role of community health posts and providers, and determining and allocating the resources available to them will increase access to services and quality. This is a reform that channels critical areas of better governance—improved responsiveness as well as voice and empowerment.

In other instances, health sector reforms focused on a specific intervention can contribute to overall improvements in health governance. Several health reforms focused on improved purchasing methods with a strong component of performance-based financing, and governments implemented these with legally binding contracts and stated penalties for underperformance. These reforms increased levels of accountability in the health system.

The majority of policy instances reviewed were related to structural and financing reforms in the health sector that affect several segments of the population. We noted that there was little evidence for direct emphasis on the reduction of corruption within the policy instances, but the impact of the policy instances was still to reduce corruption through increased transparency and accountability. It is essential that future policy instances emphasize this governance aspects to avoid downstream complications.

Several policy instances, like free provision of drugs at public facilities, unintentionally create avenues for informal payments or corruption. For policy instances associated with health financing and human resources for health, the relative strength of evidence for responsiveness, accountability and transparency as key governance interventions should support countries to develop better policy, legal and regulatory design processes.

Countries on the cusp of undertaking major health system reforms through the drafting and implementation of relevant policy instances will have to prioritize their governance interventions based on the risks specific to their existing health system contexts. At a minimum, they should do all that is possible to avoid some of the negative or unintentional aspects of sub-optimal policy instance design, that can reduce efficiency and quality. Where possible, emphasis should be placed on capturing synergies in governance interventions that increase responsiveness, accountability and transparency, as this review has found an abundance of evidence that these governance results can be mutually reinforcing and lead to step change improvements in the functioning of the health system.

Governments may have political and process constraints on the number of policy instances they can design and implement in a period leading up to and during health sector reform. In terms of which health system component to focus such change on, we have more evidence for policy instances focused on health financing, given that designing effective financing mechanisms can shape the entire health sector. Following this, policy instances that address human resources for health and supply chain management should be prioritized as they appear to have key strengthening effects on the provision of health care by increasing efficiency, equity, and quality.

In terms of the future research agenda, we find that the relative lack of policy evidence for the effects of reduced corruption and patient empowerment policy instances may spur more enquiry in associated policy, law, and regulation development and implementation.

The conceptual framework used in this paper is relatively novel and helped to define and organize a vast and potentially hard-to-define topic area. This framework allowed results to be analyzed from different perspectives, including type of policy instance, policy instance structure, health system component, governance result, UHC outcome, and various combinations thereof. However, as discussed above, the use of a relatively linear flow between policy changes within health system components, to governance results, and onward to UHC outcomes may be limiting. Follow-on work in this area should take a country case study approach to consider the context-specific factors, viewed over a longer time period, which are important attributes as well as explanatory factors in the ability of improved health governance and the related policies, laws and regulations to generate successful UHC impact.

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