Improving health interventions in conflict-affected Liberia: A community-based approach

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Glossary of Terms

Governance is the ability of the state to manage the public and maintain its capacity to provide essential functions. USAID defines democratic governance as the government's ability to develop an "efficient, effective, and accountable public management process that is open to citizen participation that strengthens rather than weakens a democratic system of government" (U.S. Agency for International Development, 2013, p. 37).

The following are **Governance Principles** taken from Siddiqi et al. (2009):

- **Strategic Vision** is long-term vision and typically includes a comprehensive development strategy.
- **Participation and Consensus Orientation** refers to participation in the decision-making process and identifying stakeholders.
- **Rule of Law** refers both to a legislative process and to interpretation of legislation to regulation and policy; this also entails enforcing laws and regulations.
- **Transparency** is the free flow of information regarding decision-making and the allocation of resources.
- **Responsiveness of institutions** refers to the response of population needs and of regional or local needs.
- **Equity** includes access to services, fair financing of services, and disparities.
- **Effectiveness and Efficiency** refer to the quality of human resources, communication processes, and capacity for implementation.
- **Accountability** refers to internal and external accountability of representatives to provide expected solutions to stakeholder interests through systems of regulation and enforcement.
- **Intelligence and information** include the generation, collection, analysis, and dissemination of information.
- **Ethics** refers to the principles of research ethics in policy formation.

Health systems strengthening (HSS), as defined by the World Health Organization, is the process by which improvements are made to a country's health systems by utilizing interventions to strengthen the existing health system structure of developing nations (WHO, 2009, p. 30). An effective intervention will target one or more of the following Health Systems Building Blocks: service delivery, health workforce, health information, medical technologies, health financing, and/or leadership and governance (WHO, 2009, p. 30-31).

Post-conflict country is defined as the intermediary point in the development process in which a country is emerging from a conflict and trying to establish peace. In doing so, it develops support systems to prevent destabilization and a return to conflict (Haar & Rubenstein, 2012, p. 6).

Public Health is "the science of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention" (Association of Schools of Public Health, n.d.).

Executive Summary

The goal of the Texas A&M University Global Health Capstone course was to analyze how public policy at the international donor level influenced public health interventions and ultimately, health outcomes, in conflict-affected countries. There are three major areas of focus throughout the final report: health systems outcomes and governance, monitoring and evaluation, and assessment of Liberia. Information regarding these topics was collected and used to create three key products for your consideration. First, we designed and administered a survey to a non-probability sample of experienced practitioners within the international development sector. Second, we created a merged dataset combining the 2008 and 2012 Afrobarometer, the 2013 Mo Ibrahim, and World Bank's Health datasets. Lastly, we provided a detailed report on our findings and recommendations for future research.

USAID's latest Liberian Country Development Cooperation Strategy (CDCS) indicates an interest in integrating principles from the democratic governance sector into other sectors, such as health. The CDCS especially encourages local participation, inclusion, and ownership. Defining a specific, overarching research question is essential to connecting the three different tasks requested by the USAID cross-sector team:

- To investigate ways to improve health systems governance;
- To examine alternatives to randomized controlled trials (RCTs); and,
- To examine how to apply the findings to the Liberian context.

The capstone class ultimately took its cue from the USAID cross-sector team. We focused on the intersection between health and the democratic governance sectors. Finding similarities between the two sectors and showing how they can work together offers a potential for increased effectiveness of health system interventions and decreased overhead from duplication of efforts.

To investigate these questions, we conducted a meta-review of development practices in the areas of health interventions and governance, especially on cross-sector integration. We also administered a development practitioner's survey, which provided key findings that informed the primary recommendations throughout the report. The survey results encapsulated the following key findings:

- International development practitioners do not seem to agree on a single best model of governance. Because circumstances are different in different countries, best governance models tend to vary.
- There was an overall consensus that outside practitioners can only facilitate change; change is primarily driven and sustained by those within the local communities.
- Finally, the findings suggest that development practitioners prefer to engage citizens in their interventions through formal and informal local leadership networks.

Based on these findings from the survey, and how they relate to our meta-review of the literature, we have identified multiple recommendations that include use of the public health model, alternative methods for monitoring and evaluation, and a discussion of how these apply to the Liberian context.

There are volumes dedicated to community participatory input and collaborative action in the public health literature. One of the key recommendations to advance the discussion on the intersection between citizen health needs and service delivery is to utilize the public health framework. Public health can bridge this gap between democracy and development by providing the theoretical framework to address both citizen needs and service delivery. With a focus on population health, public health allows practitioners to apply a framework that establishes a common language

between the governance and health sectors. Research in public health has aspects in common with the research currently conducted on democratic governance. Public health and democratic governance share many of the same ideas on engaging communities in the process of service delivery—it is simply a matter of establishing a common language.

Next, it seemed beneficial to propose alternative monitoring and evaluation methods. While an RCT can be effective where the factors for implementation are appropriate, no single approach is appropriate in all instances. RCTs can be expensive and require a significant amount of expertise and training for effective implementation. Additionally, government agencies/organizations want or need interventions to be targeted. Such programs still need evaluation, and identification strategies must be available. There is also a knowledge gap in understanding how health governance systems interact in different socio-political contexts. Indeed, some of the survey responses hint at the idea that relevant indicators that capture this dynamic are lacking. Combining RCTs with other evaluation methods, such as organizational network analysis, may fill this gap and reveal new perspectives on the relationships between those organizations that influence community health outcomes.

In addition, there are other evaluation tools that are commonly used in public health that may be extremely useful for evaluation of programs in conflict-affected countries. These should be explored in future efforts. For example, a quasi-experimental study design is often used in public health to evaluate interventions where the unit of analysis is the community rather than the individual health (Cook and Campbell, 1979; Shadish et al., 2002). The quasi-experimental study design may be very useful for evaluating certain development interventions and we recommend future investigation of this and other public health evaluation methods.

Finally, these recommendations are applicable to the Liberian context. According to the USAID's typology of fragile states, Liberia is a post-conflict country undergoing political transition. It is just over ten years since the end of the civil war, and Liberia has made progress in becoming more politically free, lessening its dependence on donor funds, and addressing the health needs of its citizens. However, Liberia is still in a delicate situation. Liberia still has some of the worst statistics in sub-Saharan Africa on key health indicators such as maternal mortality and teenage pregnancy. As the Alliance for Health Policy and Systems Research notes, fragile states have some of the worst health indicators in the world, and research rarely occurs in these countries. Nevertheless, Liberia is a willing partner: the country is part of the G7+, a voluntary association of states attempting to transition to a stable development path. USAID is a preferred partner of the Liberian government and research is certainly possible in these areas.

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Chapter 1
Capstone Project Background

Description and Terms of Reference

The goal of the Global Health capstone is to analyze how public policy at the international donor level influences public health interventions in developing countries. This information will be provided to the client, the USAID Center of Excellence on Democracy, Human Rights and Governance (DRG Center) Cross Sector Program Team. The DRG Center, a research center located within the United States Agency for International Development (USAID), is spearheading an effort to integrate the traditional democracy issues of policy formulation, citizen participation and public accountability into three Presidential initiative areas: Feed the Future, Global Health and Global Climate Change. This report will assist USAID as it develops policy regarding integrated health and governance programming in developing countries.

This capstone reflects the current reform efforts within USAID by bringing together students from Texas A&M University's Bush School of Government and Public Service and the Texas A&M Health Science Center's School of Public Health for a unique learning opportunity. Linking students with different skill sets in health–such as epidemiology or environmental science specialists–with others working in international relations, governance and foreign policy fields creates a dynamic group that can help collect evidence with mixed methods and perspectives.

Figure 1: United States Agency for International Development Democracy and Governance Strategy

Development Objective 4: Improve development outcomes through the integration of DRG principles and practices across USAID's development portfolio

4.1: Strengthen country-based mechanisms for participation, inclusion, and local ownership across all USAID development sectors

4.2: Encourage host governments and civil society to employ legitimate and effective accountability mechanisms

4.3: Promote equality of opportunity and access to public goods and services, particularly with respect to poor and marginalized populations

Source: U.S. Agency for International Development. (2013) "Democracy, Human Rights and Governance Strategy."

During this capstone course, the students conducted a meta-review for USAID to analyze how and why donor agencies address governance and accountability concerns as they design and implement public health interventions in conflict-affected/fragile countries. Specifically, this capstone project:

- Assessed the evidence and tools used–such as analysis of informal power structures that allow elite individuals to control resources–to understand the intricacies of what some call more "integrated approaches" to development.
- Examined strategic issues relating to the evolution of international development policies and practices.
- Synthesized and evaluated data for the specific case of Liberia, including an analysis of environmental, social, behavioral, community and political factors.

Global Health and Cross-Sector Programming

USAID is currently implementing a reform effort to integrate the tools used in its democracy and governance sector (policy formulation, citizen participation, and accountability) into its other development sectors. This effort, known as DRG integration, was incorporated as a formal USAID development strategy upon the release of the Democracy, Human Rights, and Governance (DRG) strategy in June 2013.

While objectives one and two of the new strategy reorganize and reconfirm traditional approaches to democracy promotion, objective three, with an emphasis on "promoting universally accepted rights," and objective four, "improving development outcomes through the integration of democracy, human rights and governance principles," have not been included in previous DRG strategies.

The current focus by USAID on creating cross-sectorial programs is not new, but has been a source of conversation for at least a decade. As a 2003 USAID report stated, "Constraints on integrated programming arise mainly from the hegemony of specialized expertise and the structural divisions that pervade the humanitarian community…" One factor hindering cross-sectorial program development is funding mechanisms that reduce intra-agency program collaboration and reinforce a silo approach to development interventions (USAID, 2011, p. 5). Even if there is agreement among different sector divisions within USAID on a collaborative program, there is still a lack of agreement on the appropriate quantitative and qualitative metrics to evaluate the success or failure of the program (USAID, 2013).

Within USAID, the DRG Center is spearheading the effort to implement development objective four into three Presidential initiative areas, including the Global Health Initiative (GHI). This initiative, established by the Obama Administration in 2009, is a multi-agency approach to strengthening U.S. government involvement in world health development issues. The primary U.S. government agencies included in the GHI are USAID, the Department of State, and the Centers for Disease Control (Department of State and the USAID, 2010, p. 82-84). The GHI focuses its efforts on three objective areas: protecting communities from infectious diseases, saving mothers and children, and creating an AIDS-free generation. Within these three areas, GHI interventions target multiple health focus areas (Global Health Initiative, 2013a). The GHI operates under seven core principles, including:

- Encouraging country ownership and local planning
- Strengthening local health systems for increased sustainability
- Enhancing monitoring and evaluation systems to increase learning and accountability (Global Health Initiative, 2013b)

These core GHI principles are consistent with objectives outlined in the 2013 DRG strategy.

Health Systems and Governance in Conflict-Affected Liberia

International development is specific to the context in which it may be taking place. For instance, in a conflict country just emerging from civil war, the capacity for a leadership to take full ownership of the country may not exist. In this case, delivering services to citizens may involve limited or no country ownership or local planning. Conversely, a developing country that has not experienced civil war may have a different set of needs. For this reason, a one-size-fits-all strategy

may not be appropriate in all instances. The USAID democracy and governance strategy recognizes the need for differently emphasized principles depending on country context. To this end, it places special attention on two conflict-affected countries: Liberia and Somalia (United States Agency for International Development, 2013, p. 30).

Key Findings and Recommendations

- Use the public health framework to bridge the perspective gap between the democracy, governance and health sectors
- Develop an enhanced monitoring and evaluation framework for health systems and governance
- Establish comparative data in order to benchmark health system and governance practices for a country transitioning from conflict to sustainable development
- Establish a demonstration project to test the assumption that community/citizen participation is correlated to long-term sustainability health outcomes
- Establish a peer-review process between academics and practitioners to enhance evidence-based health governance in conflict-affected countries

Chapter 2
Public Health: A Solution to the Absence of Theory in Democratic Governance

Introduction: The Evolving International Landscape

The field of international development is undergoing a fundamental transformation in the thinking and application of how interventions take place in developing countries. Since the 1960s, development practitioners assumed a country could lift itself out of poverty by strategic infusions of technical knowledge and capital. However, these assumptions were called into question in 2005 with the signing of the Paris Declaration on Aid Effectiveness, and reinforced by subsequent international agreements signed in Accra, Ghana (2008) and Bussan, South Korea (2011). Today, development agencies are seeking innovative ways of working with developing countries as they take the lead in their own development. Country ownership is a priority in the current era of global health and shared responsibility is viewed as an essential element to sustainable health programs.

> "Without political reform we're not helping developing countries; we're delivering services, undermining our chances of long term success"
>
> - Raj Shah
> USAID Administrator

In 2011, USAID administrator Raj Shah stated, "Without political reform we're not helping developing countries; we're delivering services, undermining our chances of long term success" (Shah, 2011). Shah's statement characterizes a shift in the relationship between traditional foreign policy tools of democracy promotion and development. This transformation culminated in June 2013 with the release of a revised democracy, human rights, and governance strategy (USAID, 2013, p. 7). Historically, democracy assistance and development assistance were viewed as two separate initiatives, each with their own end goals. Since the 1960s, development practices have relied on the assumption that a country could be lifted out of poverty with strategic infusions of capital and technical knowledge. The goal was to conduct development interventions without meddling in a county's internal political affairs (Carothers, 2013, p. 3-4). While the notion of apolitical intervention is appealing, it is incomplete. Political scientist Harold Lasswell defined politics as "who gets what, when and where" in his 1936 book by the same name. By this definition, an aid provider engages in politics when he or she, for example, gives technical support to government ministries to improve health care and food security. The apolitical aid provider is involved with resource allocation decisions and, therefore, engaged in political decision-making, albeit indirectly.

Recently, an alternate view to traditional technocratic development surfaced wherein sustainable development is linked to the governance practices in emerging democracies. This view of development, however, is not widely accepted; in fact, there is no one unifying theory in the international development literature regarding the intersection of democracy and development. Instead, views on the proper role of democracy and development are divided among seven different opinions ranging from "the values of liberal democracy are absolutely crucial for development" at one end of the scale to "the values of liberal democracy are not at all related to development" at the other (Carothers, 2013, p. 223). Francis Fukuyama, a development and democracy scholar, stresses the importance of agreeing on a theory regarding the

> "…[I]f you don't get the theory right then it is hard to even explain why you want to integrate politics and economics…"
>
> - Francis Fukuyama, Ph. D.
> Senior Fellow
> Center on Democracy,
> Development and the Rule of Law
> Stanford University
>
> Source: Carothers et al. (May 2013).

intersection of democracy and development: "…[I]f you don't get the theory right then it is hard to even explain why you want to integrate politics and economics…" The public health framework can serve to bridge the gap between the democracy and development sectors as it essentially provides the theoretical framework that is lacking to simultaneously address both citizen input and service delivery.

This organizing framework for individual and collective practice of public health is often referred to as the "core functions and essential services of public health" model. Integral to this framework are three core functions and ten essential services. The three core functions include assessment, policy development, and assurance. Each of the ten essential services are linked to these core functions and represent cyclical and continuous processes in a dynamic system.

Figure 2: The Core Functions and Essential Services of Public Health

Source: Public Health Functions Steering Committee, Adopted Fall 1994
Available at: http://www.cdc.gov/nphpsp/essentialservices.html

The cycle starts with monitoring health status and identifying/investigating health problems and hazards within the community. When paired with the process of mobilizing community partnerships and informing, educating, and empowering individuals about health problems, the result is the development of policies and procedures for interventions that support individual and community health efforts. A competent workforce can translate policies and procedures into outputs or interventions, enforce laws and regulations that protect health and guarantee safety, link people to needed services, and ensure accessibility to such services. The processes of evaluation and research can and should be performed throughout the cycle. While evaluating effectiveness of interventions and services provides a means for linking outcomes to planning measures, research yields new insights and innovative solutions to community health problems (Handler et al., 2001). Together, these core functions and essential services assess community health needs, inform policy development, and assure environments that create opportunities to lead healthy lives.

Mobilizing Communities to Identify Health Priorities and Build Capacity

This public health framework provides a strong foundation for identifying and solving health problems within local, national, and global populations. A key aspect of this model is community mobilization. In working towards achieving community change, it is important to establish that community engagement and participation are sustainable. In order to ensure sustainability, it is crucial to identify health priorities consistent with citizens' needs so that they feel empowered to share responsibility and to take ownership of improving health within their communities. This guarantees lasting effects that extend far beyond the assistance of international donor agencies. As such, sustainability is also contingent on community capacity, or, "the degree to which a context has structures and processes in place to help mobilize residents for action—the interaction of human, organizational, and social capital" (Trickett, 2009, p. 412).

Community mobilization is broadly defined as a group of individuals taking action to tackle community issues and utilizing community-based strategies to improve population health (Fertman & Allensworth, 2010). Community mobilization strives to engage all sectors to identify community members, stakeholders, and other beneficiaries who can recognize, acquire, leverage, and use assets and resources to address health priorities and accomplish community-wide goals (Trickett, 2009). Community mobilization is key to bridging the gap between the democracy and development sectors because it is intertwined with broader concepts such as community empowerment, community participation, capacity building, and community development (Fertman & Allensworth, 2010). All of these concepts are directly associated with sustainable development.

> [Sustainability is contingent on] "the degree to which a context has structures and processes in place to help mobilize residents for action—the interaction of human, organizational, and social capital"
>
> - Edison Trickett, Ph.D.
> University of Illinois at Chicago
>
> Source: Trickett, E. J. (2009)

In working to mobilize communities, not only is it important to seek active participation via community engagement, but it is equally important to identify and establish community health priorities. Involving as many community members, stakeholders, and program staff members as possible effectively captures an accurate representation of these priorities. This allows expression from a diverse range of perspectives throughout the process and enables multiple groups to share insights that may otherwise be overlooked. Citizen participation in identifying priorities is critical to obtaining these often-underrepresented perspectives and suggestions. Moreover, a participatory or collaborative approach engages subsets of stakeholders in the process of planning, implementing, and evaluating health interventions and services. In this way, delivery is more responsive to citizen needs and yields meaningful information useful for future decision-making.

Establishing health priorities is a time-consuming and difficult activity. As such, it is important to determine how to rank priorities (an evidence-based model often simplifies this process) and ensure that those impacted –the citizens–are involved in the process.. PEARL is a model representing five feasibility factors that determine how a particular problem can be addressed (Fertman & Allensworth, 2010). These factors include propriety, economic feasibility, acceptability, resources, and legality, and pose the following questions:

- **Propriety**: Does the problem fall within the organization's overall mission?
- **Economic Feasibility**: Does it make economic sense to address the problem? Will there be economic consequences if the problem is not addressed?
- **Acceptability**: Will the community or target population accept an intervention or service to address the problem?
- **Resources**: Are resources available to address the problem?
- **Legality**: Do current laws allow the problem to be addressed?

Additionally, another important reason to engage communities in the process of taking action is because community members are inherently more aware of the health problems affecting their communities than outsiders. Community mobilization and empowerment endeavors contribute to building community capacity. Assessing community capacity to operate and support interventions or service delivery systems provides considerable insight into the sustainability of the initiative. Hence, it provides a means by which to improve citizen participation in various decision-making processes, which, in turn, aids in the cultivation of community capacity. Building capacity helps to address health priorities, and links communities and individuals to needed interventions and services. Citizens are, therefore, far better equipped to actualize results and recognize the perceived barriers and

benefits of tailored interventions and services that outsiders alone cannot capture (Fertman & Allensworth, 2010). As a result, citizen participation in the process of community mobilization is imperative to sustainable community development.

Community-Based Participatory Research: A Collaborative Endeavor

An interesting way of mobilizing communities in solving complex public health problems inherent to community development is through a Community-Based Participatory Research (CBPR) approach. Various professionals and agencies have defined CBPR in different ways. Green and colleagues describe it as "a systematic inquiry, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting change" (Green & Mercer, 2001, p.1927). The Agency for Healthcare Research and Quality defines CBPR more comprehensively as "a collaborative research approach that is designed to ensure and establish structures for participation by communities affected by the issues being studied, representatives of organizations, and researchers in all aspects of the research process to improve health and well-being through taking action, including social change" (Agency for Healthcare Research and Quality, 2009).

CBPR is critical to public health because it gives citizens power over decisions that affect their health and overall lives in order to develop a more mutually beneficial process. Essentially, CBPR is an empowering approach that has the potential to strengthen community capacity via collective engagement. While difficult to accomplish, CBPR is a proven approach that involves and engages communities in a process that they help to direct (e.g., service delivery). Israel and colleagues suggest eight factors that characterize CBPR:

1. Recognizes the community as a unit of identity
2. Builds on the strengths and resources within the community
3. Facilitates collaborative, equitable partnership in all phases of the research and involves an empowering process
4. Integrates knowledge generation and intervention for the mutual benefit of all partners
5. Promotes a co-learning and empowering process that attends to social inequalities
6. Involves a cyclical and iterative process
7. Addresses health from both positive and ecological perspectives
8. Disseminates findings and knowledge gained to all partners

(Israel et al., 1998)

CBPR combines both bottom-up and top-down strategies empowering citizens and communities to identify health priorities and solve health problems with outsiders. This ensures shared responsibility and mutual accountability among groups. While it is true that outsiders can initiate processes to improve health, success of a particular intervention or service is primarily contingent on active participation by local leaders and community members who understand local culture, politics, and traditions better than outsiders. These local participants have the potential to contribute meaningfully in tailoring interventions and services to meet citizen needs.

The Institute of Medicine captures the importance of collaboration by suggesting that "health improvement and other positive outcomes typically result from collaborations that are sustained over the long term, that institutionalize effective programs and processes, and that mobilize and utilize all available resources to deal with evolving challenges and population health issues" (Fawcett et al., 2000b, 2000c). Using a collaborative and participatory approach in the processes of mobilizing communities, identifying health priorities, and building community capacity therefore allows for sustainable community development that links communities and citizens to interventions and services tailored to their particular health needs.

Chapter 3
Monitoring and Evaluation (M&E) in Conflict-Affected Countries

INTRODUCTION: THE CONFLICT-AFFECTED COUNTRY CONTEXT

Improved governance practices have the potential to serve as the support system for health system strengthening in developing countries, as they promote transparent and responsive management of the healthcare system. This is especially significant in post-conflict countries, which face numerous challenges such as conflict recidivism (Haar, Rubenstein 2012, pg. 5). Therefore, good governance helps a struggling health system to grow in a safe, conflict-free environment which allows for sustainable improvements. This project focuses on the interplay between health systems and good governance in the context of post-conflict countries that are transitioning to open democracies.

A post-conflict country struggles partly because it seeks to establish peace through the development of effective government systems that may have been weak or non-existent before the conflict. Consequently, governance sectors within the post-conflict frame must focus on building or rebuilding sustainable institutions that will serve the public effectively. Despite having this goal in mind, post-conflict countries have three perennial barriers they must overcome: "(1) the gap between the good governance agenda and existing capacities, (2) the discrepancy between formal and informal governance and (3) the inattention to sociopolitical power dynamics" (Brinkerhoff, Bossert 2012, pg. 1). Therefore, in order to combat these potential problems the national government, NGOs, and other international organizations should work together to establish and build good governance practices.

A country that is emerging from a series of conflicts also faces challenges in rebuilding and re-establishing basic health services. Conflicts inflict immense damage not only on structures, but also on systems; health professionals often flee the country and resources become inaccessible which results in either a crippled or a non-existent system. In the midst of such challenges, health system strengthening (HSS) serves as a series of necessary interventions for building up and repairing the damaged systems of post-conflict countries through improvements in the quality, efficiency, and delivery of healthcare. One essential HSS target is health financing. Aid organizations must collaborate with the local health ministry to set priorities and goals, thereby determining an efficient and fair allocation of resources (Witter 2012). Another HSS target and a necessary priority in rebuilding a healthcare system is the establishment of a sustainable healthcare workforce.

BARRIERS TO PROGRAM MONITORING IN CONFLICT-AFFECTED COUNTRIES

Widespread violence, political instability, and civil conflict have greatly constrained the extent of program monitoring activities in conflict-affected countries. As a result, they lack the capacity to perform basic health system functions, such as meeting the needs of the population, and maintaining stability/security (Haar & Rubenstein, 2012). Further barriers that inhibit effective health system program monitoring include political, cultural, economic and social factors. Specific political barriers include subpar government capacity, rebel aggression, and lack of capable health personnel; whereas a weakened infrastructure, population changes, and gender divides can generate a variety of economic, social, and cultural impediments to monitoring.

Political Factors

Effective interventions and program monitoring in conflict-affected countries are frequently interrupted by the consequences of civil war and political opposition. Political crisis promotes fragility, thus impeding adequate aid from organizations and donor agencies. Following civil war, many health personnel seek refuge in other countries and fail to return to their home country after the war ends. This scarcity affects the quality of services offered and the overall viability of the country's health infrastructure. Resources diminish, prevalence of disease increases, and access to health services is restricted. With a diminished health infrastructure, there is limited human capital to establish, implement, and sustain necessary and adequate programs (Haar & Rubenstein, 2012).

War, in consequence, impacts many facets of a conflict-affected country, particularly in terms of government leadership and community participation. The resulting political turmoil from periods of war may erode transparency, participation, and respect for human rights, which are critical areas that must be bolstered and guarded so as to avoid becoming further pitfalls to an improved health system. If these factors are not promoted in a country following civil war, the government will lose its accountability, thus failing to manage the country effectively.

The consequences of conflict, especially internal, are severe. Public resources are directed towards violence rather than productive enterprise, opportunism increases as time-horizons decrease, valuable human and financial capital escapes, and a shift takes place toward less vulnerable economic activities (Collier & Hoeffler, 2006). Death and disease among non-combatants soar due to forced migration and failed public healthcare. In addition, the costs in life and resources fall primarily on the non-combatants and neighboring societies (Collier, 2004).

Socioeconomic Factors

The aftermath of civil war heavily affects the economic progress of a post-conflict country. As a result of conflict, a country experiences losses in resources and infrastructure. Due to heavy military expenditures during a civil war, a country must compensate for economic losses post-conflict. Financing an army of personnel and weapons means that a percentage of a country's gross domestic product (GDP) is allocated towards the military and away from the health sector and infrastructure (Collier et. al, 2003). According to a 2003 World Bank report, "[T]he most obvious cost arises from the direct destruction of infrastructure" (Collier et. al, 2003, pg. 14). During conflict, rebels and soldiers destroy houses, schools, and other facilities; and, once a country's infrastructure is crippled, income reduces. Rebuilding these structures requires financial and human capital, the absence of which may hinder the rate of economic growth and recovery. Indeed, even if rebuilding commences, the risk of a country returning to conflict is 44 percent in the first five years after the end of armed hostilities (Collier and Hoeffler, 16).

Social factors, such as civilian casualties and population displacements, are hurdles to recovery in a conflict-affected country. In addition to severe casualties, civil wars also result in forced migrations as civilians flee their homes and seek refuge or asylum elsewhere. As mentioned previously, this causes not only the health worker population to decline, but civilian displacement to increase. When a country's citizens are living as refugees or internally displaced people, the society struggles to regain its social stature (Collier et. al, 2003).

Cultural Factors

During conflict, gender roles often change because men are preoccupied with battle and are away from their wives and children. Women, in turn, claim public jobs and express more authority in the

household. However, post-conflict, men tend to "revert to patriarchal traditions to reclaim masculinity and resist change to gender roles" (Omona & Aduo, 2012, pg. 123). The result is gender marginalization, particularly among women, during policy development and government rehabilitation. Women's participation in politics is minimal, therefore their input and representation in post-conflict recovery is low (Omona & Aduo, 2012). This affects their political rights and entitlements during and after recovery.

Considering the role of women in post-conflict communities, one of the more common gender-related challenges is the negative attitude toward women by men. Cultural stereotypes convince women that they are inferior to men, thus discouraging them from making program-related decisions. In addition, illiteracy and a lower level of education contribute to gender inequality and hinder the ability of women to participate in programs regarding post-conflict recovery (Omona & Aduo, 2012).

In contrast, there is also a misrepresentation of men due to demographic changes caused by combat. Following a civil war, the female-to-male ratio tends to increase due to combat fatalities. As such, households led by females and younger women living alone increases.

While not consistent for all conflict-affected countries, gender stereotypes and divisions are frequently cultural barriers that must be addressed to achieve change and development. It is, therefore, important to be conscientious regarding any negative attitudes towards women that may affect political and social progression as these attitudes are potential barriers to effective program monitoring.

Political turmoil, economic decline, social disorganization, and cultural misgivings are barriers that impact a conflict-affected region's health equity and development. In order to carry out monitoring and evaluation strategies, organizations must understand and consider the obstacles that may influence how sustainable and effective their intervention can be in a conflict-affected country.

DATA COLLECTION CHALLENGES IN CONFLICT-AFFECTED COUNTRIES

In countries affected by conflict, several barriers also exist that impede data collection, hinder program-monitoring efforts, and decrease effectiveness of program evaluations. These barriers are not political, socio-economic, or cultural at their core, but instead, deal with the inhibition of accurate data collection and its interpretation. Data collection barriers directly impair monitoring and evaluation capabilities, rendering data unfit for use (Strong et al., 1997). In conflict-affected countries, "the process of gathering data requires relatively high degree of resource capability and can result in evaluation outcomes that are patently obvious and do not capture the nuances of conflict transformation and community regeneration needed to understand what does and does not work — and why" (Maphosa, 2013, pg.92). Conflict adds more complicated elements to data collection that must be considered for M&E efforts to be effective.

Types of Data Collection Barriers

Based on the four major characteristics of high-quality data (intrinsic data quality, data quality context, data quality representation, data quality accessibility), types of data collection barriers include issues with data sources/availability, data definition/format, data accessibility, and data accuracy (Mendes & Rodrigues, 2011). These hurdles can also be divided by technological basis or ethical basis, depending on their type of barrier and the intent by which they were formed.

Data source/availability barriers include technical issues and occurrences of human error that prevent valid data accessibility. Examples include errors during data entry from users, loss or corruption of data upon computer transferring or updating, and other computer-based errors. Data

format and definition barriers vary by the type of data stored, either electronic or written. Each format of data has its own "strengths and weaknesses which may have an impact on data quality," including accessibility, ease of interpretation, or change in meaning as time passes (Mendes & Rodrigues, 2011, pg. 453). Data accessibility barriers, often considered ethical or even political barriers, exist through concepts such as security, ownership, confidentiality, and privacy. Access to data may be an obstacle, depending on how the data were recorded, when the data were recorded, and who recorded the data. In conflict-affected countries, this type of barrier is often ignored, but may exist via enforcement by some political or cultural party. Often, this type of barrier is based on organizational or institutional policy and procedure. Data accuracy barriers are the most unclear of barriers, as accuracy of data may be altered by a variety of methods, which may include subsets and combinations of several data collection barriers. Accuracy of specific documentation methods and lack of structure among entered data are technical definitions of problems in data accuracy that determine how data are interpreted. However, other forms of data accuracy barriers exist that are based on human-alteration of data for specific agendas.

Conflict-Affected Countries

Conflict-affected countries, and smaller regions within a country sometimes referred to as "conflict zones," are characterized by one or more of the following internal events: gender-based violence, class/caste violence, social violence, political instability, state-based/sanctioned intimidation, and structural violence. Because of their unstable, unpredictable, and uncontrolled environments, areas classified as "conflict-affected" "represent the antithesis of the methodologically desirable evaluation environment" (Bush & Duggan, 2013, pg. 6).

For monitoring and evaluation in conflict zones, four key "domains" help to identify certain data collection barriers and issues, according to Bush and Duggan (2013). Ethical-methodological issues are characterized by a misrepresentation of the impact of a program, specifically with emphasis on marginalizing a group that is already ostracized or taken advantage of, through a type of methodology that fails to recognize certain groups of stakeholders. Logistical-methodological issues are those barriers in which stakeholders do not have access or involvement with the evaluation process, either because of lack of time, geographical barriers, or insecurity because of the methodological process. Political-logistical issues hide certain data and results for reasons known to the program implementer. Ethical-political issues are barriers in which pressure may be applied on the monitor/evaluator in order to influence results or coerce an evaluation to be positive or negative; this pressure is often due to an outside source, such as a political party leader or an industry/organizational leader. As conflict intensifies in these specific countries and regions, these four domains lose their identifiable boundaries and cross over onto one another, so that decisions and actions that influence one domain may affect several domains. This sort of multiplicative interaction emphasizes that conflict-affected countries create data barriers for a variety of reasons that may exponentially worsen as the conflict worsens.

Whether data collection barriers are caused by poor data-collecting capacity or are due to data alterations for some unethical purpose, provision of data that is incorrect, in scope or in magnitude, will produce misleading results and analysis. This inaccurate information can incorrectly portray the system being monitored and alter evaluation of said system. In the case of health governance monitoring, barriers in data collection incorrectly portray the quality and efficacy of service delivery methods intended to meet specific citizen health needs. When data are either unavailable for collection or inaccurate, monitoring efforts produce false grounds for program evaluation, as the monitoring method outputs are not representative of the actual situation. In conflict-affected countries and regions characterized by political instability and violence, monitoring and evaluation efforts become even more difficult due to the presence of numerous data collection barriers from a variety of sources.

MONITORING AND EVALUATION STRATEGY

When a new program is implemented into the health sector of a community, it is important to track the progress of that program. Observing program progress or policy effectiveness over time allows for better decision-making in the future. Methods of M&E are used in a variety of program settings for measuring effectiveness and efficiency of both new and ongoing community programs. M&E is important because it provides valuable information throughout program design and implementation, as well as assessment of results for determining the program's successes and shortcomings.

Monitoring is an ongoing process involving continuous data collection and analysis in order to review program implementation. While evaluation can be either internal or external, program monitoring should always be conducted as an internal activity and as a valued management practice. However, monitoring is not a sufficient practice on its own. Monitoring and evaluation practices are synergistic; monitoring should be used to identify issues that require a more comprehensive investigation through evaluation methods (Schiavo-Campo, 2005). Evaluation is a periodic assessment of program relevance, effectiveness, efficiency, impact, and sustainability. However, evaluation is too expensive and time consuming to be conducted frequently. The intervention effects measured are compared to the program's goals and objectives. Information collected from M&E is presented to stakeholders in order to support policy-making, budgeting, and decision-making for the future.

When M&E strategies are discussed and developed during the program's planning stages, those involved have a better understanding of potential future challenges and are more prepared for program adaptation. The strategies should highlight basic measurements and indicators to ensure that service delivery is aligned with citizen needs. These strategic discussions should involve program beneficiaries to increase community capacity and program sustainability. It is important to remember that stakeholders are interested in direct impact and sustainable results. Relevant evaluation questions should therefore link program activities and outputs to impacts in the community.

There are numerous benefits to implementing an M&E strategy with a community program or intervention. By involving stakeholders and program beneficiaries, accountability and transparency are ensured. Decision-making at the policy level is more informed with learned lessons for the future. Trust is built and supported among groups of diverse stakeholders. Citizens' needs are met and local knowledge is utilized to support local program engagement and sustainability.

Many countries affected by conflict have had their systems and programs related to the government, the economy, and healthcare shaken into instability. Donor agencies, nonprofit organizations, and local governments may come together to find solutions or interventions to solve current issues with the hope of stabilizing systems. However, it is important that task collaborators consider effective ways of monitoring and evaluating the progress of the various interventions. Often, inadequate monitoring systems are used. For example, proposed monitoring strategies may require a great deal of funding or intellect and skills from those working for the nonprofit organizations. It is imperative for these collaborative teams to explore more effective monitoring and evaluation strategies. Additionally, these strategies should use the intellectual, social, human, and financial capital readily available from the citizens of the post-conflict regions in order to enhance community capacity and promote a future of sustainability.

PROGRAM MONITORING: A BALANCED SCORECARD APPROACH

Program monitoring can be costly, in both time and resources. Development practitioners across the globe face the frustrating task of balancing data collection and entry of measurement data with working on their actual projects. As the culture of M&E becomes more of an increasing norm in development, so also is the threat that poor utilization of this practice becomes self-defeating or debilitating to successful project implementation. Conversely, if properly used, the benefits of M&E are tremendous and well worth the costs to a project. In fact, the effectiveness of any program's evaluation will be negligible unless built upon a solid monitoring system from which it draws relevant information. The purpose of monitoring is to provide a structured, efficient, and sustainable means of collecting data relevant to achieving the program's goals.

One of the monitoring tools now widely used in both the public and private sectors across the globe is the Balanced Scorecard (BSC). This particular tool was developed in the 1990s by professors Robert Kaplan and David Norton at the Harvard Business School (Kaplan and Norton, 1996). The design of this particular monitoring tool is set up to create an understandable measurement framework, translating the mission and strategy of any project into a set of relevant performance measures. Ensuring regular collection of long and short, internal and external, financial and non-financial, as well as lead and lag measures, the BSC creates valuable insight into the workings of any project.

Figure 3: The Balanced Scorecard for the Public Sector

Source: Dr. Deborah Kerr. Balanced Scorecard Presentation, February 2014.

Elements

The Balanced Scorecard displays the progress of a project via a comprehensive storyline. At the broadest level, there are five different categories, or perspectives: Mission, Customer Focus, Internal Processes, Learning and Knowledge, and Financial (Kerr, 2003). Each of these five perspectives identifies a separate component within the overall project. Inset into each perspective exist objectives, measures, and targets. A well-prepared balanced scorecard synthesizes the monitoring of its project by beginning with broad concepts (perspectives) and flowing incrementally down to specific targets.

Perspectives

Mission - Identifies the overarching purpose of the project, one that explains why and for what cause it exists. For example, 'to provide the necessary resources and technical assistance to primary school educators in country X in order to assist them in properly educating their students to a standard Y.'

Customer Focus - Identifies the wants and needs of stakeholders, including beneficiaries. Ensures the project is indeed delivering what the beneficiaries requested (as identified in the Mission).

Internal Processes - Identifies all in-house activities performed by the implementing organization on a daily basis, which assist in achieving the project objectives. Examples of internal processes are accounts payable, inventory taking, or hiring protocol.

Learning & Knowledge - Refers to the pool of knowledge and skills, in the form of technology or personnel, possessed by the implementing organization. Examples of these are staff training sessions, established program implementation protocols, statistics software, or certification requirements.

Financial - Identifies the financial assets available to the organization. These can include grants, donated funds, loans, equipment, and facilities.

Within each perspective are objectives. These answer the question, *what is the project's strategy to achieve in this perspective?* Each objective in turn contains measures. These answer the questions, *how will progress for this objective be measured in our organization?* and *how often are these measurements collected?* Further, measures contain a number of targets—the smallest, yet most specific aspects of the balanced scorecards. These targets consist of real values that the implementing organization desires to pursue or achieve within a certain timeframe.

Upon examination, a program evaluator should easily be able to obtain two vital pieces of information: (1) a clear understanding of the mission and goals of the project, and (2) a specific and attainable road map for how to arrive there in a timely manner. The benefit of this monitoring tool is that evaluators not only save time in taking stock of the program's current situation, but can also modify various parts of the BSC to measure only what is necessary. Monitoring tools frequently become overburdened with measuring data that was initially relevant, but found later to be irrelevant to achieving the program's objectives. With a balanced scorecard, it is easier to eliminate any superfluous data and focus efforts and resources on only what is necessary for success. In this way, measurements truly are what drive performance.

PROGRAM EVALUATION: ADDING VALUE TO RANDOMIZED CONTROL TRIALS

Evaluations can increase the capacity of an international organization beyond its financial abilities. This makes it easier to determine what works in development and what does not. Trial and error methods require more resources than a strategy chosen by experimental evaluation. Randomized evaluation, or Randomized Control Trials (RCTs), are one of the evaluation methods widely used in development programs. Development agencies, international organizations, and governments have used it in policies regarding health, education, microfinance, and local government reforms. According to Duflo, RCTs can improve the efficiency of development aid and are widely applauded in the development arena (2004). Different groups use RCTs extensively in development programs mainly due to the level of control the organizations maintain in determining the exposure of program. In the public health sector, RCTs are considered as a powerful methodology because, under this evaluation method, the researcher has control over the experiment by determining who receives the treatment, while in traditional methods, a researcher merely relies on exposure determined by a third party and has lesser control over the exposure (Stolberg et al, 2004).

Based largely on perceptions of enhanced scientific rigor, RCTs have secured a preeminent position in the assortment of tools that researchers rely upon when evaluating the success or failure of development projects. RCTs enjoy a number of productive uses and advantages within the study of development: they expose micro-level policy changes that can lead to improved outcomes for the

poor, act to reduce certain biases, and are highly adaptable. Even so, the preferential use of RCTs creates a conspicuous clash between traditional technocratic development strategies and emergent political approaches. Indeed, as discussed in Carothers, RTCs are only appropriate in highly specific, bounded aid intervention scenarios; e.g., the clinical effects of distributing a particular pharmaceutical in certain villages within a region. Hence, there are a host of delicate operational circumstances - preset objectives, potential for randomization, and clear outcome indicators - required for RCTs to deliver a sufficient evaluation, many of which are rarely present within the post-conflict countries they hope to assess. Furthermore, by seeking to control all variables in pursuit of "hard evidence", RCTs favor conclusions that transcend the granular level which they examine, effectively eschewing the varied political circumstances/power structures seen between peoples, regions, and nations alike (Carothers, 2013, p. 245-250).

This is not to say that RCTs are inherently damaging to the developmental process; in and of themselves, they can be quite beneficial when used in a complementary manner. However, when intended as the foundation of a primary reform strategy, the RTC-evaluative process becomes an obstacle to more nuanced, political approaches, stressing micro reforms and policy approval over attention to broad systems and the creation of good policy. There is, in effect, a need to explore alternative methods that address the dangers and limitations of over reliance on RCT approach (Cook, 1979; Shadish, 2002).

One such alternative is social network analysis (SNA), a model that analyzes interactions and linkages between a group of actors (Luke & Harris, 2007). SNA is comparable to political economy analysis—an evaluation method that is gaining popularity among international development agencies, such as UNDP. Both methods analyze relationships and interactions among different groups in a society. However, political economy analysis tends to focus on the distribution of power and wealth at a macro, nation-state level (United Nations Development Programme, 2014). Social network analysis operates at a micro level and considers informal leadership and community members. One type of SNA is organizational network analysis—an evaluative model that analyzes relationships between community organizations. A mixed-methods approach that integrates RCTs and organizational network analysis has great potential to improve health governance systems.

Organizational Network Analysis

A network encompasses a group of actors that could represent individuals, organizations, programs, or other entities. Network analysis in public health has traditionally focused on understanding how interactions between individuals affect disease transmission (Luke & Harris, 2007). However, within the last few years, there has been growing interest in understanding how networks comprised of organizations and agencies affect health. Organizational network analysis is a rather new concept in public health; therefore, very little research has focused on its applicability in improving health, let alone in improving health governance systems. However, several studies have examined relationships between community organizations, assessed how those relationships have changed over time, and offered insight into potential effects on community health development.

The broader goal of identifying effective and adequate evaluation approaches is deeply rooted in developing and strengthening community capacity by leveraging community resources, institutions, and structures to meet the health needs of citizens. In order to do so, several health issues require citizens' diverse and unique needs to be met by multiple organizations. Thus, organizational network analysis seeks to understand the relationships and interactions among multiple organizations via information-sharing, joint planning, sharing of tangible resources, formal working agreements, and referrals to improve health and larger public health systems. The evaluation approach seeks to provide specific information on how network analysis is utilized with coalitions and partnerships. This is particularly relevant when thinking about public health resource allocation. Public health

resources are often limited, and organizational network analysis can be linked to various processes and outcomes to identify existing and missing relationships among other organizations. These interactions can strengthen the potential for future relationships to improve resource allocation in meeting citizens' health needs (Merrill et al., 2006).

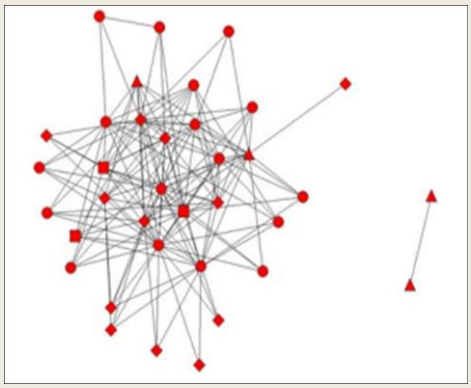
Organizational network analysis allows M&E practitioners to gain a better understanding of collaborative processes in community organizing. Assessing the organizational networks within a community creates a measureable dimension of community capacity. Examining the nature of relationships between organizations that work to leverage resources and meet citizens' health needs may yield insight into the level of cooperation and trust within the organizational network (Wendel, Prochaska, Clark, Sackett, & Perkins, 2010). This idea has been impressively captured by Burdine and colleagues, who suggest that "no single organization has the capacity to effectively address community health problems, so no single organization within the community should be expected to support the entire community health development process" (Burdine, Felix, & Wendel, 2007, pg. 11). The idea emphasizes the fact that in order for a community to sustain improvements in health and community capacity, it is crucial for organizations to challenge the status quo and establish collaborative relationships that extend beyond traditional endeavors. This can help to improve health outcomes by leveraging the variety of resources that are collectively identified as a network.

Advantages of Organizational Network Analysis

Previous research studies have shown that network analysis is a useful tool for evaluating structural changes in community partnerships and coalitions. Organizational network analysis has implications for describing and identifying existing, potential, or missing network connections for a wide array of stakeholders. This method is also an effective means to identify organizations or individuals central to a coalition. As such, this illustrates the idea, promoted by Butterfoss & Kegler, that by examining organizational linkages, one may better understand collaborative efforts, thus providing insight into network structure and function (2009). This identifies appropriate resources necessary to cater to the unique health needs of citizens since it is may be unlikely for a single organization to meet all the health needs of a citizen. For example, organizational network analysis was used to evaluate structural change and infrastructure development among organizations in the Brazos Valley Health Partnership—a community-based participatory research effort in seven rural counties of Central Texas (Wendel, Prochaska, Clark, Sackett, & Perkins, 2010). Results of this evaluative study indicated substantial growth within the networks related to resource sharing, cooperative planning, information sharing, and formal mutual agreements. These results suggest that efforts to enhance relationships among network organizations through partnership development, communication, and planning, implementation, and evaluation of community health activities have the potential to yield an increase in community capacity (Wendel, Prochaska, Clark, Sackett, & Perkins, 2010).

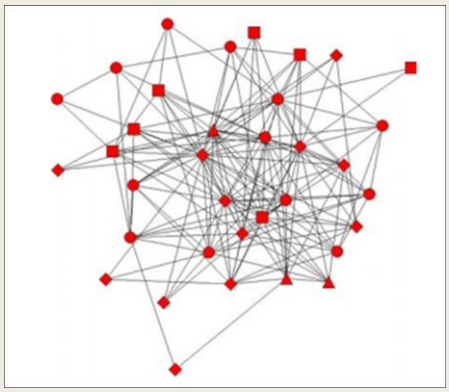
Additionally, accurate interpretations of organizational network analysis illustrate that this approach is an excellent tool for identifying network issues regarding information flow. This is because graphical representations in network analysis often capture larger network structures that may not have been apparent otherwise (Merrill et al., 2006). Using software such as NetDraw or Ucinet, network diagrams can be illustrated to show structural changes within the network over time. Examples of network diagrams are shown below. These diagrams represent changes regarding the sharing of tangible resources within the Brazos Valley Health Partnership organizational network from 2004 (Figure 4a) to 2006 (Figure 4b).

Figure 4a: Sharing of tangible resource



Source: Brazos Valley Health Partnership Organizational Network, 2004.

Figure 4b: Sharing of tangible resource



Source: Brazos Valley Health Partnership Organizational network, 2006.

The various node shapes represent different types of organizations within the network: government agencies, healthcare organizations, social service providers, and educational institutions. Each line represents the relationship between the organizations, and those agencies with stronger relationships were positioned closer to each other, as opposed to weaker, less frequent relationships. One can see that two years after beginning the Brazos Valley Health Partnership, more linkages, or collaborative relationships, were established, providing evidence of increased community capacity (Wendel, Prochaska, Clark, Sackett, & Perkins, 2010).

Results from organizational network analysis are also useful for process planning because they can lead to improvements in information systems, which, in turn, can increase performance and strengthen information-sharing among organizations. One of the most important advantages of this approach is that organizational network analysis presents opportunities to develop activities that target structural change and development among organizations and communities. This can lead to improved community capacity, ultimately resulting in better public health systems and overall health outcomes among citizens (Merrill et al., 2006).

Limitations of Organizational Network Analysis

While there are several strengths of this approach, we cannot overlook apparent limitations. A key drawback to organizational network analysis is that it takes time to evaluate inter-organizational relationships. Building relationships with other organizations and agencies can be a long and tedious process as it normally takes a substantial amount of time to build and to share information resources. Additionally, resources are required to cultivate meaningful collaborations with other organizations.

Relationships within a network are complex and sometimes difficult to understand. As such, there is great potential for overestimating connectivity between and among organizations that may not accurately capture the nature of their relationship. This has a huge impact on evaluation of network effectiveness because it could potentially convince organizations to share and allocate resources with others that may not otherwise be available. This could also cause organizations to overestimate the overall availability of resources to meet citizens' health needs (Merrill et al., 2006). In addition, there are major limitations in evaluating network effectiveness because stakeholder interests are overwhelmingly diverse. This is important to account for as determining network effectiveness from the perspectives of those organizations that make up the network and provide

resources significantly affects the network (Provan & Milward, 2001). However, it is often difficult to incorporate all perspectives; this hinders progress in understanding how relationships and interactions can strengthen among organizations.

Given the complex historical context of conflict-affected areas, several barriers make the sole use of RCTs an inadequate approach. As such, it is imperative to consider utilizing a mixed-methods approach with the additional evaluative component of organizational network analysis. A mixed-methods approach allows for the acknowledgement of limitations to each research method and recognizes the different dimensions of each paradigm. This helps in leveraging the strengths of each method to compensate for limitations. Furthermore, there is great need to complement RCTs with organizational network analysis, which can serve as an effective evaluation tool for examining the nature of relationships among organizations. Understanding network ties can enhance public health practice by facilitating more efficient, sustainable community-based coalitions and partnerships that work to strengthen health governance systems.

STRENGTHS AND LIMITATIONS OF MONITORING AND EVALUATION

Although monitoring and evaluation tools have different functions, they are complementary in enriching the quality of programs. While monitoring tools can help to provide data and identify questions and issues for in-depth evaluation, evaluation tools can help to identify what can be monitored in the future. As mentioned throughout this section, monitoring tools such as the balanced scorecard and complementary evaluation tools like randomized control trials, paired with organizational network analysis, have the potential to serve as effective M&E tools. However, M&E is wide in its scope and purpose and can vary from one program to another. As a result, there is not necessarily one right or wrong way to utilize M&E. Rather, the process tends to incorporate a mixed-methods utilizing several unique tools.

While monitoring and evaluation have many strengths, they also have limitations. Incorporating M&E from the onset of programs can help to quantify the attainment of program goals and objectives, assess program fidelity, and provide continuous feedback for improvement of project design. In addition, M&E can help to identify potential problems, gauge overall program impact, and produce sustainable results that benefit target populations. In doing so, M&E help improve informed decision-making regarding program operations management and service delivery, and strengthen learning and capacity development. M&E tools also mobilize stakeholders to work together to improve overall accountability, to apply results to practice, and to ultimately inform policy development. M&E tools serve as powerful resources for advocacy of strong health governance systems.

While M&E strategies are useful for many reasons, various limitations also exist that can hinder the goals and outcomes of a program. Political, socioeconomic, and cultural barriers, in addition to data-collection barriers, all affect the productivity of monitoring stages. If not properly addressed during M&E, these barriers may result in inconclusive decisions regarding the viability of a program. For example, a lack of rigor leads to falsified and biased data, thus resulting in a weakened analysis of programs. In addition, the political interests of those participating may trump citizen needs and which services should be delivered in conflict-affected regions. Because M&E strategies are often tailored to donor interests, several aspects can easily be overlooked, including the utilization of M&E in its full capacity for design and continual improvement of interventions. As a result, effectiveness is limited significantly. Ultimately, M&E incorporates a variety of tools and processes to establish a sustainable program. According to experts in the field, this strategy has been found to be most effective in addressing health systems among conflict-affected regions.

Chapter 4
Liberia Health Systems and Governance

INTRODUCTION: HISTORY OF LIBERIA

Liberia's existence began in the early 19th century with an attempt by the American Colonization Society to repatriate freed American slaves to Africa in hopes of averting slave rebellions and avoiding the prospect of abolition. While both free blacks and abolitionists in the United States largely opposed this effort, a small group of volunteers agreed to establish a settlement on the west coast of Africa in 1822, which they named "Monrovia" after American president James Monroe. Over the next few decades, nearly 20,000 American repatriates settled in the area (Bright, 2002).

By 1947, the settlers had declared independence as the new country of Liberia and elected their first president, an Americo-Liberian named Joseph J. Roberts. Unfortunately, the new nation was plagued by economic troubles and suffered from increasingly repressive political regimes. In 1980, Americo-Liberian rule ended with a military coup by indigenous military officer Samuel Doe, igniting an era of political and economic instability followed by two consecutive civil wars between 1989 and 2003 (Bright, 2002). According to the United Nations Mission in Liberia, the two civil wars resulted in nearly 150,000 civilian casualties and approximately 850,000 refugees dispersed across neighboring countries (UNMIL). The number of Liberian refugees decreased from 150,153 in 1993 to 10,168 in 2005 (UNHCR, 2004, p. 366; UNHCR, 2007, p. 400), likely due to the cessation of the civil wars.

When Liberia's bloody wars ended in 2003, a transitional government was established with the assistance of United Nations peacekeeping forces. In 2005, Liberians elected Ellen Johnson Sirleaf, a Harvard-educated economist who would become the first female president of an African country. In order to stabilize the country and maintain the solvency of the government, it was important for President Sirleaf to quickly secure outside aid and investment in Liberia, but the new administration had inherited a country ravaged by decades of conflict, plagued by debt, and suffering severe infrastructural deficits(Junge & Johnson, 2007).

In addition, it was necessary to complete the demobilization, disarmament, and reintegration of former combatants from both sides in order to ensure continued peace. This was facilitated by the United Nations Mission, which demobilized and disarmed more than 100,000 soldiers. Former combatants were provided with $300 USD each as an incentive to turn over their weapons, and were subsequently offered subsidized formal education or vocational training to assist with reintegration into civilian society. Data shows that attrition was high in the reintegration phase, but that participation in job training did little to boost former combatants earnings when compared to those who did not participate in the program. Unemployment remained high, particularly in Monrovia, largely due to a lack of available employment opportunities in the post-conflict economy (Levely, 2013).

The bleak picture in post-conflict Liberia sets the stage for the status of Liberia's healthcare. Fourteen years of civil war devastated Liberia's healthcare system, destroying the majority of the country's healthcare facilities and institutions. During the war, all medical training institutions were shut down, and graduation rates remained low between 1999 and 2002 among the five of seven medical and health-related schools which were operational by 2002. A.M. Dogliotti College of Medicine graduated only 17 physicians due to the collapse of the John F Kennedy teaching program. Tubman National Institute of Medical Science graduated 464 physician assistants and nurses. University College School of Nursing graduated 95 nurses. Cuttington and Mother Patern School of Health Science graduated 221 associate degree nurses (Varpilah, 2011). Most credentialed healthcare

providers fled the country during this time. However, for those who remained in Liberia during this period, food became their compensation for work, and many did not survive. Prior to 1989, that number had dropped to 13,526 healthcare providers employed in the public health sector; by 1998, there were only 1396 professionals, including 89 physicians and 329 nurses (Varpilah, 2011).

In addition to personnel shortages, there was a shortage of facilities, equipment, and supplies to address health concerns. During the war, hospitals were looted and emptied of medicine. Of the 550 hospitals standing in Liberia before the war, only 354 of them remained operational. The headquarters of Liberia's health ministry became a temporary residence for refugees (Downie, 2012). Of the facilities still operational in 2003, the majority were run by non-governmental or faith-based organizations (Lee et al., 2011).

One of the administration's first steps toward recovery was to establish the Governance and Economic Management Assistance Program (GEMAP) in 2006 to oversee the nation's economic and political affairs, including financial management and accountability, budgeting and expenditure management, procurement and granting concessions, effective processes to control corruption, support for key institutions, and capacity building. GEMAP was an agreement between Liberia's new government and international partners such as USAID, the World Bank, the European Union, and the International Monetary Fund intended to rebuild government institutions, address corruption, and improve efficiency. These partners provided guidance to the new governmental institutions, and approved all financial transactions as part of an effort to inhibit corruption and prevent wasteful spending. While this approach required intensive involvement in the early stages, including the embedding of GEMAP advisors in the daily operations of government ministries, the role of GEMAP was to increase capacity in the Liberian government by expanding knowledge and skills and by providing mentorship to Liberian staff ("Liberia Governance and Economic Management Assistance Program," n.d.).

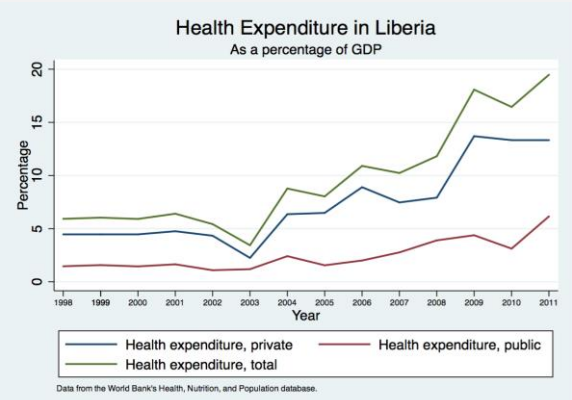
POST-CONFLICT CHANGES

In 2007, the Liberian government launched the Liberian Poverty Reduction Strategy, which focused on four pillars: security; economic revitalization, governance and the rule of law, and infrastructure and basic services. This program encompassed Liberia's National Health Policy and National Health Plan with priorities including maternal health, child health, communicable diseases (including malaria and HIV), nutrition, water and sanitation, and social welfare (Republic of Liberia Ministry of Health and Social Welfare, 2011). Other priorities pertain to infrastructural deficits such as electricity, water, roads, and buildings along with personnel shortages caused by lack of graduating healthcare workers and low salaries (Varpilah, 2011). The functional foundation of the National Health Policy is the Basic Package of Health Services, which must be delivered to Liberian citizens free of charge. Services in this package include antenatal care; labor, delivery, and post-partum care; newborn care; reproductive and adolescent health; child health; communicable disease; mental health; emergency care; and sexual and gender-based violence care (Cleveland et al., 2011). This plan was set to deploy between 2008 and 2011 (Downie, 2012).

In addition to the implementation of the Basic Package of Health Services, the Liberian government began an accreditation program in cooperation with the Clinton HIV/AIDS Initiative to ensure that facilities were providing the services as planned. Facilities that achieved a score of 75 percent or higher on the accreditation grading scale were considered functional, with those achieving higher scores given silver or gold accreditation. In developed countries, similar healthcare accreditation is typically performed by non-governmental entities such as industry associations, but in Liberia the fragmentation of the health system made this impossible. The country had no landline communication network, and very little utility infrastructure. Many facilities were accessible only on foot due to flooding and washed-out roads, and were out of contact with the central government for

months at a time. As a result, many facilities were not even aware of the existence of the accreditation program prior to the arrival of the accreditation team. Despite these barriers, the accreditation program was able to achieve several important advances for Liberia's healthcare system. First, it amassed a large amount of data on the number of operational facilities, qualified personnel, and available services in the country. Second, it improved the cohesiveness of the health system by making facilities and stakeholders aware of the content of the Basic Package of Health Services and the National Health Plan. Finally, it laid the framework for the future implementation of performance-based contracting with outside entities, perhaps improving the overall quality of the health system (Cleveland et al., 2011).

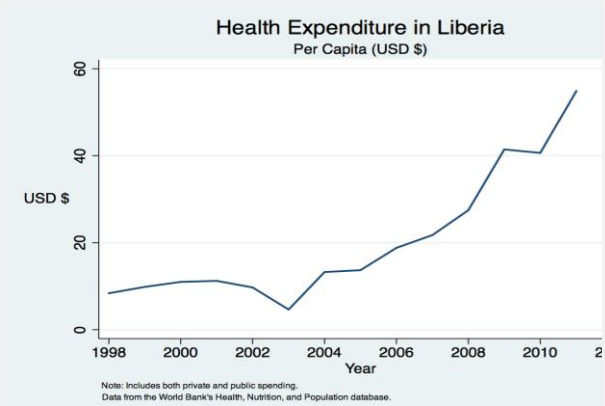
Figure 5: Health Expenditures in Liberia as a percentage of GDP



Source: The World Bank's Health, Nutrition and Populations database

In 2012, the Sirleaf Administration replaced the National Poverty Reduction Strategy with National Vision 2030 (Glencorse, 2013). A major component of this plan involves eliminating Liberia's dependence on foreign aid by 2020. In 2008, foreign aid to Liberia was more than 700 percent of the nation's GDP, leading many to believe that Liberia was subject to undue influence from outside donors ("National Vision 2030," 2012). Efforts to reduce aid dependence includes soliciting increased foreign investment, particularly from countries outside the US and Western Europe, a strategy that may improve income at the expense of autonomy.

Figure 6: Health Expenditures in Liberia per capita (USD)



Source: The World Bank's Health, Nutrition and Populations database

The positive effects of these initiatives are reflected in the significant health expenditure increases over the years (Figures 6 and 7). Even when excluding private sources of health spending, the Liberian government has drastically augmented total and per capita health expenditures. While the effects of such changes may not be immediately apparent, the raw spending data dovetails with the publicized health initiatives, such as the National Health Policy and National Health Plan.

THE CURRENT STATE OF PUBLIC HEALTH

Liberia fared poorly on a variety of population health measures following the civil wars. In 2012, life expectancy in Liberia was estimated to be 57.4 years. The fertility rate was 5.9 births per woman, with a 2010 maternal mortality rate of 990 deaths per 100,000 births. Infectious and communicable diseases were widespread, including tuberculosis, diarrheal disease, and malaria. In 2007, HIV

infection rates stood at 2 percent of the population aged 15–49, while the incidence of tuberculosis was 420 cases per 100,000 in 2008. Nevertheless, by 2011, the HIV infection rate and incidence of tuberculosis had dropped to 1 percent of the population aged 15-49 and 299 cases per 100,000 respectively (The World Bank, 2013). In 2007, the childhood malnutrition rate was 20.4 percent. In 2008, only 17 percent of Liberia's population had access to adequate sanitation facilities. Many areas have no local source of healthcare, and their residents are required to travel long distances to seek care (Last Mile Heath, 2012).

Liberia is host to a wide array of public health problems including issues related to untreated waste, malnutrition, maternal mortality, contaminated water, and child mortality. Untreated waste is an issue mainly affecting the low-income populations of urban areas, the decades-long lack of a dedicated waste management sector and proper toilets has led to the random dispersion of household garbage, human feces, and other sordid wastes throughout many of Liberia's major cities. This has resulted in the accumulation of massive, unsanitary trash mounds, with nearly 70,000 tons of solid waste in Monrovia alone. Such an environment causes a plethora of injuries and disease, including exposure to toxic chemicals and the proliferation of food and waterborne disease. As a population, Liberians are largely uneducated on issues regarding uncontrolled waste disposal in growing urban areas. Unfortunately, this lethal combination has contributed to cholera epidemics, as well as diarrhea problems in the population. Fortunately, many people aware of the issue have worked as a community to build latrines away from the dump sites ("Liberia: Uncontrolled Trash Greatest Public Health Threat - UN," 2007).

Another prevalent public health problem in Liberia is malnutrition; approximately 31.4 percent of the total population is undernourished in some capacity (The World Bank, 2013). Conflict, a lack of infrastructure, and general economic inefficiencies prevent the widespread distribution of foodstuffs to populations in need. Furthermore, owing to a lack of widely available contraceptives, two bloody civil wars, and the subsequent breakdown of the country's social fabric via the destruction of families and the rape of many women and girls, Liberia has one of the highest rates of teenage pregnancy in West Africa: 32 percent overall, with even higher rates in rural areas. Due to the economic and infrastructural collapse that often follow intensive periods of internal conflict, most new mothers lack the social, medical, economic, or familial resources to provide their children with the nutrients required for survival, much less healthy development. Indeed, according to the Ministry of Health's 2008 national nutrition policy, chronic malnutrition affects 39 percent of Liberian children under five, with more than 6 percent acutely malnourished (Government of Liberia, 2008). Such children are highly susceptible to stunted growth, developmental disorders, and serious diseases that impact their future as productive citizens, as well as increase their risk of early death ("Liberia Poverty Reduction Strategy," 2008).

Another major public health problem affecting Liberia is maternal mortality. The ratio of maternal mortality is one of the highest seen in sub-Saharan Africa: roughly 1,000 deaths per 100,000 live births, with even higher rates in rural areas. Maternal mortality shares many root cases with malnutrition, including high rates of teenage pregnancy (the pregnancies of young girls are inherently more risky than those of mature women). Furthermore, as a result of infrastructural and institutional deficits in maternal care caused by Liberia's civil wars and economic stagnation, many women make do with grossly substandard delivery methods and practitioners that put both the mother and the baby at unnecessary risk (World Health Organization, 2003).

Another notable environmental cause of disease is contaminated water. As only 25 percent of Liberia's population has access to safe drinking water, and 15 percent to proper human waste collection and disposal systems, waterborne diseases such as typhoid, cholera, and other diarrheal diseases account for a significant level of morbidity and mortality among both rural and urban populations, with the highest prevalence within poor rural populations. For instance, the average

incidence of cholera in Liberia over a six-year period between 2000 and 2005 was 594 people per 1 million, resulting in a mean case fatality rate of 0.6 (Gaffga, Tauxe, & Mintz, 2007; Liberia Institute of Statistics and Geo-Information Services, 2007).

On a positive note, according to the 2013 IIAG survey, child mortality, measured as the probability of dying between birth and five years of age and expressed as a number of deaths per 1,000 live births, has steadily decreased between 2000 and 2011. Indeed, the probability in 2011 dropped by 50 percent from 2000 (Mo Ibrahim Foundation, 2013). Furthermore, the percentages of children immunized against measles and/or diphtheria, pertussis, and tetanus (DPT) either rose or remained constant during most of the post-war period (Mo Ibrahim Foundation, 2013).

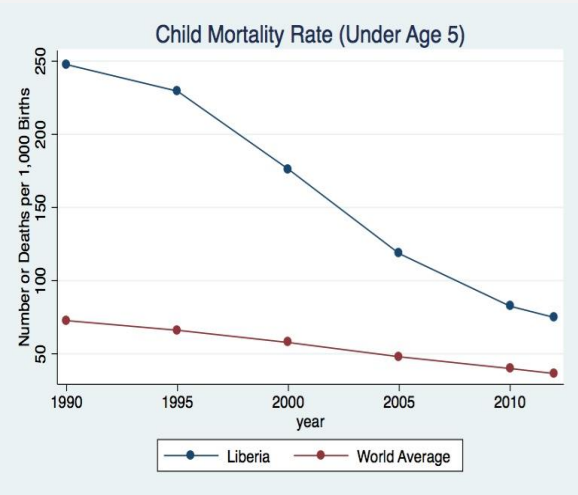
Liberia has improved in other health service areas as well: the percentage of the population that has access to "improved sanitation facilities" increased from 11.6 percent in 2000 to 18.2 percent in 2011, with overall declines in infant and adult mortality rates during the same period (The World Bank, 2013). As a result, some notable progress has been made since the end of the conflicts; though, overall, the health conditions in Liberia remain dire.

Chapter 5
Benchmarking Liberia's Development Transition

Introduction: Liberia's Transition from Conflict to Sustainable Development

The Country Development Cooperation Strategy (CDCS) for Liberia states, "Liberia is poised to shift its primary focus from…post conflict stabilization and recovery to dynamic and sustained long-term development" (USAID, August 2013, 4). The CDCS, however, does not state how this transition will take place nor does the CDCS describe what the next stage of development looks like. Therefore, it is important to establish benchmarks in order to measure progress towards this transition. Countries with similar conflict backgrounds - Peru, Senegal, Lesotho – could provide the basis for establishing benchmarks for decentralization, public private partnerships and rule of law.

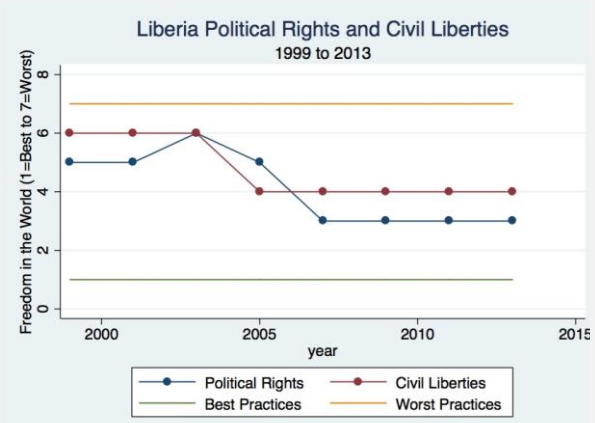
Figure 7: Liberia Child Mortality Rate (2012)



Source: UN Inter-agency Group for Child Mortality Estimation.

Establishing good benchmarks requires an understanding of Liberia's current developmental status. According to the Liberia CDCS, Liberia faces several challenges as it transitions to the next stage of development including limited capacity of government institutions and the lack of a trained workforce (USAID, August 2013, 4). In addition while making significant progress in many development indicators, Liberia still lags behind many African countries in terms of the six key indicators listed in the CDCS (USAID, August 2013, 11-12). One of these indicators, child-mortality under the age of five, has been reduced dramatically since 1990; however, Liberia most likely will not meet its child mortality goals established in cooperation with the international community (USAID, August 2013, 54).

Figure 8: Liberia Political and Civil Liberty Freedom



Source: Freedom in the World Index. Freedom House.

In addition to challenges in terms of improving development indicators, Liberia also faces challenges with regard to inclusion of all Liberians in the public affairs of the country. The CDCS states, "many of the extractive, non-inclusive social, political, and economic systems of the past remain fundamentally unchanged today (USAID, August 2013, 4). According to the Freedom in the World Index, published annually since 1972, Liberia is listed as a "partially free" country with regard to political rights and civil liberties enjoyed by its citizens

(Freedom House. 2014b). The Freedom in the World index is based on a one to seven scale with a one representing "best practices" and a seven indicating "worst practices" (Freedom House, 2014, 2). In the 2014 rankings, Liberia rated a three on the political rights scale and a four on the civil liberties scale (Freedom House, 2014, 21). These 2014 ratings are improvements from the 2003 ratings for both political rights and civil liberties (Freedom House, 2003). However, Liberia's political and civil liberties ratings remain unchanged since 2007.

The Government of Liberia, through its 2008 to 2011 Poverty Reduction Strategy (PRS), began to address many of the development, political and civil liberties deficiencies. The PRS included four pillars including a commitment to "strengthen governance and the rule of law, with a particular focus on decentralizing political and administrative authorities to the county, district, and local levels" (USAID, August 2013, 17). At the conclusion of the PRS in 2011, the Government commissioned additional research and formed working groups to formulate a new strategy to build on the successes since 2008 and to address the remaining deficiencies (USAID, August 2013, 17). The 2013 to 2017 USAID Country Development Cooperation Strategy for Liberia reflects the progress that has been made to date and acknowledges the current development challenges. The CDCS results framework lists four development objects and 13 immediate result categories. The four development objectives are:

DO1: More effective, accountable and inclusive governance
DO2: Sustained market-driven economic growth to reduce poverty
DO3: Improved health status for Liberians
DO4: Better educated Liberians
(USAID, August 2013, 5-6)

For the purpose of establishing benchmarks to assist in tracking progress towards sustainable development, three Liberia immediate results are of particular interest. These immediate results include:

IR1.1: Public resources managed more transparently and accountably
IR2.3: Enabling environment supports private enterprise growth
IR3.2: More responsive services through health system decentralization
(USAID, August 2013, 84-85)

Figure 9: Country Health and Freedom Typology

Child Mortality (under age 5)	Freedom House Index: Not Free	Partially Free	Free
High	DR Congo, Afghanistan	Liberia, Sierra Leone	Lesotho
Medium/High	Rwanda	Bangladesh	Senegal
Medim/Low	West Bank / Gaza	Ukraine	Peru
Low			United States

* Select USAID Health System 2020 Countries

Note: Typology created using the Freedom in the World Index and the UN Inter-agency Group for Child Mortality Estimation.

In order to establish benchmarks for these three areas, USAID Liberia can draw on the experiences of the USAID funded Health Systems 2020 project. This was a 5-year project that concluded in 2011. The project gathered information on health financing, governance, operations and institutional capacities for 50 countries worldwide including Liberia. Health System 2020 focused primarily on countries from Africa, 52 percent, and Latin America, 26 percent. After analyzing each of the Health System 2020 countries based on child mortality (under age 5) and

the Freedom in the World Index, Peru, Lesotho and Senegal were selected as possible comparative countries for Liberia (see Appendix E). Each of the three countries provides some additional insights for the eventual creation of benchmarks in the three immediate results areas. For example, Lesotho is achieving its Millennium Challenge Corporation (MCC) goals by creating public private partnerships and engagement with non-government stakeholders. Senegal, by taking part in the Bamako Initiative, gives an example of how health services can be responsive to the needs of citizens. Peru's participatory budgeting and decentralized health systems offer a framework for encouraging the country's citizens and local leadership to become involved in the governance project.

PERU: PARTICIPATORY BUDGETING AND DECENTRALIZATION

Peru has enjoyed economic growth over the last two decades thanks to strong macroeconomic policies that allowed for economic expansion, low inflation, improved status in the country's national debt, and a reduction of poverty rates (U.S. Department of State). Further, the country's relative economic success parallels its good governance practices as exhibited by the World Bank's ranking of Peru within the 50th percentile worldwide in government effectiveness. The country also takes advantage of its land and aims to help its citizens via investment efforts such as the decentralization program, which invests area mining and hydrocarbon royalties into regional infrastructure (Freedom House 2013).

The health system reforms in Peru present a constructive example compared to Liberia. While the country is technically still in an internal military conflict, the significant decline of violence since 2000 qualifies Peru as a post-conflict country. Violence during the 1980s destroyed the public health system, but the system has been on a gradual path to recovery. One of the biggest changes in the provision of healthcare came in the mid-1990s when the government's social security system ran into a financial crisis. Since then, all private sector workers have had to take out insurance with health companies (called EPS).

While health sector spending in Peru is below average for Latin America, its government has taken a strategic approach to dealing with its public health challenges. One significant factor is a decentralized process that provides local authorities with the ability to manage their health system priorities and organize access to healthcare services. Decentralization has improved the social security system not by spending more on medicines, but by reorganizing services so that people with basic illnesses can find the treatment they need closer to home.

In an effort to democratize and decentralize, the federal government mandated participatory budgeting in each of Peru's subnational governments (McNulty 2012). This requires the inclusion of local populations in the creation of government budgets as well as disclosing the implementation of the budget according to the law (McNulty 2012). The participating agents (PAs) are typically civil society representatives, government officials, and members of the regional or local coordination council (McNulty 2012). Many groups have deemed this method of budget planning a success in terms of the increase in participation of civil society organizations (CSOs) and the positive outcomes of these collaborations. The World Bank reported that out of 3,213 PAs, 57 percent were representatives of CSOs (McNulty 2012). In terms of outcomes (at least in the short term), the World Bank noted that participants brought greater attention to "pro-poor" social projects that were targeted towards the basic needs of citizens (McNulty 2012). Although the World Bank encourages reform due to the disconnect between the projects that the CSOs supported and the ones that were implemented, it is important to note that a participatory budget has made the process, as a whole, more transparent to local citizens, as well as increased their participation.

While there are successes in Peru, when establishing benchmarks for Liberia the deficiencies of their reforms need to be taken into account as well. In 2004, Peru implemented a program

encouraging participatory governance in the budgetary process. While the program garnered international attention, there was no formal measurement of the program's success. It was only after outside researchers had undertaken an intensive study that the program was revealed to have major flaws. As McNulty points out, "the most problematic aspects facing Peru's [Participatory Budgeting] PB are much more difficult to change. The Peruvian state has a long history of not responding to the average citizens' needs and of excluding significant numbers of people in the public sector" (McNulty 2012). A government must be invested in its people if it wishes to effectively encourage development. Altering governmental attitudes, therefore, represents a major challenge in the country's long-term development.

SENEGAL: CITIZEN RESPONSIVENESS

Senegal has experienced a low-level civil war in its southern region since 1981 (MFDC 1982). It is considered one of the most stable countries in western Africa, and has achieved consistent economic and political progress since the late 1990s. Senegal has also been a part of the "Bamako Initiative" which has significantly shaped the health system in the country since the early 1990s (Bamako Initiative 1987). This new financing plan, created at a meeting sponsored by the WHO and UNICEF in Bamako in 1987, was designed to increase the availability of essential medicines and to improve drug procurement systems through resale of pharmaceuticals at health centers (Kanji 1989).

As part of its effort to retain a minimum of health services in the wake of reduced state spending on social sectors, Senegal implemented a series of health reforms under the Bamako Initiative in the 1990s. This strategic initiative established minimal user fees for primary care services at government health structures and higher fees for care at secondary and tertiary levels, and established health committees as a vehicle for community involvement in the health sector (Foley 2009). One of the Bamako Initiative's successes is improved responsiveness at both urban and rural areas, where most dispensaries have had an adequate inventory of essential pharmaceuticals available at wholesale prices. In the Senegalese health system primary care and generic pharmaceuticals are available at rural health huts and urban dispensaries for minimal fees (Foley 2009). However, in some rural areas, even modest fees have presented a significant barrier to accessing healthcare services for the poorest populations.

While the package of services available in many primary care points is limited, Senegal has significantly improved the responsiveness of its health system by adopting a strategic vision to its long-term planning of health sector financing. Inclusiveness has improved, but significant deficiencies regarding access to quality and specialized healthcare still persist, especially in rural areas. What makes the health structure in Senegal strategically important is the possibility of pumping future funds into the existing structure to improve the overall quality and quantity of the health services provided.

Senegal is a country with a history of efficiency and effectiveness unlike any other country in Sub-Saharan Africa. The country has been successful in promoting democracy and avoiding many of the civil wars that other countries have had to face. Freedom House indicates that Senegal is one of the few free countries in Sub-Saharan Africa (Freedom House 2013), and sees growing support from the international community in its endeavors. Interestingly enough, Senegal has taken steps to strengthen its ties in global governance and health by joining the Global Health and Foreign Policy Initiative (Ministers of Foreign Affairs of Brazil et al 2011). This kind of agreement requires Senegal to aim to improve its economic position or face international pressure.

While the country is seeing success, there are areas that require improvement. Based on surveys conducted by Afrobarometer, the people of the country feel the government is doing an average job of providing health services. Fifty percent of the population says that changes positively affect them,

while the other half is not as pleased (Afrobarometer 2008). Senegal's recent transition from one leading party to another after 12 years of single party rule gives hope to the people that fair elections and processes are possible for the country.

Despite former president Wade's attempts to stay in power, in 2012 Macky Sall defeated him (Kelly 2012). This showed the world that while the government is not perfect, the democratic process is allowing the people to vote out those who do not have the country's best interests in mind. Another example of this is the growth of civil society groups committed to preserving the structure of the government; these groups are taking action to hold the government accountable to being an efficient and effective body. Examples of this include "social movements like Don't Touch My Constitution and the M23, the RADDHO connected angry citizens and newly enfranchised youth to politicians and parties with similar interests" (Kelly 2012 p. 11). Liberia can learn from Senegal by beginning to pursue international relationships with other countries trying to improve their effectiveness as a government.

LESOTHO: PUBLIC PRIVATE PARTNERSHIPS

Lesotho is a small country, but still suffers from many of the same worries as other countries in the region. One big concern is the prevalence of AIDS. Lesotho has been gathering information on ways to combat these problems, and has come up with the National Strategic Development Program. The goal of this program is to "pursue high, shared, and employment generating economic growth; develop key infrastructure, enhance the skills base, technology adoption and foundation for innovation; improve health; combat HIV and AIDS and reduce vulnerability; reverse environmental degradation and adapt to climate change; and promote peace, democratic governance, and build effective institutions" (The World Bank 2014). Lesotho keeps moving via constant reviews of the current situation; i.e., planning for change, collaborating both government and private other organizations, and implementing programs to fix the problems. This strategy can also be of use to Liberia.

Lesotho, one of the few countries in Africa that is still a kingdom, depends heavily on its prime minister and parliament. While its democratic process is far from perfect, the country is taking steps to increase its level of democratic freedoms. Lesotho enjoys a close, mutually beneficial relationship with South Africa. When Lesotho was in the midst of a civil war, for instance, South Africa sent in a myriad of troops to quell the conflict. A partnership between the neighboring countries will soon increase the trade of clean water from Lesotho to South Africa.

Lesotho depends on its many NGOs to help bring change to their health systems. For example, in the fight against HIV and AIDS, the government has depended on research conducted by outside organizations to learn how to battle against the disease. Recently, the country has taken strides towards developing laws that hold NGOs accountable for the funds meant to fight HIV/AIDS. Moreover, Lesotho is finding that mass education of its people is a powerful tool against disease: "Through the mainstreaming approach, the fight against the disease has been integrated into everyday life" (Lowenberg 2014). Education of both policymakers and of average citizens, then, can drastically improve efforts to combat disease.

Beginning in 2000, the government of Lesotho became strategically engaged in a public-private investment partnership (PPIP), the first long-term partnership of its kind in Africa and a lower-income country. The PPIP brought together the Lesotho government and a consortium of private partners to not only rebuild the national referral hospital and associated clinics in the capital city of Maseru, but also to engage the consortium in managing delivery of hospital and clinical services over an 18-year contract period (The Global Health Group 2013).

With these contracts, Lesotho greatly expanded the scope, quality, and volume of services available through the new national referral hospital with an approximate 7.5 percent increase in annual operating costs as compared to the old hospital (Global Health Group 2013). While user fees at the new hospital were equal to fees at other public hospitals, some patients paid no more for significantly improved care through this created partnership.

Chapter 6
Survey of Health, Governance, and Evaluation Practitioners

INTRODUCTION: PRACTITIONER SURVEY FINDINGS

This capstone project conducted a non-probability convenience survey of practitioners with experience in health and governance projects in conflict-affected countries such as Liberia. The survey was sent to 60 practitioners with a final response of 15 practitioners (see appendix A for survey methodology). While this capstone project cannot make sweeping generalizations based on a small sample size and non-randomization of respondents, the data obtained does provide a starting point to develop future research into issues related to health systems strengthening and governance. The practitioner survey indicated the following:

- There is no agreed upon model to integrate the tools of democracy promotion with traditional development sectors such as health.
- There is no agreement on which governance principles impact the citizen-service delivery intersection
- Host country governments believe that a strong centralized government is necessary to implement change, but they are not opposed to engaging citizens who are not adversarial
- Change processes require the engagement of formal and informal leaders
- Current monitoring and evaluation practices do not sufficiently address the citizen health preference-service delivery intersection.

THE RELATIONSHIP BETWEEN DEMOCRACY, GOVERNANCE AND DEVELOPMENT

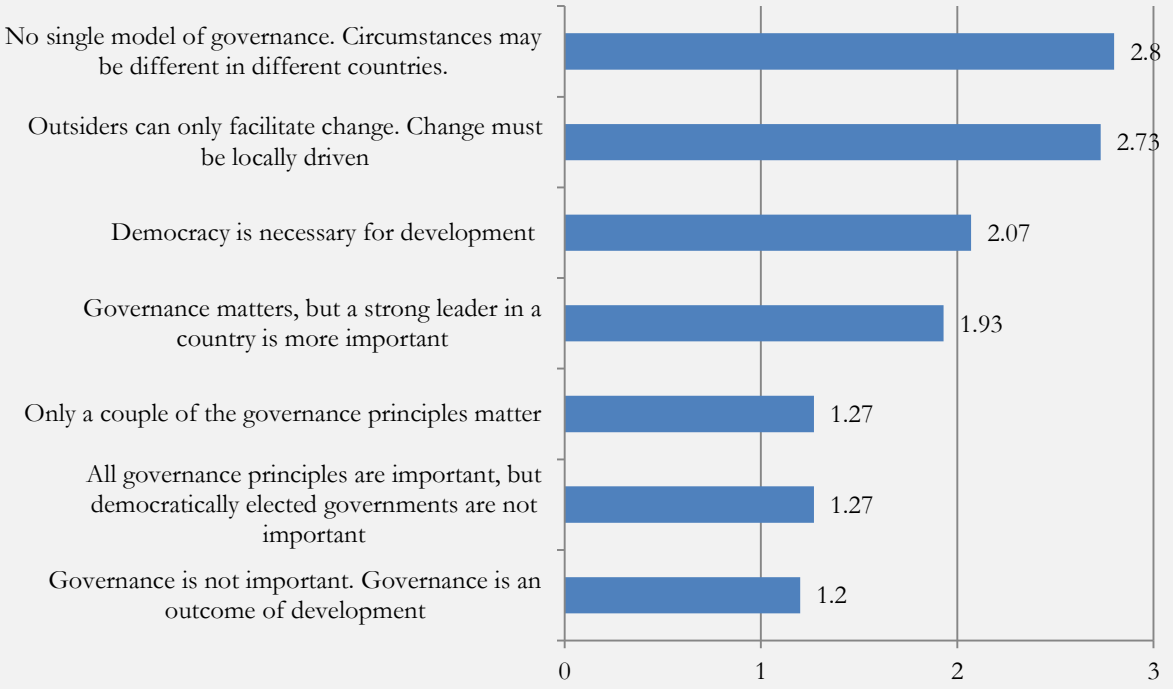
The relationship between a country's democratic practices and socio-economic development status has been debated since the 1960s. Advocates on the far end of the democracy spectrum long assumed that the relationship was positive and claimed that "all good things go together" so democracy and development must be related. Advocates from the traditional development spectrum, on the other hand, argue that good governance at best is a result of development. In his book *Development Aid Confronts Politics: The Almost Revolution*, Thomas Carothers establishes what he calls the "instrumental case ladder" (Carothers & de Gramont, 2013, 220-223). This ladder consists of seven possible viewpoints regarding democracy and development.

The capstone practitioner survey asked respondents which of the seven opinions were closest to their own views regarding the democracy and development relationship. Respondents were provided with statements and asked if they agreed (coded as 3), somewhat agreed (coded as 2), or disagreed. (coded as 1). Using a Likert scaling technique, the responses for each possible opinion were averaged across all respondents to create a relative ranking of opinions (O'Sullivan and Rassel, 1999, p. 297-301). In order, the top four opinions regarding the relationship between democracy and development were:

- No single model of governance. Circumstances may be different in different countries.
- Outsiders can only facilitate change. Change must be locally driven
- Democracy is necessary for development
- Governance matters, but a strong leader is more important

Figure 10: Average respondent perceptions regarding the relationship between democracy, governance and health systems.

Q11. Historically, international development practices avoided engaging in a developing country's internal politics. Recently, some have argued that the division between technical implementation of development and a developing county's politics could not be ignored. Below are 7 views regarding the interaction between democracy, governance and health systems development. Thinking about a post-conflict country, please indicate where you agree [3], somewhat agree [2] or disagree [1] with the following statements.



There is consensus among respondents with regard to the context-driven nature of governance and the need for locally driven change processes governance. Twelve respondents agreed that there was no single model of governance because country circumstances are different, three somewhat agreed and none disagreed. Twelve respondents agreed that change must be locally driven, two somewhat agreed and one disagreed. Respondents also indicated a consensus on democracy as necessary factor for development as somewhat important. Three respondents agreed that democracy is necessary for development, ten respondents indicating somewhat important and only two indicating not important. However, there was no consensus among respondents regarding whether or not a strong leader was more important than governance. On this point, four respondents strongly agreed, six somewhat agreed, and five disagreed.

In a question relating to which ten governance principles were most important, there is no clear consensus regarding the relative ranking of health governance principles. Respondents were asked which governance principles they considered "very important" (coded as 3), "somewhat important" (coded as a 2), and "not important" (coded as 1). Using a Likert scaling technique, the response for

each possible opinion was then averaged across all respondents to create a relative ranking of opinions (O'Sullivan and Rassel, 1999, p. 297-301).

Figure 11: Average respondent perceptions regarding the priority of governance principles.

Q5. The term governance has many definitions and uses. Below are health systems governance principles compiled from the World Health Organization, DFID, the Pan American Health Organization, and The World Bank. Thinking about a country in a post conflict transition, please indicate the importance of each governance principle. "Important" [3], "Somewhat important" [2], "Not important" [1].

The respondents believed that the principles of accountability, transparency, and fairness were relatively more important in government than effectiveness or efficiency. All 15 respondents indicated that accountability was a "very important" governance principle, 14 indicated rule of law, and 13 indicated transparency. Only nine respondents indicated efficiency as a "very important" governance principle.

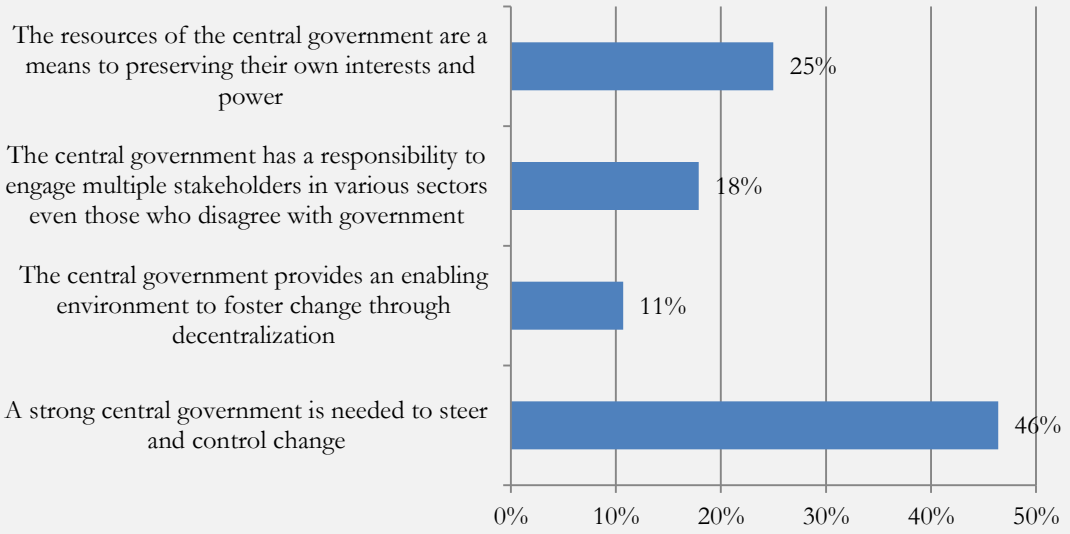
THE RELATIONSHIP BETWEEN CENTRAL GOVERNMENTS AND THE CITIZENS

Respondents indicated there was a preference among post-conflict government for strong centralized power. Despite this preference, the post-conflict governments are not opposed interacting with citizens and elites who are not adversarial to the government. The quality of the interaction varies, however. An area of further research might include an exploration into how the decision to engage local leaders affects relationships with the central government, considering the central government's desire to maintain strong, centralized control.

When asked how the government viewed its own role, 13 respondents stated that the government believed in the need for a strong central government to steer and control change. Of those respondents, 7 also felt that the central government believed that its resources were a means to preserving its own interests and power. Only three indicated that the central government believed that it must provide an environment of change through decentralization, while five said that the central government believed in its responsibility to engage stakeholders even if they do not agree with the government.

Figure 12: Perceptions on how conflict-affected governments perceive their role.

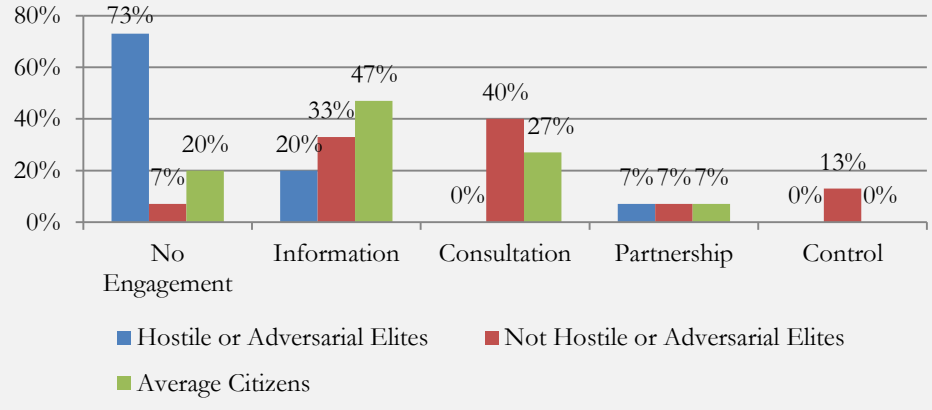
Q6. Thinking about a country in the post-conflict/transitioning phase, which of the following best describes how the central government views the role of government, generally speaking. You may select up to 2 choices.



As a government decides to include citizen input into the public policy process, it can choose from a variety of community engagement processes. The most basic citizen engagement technique involves government agencies conducting information campaigns to solicit support and educate the community. In this approach, citizens are not involved in either problem or solution definition. In a citizen consultation approach, citizens still are not involved in problem and solution definition, but their input and feedback is taken into account in revising policy. Citizens become increasingly involved with problem definition and solutions when government chooses to engage in partnership, delegation and control. At the level of partnership, problem and solution definitions become joint activities between citizens and government. Delegation and control strategies are used when government needs policy solutions from the community with appearance of an arm length transaction from politics (Kilpatrick, 2009, p. 40-41).

Figure 13: Perceptions of government engagement with various stakeholders

Q7, Q8. Q9. Thinking about a country in the post-conflict/ transitioning phase, in general at what participatory level does the central government engage other elites who are hostile/adversarial to the government, who are NOT hostile/adversarial to the government, and average citizens?

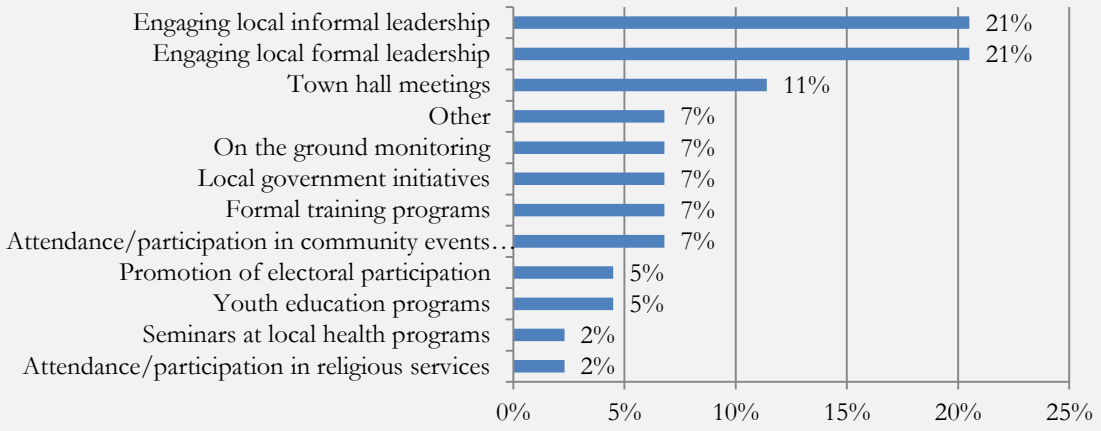


The capstone survey indicates that the level of participation varied depending on stakeholder type. For elites who were perceived as hostile to the government, 11 respondents indicated that the government would choose no engagement and only 3 respondents indicated the government would engage hostile/adversarial elites at the most basic engagement level and include them in informational campaigns. Conversely, 11 respondents indicated that non-hostile/adversarial elites were more likely to be included by the government in informational campaigns, and their perspectives were also more likely to be considered in revising government policy. The respondents had mixed views with regard to government engagement of average citizens. Seven respondents indicated that average citizens were more likely to be the recipients of informational campaigns while four respondents indicated the engagement could be extended to consultation as well. Three respondents indicated there was no engagement of average citizens.

When governments do engage with various citizen stakeholders they have a variety of tools available for their use. When asked about the most powerful tools for community engagement (multiple answers allowed), nine practitioners indicated engaging with local formal leadership, nine indicated engaging with local informal leadership, and five indicated the use of town hall meetings.

Figure 14: Perceptions of community engagement techniques

Q10. What are the three most powerful tools you have used to engage local communities in the process of development? (Multiple responses allowed)



MONITORING AND EVALUATION PERSPECTIVES

Q20. From the supply and demand perspective--with supply referring to services supplied by the government, and demand referring to citizen service preference--how do you tailor your monitoring and evaluation strategies to best accommodate the needs of both groups while still striving to achieve the overall mission?

> We no longer use 'demand' and 'supply' frameworks, which tend to be too focused on principal/agent theories. We use theories of collective action."
>
> - Respondent # 5

Respondents addressed several M&E methods that take into account both supply-and-demand - related perspectives. The preferred method from several respondents focused on a method of triangulation, using different methods to determine the needs of all stakeholders, including citizens, donors, and the government. This enables finding "common ground," in order to base interventions for capacity development on consolidated interests. Organizations with more resources often choose to analyze needs using a "multi-stakeholder, multi-sectoral, and grounded approach" to obtain as much stakeholder input as possible, bringing in organizations, citizens, government representatives, and focus groups for collective and collaborative input.

Methods to determine stakeholder needs do vary, however, with some respondents choosing to evaluate demand-side and supply-side via different types of exercises, such as community scorecards versus self-assessment exercises. Whole systems approaches and theories of collective action were recommended to evaluate overall stakeholder needs, without differentiating between supply and demand, which may "be too focused on principal and agent theories" (Respondent #5). Effective monitoring and evaluation approaches ultimately must consider both supply and demand perspectives in order to identify the true needs of a population.

Respondents, in some cases, preferred to address supply and demand perspectives with a focus on integrative intervention strategies. Comprehensive intervention planning and strategies should target both supply-and-demand side issues, using summarizing principles instead of direct issue evaluation. For example, several respondents emphasized a principle-based focus on terms such as "availability, quality, accessibility, and affordability," theorizing that by addressing each of these principles individually, all perspectives will be considered, as long as the proper stakeholders are involved. In designing these interventions and evaluation criteria, particular emphasis was placed on collecting as many perspectives as possible so that information would be included from all sides. All respondents agreed that these strategies are dependent on the situation, as stakeholder involvement and input vary by population. Consistency in monitoring and evaluation is also important since the program is designed to "stay as attuned as possible to local demand," changing with the needs of the stakeholders and the fluidity of the situation. M&E efforts must focus on a wide range of involvement from all relevant stakeholders, should specify the needs of both supply and demand, and should be able to adjust with changing situations and stakeholder demands.

Q21. When establishing a program monitoring system, what are the key elements needed to ensure an implementing partner will utilize the system to make strategic programmatic decisions?

When developing a program monitoring system, there are several key elements to consider in order to ensure the system's sustainable utilization by the implementing partner. This system will be used to make strategic decisions regarding the executed program or intervention. Survey respondents addressed key elements that should be considered during monitoring system development.

Nearly all of the surveyed M&E experts agreed that individuals from local communities and organizations should be involved in the system development process from the beginning. Working closely with local stakeholders allows their goals and visions to be heard and considered. One survey respondent also suggested conducting a stakeholder and power analysis in order to assess the organizations' current strategic directions. Combining external and internal stakeholders sets the stage for system sustainability.

> "It needs to be clear, simple to use, and clearly connected to the program objective. I have seen many monitoring tools / M&E plans with pages of indicators that are essentially "bean counting". Fewer indicators that are clear/concise and relevant to the desired outcomes are key."
>
> - Respondent # 15

When collaboratively developing monitoring systems, it is also important to identify process and outcome indicators that measure the effectiveness and efficiency of the system. These indicators, as well as the monitoring tools and methods, should be relevant to what needs to be measured, useful for the process of measuring, and simple to follow and understand. The process and outcome indicators also need to be reasonable, specific, and aligned with the goals of both external and internal stakeholders. The M&E experts also emphasized the implementation of proper staff training. It is important that everyone involved understands the purpose and goals of the monitoring system.

In order to develop a monitoring system to ensure program sustainability, it is critical to involve local stakeholders. Outcome indicators should align with the goals of the organizations involved while also being relevant and useful for assuring that citizens' needs are met. Additionally, proper staff education and training give the local communities and organizations the intellectual capital needed for program success.

Q22. What are barriers (political, socioeconomic, cultural, etc.) to monitoring and evaluating interventions in LMICs (low-income and middle-income countries) that weaken analysis of these interventions?

The barriers to program monitoring presented previously illustrated common problems that organizations encounter when implementing interventions in conflict-affected countries. While these barriers exist, they will likely differ for every intervention implemented within a conflict-affected region. However, many factors hinder adequate analysis. Upon consultation with experts in the monitoring and evaluation field, barriers that weaken the analysis of interventions in low-income and middle-income countries (LMICs) were identified.

> "M&E used as reporting [tool] rather than program management tool…Social pressure to demonstrate results even when none are being achieved can lead to data falsification."
>
> - Respondent #8

In concordance with the aforementioned political barriers, the experts also agreed that corruption and a weakened national system and governance structure affect M&E systems. Corruption may refer to "lack of political will" and "lack of institutional capacity" as stated by one of the respondents. In regards to an ineffective national system, conflict between the governmental agenda and personal interests specifically affects M&E systems. According to a respondent, personal political gain is a prominent issue because "politics is not easily divorced from development since most members of the legislature use their law-making and budget development power for their personal interests."

The respondents suggested that data collection barriers also contribute to weakened analysis of interventions because "many people in LMICs do not appreciate the need for rigor." As such, the data obtained are often biased, falsified, inaccurate, or incomprehensive. In addition to the lack of rigor, one respondent indicated that there is "social pressure to demonstrate results even when none are being achieved." Therefore, this desire to demonstrate viable results affects the validity of the data. On the other hand, one respondent mentioned that weakened analysis is due to a "lack of incentives to perform well."

Other barriers involve infrastructural factors, such as roads or bridge that impact access. Obtaining needed information is also impeded by language barriers, race, income, ethnic group, religious differences, and historical factors as suggested by another respondent. Lastly, a barrier that M&E systems must overcome is changing the focus from the donors to the actual intervention. As suggested by a respondent, "there is also a need to change the culture of M&E being seen as something that's only for the donor, as opposed to a useful tool for designing and/or improving interventions."

Ultimately, there must be a clear definition regarding the actions that encompass an M&E strategy for a tailored intervention in a particular country. This may help avoid barriers that otherwise hinder the proper analysis of an intervention. While political, socioeconomic, cultural and other factors are innate, measures can be taken to prevent additional barriers from negatively affecting M&E analysis.

Q23. The value of the randomized control trial approach to evaluation continues to be debated. What are your thoughts on this approach given your experiences in international development? What alternatives have you found to be effective?

> "I find the RCT a method that is way too rigid to allow the nuance…The best approaches are mixed methods… RCT requires a rigidity that makes development actors unable to do what is needed, in order to maintain the "research structure."
>
> - Respondent # 4

Most respondents agree that the use of RCTs is very appropriate but should not be used singlehandedly. RCTs are effective because they give an accurate analysis of the impact of the intervention. However, use of RCTs may not always be beneficial depending on the type of intervention or the program. RCTs are very rigid and need accurate data for analysis; they are also inadequate for use in complex environments such as a post-conflict country. In a post-conflict country, adequate data may not be available. Collecting such complex data is very costly. As one respondent mentions, the control group in a post-conflict country may not have received the treatment (intervention) due to the unstable nature of the group. In such a case, the characteristics in treatment and control groups vary largely, falsifying the assumption of all other factors being constant. RCTs are necessary, but not sufficient, in the evaluation of an intervention in a complex environment such as a post-conflict country.

A couple of the respondents also added that complex supply chains limit the use of RCTs. Since RCTs are rigid, they fail to detect and include various components of the supply chain. External validity is thus at risk if RCTs are used in complex environments and complex supply chains. As another respondent stated, "No single method will cover it all." The respondents agree that a mixed approach should be used for a more accurate impact evaluation. The suggestion includes outcome mapping, process tracing, end line, and baseline surveys. However, according to certain respondents,

it ultimately depends on the intervention type. To understand the complex supply chains and to reduce the rigidity, a qualitative approach must be used along with RCTs.

Q24. In your experience, do you feel that M&E has directly influenced program beneficiaries and other stakeholders? If so, in what ways?

While most respondents agree that M&E, when done correctly and consistently, can directly influence program beneficiaries and other stakeholders, it is essential to understand the context in which M&E is being performed. M&E varies widely in scope and its impact on program beneficiaries and other stakeholders is largely contingent on the broader goals and objectives for utilizing M&E systems to begin with.

Several respondents stated that M&E has affected program beneficiaries, such as program staff, by advancing quality improvement in service delivery. One respondent suggested that M&E "empowered providers and lower level management to use data to make changes and improve the quality of care and therefore save lives." Another respondent stated that M&E is useful in informing appropriate modifications to interventions by recognizing external factors that can influence project outputs and outcomes in ways that may have not been otherwise anticipated. This process allows for data and insight to be gathered on unintended benefits and consequences of interventions. A respondent shared that it is important to incorporate M&E throughout interventions because "there is always room for improvement and human nature can often lead to unfounded enthusiasm for interventions that are not proven and whose effects are not well understood." This is important because "M&E activities lead to changes in programs, strategies, budgets, etc." Ultimately, M&E is viewed by many respondents to be a sound approach in understanding the effect of the programs, whether they work or not, why, how, and for whom.

> "M&E when done correctly and consistently, it influences beneficiaries and stakeholders because it advances the quality of intervention."
>
> - Respondent # 6

Others stated that M&E is a useful tool in ensuring accountability, specifically as it relates to service delivery. One respondent claimed that M&E is useful when its "objective…is to provide information to citizens to hold government more accountable or to provide them with the information needed to request improvements/changes to the beneficiaries." Using a supply-and-demand framework, another respondent suggested that the supply side would strive to achieve responsibilities, knowing it will be evaluated, while the demand side will expect and demand better quality, knowing that the intervention will be regularly monitored and evaluated. As such, the demand side is essentially expecting accountability on the part of the supply side hoping it will lead to an overall positive impact. With respect to service delivery in such cases, M&E can also be used as a tool to change accountability relationships between providers and clients.

In contrast, one of the nine respondents claimed that M&E has not directly influenced program beneficiaries and other stakeholders. The reasoning behind this claim was rooted in the idea that M&E serves as more of a reporting tool that informs decision-making for funders. This was apparent when the respondent suggested the following: "M&E is used primarily for reporting purposes to funders rather than as a program management tool." While it is not completely clear in which context the respondent makes this claim, it is imperative to understand that M&E is utilized differently across organizations and throughout programs. Thus, there may be differing objectives in utilizing M&E that may not necessarily impact program beneficiaries and other stakeholders directly. Instead, each organization or program has different standards for M&E and how success is measured throughout this process.

Of equal importance in this respondent's statement is the fact that he/she does not identify funders as a type of stakeholder. Traditionally, funders are some of the primary decision-makers within and throughout program planning, implementation, and evaluation. They usually have the power to drive the most crucial decisions within a program as they provide the monetary funds to supply the resources needed for program operations. As such, one could argue that M&E does indeed impact program beneficiaries and other stakeholders, like funders. However, such definitions of stakeholders and impacts vary from one program to another and cannot be standardized given contextual differences.

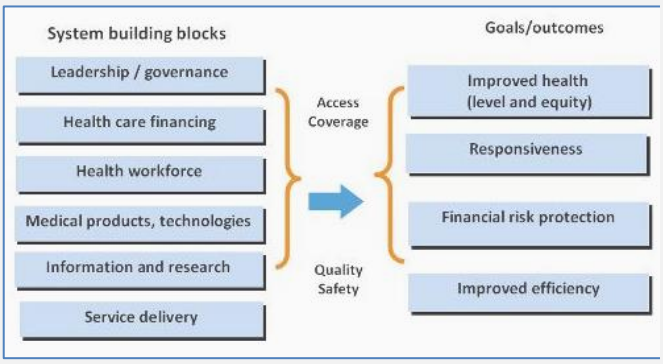
Chapter 7
Areas for Future Study into the Citizen-Service Delivery Intersection

INTRODUCTION: CREATING A CAUSE AND EFFECT RELATIONSHIP FOR HEALTH SYSTEMS BUILDING BLOCKS

The Government of Liberia is pursuing a health policy based on participatory and inclusive processes, believing this approach will build and sustain health interventions at the community level. According to the Liberia Governance Performance Assessment, "governance should be a people-centered activity that ultimately aspires to fostering sustainable economic and social development" (Governance Commission, 2013, pg. 5).

The WHO building block framework is a standard, reliable approach that has benefited many development organizations. However, with regard to M&E in Liberia, this model is incomplete since it fails to provide an overlap between citizen needs and service delivery with respect to governance principles. In order to ensure program sustainability, there must be a causal link.

Figure 15: World Health Organization Health System Building Blocks



Source: World Health Organization. http://www.wpro.who.int/health_services/health_systems_framework/en/

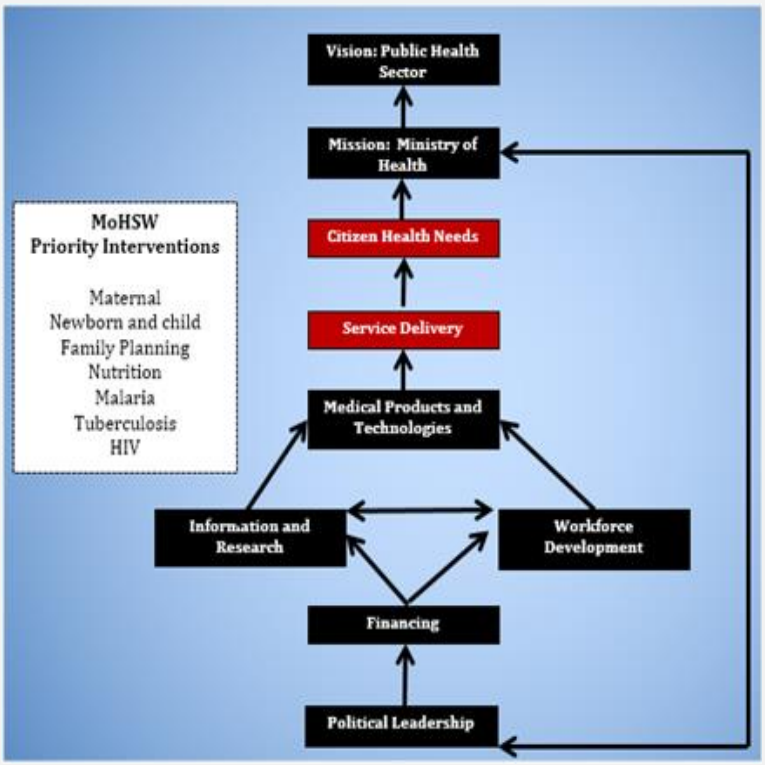
In an attempt to depict a more holistic model, this capstone proposes to enhance the WHO health systems building blocks by applying the causal-relationship established in the Balanced Scorecard (Pool, 2014). This scorecard maintains a similar flow of "storyline" while concurrently depicting these twinning development sectors. In following with the general flow from top to bottom, an organization's vision is laid out by all stakeholders, including the Liberian government and citizens, international donor agencies, governments, and private organization. Their vision describes the ultimate goal for the Liberian public health sector.

To be able to provide the most effective services, the ministry must have access to top medical products and technology. This is accomplished through a joint focus on improving information and research systems, as well as the appropriate human capital via workforce development. Information and research and workforce development will be catalyzed by a sufficient flow of financing from relevant stakeholders. The goal of most international donors is and should be to continue working with the Liberian MoHSW to increase its capacity to eventually finance, manage, and sustain its programs and goals autonomously.

This leads to the final component of the Liberian health system and governance scorecard: political leadership. As shown in figure 16, political leadership is connected also to the mission of the MoHSW. The key to adequate financing of health services lies in the good governance at the political level. Conversely, poor governance, such as corruption and inefficiencies in bureaucracy, could

negatively affect financing. It could also directly influence the capabilities of one of its own ministries (MoHSW) to designate and achieve critical objectives towards its mission of a superior public health sector for its country.

Figure 16: World Health Organization Health System Building Blocks Modified Using a Balanced Scorecard Framework



Source: Pool, S. (2014). Health system building blocks using a balanced scorecard framework. Unpublished concept diagram.

In order to achieve the vision of improved health outcomes through citizen involvement and inclusion, two key steps must be taken. Highlighted in red (Figure 16) are citizen health needs and service delivery, respectively. The core of the BSC is two components, which can be viewed in the terms of "supply" and "demand." These two particular components are considered the lynchpin to ultimate success or failure in achieving the vision and mission of the MoHSW. By properly focusing on the correct and most vital citizen health needs, the services provided by the MoHSW will be most productive.

NEXT STEPS: PRIORITIZING HEALTH GOVERNANCE PRINCIPLES

The practitioner survey and document review conducted as part of this capstone suggest that additional study is needed in order to better understand health systems strengthening and governance in conflict-affected countries like Liberia. There are three reasons for this recommendation.

First, 'governance' can be a vague term, which allowed each survey respondent to answer according to his or her own understanding of governance, which may not align with what we defined in this project. Second, Carothers & De Gramont (2013) distinguishes between two types of democratic developments: those that pursue overtly political goals (such as the International Republican Institute or the National Democratic Institute), and traditional development that employs "politically smart" methods (Carothers & De Gramont, 2013, 10-13). When considering the options in the survey, the practitioners may or may not have distinguished between these two forms of development. Third, while Siddiqi et al. (2009) were able to compile a list of governance principles, they did not resolve the question of whether some of the principles held greater importance than others. A survey of 15 development practitioners conducted as part of the capstone project indicated that the principles of accountability, transparency, and rule of law trump true effectiveness or efficiency. However, the Liberia Country Cooperation Strategy (CDCS) states a preference for responsiveness and quality service delivery.

In order to gain further insight into the intersection between citizen's health needs and service delivery, an in-country assessment of health and governance practices is recommended for Liberia. While health systems can be analyzed within the context of a formal governance framework, there are few, if any, standardized health system governance frameworks specific to health systems. Prior frameworks typically emphasize political structures or specific economic systems. Indeed, as noted by Siddiqi et al., current health system governance literature remains sparse at best (2009, p.14).

The proposed assessment would look at health systems and governance practices by the Government of Liberia. The assessment would use a survey instrument (see appendix D) based on the work of Siddiqi et al. (2009) and would be administered to various health stakeholders at the national and sub-national levels. An emphasis would be placed on stakeholders residing, or conducting programming, in the USAID target counties of Bong, Lofa, and Nimba.

NEXT STEPS: ESTABLISHING EMPIRICAL EVIDENCE

Based on our collected data and survey results, we cannot draw definitive conclusions about the effectiveness of specific strategies for integrating governance principles and health systems. Therefore, we propose a three-year quasi-experimental research design to test intervention strategies using three locations, which were identified in the CDCS as counties of focus (Lofa, Bong, and Nimba). A quasi-experimental study design is often used in public health (Cook and Campbell, 1979; Shadish et al., 2002) to evaluate interventions where the unit of analysis is the community rather than the individual. This may be a very useful study design for certain development interventions and we recommend future investigation of this and other public health evaluation methods.

The study would utilize a different community-based strategy in each of the three locations and would compare health outcomes between the three locations. In one location, a community-based participatory research method, which involves community members in all aspects of the research process including selecting the health topic of interest, would be used. In another location, the intervention method would be centered on limited citizen involvement, specifically in the research process. The health topic would be chosen by the researchers, but community input on solutions to the problem would be encouraged. In the third location, the health intervention would utilize the traditional top-down approach from the Ministry of Health and Social Welfare with no citizen involvement. Since this approach is similar to the current state of affairs in Liberia, this group could be used as a control group for comparison.

Our hypothesis is that the location receiving the community-based participatory research method-run intervention would have significant improvements in the health outcome of interest compared to the control location, due to high stakeholder involvement. Before implementing the health interventions in each of the locations, a baseline assessment of health indicators would be needed.

Over a proposed 3-year period, monitoring and evaluation efforts would provide annual assessments of the chosen indicators, concluding with a final assessment of the effectiveness of the chosen health interventions in each location. Considering Liberia's post-conflict context, a mixed-methods approach incorporating organizational network analysis would be beneficial.

Chapter 8
Conclusions and Recommendations

Liberia has provided a study of democratic governance in a post-conflict country. The Government of Liberia has made progress both democratically and developmentally since the end of the civil war. However, gaps remain that need to be addressed and Liberia still has considerable need for improvement. Liberia should be able to reach its National Vision by 2030, but the international development community must continue assisting Liberia in this transition. Specifically, Liberia needs assistance with better data collection methods, monitoring and evaluation systems, and evidence-based programming. There are, nevertheless, several barriers to achieving the desired results, including, disjointed definitions of health governance principles, limited resources dedicated to sharing results of development attempts, and a lack of health systems research in general.

One factor hindering the discussion on using the tools of democracy – citizen participation and policy formulation – with traditional development sectors is a lack of a theory or framework in which to discuss divergent views. In the absence of theory in the international development literature, this capstone project recommends using the public health model as starting point for discussion. The core functions and essential services of the public health model provide a framework for discussing the role of communities in sustainable development. The public health framework is particularly useful in creating a new health research agenda in conflict-affected countries, such as Liberia, where the USAID Country Development Cooperation Strategy states a desire to improving both the efficiency and effectiveness of service delivery and increase citizen inclusion into the process.

The Public Health Framework: 10 Essential Services

Monitor health status to identify community health problems.

Diagnose and investigate health problems and health hazards in the community.

Inform, educate, and empower people about health issues.

Mobilize community partnerships to identify and solve health problems.

Develop policies and plans that support individual and community health efforts.

Enforce laws and regulations that protect health and ensure safety.

Link people to needed personal health services and assure the provision of health care when otherwise unavailable.

Assure a competent public health and personal healthcare workforce.

Evaluate effectiveness, accessibility, and quality of personal and population-based health services.

Research for new insights and innovative solutions to health problems.

Source: American Public Health Association. http://www.apha.org/programs/standards/performancestandardsprogram/resexxentialservices.htm

Currently, there is limited health systems and governance research in conflict-affected countries for several reasons including a lack of funding, a lack of scientific 'champions', and a lack of access to the conflict-affected regions. Additionally, commonly used health systems frameworks, such as the World Health Organization's health systems building blocks, are designed to address the technical aspects of governance, but are limited with regard to the citizen/service delivery intersection. The WHO model, as currently employed, is a good classification system for describing the elements of a health system, but does not establish the causal linkages necessary to establish empirical evidence for improving the health system of a country.

There is limited empirical evidence to establish a causal inference in regards to democratic governance and effective public health systems. Testing for a correlation and causal effects was beyond the scope of this capstone project, but is important in establishing future research into health systems and governance in conflict-affected countries. A majority of the top 30 countries considered to have the best health care systems in the world are in fact democratic. However, it is important to take into account the size of these countries in terms of population, area, as well as type of economy, and recent history. A majority of the countries that are ranked high in both democratic governance as well as health systems are geographically smaller, contain smaller populations, and have not recently experienced internal conflict. It is important to diagnose the factors under which democratic governance is positively correlated with good public health practices.

As the research agenda in health governance in conflict-affected countries expands, a need exists for better knowledge sharing among academics and practitioners. In order to address this issue, the creation of a peer-reviewed literature database is recommended. This type of system would allow for weight of evidence evaluations of causal relationships to be established over time. While there is an abundance of existing research and literature regarding individual sectors, such as health systems or governance, collaboration between these sectors is necessary to promote cross-sector development.

Compiling literature and relevant data into a peer-reviewed system would allow for a systematic and comprehensive discussion regarding evidence-based research. For example, M&E approaches towards program planning and intervention analysis require multiple perspectives. By creating an accessible system of cross-sector development efforts and data, organizations may be able to compare intervention programs from different areas and extrapolate the results of said efforts, working towards establishing situation-specific guidelines regarding development processes and strategies.

Based on the reason listed above, this capstone project recommends the following as emphasis areas for future research into health systems and governance in conflict-affected countries.

- Use the public health framework to bridge the perspective gap between the democracy/ governance and health sectors
- Develop an enhanced monitoring and evaluation framework for health systems and governance
- Establish comparative data in order to benchmark health system and governance practices for a country transitioning from conflict to sustainable development
- Establish a demonstration project to test the assumption that community/citizen participation is correlated to long-term sustainability health outcomes
- Establish an information sharing and peer-review process between academics and practitioners to enhance evidence-based health governance in conflict-affected countries

References

Africa Development World Bank. 2003.

Africa Health Workforce Observatory. 2010. HR Information Systems. Retrieved from: http://www.hrh-observatory.afro.who.int/en/data-and-statistics/hr-information-systems.html

Afrobarometer. (2008). *Liberia Round 4 Data (2008)* [Data file]. Retrieved from http://www.afrobarometer.org/data/data-by-country/liberia.

Afrobarometer. (2008). Retrieved from: http://www.afrobarometer.org/files/documents/summary_results/sen_r4_sor_english.pdf

Afrobarometer. (2008). Summary of Democracy Indicators. Retrieved from: http://www.afrobarometer.org/files/documents/democracy_indicators/les_r4_di.pdf

Afrobarometer (2009). "Popular Attitudes Towards Democracy in Senegal." Retrieved from: http://www.afrobarometer.org/files/documents/democracy_indicators/sen_r4_di.pdf.

Afrobarometer. (2012). *Liberia Round 5 Data (2012)* [Data file]. Retrieved from http://www.afrobarometer.org/data/data-by-country/liberia.

Afrobarometer, (2013) "Survey in Lesotho." Retrieved from: http://www.afrobarometer.org/files/documents/media_briefing/les_r5_presentation4.pdf.

Agency for Healthcare Research and Quality. (2009). *Program Brief: AHRQ Activities Using Community-Based Participatory Research to Address Health Care Disparities*. Retrieved from http://www.ahrq.gov/research/findings/factsheets/primary/cbprbrief/cbprbrief.pdf.

Akinkugbe O, Mohanoe M. Public Health Expenditure as a Determinant of Health Status in Lesotho. *Social Work in Public Health*. 2009. 24: 131-147.

Boley, T. (2103, March 25). Liberia's Education Crisis: Water and Sanitation. *Pulitzer Center*. Retrieved March 21, 2014, from http://pulitzercenter.org/reporting/liberia-monrovia-water sanitation-education-crisis

Bose, S. (2012). UNDP Liberia Annual Report 2011. *United Nations Development Program*. Retrieved April 10, 2014, from www.lr.undp.org/content/dam/liberia/docs/docs/UNDP percent20Liberia percent20Annual percent20Reprt percent202011.pdf.

Bright, N. O. (2002). *Liberia: America's Stepchild*. Documentary, PBS.

Brinkerhoff, Derick, and Thomas Bossert. "Health Governance: Principal-Agent Linkages and Health System Strengthening ." *Health Policy and Planning* . (2013).

Burdine, J. N., Felix, M. R. J., & Wendel, M. L. (2007). The basics of community health development. *Texas Public Health Association Journal, 59*(2), 10-11.

Bush, K. & Duggan, C. (2013). Evaluation in Conflict Zones: Methodological and Ethical Challenges, *Journal of Peacebuilding & Development*, 8:2, 5-25, DOI: 10.1080/15423166.2013.812891.

Butterfoss, F. D., & Kegler, M. C. (2009). The community coalition action theory, in R. DiClemente, R. Crosby, & M. Kegler (Eds.), *Emerging Theories in Health Promotion Practice and Research: Strategies for Improving Public Health, 2nd Edition* (pp. 237-276). San Francisco, CA: Jossey-Bass.

Carothers, P., de Gramont, D. (2013). Development aid confronts politics: The almost revolution. Washington, DC: Carnegie Endowment for International Peace.

Carothers, T., Fukuyama, F., Garber, L., Fritz, V. (2 May 2013).Book Launch- Development Aid Confront Politics: The Almost revolution. Available at http://carnegieendowment.org/2013/05/02/book-launch-development-aid-confronts-politics-almost-revolution/g045

Camara, F. (2007). Women and the Law: A Critique of Senegalese Family Law. Social Identities, 13(6), (p. 787).

Cleveland, E. C., Dahn, B. T., Lincoln, T. M., Safer, M., Podesta, M., & Bradley, E. (2011). Introducing health facility accreditation in Liberia. *Global Public Health*, *6*(3), 271–282.

Collier, Paul. Development and Conflict. Centre for the Study of African Economies, Department of Economics, Oxford University.

Collier, Paul and Hoeffler, Anke. Civil War: Draft Chapter for the Handbook of Defense Economics. Department of Economics, University of Oxford. Oxford, 2006.

Collier, P., Elliot,V.L., Hegre, H., Hoeffler, A., Reynal-Querol, M., Sambanis, N. (2003). Breaking the conflict trap: civil war and development policy. World Bank Policy Research Report, 244.

Cook, T.D. (1979). Quasi-Experimentation: Designs and analysis issues for field settings. Boston, MA: Houghton Mifflin.

Downie, R. (2012). *The Road to Recovery: Rebuilding LIberia's Health System*. The CSIS Global Health Policy Center. Retrieved from http://csis.org/files/publication/120822_Downie_RoadtoRecovery_web.pdf.

Duflo, E. (2004). Scaling up and evaluation. In *Annual World Bank Conference on Development Economics 2004* (pp. 341-369).

Duflo, Esther and Michael Kremer (2005). Use of Randomization in the Evaluation of Development Effectiveness. In G. Pitman, O. Feinstein, and G. Ingram, (ed.), Evaluating Development Effectiveness, World Bank Publication (pp. 93-120).

Fertman, C. I., & Allensworth, D. D. (Eds.). (2010). *Health promotion programs: from theory to practice*. John Wiley & Sons.

Freedom House. (2014a). Lesotho. Retrieved from: http://www.freedomhouse.org/country/lesotho#.U0djN_a-iNo.

Freedom House. (2014)b. Liberia. Retrieved from http://freedomhouse.org/country/liberia#.U4SUAKMo7cs

Freedom House. (2014c). Peru. Retrieved from: http://www.freedomhouse.org/country/peru#.U0dclva-iNo.

Gaffga, N. H., Tauxe, R. V., & Mintz, E. D. (2007). Cholera: a new homeland in Africa? *American Journal of Tropical Medicine and Hygiene*, *77*(4), 705.

Garay M, and Schirmer, C. (2010). Peruvian Pharmaceutical and Medical Devices Market Overview. Osec. (p. 1-48)

Glencorse, B. (2013, August 19). A decade of aid dependence in Liberia. *International Development News*. Retrieved April 9, 2014, from https://www.devex.com/news/a-decade-of-aid dependence-in-liberia-81634.

Global Health Initiative. (2013a). Initiative results. Retrieved at http://www.ghi.gov/about/goals/index.htm

Global Health Initiative. (2013b). Initiative principles. Retrieved at http://www.ghi.gov/about/189862.htm

Governance Commission (2013). Sectoral Governance Assessment Liberia: The Liberian Assessment Model. Retrieved from: http://www.gaportal.org/sites/default/files/M percent26E percent20Model_Final percent20Version.pdf.

Green, L. W., & Mercer, S. L. (2001). Can public health researchers and agencies reconcile the push from funding bodies and the pull from communities? *American journal of public health*, *91*(12), 1926-1929.

Haar, R. & Rubenstein, L (2012) Health in fragile and post-conflict states: a review of current understanding and challenges ahead. *Medicine, Conflict and Survival, 28*(4), 289-316.

Haar, Rohini and Leonard Rubenstein. 2012. "Health in Post conflict and Fragile States." January. "http://www.usip.org/sites/default/files/SR_301.pdf" (2/25/2014).

Handler, A., Issel, M., & Turnock, B. (2001). A conceptual framework to measure performance of the public health system. *American Journal of Public Health*, *91*(8), 1235-1239.

Health Systems 20/20. Lesotho Health Systems Assessment 2010.

Health Crisis in Liberia: The Long Road to Recovery. (2003, September 18). *World Health Organization*. Retrieved March 21, 2014, from http://www.who.int/features/2003/09b/en/.

Hermann, C. (1987). Designing Monitoring and Evaluation Systems: Issues and Opportunities. A.I.D. Evaluation Occasional Paper No. 14 ((Document Order No. PN-AAY-391). U.S. Agency for International Development. Retrieved from: http://pdf.usaid.gov/pdf_docs/pnaay391.pdf.

Heyen-Perschon J. Report on current situation in the health sector of Senegal and possible roles for non-motorised transport interventions. Institute for Transportation and Development Policy 2005.

Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: assessing partnership approaches to improve public health. *Annual review of public health*, *19*(1), 173-202.

Junge, D., & Johnson, S. S. (2007). *Iron Ladies of Liberia*. Documentary, PBS.

Kaplan, Robert S. and David P. Norton. 1996. The Balanced Scorecard. Harvard Business School Press: Boston, Massachusetts.

Kerr, Deborah L. 2003. "Accountability by the Numbers." Journal of Accountancy 195(6): 61- 71.

Kilpatrick, S. (2009). Multi-level rural community engagement in health. Journal of Rural Health, 17, 33-49.

Kington of Lesotho: Country Development Strategy." (2013). *African Development Bank Group*.

Kingdom of Lesotho: Country Governance Profile. (2006). African Development Bank.

Kruk M, Freedman L.P, Anglin A.G, Waldman R.J, 2007. Rebuilding health systems to improve health and promote statebuilding in post-conflict countries: A theoretical framework and research agenda. *Social Science and Medicine* 70 (1) 89-97.

Last Mile Heath. (2012). 2012 Annual Report. *Last Mile Health*. Retrieved April 4, 2014, from http://lastmilehealth.org/2012-annual-report/.

Lee, P. T., Kruse, G. R., Chan, B. T., Massaquoi, M. B., Panjabi, R. R., Dahn, B. T., & Gwenigale, W. T. (2011). An analysis of Liberia's 2007 national health policy: lessons for health systems strengthening and chronic disease care in poor, post-conflict countries. *Globalization and Health*, *7*(1), 37.

Lesotho Statistical Yearbook. National Statistical System of Lesotho. *Lesotho: Ministry of Finance and Development Planning and Bureau of Statistics* 2008.

Levely, I. (2013). Measuring Intermediate Outcomes of Liberia's Disarmament, Demobilization, Rehabilitation, and Reintegration Program. *Defence and Peace Economics*, (ahead-of-print), 1–24.

Levitt, Steven and John List (2009). Field Experiments in Economics: The Past, the Present, and the Future. European Economic Review, 53(1) (pp. 1-18).

Liberia Governance and Economic Management Assistance Program. (n.d.). GEMAP Liberia. Retrieved April 2, 2014, from http://www.gemap-liberia.org/about_gemap/index.html

Liberia Institute of Statistics and Geo-Information Services. (2007). *Liberia Demographic and Health Survey*. Retrieved from http://dhsprogram.com/pubs/pdf/fr201/fr201.pdf.

Liberia Poverty Reduction Strategy. (2008). Retrieved March 21, 2014, from http://www.emansion.gov.lr/doc/Final percent20PRS.pdf.

Liberia: Major Health Crisis Hits Liberia's Health Care Delivery. (2013, July 22). *allAfrica*. Retrieved March 21, 2014, from http://allafrica.com/stories/201307221580.html.

Liberia: Uncontrolled Trash Greatest Public Health Threat - UN. (2007, July 3). *IRIN Humanitarian News and Analysis*. Retrieved March 21, 2014, from http://www.irinnews.org/report/73065/liberia-uncontrolled-trash-greatest-public-health threat-in-monrovia-un.

Luke, D. A., & Harris, J. K. (2007). Network analysis in public health: history, methods, and applications. Annu. Rev. Public Health, 28, 69-93.

Magala, Michael, and Richard Vengroff. (2001). "Democratic reform, transition and consolidation: evidence from Senegal's 2000 Presidential Election ." *The Journal of Modern African Studies*. no. 1. (p. 130).

Maphosa, S.B. (2013). Thinking Creatively About Methodological Issues in Conflict-Affected Societies: A Primer from the Field, *Journal of Peacebuilding & Development*, 8:2, 91-104, DOI: 10.1080/15423166.2013.823058.

McNulty, Stephanie. (2012). "An Unlikely Success: Peru's Top-Down Pariticpatory Budgeting Experience." *Journal of Public Deliberation.* No. 2. 8.

Mendes, R. & Rodrigues, P.P. (2011). Main Barriers for Quality Data Collection in EHR - A Review. *Proceedings of the International Conference on Health Informatics*, Rome, Italy. Retreived from http://users.med.up.pt/pprodrigues/papers/MR11a.pdf.

Merrill, J., Rockoff, M., Bakken, S., & Carley, K. (2006). Organizational network analysis: a method to model information in public health work. In AMIA Annual Symposium Proceedings (Vol. 2006, p. 1030). American Medical Informatics Association.

Millenium Challenge Account. (2014). Retrieved from: http://www.mca.org.ls/home/default.php.

Ministerio de Salud, Consorcio de Investigación Económica y Social. Cuentas nacionales en salud. Perú 1995-2005. Lima: Ministerio de Salud, Consorcio de Investigación Econúmica y Social. (2008). Retrieved from: http://www.who.int/nha/country/per/NHA_ percent20Peru_1995-2005.pdf

Mo Ibrahim Foundation. (2013). *2013 IIAG Unformatted Dataset* [Data file]. Retrieved from http://www.moibrahimfoundation.org/liberia/.

Mwase, Takondwa, Eddie Kariisa, Julie Doherty, Nomaphuthi Hoohlo-Khotle, Paul Kiwanuka-Mukiibi, Taylor Williamson. June 2010. Lesotho Health Systems Assessment 2010. Bethesda, MD: Health Systems 20/20, Abt Associates Inc.

National Institutes of Health. 2010. Biomedical and Health Informatics in Peru: Significance for Public Health. Retrieved from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2743467/.

National Vision 2030. (2012). Official Website of The National Vision 2030. Retrieved April 9, 2014, from http://www.nationalvision2030.org/index.php.

Navarro, Nelly Calderon. (2006). "Fighting Corruption: The Peruvian Experience." *Journal of International Criminal Justice.* (p. 488).

Nestour A. L, Lepine A. The Determinants of Health Care Utilization in Rural Senegal.

Omona, J. & Aduo, J. (2013). Gender issues during post-conflict recovery: the case of Nwoya district, northern Uganda. *Journal of Gender Studies, 22*(2), 119-136.

O'Sullivan, E. & Rassel, G. (1999). Research methods for public administrator [third edition]. New York: Longman

Peru Background: American Bar Association: Rule of Law Initiative. (2014). Retrieved from: http://www.americanbar.org/advocacy/rule_of_law/where_we_work/latin_america_caribbean/peru/background.html.

Petrera M, Valdivia M, Jimenez E, Almeida G. Equity in Health and Health Care in Peru, 2004-2008. (2013). Rev Panam Publica. 33(2): 131-136

Pool, S. (2014). Health systems building blocks using a balanced scorecard framework. Unpublished concept diagram.

Powers, Ronald. (1965)"Identify Community Power Structure."*North Central Regional Publications* . no. 19.

Provan, K. G., & Milward, H. B. (2001). Do networks really work? A framework for evaluating public-sector organizational networks. Public administration review, 61(4), 414-423.

Ravallion, Martin. Evaluation in the Practice of Development. World Bank Research Observer, Vol. 24, No. 1, 2009 (pp. 29-53).

Republic of Liberia Ministry of Health and Social Welfare. (2011). National Health and Social Welfare Policy 2011. Retrieved February 10, 2014, from https://www.healthresearchweb.org/files/NHPP_July132011.pdf.

Rothwell, P. M. (2005). External validity of randomised controlled trials: to whom do the results of this trial apply?. *The Lancet*, *365*(9453), 82-93.

Schiavo-Campo, S. (2005). Building country capacity for monitoring and evaluation in the public sector: Selected lessons of international experience. *The World Bank Operations Evaluation Department, Evaluation Capacity Development, 32881*(13), 1-14.

Shadish, W.R., Cook. T.D. (2003). Experimental and Quasi-experimental designs for generalized causal inference. Boston, MA: Houghton Mifflin

Shah, R. (20 June 2011). "'DRG 2.0: Promoting Democracy, Human Rights, and Governance in 2011'. Arlington, VA. Retrieved at http://www.usaid.gov/news-information/speeches/remarks-usaid-administrator-dr-raj-shah-drg-20-promoting-democracy-human

Siddiqi, S., Masud, T. I., Nishtar, S., Peters, D. H., Sabri, B., Bile, K. M., & Jama, M. A. (2009). Framework for assessing governance of the health system in developing countries: gateway to good governance. *Health Policy*, *90*(1), 13–25.

Strong, D. M., Lee, Y. W. & Wang, R. Y. (1997). Data quality in context. *Communincation of the ACM*, 40, 103-110. doi:http://doi.acm.org/10.1145/253769.253804.

Transparency International. (2014). Peru. Retrieved from: http://www.transparency.org/country#PER.

Transparency International: The Global Coalition Against Corruption. (2014). "Corruption by Country/Territory." Retrieved from: http://www.transparency.org/country#SEN.

Transparency International: The Global Coalition Against Corruption. (2014). "Corruption by Country/Territory." Retrieved from: http://www.transparency.org/country#LSO.

Trickett, E. J. (2009). Community psychology: Individuals and interventions in community context. *Annual Review of Psychology*, *60*, 395-419.

United Nations Development Programme. (2014). Political Economy Analysis. Retrieved from: http://www.undp.org/content/undp/en/home/ourwork/democraticgovernance/oslo_governance_centre/analysis_and_learning/political_economyanalysis.html.

UNHCR - The United Nations Refugee Agency. (2004, July). *2002 UNHCR Statistical Yearbook*. Geneva, Switzerland: The United Nations High Commissioner for Refugees.

UNHCR - The United Nations Refugee Agency. (2007, April). *2005 UNHCR Statistical Yearbook*. Geneva, Switzerland: The United Nations High Commissioner for Refugees.

UNMIL Background - United Nations Mission in Liberia. (n.d.). *UN News Center*. Retrieved March 28, 2014, from http://www.un.org/en/peacekeeping/missions/unmil/background.shtml.

U.S. Agency for International Development. (n.d.). Country Development and Cooperation Strategy Liberia 2007-2013. Retrieved April 10, 2014, from www.usaid.gov/sites/default/files/documents/1870/liberia-cdcs.pdf.

U.S. Agency for International Development. (2007). Monitoring and Evaluation Systems Strengthening Tool. Retrieved from: http://pdf.usaid.gov/pdf_docs/pnadj233.pdf.

United States Agency for International Development. (2011). Systems thinking in conflict assessment: concepts and application (DFD-I-00-05-00245-00 (AID-OAA-TO-10-00054). Washington, DC: United States Agency for International Development.

U.S. Agency for International Development. (2013) "Democracy, Human Rights and Governance Strategy." Retrieved from: http://www.usaid.gov/democracy-human-rights-and-governance-strategy.

Varpilah, S. T., Safer, M., Frenkel, E., Baba, D., Massaquoi, M., Barrow, G. (2011). Rebuilding human resources for health: a case study from Liberia. *Human Resources for Health*, *9*(1), 11.

Wendel, M. L., Prochaska, J. D., Clark, H. R., Sackett, S., & Perkins, K. (2010). Interorganizational network changes among health organizations in the Brazos Valley, Texas. *The Journal of Primary Prevention, 31*(1-2), 59-68.

Witter, S. (2012). Health financing in fragile and post-conflict states: What do we know and what are the gaps? *Social Science and Medicine* 75 (12) 2370-2377.

The World Bank. (2013, 19 December). *Health, Nutrition, and Population Statistics* [Data file]. Retrieved from http://data.worldbank.org/data-catalog/health-nutrition-and-population-statistics.

The World Bank. (2014). Lesotho Overview. Retrieved from: http://www.worldbank.org/en/country/lesotho/overview.

World Health Organization. (2003). Liberia Health Situation Analysis Final Report. Retrieved March 21, 2014, from http://reliefweb.int/sites/reliefweb.int/files/resources/4A75D4D0C32E16E3C1256DF7004782DC-who-lib-29nov.pdf.

World Health Organization (2008). Neglected health systems research: Health policy and systems research in conflict-affected fragile states. http://digicollection.org/hss/documents/s15873e/s15873e.pdf.

World Health Organization. (2009) "Systems Thinking for Health Systems Strengthening." (editor: Don de Savigny and Taghreed Adam).

World Health Organization. (2011). Community Ownership and Participation. *African Health Observatory*. Retrieved April 3, 2014, from http://www.aho.afro.who.int/profiles_information/index.php/Liberia:Analytical_summar_-_Community_ownership_and_participation.

World Health Organization. (2012). *World Malaria Report Country Profiles*. Retrieved from http://www.who.int/malaria/publications/world_malaria_report_2012/wmr2012_country profiles.pdf?ua=1.

World Health Organization: African Health Observatory. (2014). Comprehensive Analytical Profile: Lesotho. Retrieved from: http://www.aho.afro.who.int/profiles_information/index.php/Lesotho:Index.

World Health Organization. (2014). Global health workforce alliance: Peru. Retrieved from: http://www.who.int/workforcealliance/countries/per/en/.

World Health Organization: Senegal http://www.who.int/countries/sen/en/.

World Justice Project: Rule of Law Index Project. (2014). Retrieved from: http://worldjusticeproject.org/sites/default/files/files/wjp_rule_of_law_index_2014_report.pdf.

Zurn, P., Codjia, L., Sall, F., & Braichet, J. 2010. How to recruit and retain health workers in underserved areas: the Senegalese experience. *Bull World Health Organization.* P. 386-89. doi:10.2471/BLT.09.070730.

Appendix A: Survey of Development Practices in Conflict-Affected Countries with Emphasis on Liberia

Methodology

The goal of this survey is to understand how aid practitioners conceptualize health governance, understand the role of various stakeholders in establishing government policy, and to understand cross-sector program relationships. The survey focuses on practitioner perspectives of these issues in post-conflict and transitioning countries. In order to gain insight into these areas, a non-probability survey of convenience consisting of 24 questions was conducted between from March 10 to March 27, 2014. Data was collected using Qualtrics, an-online data collection instrument authorized by Texas A&M University.

Sample Frame

The survey was sent to 60 practitioners, of which 53 were development specialists in Liberia, working in the health, civil society, or governance sectors. The remaining 7 were monitoring and evaluation consultants with experience in health programs, but not tied to Liberia. Of the total number, 9 contacts were reached through their membership in the Democracy and Governance Donor Steering Committee; the rest of the Liberia specialists were contacted through the country fact sheet compiled by the International Organization for Migration. The 7 monitoring and evaluation specialists were contacted via the personal contacts network of Professor Scott Pool of Texas A&M University's School of Public Health.

Respondent characteristics

Of the 60 practitioners contacted, 15 responded with complete surveys. Of those 15, four worked for a donor or sponsor agency, seven for international NGOs, and four as consultants. The respondents were equally divided between field offices and home offices, with one responding "other" and over half of the respondents had been working in international development for 10 years or more.

Survey Results

Q1. Survey Information Sheet

Project Title: Global Health Policy and Practice Capstone

Information sheet

For several decades, there was an assumption that a county could be lifted out of poverty by infusions of financial capital and technical knowledge. However, these assumptions where called into question with the signing of the Paris Agreement on Aid Effectiveness in 2005. Today, many countries receiving development assistance are in the midst of economic transitions and will become increasingly able to fund their own interventions with limited outside assistance. However, transitions to country owned, managed and eventually financed health programs require: political stewardship and commitment; institutional and community ownership; capable workforce, effective systems and institutions; and mutual accountability.

The purpose of this survey is to understand perceptions of the international development practitioners with regard to health systems strengthening and governance in a post-conflict country like Liberia. This study

uses a questionnaire and a review of established literature to examine issues such as: the interactions between governments and citizens in health interventions, the role local politics and power structures have on intervention strategies, the capacity of the Ministry of Health in a post-conflict setting, and the design of monitoring and evaluation systems for improved health systems governance. Additionally, this study seeks to understand the role cross-sector collaboration plays in determining the success of interventions.

This study is being conducted as a student project in partnership with the Texas A&M School of Public Health and the George H. W. Bush School of Government and Public Service. This project brings together students from all disciplines of public health with others working on international relations, governance and foreign policy. The project is being supervised by Dr. Leslie Cizmas, Assistant Professor at the School of Public Health, and Prof. Scott Pool, Adjunct Lecturer at the Bush School.

You are being asked to participate in this project based on your current or past experience in international development. Up to 60 individuals will participate. The views you express will be your own and will not be representative of your current or previous employer's policy. Aside from your time, there are no costs for taking part in the study and you will not be paid for taking part in this study. This research is voluntary and you have the choice of whether or not to be in this research study. You may decide to not begin or to stop participating at any time. The information you submit will be anonymous and cannot be identified with you or your email address.

If you decide to take part in the study, you will need to complete a questionnaire that will take no more than 1 hour of your time, which can be completed anytime at your convenience over a seven-day period. You will also have the opportunity to go back and forth in the questionnaire to review all your answers before submitting your answers. Once you have submitted your answers you will not be able to modify your answers.

Although your personal identity will not be made publicly available in the meta-review, others including other individuals in your agency may be able to figure out your identity. This could happen because of discussions with donor agencies or contractors about who should participate in these interviews, and/or information in the meta-review that is produced as part of this study.

You may contact either of the Principal Investigators, Professor Scott Pool at 979-845-0190 or pool@srph.tamhsc.edu, or Dr. Leslie Cizmas at 979-845-5647 or lhcizmas@srph.tamhsc.edu, to inform them about a concern or complaint about this research. For questions about your rights as a research participant, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office at (979) 458-4067 or irb@tamu.edu.

You may print a copy of this form to keep for your records.

Do you give your consent to proceed with the survey?

	Frequency	Percent
Yes	15	100 %
No	0	0 %

Q2. What type of organization are you currently affiliated with?

	Frequency	Percent
Donor/sponsor	4	26.7 %
Intl NGO	7	46.7 %
Consultant	4	26.7 %
	15	

Q3. Is your primary work location in your organization's home office, regional office or field office?

	Frequency	Percent
Home office	7	46.7 %
Field office	7	46.7 %
Other	1	6.7 %
	15	

Q4. Please indicate the total number of years of experience do you have working in international development.

	Frequency	Percent
2 to 5	2	13.3 %
5 to 10	5	33.3 %
10 +	8	53.3 %
	15	

Q5. The term governance has many definitions and uses. Below are health systems governance principles compiled from the World Health Organization, DFID, the Pan American Health Organization, and The World Bank. Thinking about a country in a post conflict transition, please indicate the importance of each governance principle.

	Very Important (3)	Somewhat Important (2)	Not Important (1)	Average
Strategic Vision	12	3	0	2.8
Transparency	13	2	0	2.87
Ethics	11	4	0	2.73
Rule of Law	14	1	0	2.93
Responsiveness	11	4	0	2.73
Information/Intelligence	7	8	0	2.47
Inclusiveness	12	3	0	2.8
Accountability	15	0	0	3
Efficiency/Effectiveness	9	6	0	2.6

Q6. Thinking about a country in the post-conflict/transitioning phase, which of the following best describes how the central government views the role of government, generally speaking. You may select up to 2 choices.

	Frequency	Percent
A strong central government is needed to steer and control change	13	46.4 %
The central government provides an enabling environment to foster change through decentralization	3	10.7 %
The central government has a responsibility to engage multiple stakeholders in various sectors even those who disagree with government	5	17.9 %
The resources of the central government are a means to preserving their own interests and power	7	25.0 %
	28	

Q7. Thinking about a country in the post-conflict/ transitioning phase, in general at what participatory level does the central government engage other elites who are NOT hostile/adversarial to the government?

	Frequency	Percent
No Engagement	1	6.7 %
Information	5	33.3 %
Consultation	6	40.0 %
Partnership	1	6.7 %
Control	2	13.3 %
	15	

Q8. Thinking about a country in the post-conflict/ transitioning phase, in general at what participatory level does the central government engage other elites who ARE hostile/adversarial to the government?

	Frequency	Percent
No Engagement	11	73.3 %
Information	3	20.0 %
Consultation	0	0.0 %
Partnership	1	6.7 %
Control	0	0.0 %
	15	

Q9. Thinking about a country in the post-conflict/ transitioning phase, in general at what participatory level does the central government engage average citizens?

	Frequency	Percent
No Engagement	3	20.0 %
Information	7	46.7 %
Consultation	4	26.7 %
Partnership	1	6.7 %
Control	0	0.0 %
	15	

Q10. What are the three most powerful tools you have used to engage local communities in the process of development? (Multiple responses allowed)

	Frequency	Percent
Engaging local formal leadership	9	20.5 %
Engaging local informal leadership	9	20.5 %
Town hall meetings	5	11.4 %
Attendance/participation in religious services	1	2.3 %
Attendance/participation in community events or fairs	3	6.8 %
Formal training programs	3	6.8 %
Local government initiatives	3	6.8 %
Youth education programs	2	4.5 %
Seminars at local health programs	1	2.3 %
Promotion of electoral participation	2	4.5 %
On the ground monitoring	3	6.8 %
Other	3	6.8 %
	44	

Q11. Historically, international development practices avoided engaging in a developing country's internal politics. Recently, some have argued that the division between technical implementation of development and a developing county's politics could not be ignored. Below are 7 views regarding the interaction between democracy, governance and health systems development. Thinking about a post-conflict country, please indicate where you agree, somewhat agree or disagree with the following statements.

	Agree (3)	Somewhat Agree (2)	Disagree (1)	average
Democracy is necessary for development	3	10	2	2.07
All governance principles are important, but democratically elected governments are not important	0	4	11	1.27
Only a couple of the governance principles matter	0	4	11	1.27
Governance matters, but a strong leader in a country is more important	4	6	5	1.93
No single model of governance. Circumstances may be different in different countries.	12	3	0	2.8
Outsiders can only facilitate change. Change must be locally driven	12	2	1	2.73
Governance is not important. Governance is an outcome of development	1	1	13	1.2

Q12. To the best of your knowledge, does your agency conduct a formal analysis of local political power structures when designing a health intervention project in a developing country?

	Frequency	Percent
Yes	7	46.7%
No	8	53.3%
	15	

Q13. What in particular does the analysis seek to determine, and how is it performed?

The appropriateness of public health for locals; and the full implementation of public health programs for communities.

It is more informal, but we take a whole systems approach to whatever we do and this is an important part of understanding the context so as to shape your strategy to the reality on the ground

My organization only focuses on health interventions and we generally have been working in a country for a number of years. Usually at the proposal stage, while WE may not undertake the formal analysis, one is provided by the donor as part of the background documents. Where there isn't one, we will do a mini one as part of our proposal based on consultations with in-country government officials, other organizations we intend to work with and our own knowledge of the situation. Depending on the intervention, we sometimes will do a stakeholder analysis of different groups or individuals to understand their positions on the interventions we might design.

Who influences decision and who makes decisions.

The (potential) impact of the quality of governance on the quality of service delivery

Power dynamics between formal and informal leadership; unequal power relations between men and women with respect to access and decision-making; local governance structures and linkage to customary laws and possible violence against women.

We perform a general democracy and governance situation analysis. Our programs our multisectoral, so the analysis is conducted nationally and used as a general informational document for all programs.

Q13. Some development practitioners argue that cross-sector collaboration is becoming increasingly necessary to tackle the complex challenges in the development field. For each of the following questions, please indicate your view on cross-sector collaboration and how it relates to your agency. Does your organization collaborate with other development sectors as part of a program to achieve your organization's development goals? If so, how often?

	Frequency	Percent
No/Never	0	0.0 %
Yes- less than once a month	5	33.3 %
Yes- once a month	2	13.3 %
Yes- once a week	1	6.7 %
Yes- more than once a week	7	46.7 %
	15	

Q14. How would you rate the different cross-sector relationships in your program?

	Very Important (1)	Somewhat Important (2)	Not Important (3)	Average
	4	10	1	1.8
Education and literacy	8	7	0	1.5
Governance and political awareness	12	3	0	1.2
Civil society	13	2	0	1.1
Democracy promotion	6	5	4	1.9
Emergency preparedness	8	4	3	1.7
Poverty reduction	10	4	1	1.4
Human rights	11	4	0	1.3
Gender equality	14	1	0	1.1
Economy	5	9	1	1.7
Private sector financing	6	7	2	1.7
Environment	6	6	3	1.8
Agriculture and food production	5	7	3	1.9
Water supply and sanitation	6	7	1	1.6
Other	1	0	0	1

Q15. Is your cross-sector relationship positive?

	Frequency	Percent
Yes	14	93.33 %
No	1	6.67 %
	15	

Q16. What defines this success? Select all that apply.

	Frequency	Percent
Positive communication	12	17.4 %
Sharing of resources	10	14.5 %
Sharing of local background information	9	13.0 %
Joint projects	3	4.3 %
Financial support	2	2.9 %
Cultural expertise	3	4.3 %
Sharing best practices	9	13.0 %
Sharing connections	8	11.6 %
Shared government support	7	10.1 %
Research expertise	5	7.2 %
Other	1	1.4 %
	69	

Q17. What areas could be improved? Select all that apply.

	Frequency	Percent
Positive communication	1	14.3 %
Sharing of resources	1	14.3 %
Sharing of local background information	1	14.3 %
Joint projects	1	14.3 %
Financial support	1	14.3 %
Cultural expertise	0	0.0 %
Sharing best practices	1	14.3 %
Sharing connections	0	0.0 %
Shared government support	1	14.3 %
Research expertise	0	0.0 %
Other	0	0.0 %
	7	

Q18. Can you cite any specific cross-sector programs that you consider both highly efficient and successful? This could be from within your own organization or with another.

	Frequency	Percent
Yes	8	53 %
No	7	47 %
	15	

Q19. Between what two sectors did you witness the MOST effective cross-sector programs that were both highly efficient and successful? Please select 2 choices.

	Frequency	Percent
Infrastructure and building	1	6.3 %
Education and literacy	2	12.5 %
Governance and political awareness	3	18.8 %
Civil society	3	18.8 %
Democracy promotion	0	0.0 %
Disaster preparedness	0	0.0 %
Poverty reduction	0	0.0 %
Human rights	1	6.3 %
Gender equality	3	18.8 %
Economy	0	0.0 %
Private sector financing	1	6.3 %
Environment	0	0.0 %
Agriculture and food production	1	6.3 %
Water supply and sanitation	1	6.3 %

Q20. From the supply and demand perspective--with supply referring to services supplied by the government, and demand referring to citizen service preference--how do you tailor your monitoring and evaluation strategies to best accommodate the needs of both groups while still striving to achieve the overall mission?

We take a whole systems approach that requires including the various perspectives. So we include data collection from all stakeholders and triangulate
We no longer use 'demand' and 'supply' frameworks, which tend to be too focused on principal/agent theories. We use theories of collective action.

My monitoring and evaluation strategy will be tailored on the basis of four principles. These principles are 'availability', 'quality' 'accessibility', and 'affordability'. These principles are intended to see whether the services are available in the first place, it assesses the quality of the services both from the supply and demand perspectives, and gauge whether or not people can freely access these services, and finally whether citizens can afford the services.
Designing the program to stay attuned as possible to local demands (done through tools formally and informally)

Monitoring and evaluations strategies are built around intervention strategies. If the intervention strategies target both supply side issues as well as demand side (both encouraging a sense of agency and control, as well as health seeking behaviors -- demand is not necessarily an issue of preference when choice is not available), then the monitoring and evaluation plans look at both examining how the interventions have affected supply and demand. Quality of services, for example, can be assessed through service audits with observational checklists as well as exit interviews of patients. For the project, we are a catalytic initiative, not engaged in service delivery. Our monitoring and evaluation efforts look at both increased availability of services as well as uptake of services, and satisfaction of services.

I'm not entirely sure what this question is asking. Usually, it is not government or citizens asking for the M&E information, but rather the donor. We also don't want to be funding or implementing interventions that are not effective, so we do it to ensure our resources are channeled to efficient and effective interventions. However, in designing our M&E plan, we would typically ensure that we get information from both the supply and demand sides, and then also pilot test and tweak our M&E tools with both target groups.

Doing governance assessments from both perspectives. Creating platform s for dialogue between supply and demand side capacity development for all actors to deal from their interest with the promotion of good governance

I do a community score card for the demand perspective and a self-assessment exercise for the supply side. Findings are presented in a series of conferences that bring the community and service providers in to some interface where we are able to present findings based on triangulations.

Our organization works specifically with government led networks, task force, with an agreed to monitoring mechanism. This situation allows our team to ensure that it has a multi-stakeholder, muiti-sectoral and grounded approach. One example is our work with the Sexual and Gender Based Violence Task Force. This group comprises all organizations (CSOs, Government, INGOs) responding to SGBV in Liberia. While it is national, it is also regional with county units. INGOs monitor agreed to issues but work in a consolidated fashion to collate and validate in joints meetings, usually held once a month.

Effective M&E approaches need to consider both perspectives, and often different methods are required. For instance, Performance-Based Financing interventions in the health sector are increasingly combining formal M&E (direct clinical monitoring and reporting of performance against standards for service provision, management, etc.) with "bottom-up" feedback mechanisms such as exit surveys, community surveys, participatory/partnership-defined quality approaches (i.e. report cards), etc. There is a wide and growing array of participatory approaches for data collection at the community level or among local leaders, technocrats, etc. depending on who your "demand side" target group is.

Q21. When establishing a program monitoring system, what are the key elements needed to ensure an implementing partner will utilize the system to make strategic programmatic decisions?

working with them closely in the design of the system -- focusing on how this information is important for them to make strategic and programmatic decisions to be able to be successful -- keeping a focus on what is the ultimate goal and what are we doing to get there.

Those collecting the data are given the authority to use it and make decisions as a result of it. Every effort should be made to introduce the monitoring system to the implementing partner before it is been used to monitor their work. Implementing partners' views should be taken into consideration and where applicable use to modify monitoring system. Partners sometimes see monitoring as a process to look for failures; effort should be made to emphasize that monitoring is intended to improve existing initiative. Reports emanating from the monitoring system should be discussed with implementing partners to help ensure that they understand how this affects programmatic decisions.

All has to be designed to be "reasonable" (labor, time, easy tools, collectible) and above all to feed into management systems and provide information that is USEFUL and relevant to management. So what to always consider; what is to be measured (i.e, you need to be able to clearly articulate what change your program is trying to achieve and how) and how to measure it (simple, doable, useful)

The partner should be involved in the development of the program monitoring system -- what information is needed for them to know whether the program is working? How often do you need that information? How will you use that information to make program decisions? A monitoring system cannot be externally imposed if it is to be successful and sustainable beyond the project period.

Designating a specific staff person(s) to oversee M&E for that program, training them, and working with them to collect and use the information on a routine basis. It should be seen as part of program implementation.

localizing indicators to fit the needs of all actors linking input-output-outcome and impact indicators develop actionable indicators that are within the scope of control of the actors to influence/change keep them simple and cheap to collect/monitor

Strong collaboration and technical engagement from the very onset with the partner. Agreement on the evaluation framework, methodology and instrument is also critical to achieving this objective.

We are first concerned with context prior to an investment in a particular area and the main component of the system includes a baseline research/study to determine this. The baseline supports the development of a logframe that is realistic around attribution, outcomes and impact. Other elements include training of staff involved in this process and familiarity and agreement with all partners, communities and the Government when necessary. We also take particular interest in conducting a stakeholders' and power analysis to determine the direction of strategy and decision-making. Gender equality issues frame the process as it relates to information sharing and participation.

It needs to be clear, simple to use, and clearly connected to the program objective. I have seen many monitoring tools / M&E plans with pages of indicators that are essentially "bean counting". Fewer indicators that are clear/concise and relevant to the desired outcomes are key. All they better if they are straightforward to monitor and collect - though this can be a tall order. Also when cross-sectoral outcomes/outputs are being monitored and evaluated, the understanding / expertise of the people utilizing the system must also be considered. For instance, it may take more explanation /coaching for public health experts to provide meaningful information on DG-related outcomes, and vice versa.

Q22. What are barriers (political, socioeconomic, cultural, etc.) to monitoring and evaluating interventions in LMICs (low-income and middle-income countries) that weaken analysis of these interventions?

Lack of incentives to perform well, recognition of results, and mostly LACK OF ACCONTABILITY

Depends on which interventions.

Corruption, ineffective national systems and structures, lack of personal and institutional ownership and initiatives, and lack of accurate and comprehensive data contribute to week analysis of interventions.

Institutional reluctance (fear of over-commitment/ added workload/change) Corruption (going against the interests of a few) - but can be mitigated by putting in place "fair" and transparent systems well ahead of time, with fair and transparent monitoring systems

Lack of engagement of service providers in designing and using M&E systems. M&E used as reporting rather than program management tool. Lack of numeracy skills among management. Social pressure to demonstrate results even when none are being achieved can lead to data falsification. Lack of training of service providers on use of data.

It depends on what kinds of M&E tools you are using, but typically, what I've found is that many people in LMICs do not appreciate the need for rigor in conducting studies or collecting information, so the data or information we collect may be biased or otherwise questionable. There is also a need to change the culture of M&E being seen as something that's only for the donor (which is often the case), as opposed to a useful tool for designing and/or improving interventions.

Potential exposure of non-performance, corruption, etc. exposure of systemic weaknesses that require structural improvements in the governance system conflict between the governance agenda and personal interests weakness of existing baseline data and M&E systems
View1. Lack of political will; 2. Lack of institutional capacity; 3. Lack of champions; 4. Lack of definitions regarding quality standards across sectors and 5. Over-dependence on donor intervention among others

From an infrastructural perspective, access (roads, bridges or the lack of them) is an issue. Language, when placed at a very technical level is an issue in getting the right kind of information. Additionally, communities in Liberia do not believe or understand the politics of aid, so most organizations, who should only be 'conduits' of aid behave in a way like they are doing these communities a favor. It makes it difficult for communities and other stakeholders to critique the work of these organizations with the interest to improve and build on existing resources and knowledge within these areas. Politics is not easily divorced from development also since most members of the legislature use their law-making and budget development power for their personal interests

Political, socioeconomic, cultural and other barriers can all be important lenses through which interventions are interpreted, implemented, and ultimately evaluated. All can influence people's behaviors, attitudes, and practices, and the extent to which systems are formal and explicit vs informal and hidden, which in turn affect how development interventions function in the local context. Even evaluating something as straightforward as whether a vaccination program reached its intended beneficiaries and why/why not can be more complicated than it appears. Local politicians and technocrats running the program may have incentives to direct resources and benefits in non-obvious ways. Health care workers may face a wide range of incentives affecting how hard they work to reach intended beneficiaries, and the level of trust between health workers and communities can vary - race, income, ethnic group, religious differences, historical factors, etc. can become barriers to access

Q23. The value of the randomized control trial approach to evaluation continues to be debated. What are your thoughts on this approach given your experiences in international development? What alternatives have you found to be effective?

i find the RCT a method that is way too rigid to allow the nuance that is important to understand success. The best approaches are mixed methods that allow both, but the RCT requires a rigidity that makes development actors unable to do what is needed, in order to maintain the "research structure"

RCTs are useful in situations that do not require external validity and when the causal chain is not complex. More useful alternatives for more complex change processes are outcome mapping and process tracing.

I still believe that randomized control trial to evaluation offers the best opportunities to truly understand the impact of interventions. Another approach I have found useful is focus groups' discussions that target representatives of all the stakeholders to the intervention.

Very expensive, most often conclusive Need holistic and complimentary systems that help draw a more comprehensive and realistic picture (no single system will cover it all): measuring the quality in an easy, reliable, verifiable way, garnering independent and regular feedback from beneficiaries, carrying out evaluations/ assessments, third party monitoring...

RCT design is useful if you are testing out a novel approach for efficacy. The conditions required are not conducive to providing lessons learned on how to effectively scale up a program without the restrictive controls and additional inputs provided in an RCT.

When it's possible, I like to use it. But it's important to consider the ethical implications of having a control setting, and it can be especially difficult to get robust data in a post-conflict setting. You might have lots of options for the "control" setting, but the reason why that setting isn't getting the intervention can be due to security. So getting a pure control isn't always possible. There are lots of other options for evaluations. Baseline and endline surveys or assessments, for example. It really depends on your project and intervention.

In general too costly and sophisticated for use in “data-poor” countries. Non-compliance and attrition will be very high in LMIC as well as the difficulty to monitor potential social variables that might influence the effect of the intervention. Triangulation with other more qualitative research methods.

Given its potential to significantly minimize allocation biases between known and unknown diagnosis factors in the assignment of treatment, I hold the view that RCT remains a valid approach to health evaluation. I am anxiously looking forward to alternatives that might be posited in favor of the ongoing debate.

The value of this approach is enhanced if inclusion criteria is strengthened and adhered to . For example, in a program which focuses and gender equality and LGBT rights, the monitoring team will ensure that the results are scientific, unbiased but also clear that targeted groups are a part of this randomized approach.

As Lant Pritchett recently said (let me roughly paraphrase): RCTs are a hammer but not every development problem is a nail. RCTs are useful when you have a reasonably well-defined intervention and you want to demonstrate its impact on the ultimate development problem you're trying to solve, all other factors held constant. The challenge is that all other factors are rarely constant, and many development interventions are complex and operate in complex environments, so don't lend themselves easily to a "yes it works" or "no it doesn't work" answer. For example, there is much investment being made in evaluations of performance-based financing schemes across a number of countries. But PBF schemes can take a wide range of forms and have varying rules of the game - demonstrating that "PBF" works in one country and setting doesn't necessarily tell you much about what will work in another. In summary: RCTs are fantastic, but they are expensive and not useful for all problems. Particularly for complex interventions in complex environments, qualitative and mixed method evaluations that delve into the "how" and the "why" and draw lessons learned tend to be more operationally useful.

Q24. In your experience, do you feel that M&E has directly influenced program beneficiaries and other stakeholders? If so, in what ways?

Yes, when it is done well, it is very empowering. I have done a lot of work in quality improvement which is an approach to M&E which has really empowered providers and lower level managers to use data to make changes and improve the quality of care and therefore save lives

In some circumstances, M&E can be a tool to change accountability relationships between providers and clients - typically at service delivery points

M&E when done correctly and consistently, it influences beneficiaries and stakeholders because it advances the quality of intervention. The supply side is aware of its responsibilities and strive to achieve them knowing that they will be evaluated, and the demand side will expect and demand a better quality because they know the intent of the intervention is to have positive impact that is regularly evaluated; and their satisfaction or dissatisfaction could change the course of the invention.

Yes if made realistic and useful (no one size fits all) but requires time/effort at the beginning and management buy-in.

No, because M&E is used primarily for reporting purposes to funders rather than as a program management tool.

Again, not sure what this question is asking. It depends on who is doing the M&E and what the M&E objective is. I think M&E influences the design of program interventions, which has an impact on beneficiaries. If the objective of M&E is to provide information to citizens to hold government more accountable or to provide them with the information needed to request improvements/changes to the beneficiaries, I've seen that happen and it's useful. If the objective of M&E is to provide information to government to help them design or improve their

Certainly. Adjustment of interventions due to proper monitoring of anticipated outcome and impact, increasing cost-benefit by identifying interventions that are more effective or efficient or ways to implement them cheaper without sacrificing on impact. M&E can result in a better understanding of the way in which external variables can have an impact on the project outputs/outcomes. Better insight in positive or negative unintended side effects of the interventions.

In the organization I work for, it has. We have an annual review that is controlled by program beneficiaries and other stakeholders. Our M and E team listens. In many cases, it is challenging since most INGOs see themselves as above reproach and are 'helping' so they should not be criticized. This process is mandatory and all results are documented and shared with communities and ActionAid International to support future programming and accountability mandates.

Absolutely yes. As development professionals we are bound to use M&E to understand the effect of the programs we fund, whether they work or not, why, how, and for whom. Of course, there is always room for improvement and human nature can often lead to unfounded enthusiasm for interventions that are not proven and whose effects are not well understood. In fact, innovation sometimes demands that we try things that are not proven. But I see instances all the time where M&E activities lead to changes in programs, strategies, budgets, etc.

APPENDIX B: TOOLS FOR UNDERSTANDING POWER RELATIONSHIPS

While originally aid organizations attempted to separate their work from the recipient countries' political structures, since the early 1990s, politics has steadily moved to the forefront of the international aid community, and continues to evolve in importance today. Carothers & De Gramont (2013) argue that political processes affect every aspect of developmental change, and that "(t)he key to more effective assistance is to conceive of aid interventions as integral parts of productive sociopolitical processes that produce positive developmental change(Carothers & De Gramont, 2013, P. 159)." In light of the importance of utilizing political methods to increase the success of donor missions, many organizations have more recently developed or implemented existing tools to increase their ability to conduct political economy analysis (Carothers & De Gramont, 2013).

While most major aid organizations presently accept and understand the importance of governance as a function of political efficacy in creating sustainable developments, they have come to no clear consensus on what measures indicate strong governance. Consequently, each agency has developed its own tools and mechanisms to measure the political and power dynamics that they believe contribute to strong governance. These different methods demonstrate the varying perceptions of agencies as to what makes strong governance. Incidentally, most of these measures draw from existing data and statistical information with only a small emphasis on the informal power structures that set the conditions for the technical realities; based on the previous discussion on the importance of these informal power structures, this can be a major deficiency that limits the analytical power of these measures.

Table 1: Macro-level analysis tools used to analyze political, institutional, and social policy for country and reform context

	The Tool name and purpose	**The Tool focus and description**
1.	**Country Social Analysis (CSA)**: Integrates social, economic, political, and institutional analysis	The CSA uses qualitative and quantitative data to better understand the influence of country context on policy reform and development outcomes.
2.	**Power Analysis**: used to analyze actors, interest groups, and structures	Power analysis is used to understand where power lies in society and how it is distributed. It is based on the understanding that poverty reduction can occur when lower socioeconomic groups have access to political power and resources.
3.	**Drivers of Change**: Used to improve understanding of political, economic, social, and cultural forces	Drivers of Change is used to identify the forces that make changes in regional and country context and link the changes with key policy and institutional "drivers" of change in order to reduce poverty.
4.	**Stakeholder Analysis Matrices**: Used to list and identify stakeholders and their relationship in regards to policy process	Stakeholder Analysis Matrices identifies two or more variables that will have an association with policy reform, policy development, or policy process for stakeholders, and identifies: A) stakeholder impact, B) stakeholder interest, C) satisfaction of stakeholders, D) influence of stakeholders, and E) resources of stakeholders to make changes.
5.	**Political Mapping**: Used to identify the strength and nature of political-ideological opinion on a reform issue	Political Mapping identifies political actors that are important, and links their relationship to one another to assist with policy design and delivery in order to: A) provide a graphic representation of the political viability of a regime, B) identify possible vulnerabilities of a regime, C) identify opposition and support to the regime, D) indicate the level of authority of a regime, E) identify implementation capacity of stakeholders, and F) identify new policy direction

Table 1 (cont): Macro-level analysis tools used to analyze political, institutional, and social policy for country and reform context

	The Tool name and purpose	The Tool focus and description
6.	**Network Analysis**: Used to strategically understand the strength and nature of institutional connections in the political landscape	Network Analysis focuses on relationship structures of people, groups, and organizations in a community, sector, or industry. Network Analysis attempts to: A) understand organizational structure and how systems function, B) understand organizational behavior, inter-organizational relations, social support, and the flow of information, knowledge, and resources, and C) understand potential impacts of policy changes or execution on relationships among a set of actors.
7.	**Transaction Cost Analysis**: Political economy analysis that focuses on the uneven distribution of information	Transaction Cost Analysis identifies limits on reforms in relation to transaction cost during design and execution phases. It assist in determining power relations in terms of transaction cost enforced on actors that are less powerful due to deficiency of access to facts.
8.	**The Research and Policy in Development (RAPID) Framework**: Used to determine if policy development and policy making can impact poverty reduction	The RAPID Framework: assist in identifying interrelated factors (political context, evidence, and external context) in order to determine if research-based and other forms of evidence might be adopted by policy makers and practitioners.

Source: World Bank's 2007 Tools for Institutional, Political, and Social Analysis of Policy Reform.

APPENDIX C: DATA SOURCES FOR LIBERIA ASSESSMENT

Raw data was collected from a variety of sources, specifically focusing on health indicators and health-service related measures. This assessment includes variables for health expenditures, disease and illness indicators, health service provision (e.g. hospitals per capita), and various mortality and life expectancy rates. The aforementioned data will accurately describe the historical and current health and health-service environment in Liberia. Furthermore, this data allows to discuss general trends, describe significant changes, and establish potential causal relationships between specific measures and variables. However, without a clearly defined regression model with adequate controls for confounding and unobserved variables, one cannot state with absolute certainty that one measure had a statistically significant impact on another. Therefore, it is only possible to develop logical arguments based upon a historical understanding of Liberia and utilize the collected data in a descriptive manner. As a result, this does not establish prescriptive policy descriptions.

The data was collected from four primary sources: the Afrobarometer research project, the Millennium Challenge Corporation's (MCC) country scorecard report, the Mo Ibrahim Foundation's Ibrahim Index (IIAG), and the World Bank's Health, Nutrition, and Population Statistics dataset. The generated data set also includes the World Health Organization's 2013 Statistics yearbook, but not actively modified or merged with the information. All four sources were accessed electronically. Only three provided full access to the raw data files: Afrobarometer (2012 and 2008 survey results), the 2013 IIAG dataset, and the World Bank database. The goal in collecting the data was to develop a comprehensive dataset for Liberia spanning at least the immediate pre- and post-conflict years, with as many intervening years as possible. The data includes measures with relatively complete data or observations across this time period, so as to accurately assess potential trends and long-term changes. Accessing the raw data files from the aforementioned three sources allowed tweaking and merging them to fit the needs for this analysis. In order to maintain data integrity, Stata *.do* files were utilized to limit any permanent changes to the original files. The team generated *.log* files for future reference.[1] Where possible, the team kept the original variable names and labels, using only basic merge commands to collapse the data into one file. The following sections describe the specific changes and methods used for each particular data source, along with any noteworthy variables, items, or issues.

A. Afrobarometer 2008 and 2012 survey results

The Afrobarometer survey results presented a unique opportunity for our team: instead of raw descriptive statistics, the Afrobarometer surveys tabulated the opinions of the Liberian populace. As a result, this survey data provides a counter-balance to the somewhat sterile data retrieved from the other sources. However, the raw survey result files provided by Afrobarometer presented additional technical challenges. The survey results were only available in a SPSS *.sav* file, breaking compatibility with our use of Stata and its equivalent *.dta* file format. As a result, additional coding and programming was required, using the *R.app*, in order to integrate the Afrobarometer survey results with the rest of our data. Both the 2008 and 2012 survey results required extensive processing and re-coding via Stata *.do* files in order to generate easily accessible information. Nevertheless, the file conversion provided significant insight into Liberian society, provision of social services, and the state of healthcare during two distinct periods. These results have been included in the relevant sections of the paper. Of note is the fact that the 2008 survey focused heavily on post-war conditions and reconciliation whereas the 2012 survey emphasized government provision of services and quality of governance. Finally, each survey contained unique questions, with many not asked in both of the

[1] All Stata materials, including *.do* and *.log* files, modified and merged datasets, and relevant codebooks are available upon request.

surveys. Thus, it remains difficult to compare Liberian opinions between 2008 and 2012, due to the lack of survey consistency and questioning.

B. The Millennium Challenge Corporation's Country Scorecard

Unlike the other sources, the MCC scorecards provided little raw data. Instead, the scorecards distilled a number of Liberian metrics (from a variety of third-party sources) into a relative measurement scale. These metrics ranged from political issues, governance, and economic development, with tangentially related "Investment in People" categories providing superficial health statistics and data. The team chose not to rely on the MCC scorecards due to limited scope (encompassing only the years 2007 through 2011) and a lack of relevant health metrics. Furthermore, the other three sources provided similar, if not identical measures, across a longer time horizon. As a result, the team did not utilize the MCC scorecards in our data processing.

C. The Mo Ibrahim Foundation's 2013 IIAG dataset

The Mo Ibrahim Foundation's raw data files contained a variety of measures, including specific governance, political, economic, and social indicators gathered from Liberia over a number of years. The Foundation collects and combines the data from a variety of primary- and third-party sources, using a weighted calculation to generate relative scores for African countries, political governance, and economic development. The data ranges from 2000 to 2012, with variable observations classified as one of four major categories: Safety & Rule of Law, Participation & Human Rights, Sustainable Economic Opportunity, and Human Development. These four individual scores are then weighted separately and combined to generate the overall country score for the Ibrahim Index (IIAG). In the 2013 Index, Liberia placed 29th out of 52 countries, with overall improvements in each of the four previously mentioned categories. Significant improvements are evident immediately after the cessation of hostilities between 2003 and 2004, as seen in Figure 8 and 9 below (Mo Ibrahim Foundation, 2013). The Foundation provided the raw data in an unformatted (raw) and formatted format. Also included were a variety of codebooks and methodology descriptions that provided ample support for their measures. As a result of the breadth and depth of the provided information, we selected the IIAG data and sought to combine it with our additional sources. Minor data processing and editing work was performed to ensure proper compatibility with our other data files.

D. The World Bank's Health, Nutrition, and Population Statistics database

This database, hosted and updated by the World Bank, draws upon a variety of sources, including governmental databases, statistical organizations, non-governmental organizations, aid groups, and internal research, to assemble one of the widest-reaching health related data sources currently available to the public. The World Bank provided a direct download of all relevant Liberian metrics, variables, and observations, dating back to 1960, with the most recent recorded observations from 2012. Furthermore, this database contained nearly every imaginable health-based variable, although, admittedly, many observations for Liberia contained no information (an issue with missing data and a lack of collection during conflict periods). Due to the scope of this database and the detailed information contained in the above IIAG dataset, we chose to merge both of these together to create a custom dataset for Liberia, encompassing the years 2000 through 2011.

This custom dataset allowed the team to generate relatively complete comparisons of numerous Liberian health measures; as a result, we relied heavily on this dataset. Data processing and formatting for the World Bank database entailed little more than minor formatting in Excel, combined with an import into *Stata*. The IIAG data was then merged with the imported World Bank data using the *country* and *year* variables as the matching variables. Issues with the data include the aforementioned missing data, a lack of consistent observations, potential measurement errors and/or

biases (given the original sources), and possible data management issues with respect to the merge process. Nevertheless, the team's custom dataset provides the best source of statistical information on Liberian health issues and services during the specified period.

APPENDIX D: QUESTIONNAIRE FOR IN-COUNTRY LIBERIA HEALTH GOVERNANCE ASSESSMENT

Q1. The World Health Organization (WHO) developed a health systems framework of building blocks, goals and outcomes. The WHO definition states, "a health system consists of all organizations, people and actions whose primary interest is to promote, restore or maintain health." Please indicate the top three priorities for strengthening a local country health system in a post-conflict country.

Government leadership and governance
Health service access
Health service quality
Health financing system
Health information systems
Health research and data quality capacity
Health workforce capacity
Medical products - availability
Medical products - distribution
Medical products - new technology
Planning – Centralized President
Planning – Centralized Ministry of Health
Planning – Decentralized to sub-national government
Promoting behavior change at the community level
Promoting behavior change at the individual level
Other _____

Q2. Please rank the factors that contribute to government accountability when implementing health programs according to the following scale:

1 = "Not important at all"; 2 = "Not Important"; 3 = "Unsure / no opinion"; 4 = "Important"; 5 = "Very Important"

Delegation/ understanding how services will be provided.

Financing of services to ensure that adequate resources are set aside and directed toward those agreed to in the understanding.

Performance around the services that are provided.

Receipt of relevant information for stakeholders to monitor the quality of services.

Other._____

Q3. In your opinion, when asked to identify its strategic public health objectives, how clearly can the Ministry of Health and Social Welfare identify specific goals?

Very Clearly
Clearly
Vaguely
Poorly
Very Poorly
Don't Know / No Opinion

Q4. In your opinion, when asked how it will achieve its public health objectives, how clearly can the Ministry of Health identify a strategic plan to accomplish their goals?

Very Clearly
Clearly
Vaguely
Poorly
Very Poorly
Don't Know / No Opinion

Q5. Do you agree or disagree with the following statement? The general public has the capacity to advocate for health issues.

Strongly Agree
Agree
Disagree
Strongly Disagree
Don't Know / No Opinion

Q6. In your opinion, do post-conflict/transitional countries like Liberia have well-developed laws providing patient protection from malpractice and redress of grievances?

Strongly Agree
Agree
Somewhat agree
Disagree
Strongly Disagree
Don't know/No Opinion

Q7. In your opinion, how effective is enforcement of health system law?

Very effective
Effective
Somewhat effective
Ineffective
Very Ineffective
Don't Know / No Opinion

Q8. Do you agree or disagree with the following statement? In the current environment, civil society organizations are able to effectively oversee the delivery and financing of health services, and ensure that government follows protocols and standards.

Strongly Agree
Agree
Somewhat Agree
Disagree
Strongly Disagree
Don't Know / No Opinion

Q9. How would you rate press freedom to report financial and administrative violations in government?

Very Free
Fairly Free
Somewhat Free
Restricted
Very Restricted
Don't Know/No Opinion

Q10. Do you agree or disagree with the following statement? The national government regularly communicates with stakeholders and the public regarding the health sector.

Strongly Agree
Agree
Disagree
Strongly Disagree
Don't Know / No Opinion

Q11. In your opinion, how quickly can the central Ministry respond to serious health issues at regional and local levels?

Very Quickly
Quickly
Somewhat Quickly
Slowly
Very Slowly

Q12. On a scale of 1-10, please rate how important the following aspects affect people's access to healthcare in a post-conflict country like Liberia:

Income
Family
Gender
Tribe / Clan identity
Race
Rural residency
Religion
Other

Q13. In your opinion, how effective are the Ministry's policies at improving healthcare access for the poor?

Very effective
Effective
Somewhat effective
Ineffective
Very Ineffective
Don't Know / No Opinion

Q14. In your opinion, the Ministry of Health uses evidence on program results, patient satisfaction, and other health-related information to improve the services they deliver and finding barriers to advancing health policy.

Always
Frequently
Sometimes
Rarely
Never
Don't Know / No Opinion

Q15. Do you agree or disagree with the following statement? The Liberian government has mechanisms for overseeing adherence to financial and administrative rules in place.

Strongly Agree
Agree
Disagree
Strongly Disagree
Don't Know / No Opinion

Q16. In your opinion, wow reliable is the Ministry of Health record keeping system?

Very reliable
Reliable
Somewhat Reliable
Unreliable
Very Unreliable
Don't Know / No Opinion

Q17. Do you agree or disagree with the following statement? The government in a post-conflict country like Liberia has a set of clear policies on promoting ethical practices and reporting ethical breaches in health care and research.

Strongly Agree
Agree
Disagree
Strongly Disagree

APPENDIX E: COUNTRY HEALTH AND CITIZEN FREEDOM TYPOLOGY

The country health and citizen freedom typology was constructed using 2012 data from the United Nations Inter-agency Group for Child Mortality Estimation and the 2014 Freedom House Freedom in the World Index.

The mean child mortality rate for all countries is 38.15 deaths per 1,000 births. The standard deviation of the mortality data is 38.15 deaths per 1,000 births. The child mortality data was placed into quartiles using the standard normal curve and labeled as "low" mortality for zscores below -.675, "medium/low" for zscore between 0 and -.675, "medium/high" for zscores between 0 and .675, and "high" for zscores greater than .675. Countries were then coded from one to four based on the countries child mortality quartile ranking.

Countries are labeled as "Free," "Partially free," and "Not free" based on their classification in the 2012 World Freedom Index published by Freedom House, an international non-governmental organization with a mandate to track the amount of freedom citizens in countries are allowed to exercise. Countries were coded 10 (Free), 20 (Partially free), or 30 (Not free) based on the Freedom House rankings.

In order to categorize similar countries based on child mortality quartile and Freedom House rankings, a typology score was created by adding scores of the two dimensions together. While all countries in the World Health Organization data base of child mortality were used to determine quartile rankings, this capstone project places emphasis on the 50 countries included in the USAID Health Systems Strengthening 2020 project which was implemented from 2006 to 2011. This prioritization is necessary in order to establish appropriate comparative countries to benchmark against Liberia.

Figure 16: Country Health and Freedom Typology Classification Diagram

Child Mortality (under age 5)	Freedom House Index: Not Free (30)	Partially Free (20)	Free (10)
Highest 25% (4)	34	24	14
50% to 75% (3)	33	23	13
25% to 50% (2)	32	22	12
Lowest 25% (1)	31	21	11

Note: Typology created using the Freedom in the World Index and the UN Inter-agency Group for Child Mortality Estimation.

Table 2: Country Typology Scores based on Child Mortality Quartiles and Freedom in the World Rankings

Country	Health System 2020 Country (1=Yes, 0=No)	Typology Score	Freedom in the World 2014 (10=Free, 20=Partially Free, 30=Not Free)	2012 Child Mortality (under age 5) Quartile	2012 Child Mortality (per 1,000 births)	2012 Child Mortality (under age 5) Standardized Score
Antigua and Barbuda	1	12	10	2	9.9	-0.7
Dominica	1	12	10	2	12.6	-0.6288
Grenada	1	12	10	2	13.5	-0.605
Jamaica	1	12	10	2	16.8	-0.518
Peru	1	12	10	2	18.2	-0.481
St. Kitts and Nevis	1	12	10	2	9.2	-0.7185
St. Lucia	1	12	10	2	17.5	-0.4995
Botswana	1	13	10	3	53.3	0.4452
Guyana	1	13	10	3	35.2	-0.0324
India	1	13	10	3	56.3	0.5244
Namibia	1	13	10	3	38.7	0.0599
St. Vincent and the Grenadines	1	13	10	3	23.4	-0.3438
Suriname	1	13	10	3	20.8	-0.4124
Trinidad and Tobago	1	13	10	3	20.7	-0.415
Benin	1	14	10	4	89.5	1.4005
Ghana	1	14	10	4	72	0.9387
Lesotho	1	14	10	4	99.6	1.667
Senegal	1	14	10	4	59.6	0.6115
Ukraine	1	22	20	2	10.7	-0.6789
Bangladesh	1	23	20	3	40.9	0.118
Bolivia	1	23	20	3	41.4	0.1312
Indonesia	1	23	20	3	31	-0.1432
Philippines	1	23	20	3	29.8	-0.1749
Tanzania	1	23	20	3	54	0.4637
Cote d'Ivoire	1	24	20	4	107.6	1.8781
Haiti	1	24	20	4	75.6	1.0337
Kenya	1	24	20	4	72.9	0.9624
Liberia	1	24	20	4	74.8	1.0126

Madagascar	1	24	20	4	58.2	0.5745
Malawi	1	24	20	4	71	0.9123
Mali	1	24	20	4	128	2.4164
Mozambique	1	24	20	4	89.7	1.4057
Niger	1	24	20	4	113.5	2.0338
Nigeria	1	24	20	4	123.7	2.3029
Papua New Guinea	1	24	20	4	63	0.7012
Sierra Leone	1	24	20	4	181.6	3.8308
Uganda	1	24	20	4	68.9	0.8569
Zambia	1	24	20	4	88.5	1.3741
Egypt, Arab Rep.	1	33	30	3	21	-0.4071
Rwanda	1	33	30	3	55	0.4901
Vietnam	1	33	30	3	23	-0.3543
West Bank and Gaza	1	33	30	3	22.6	-0.3649
Afghanistan	1	34	30	4	98.5	1.638
Angola	1	34	30	4	163.5	3.3532
Congo, Dem. Rep.	1	34	30	4	145.7	2.8835
Ethiopia	1	34	30	4	68.3	0.841
South Sudan	1	34	30	4	104	1.7831
Swaziland	1	34	30	4	79.7	1.1419
Yemen, Rep.	1	34	30	4	60	0.622
Zimbabwe	1	34	30	4	89.8	1.4084
Albania	0	22	20	2	16.7	-0.5206
Algeria	0	33	30	3	20	-0.4335
American Samoa	0	0	.	.		
Andorra	0	11	10	1	3.2	-0.8768
Argentina	0	12	10	2	14.2	-0.5866
Armenia	0	22	20	2	16.4	-0.5285
Aruba	0	0				
Australia	0	11	10	1	4.9	-0.832
Austria	0	11	10	1	4	-0.8557
Azerbaijan	0	33	30	3	35.2	-0.0324
Bahamas, The	0	12	10	2	16.9	-0.5153
Bahrain	0	32	30	2	9.6	-0.7079
Barbados	0	12	10	2	18.4	-0.4757
Belarus	0	31	30	1	5.2	-0.8241
Belgium	0	11	10	1	4.2	-0.8504
Belize	0	12	10	2	18.3	-0.4784

Bermuda	0	0				
Bhutan	0	23	20	3	44.6	0.2156
Bosnia and Herzegovina	0	21	20	1	6.7	-0.7845
Brazil	0	12	10	2	14.4	-0.5813
Brunei Darussalam	0	31	30	1	8	-0.7502
Bulgaria	0	12	10	2	12.1	-0.642
Burkina Faso	0	24	20	4	102.4	1.7409
Burundi	0	24	20	4	104.3	1.791
Cabo Verde	0	13	10	3	22.2	-0.3755
Cambodia	0	23	20	3	39.7	0.0863
Cameroon	0	34	30	4	94.9	1.543
Canada	0	11	10	1	5.3	-0.8214
Cayman Islands	0	0				
Central African Republic	0	34	30	4	128.6	2.4322
Chad	0	34	30	4	149.8	2.9917
Channel Islands	0	0				
Chile	0	12	10	2	9.1	-0.7211
China	0	32	30	2	14	-0.5918
Colombia	0	22	20	2	17.6	-0.4968
Comoros	0	24	20	4	77.6	1.0864
Congo, Rep.	0	34	30	4	96	1.572
Costa Rica	0	12	10	2	9.9	-0.7
Croatia	0	11	10	1	4.7	-0.8373
Cuba	0	31	30	1	5.5	-0.8161
Curacao	0	0				
Cyprus	0	11	10	1	3.2	-0.8768
Czech Republic	0	11	10	1	3.8	-0.861
Denmark	0	11	10	1	3.7	-0.8636
Djibouti	0	34	30	4	80.9	1.1735
Dominican Republic	0	13	10	3	27.1	-0.2462
Ecuador	0	23	20	3	23.3	-0.3464
El Salvador	0	12	10	2	15.9	-0.5417
Equatorial Guinea	0	34	30	4	100.3	1.6855
Eritrea	0	33	30	3	51.8	0.4056
Estonia	0	11	10	1	3.6	-0.8663
Faeroe Islands	0	0				
Fiji	0	23	20	3	22.4	-0.3702

Finland	0	11	10	1	2.9	-0.8847
France	0	11	10	1	4.1	-0.8531
French Polynesia	0	0				
Gabon	0	34	30	4	62	0.6748
Gambia, The	0	34	30	4	72.9	0.9624
Georgia	0	23	20	3	19.9	-0.4362
Germany	0	11	10	1	4.1	-0.8531
Greece	0	11	10	1	4.8	-0.8346
Greenland	0	0				
Guam	0	0				
Guatemala	0	23	20	3	32	-0.1169
Guinea	0	24	20	4	101.2	1.7092
Guinea-Bissau	0	34	30	4	129.1	2.4454
Honduras	0	23	20	3	22.9	-0.357
Hong Kong SAR, China	0	20	20			
Hungary	0	11	10	1	6.2	-0.7977
Iceland	0	11	10	1	2.3	-0.9006
Iran, Islamic Rep.	0	32	30	2	17.6	-0.4968
Iraq	0	33	30	3	34.4	-0.0535
Ireland	0	11	10	1	4	-0.8557
Isle of Man	0	0				
Israel	0	11	10	1	4.2	-0.8504
Italy	0	11	10	1	3.8	-0.861
Japan	0	11	10	1	3	-0.8821
Jordan	0	32	30	2	19.1	-0.4573
Kazakhstan	0	32	30	2	18.7	-0.4678
Kiribati	0	14	10	4	59.9	0.6194
Korea, Dem. Rep.	0	3		3	28.8	-0.2013
Korea, Rep.	0	1		1	3.8	-0.861
Kosovo	0	20	20			
Kuwait	0	22	20	2	11	-0.671
Kyrgyz Republic	0	23	20	3	26.6	-0.2594
Lao PDR	0	34	30	4	71.8	0.9334
Latvia	0	12	10	2	8.7	-0.7317
Lebanon	0	22	20	2	9.3	-0.7159
Libya	0	22	20	2	15.4	-0.5549
Liechtenstein	0	10	10			
Lithuania	0	11	10	1	5.4	-0.8188

Luxembourg	0	11	10	1	2.2	-0.9032
Macao SAR, China	0	0				
Macedonia, FYR	0	21	20	1	7.4	-0.766
Malaysia	0	22	20	2	8.5	-0.737
Maldives	0	22	20	2	10.5	-0.6842
Malta	0	11	10	1	6.8	-0.7818
Marshall Islands	0	13	10	3	37.9	0.0388
Mauritania	0	34	30	4	84	1.2553
Mauritius	0	12	10	2	15.1	-0.5628
Mexico	0	22	20	2	16.2	-0.5338
Micronesia, Fed. Sts.	0	13	10	3	38.5	0.0547
Moldova	0	22	20	2	17.6	-0.4968
Monaco	0	11	10	1	3.8	-0.861
Mongolia	0	13	10	3	27.5	-0.2356
Montenegro	0	11	10	1	5.9	-0.8056
Morocco	0	23	20	3	31.1	-0.1406
Myanmar	0	33	30	3	52.3	0.4188
Nepal	0	23	20	3	41.6	0.1365
Netherlands	0	11	10	1	4.1	-0.8531
New Caledonia	0	0				
New Zealand	0	11	10	1	5.7	-0.8109
Nicaragua	0	23	20	3	24.4	-0.3174
Northern Mariana Islands	0	0				
Norway	0	11	10	1	2.8	-0.8874
Oman	0	32	30	2	11.6	-0.6552
Pakistan	0	24	20	4	85.9	1.3055
Palau	0	13	10	3	20.8	-0.4124
Panama	0	12	10	2	18.5	-0.4731
Paraguay	0	23	20	3	22	-0.3807
Poland	0	11	10	1	5	-0.8293
Portugal	0	11	10	1	3.6	-0.8663
Puerto Rico	0	10	10			
Qatar	0	31	30	1	7.4	-0.766
Romania	0	12	10	2	12.2	-0.6393
Russian Federation	0	32	30	2	10.3	-0.6895
Samoa	0	12	10	2	17.8	-0.4916
San Marino	0	11	10	1	3.3	-0.8742

Sao Tome and Principe	0	13	10	3	53.2	0.4426
Saudi Arabia	0	32	30	2	8.6	-0.7343
Serbia	0	11	10	1	6.6	-0.7871
Seychelles	0	22	20	2	13.1	-0.6156
Singapore	0	21	20	1	2.9	-0.8847
Sint Maarten (Dutch part)	0	0				
Slovak Republic	0	11	10	1	7.5	-0.7634
Slovenia	0	11	10	1	3.1	-0.8795
Solomon Islands	0	23	20	3	31.1	-0.1406
Somalia	0	34	30	4	147.4	2.9283
South Africa	0	13	10	3	44.6	0.2156
Spain	0	11	10	1	4.5	-0.8425
Sri Lanka	0	22	20	2	9.6	-0.7079
St. Martin (French part)	0	0				
Sudan	0	34	30	4	73.1	0.9677
Sweden	0	11	10	1	2.9	-0.8847
Switzerland	0	11	10	1	4.3	-0.8478
Syrian Arab Republic	0	32	30	2	15.1	-0.5628
Tajikistan	0	34	30	4	58.3	0.5772
Thailand	0	22	20	2	13.2	-0.613
Timor-Leste	0	23	20	3	56.7	0.5349
Togo	0	24	20	4	95.5	1.5588
Tonga	0	12	10	2	12.8	-0.6235
Tunisia	0	22	20	2	16.1	-0.5364
Turkey	0	22	20	2	14.2	-0.5866
Turkmenistan	0	33	30	3	52.8	0.432
Turks and Caicos Islands	0	0				
Tuvalu	0	13	10	3	29.7	-0.1775
United Arab Emirates	0	31	30	1	8.4	-0.7396
United Kingdom	0	11	10	1	4.8	-0.8346
United States	0	11	10	1	7.1	-0.7739
Uruguay	0	11	10	1	7.2	-0.7713
Uzbekistan	0	33	30	3	39.6	0.0837
Vanuatu	0	12	10	2	17.9	-0.4889
Venezuela, RB	0	22	20	2	15.3	-0.5575
Virgin Islands (U.S.)	0	0				

APPENDIX F: THE BALANCED SCORECARD IN THE PUBLIC SECTOR

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The Balanced Scorecard in the Public Sector

By Deborah L. Kerr, Ph.D.
Chief Strategy Officer
Texas State Auditor's Office

You and I are a lot alike. Really. We have goals that are hard to meet. We have customers whose needs we have to identify and meet, and we have to keep up as their needs change. We have established business processes that we use to create and deliver our products and services. We manage our talent … our employees come to work most days, work hard, do great things, make mistakes, think up new ways to work, and go home. Our budgets are never quite big enough to get done all we want to, or even need to. And we collect data … lots of data. We use our data to run our business, just like you do. From this data we generate standard reports and ad hoc reports … lots of ad hoc reports.

But in some ways, we are very different, you and I. I am a government employee. During the past 10 years I have served as a Director and now Chief Strategy Officer at the Texas State Auditor's Office (SAO). As research and experience indicate, the differences between the private and public sector require somewhat different approaches to management and measurement. Many of our differences are strategic. So no matter how often we insist that government should be run like a business, it can't be because of the key strategic differences that preclude the direct application of private sector methods to the public sector.

Dilemmas and Difficulties

Serving a diverse citizenry with widely differing beliefs about the role of government is tough. And balancing the inconsistent demands of public service and politics is tricky. A glimpse at a few predicaments may be helpful.

Let's begin with the basic issue of goals. The goal of business is to increase shareholder value. The goal of government is to provide services to citizens from protecting abused children to repairing roads, from collecting taxes to providing healthcare, and to do it all in a way that gives citizens a good return on their tax dollars.

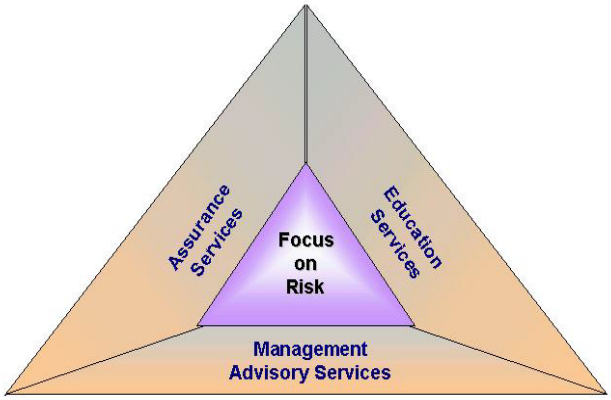
Agencies are often assigned contradictory goals, like "improve services to citizens" and "cut your budget." Achieving one of these goals might mean that the other is missed or ignored. The public sector is often exhorted to adopt "business-like government" in order to meet its goals. The National Performance Review, for example, explained how government was supposed to unleash "…the creative power of government employees." At the same time the Review set specific downsizing targets for federal agencies. How would you respond – get creative or downsize? Or would you try to accomplish both? And how creative do you feel when your job is on the line … perhaps for political rather than performance reasons?

Another basic difference between the public and private sectors is information access. In the public sector, virtually all our processes, data, and records are public and available for anyone to read on request. If everything you wrote, did, or said was available to the media (including performance evaluations), would that change the way you managed?

Difficult circumstances like these are typical for government organizations. But that does not mean we are hog-tied, unable to make prudent or necessary management decisions. Nor do the differences between the public and private sectors mean that we have nothing to learn from each other. Indeed the Balanced

Photo care of The State Preservation Board, Austin, Texas

▲ Texas State Capitol



Scorecard (Scorecard) is a private sector management tool that has given us a big payback.

Our organization, the SAO, is a legislative agency providing audit and assurance services to the Texas Legislature. Our mission is: "To actively provide useful information to government leaders that improves accountability." With a $16 million budget, the SAO identifies and audits high risk areas in the State of Texas, which has an annual budget of about $55 billion. The SAO also offers educational and consulting services to other state agencies to help them reduce risk. In other words, the SAO is the "Andersen" or "Deloitte" of Texas government.

> "With the Scorecard we found a better way to translate and communicate our mission."

The SAO has long been recognized as a national leader in experimentation and innovation in auditing and management, so it wasn't out of character for us to be a "first mover" in the public sector Scorecard. As State Auditor, Larry Alwin says, "We use the Balanced Scorecard because it makes good business sense. It's that simple." Currently, we are one of the few state agencies in the country managing its entire operation with the Scorecard, and we were recently named a "best practice" implementer of the Scorecard by the Society for Human Resource Management. Integrating our business into the Scorecard wasn't easy, but we have already seen the benefits.

Greatest Benefits

There are interesting challenges as we work to provide efficient and effective services to legislators, agency management, and ultimately to the citizens. The Scorecard has helped us to organize our challenges and to do the business basics consciously, on purpose.

With the Scorecard we found a better way to translate and communicate our mission, and strategies for achieving that mission, to all our employees, to our oversight committee, and to others in state government. In other words, we have a mission and strategic plan that you can carry around in your head.

One of the biggest challenges for any organization, private or public sector, is to describe and differentiate jobs within the business. Have you ever noticed how much time and money is wasted when people aren't clear about their jobs? You get duplication, rework, gaps, and often tension and conflict in the business. The Scorecard presented us with a way to clarify our agency goals, as well as manager roles, goals, and authority. By assigning owners and describing the work processes and target results through the perspectives, we simplified and sharpened our management.

Rather than tracking work *processes*, through the Scorecard we found a way to identify and report on performance trends and outcomes. We now focus on the *results* of our work, using our process measures to manage how we achieve our results. We have clearly differentiated outcomes and outputs – we track outcomes in our mission perspective (more about that new perspective later) and our outputs in the internal process perspective.This enables the legislature to understand more fully how our budget was used to benefit them and the state.

A big benefit is having access to virtually all critical performance data in one system and in one location. This eliminates the need to "chase the data" or to leaf through page after page of paper reports. This means we use our time to actually manage: to solve problems,

▲ Texas State Auditor Larry F. Alwin and Director of Audits Frank Vito review the data in **pbviews**

to establish accountability, and to develop staff.

In addition, we have used the Scorecard to manage change through initiatives. Now, instead of simply hoping people find time to work on new ideas, we allocate resources and budget to a few, carefully chosen change projects. In addition, by developing initiative scorecards and measures, we can track performance to see if the changes we make through the initiatives are giving us the results we want.

The Scorecard has changed the way we manage. First, we have streamlined our meetings and increased their effectiveness by using the Scorecard as our agenda. That way every manager and executive is focused on organizational strategy and its achievement during discussions of the agenda items. Second, our audit work is structured through projects, and our project scorecard provides a map to performance expectations. That means our project managers know what is expected, project team members understand what performance leads to a successful project, and the executive team can see how each team's results contribute to our overall strategy achievement.

While we have realized these benefits, and more, it wasn't exactly painless.

Challenges and Goals

Change, like good management, is never easy, and introducing this new framework for managing our office was no exception. We already had pretty good information and management systems in place. We collected data that was helpful in making management decisions. We had identified key performance measures, and we reported our results annually in a public report. And the SAO's results were nationally recognized for excellence. So what was the problem?

"We were trying to identify key performance measures that went beyond measuring our processes and outputs."

The problem was that we wanted to perform better: We wanted to be able to learn from and repeat our successes as well as to fix problems and learn from them. We wanted to collect *less* data, but to focus on *more relevant* data to make decisions. From the data, we wanted to be able to predict when we were going to succeed and to know when we were off track in time to adjust. We also wanted to see how the actions of the individual units within our office affected each other and our overall results. We wanted to understand the links between various aspects of our business and to identify which actions or activities were critical to success.

Many public sector measures focus on the process of providing services, almost to the exclusion of other kinds of measures. We were trying to identify key performance measures that went beyond measuring our processes and *outputs* and measured results against *outcome* targets. This shift is similar to the private sector's move from a singular focus on financial measures to the inclusion of other key performance indicators.

The seed of our public sector scorecard inspiration was planted in 1997 as I read a 1996 issue of the *Harvard Business Review* in which Dr. Robert S. Kaplan and Dr. David P. Norton described their research and their results. Although theirs was a system designed by and for the private sector, I had a nagging suspicion that there was a public sector application lurking within their model. Of course there was no money in our budget to support experimenting with such an innovation, and so our Scorecard skunkworks was born.

I talked to several managers about the Scorecard idea and asked if they would like to get together for some "lunch and learn" about performance management… off the clock. To my surprise, several accepted. We purchased reprints of the article and all read them before our lunch meeting, at which we began to brainstorm possible public sector applications. Remember, at this point, Kaplan and Norton had not yet published their public sector model, so we were on our own in translating the process.

This lunch meeting turned into a series of meetings over the next few months as we began to develop a way to apply the theory to a government agency. We spent this "free" time developing some expertise in the latest thinking on managing performance: we read books and articles, made presentations to each other, and tested various aspects of the Scorecard.

The toughest challenge at this point was how to transform the critical Financial Perspective into one that was meaningful in the public sector. Our goal is not to make a profit and increase shareholder value, but to ultimately provide services and enhance the quality of life for citizens by spending the entire budget. (Any "savings" realized by agencies is generally re-appropriated away from the agency. Conventional wisdom is if all the budget isn't spent, the agency must not have needed all that money in the first place.) After making some false starts and a little headway on the translation, in June 1998 we sent one of our group members, Manager Frank Vito, to a Scorecard conference.

At that conference Frank learned a great deal from the theory presentations and by comparing our experiments to the Scorecard examples given by private sector participants. He also took the opportunity to confer with Dr. Kaplan about our dilemma. That discussion was a watershed for us: we recognized that the ultimate outcome for the public sector, the achievement of mission, could serve as a perspective in the same way financial gain is used by the private sector. With that in mind we developed a "new" version of the Scorecard that reflected two important changes in the original scorecard.

First, we maintained a financial perspective as a key component, but one that reflected the *appropriations* that agencies receive,

Private Sector - Focus is Financial

Public Sector - Focus is Mission

rather than the ultimate result of the work performed. So our base building block is the appropriations used to acquire the knowledge and skill needed in the organization. Second, we created a "mission" perspective that would describe and measure the ultimate result of our work.

With a basic, workable structure now in place we could proceed with the next challenge: convincing the State Auditor (the executive head of our agency) that we needed to invest part of our already-strained budget in the development and implementation of a system – even though we couldn't show him a working model!

At the time we designed our Scorecard, Texas government was experiencing a "knowledge drain." We were enjoying a thriving technology industry, a strong economy, and low unemployment while the population of Texas was one of the fastest growing in the nation. We were facing an unprecedented state government annual turnover rate of 19 percent at the same time demand for services was increasing. This put a choke-hold on our budget – we were spending extraordinary time and resources simply trying to recruit and retain our professional staff. And now we came asking for innovation money.

It took a few meetings to convince the State Auditor. We discussed the value of creating the ability to link our daily actions to the strategic direction of the office while at the same time focusing our managers and staff on the performance that would lead to success. Just as in the private sector, we had to justify the expenditure of time, effort, and dollars and then project the results and benefits, both in dollars saved and increased work quality. Finally we got the go-ahead.

With this commitment from the top, we assembled a Scorecard design team, led by a "scorecard manager" whose only job was to lead the development and implementation of the SAO scorecard. Then began the real work of identifying the objectives, measures, targets, and initiatives that would drive the achievement of our three organizational strategies.

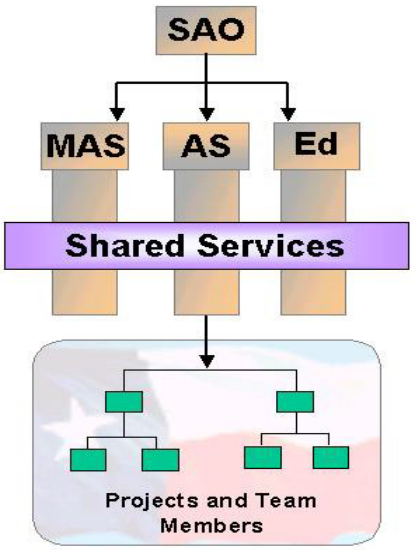
Design and Implementation

Our experimentation with the Scorecard concept happened to coincide with a major revision of our strategic plan in the summer of 1998. We designed a strategic planning process that involved some 25 percent of our staff and yielded some 400 future-oriented answers to this question: "What today is impossible to do in our business, but if it could be done, would fundamentally change what you do?" An analysis of these ideas led to the identification of three organizational "strategies" for achieving our mission. With our strategies identified we moved toward merging our growing understanding of the Scorecard with our new strategic vision.

> "We often found ourselves struggling to let go of measures we had always used."

Our challenges continued. Like all good auditors, we could immediately identify several hundred measures that would tell (and document) the whole, entire, and complete story of our agency, its work, and its results. We soon recognized the need for a self-discipline that would enable us to spot the essential measures to tell the story of our journey toward mission achievement. We concentrated on pinpointing measures vital to driving performance, those that would reflect our results at the organizational level.

Like many others, we often found ourselves struggling to let go of the measures we had always used. By focusing on our purpose, by setting targets and milestones for Scorecard development, establishing limits on the number of measures, and by continually reminding ourselves that we weren't building the perfect system, we were able to produce an organizational scorecard, three strategy scorecards, four support service scorecards, and an audit project scorecard within 16 months.



During the development we also began educating our staff and including them in the development of various scorecards. We continued attending conferences and applying immediately what we learned from each.

> "It is easy to get caught up in the creation of measures and targets and lose sight of your purpose."

Early in the development process we realized that we would need a technology application to help us manage our information efficiently - we wanted to move away from our four-inch binders of reports that were hard to use and expensive to produce. We considered the usual suspects: Excel, Access, building our own system in-house. These programs didn't really provide what we wanted in a performance measurement system and programming in-house would be too expensive. In the fall of 1998 we began to consider commercially available performance measurement software. We had identified our basic needs:

- Capability to compare performance data and depth of data analysis.
- Reporting flexibility and customization.
- Ease of implementation.
- A user-friendly interface.
- Flexibility to change objectives, measures and data.
- Customer support.
- Ease of maintenance and administration.
- Data import/export capability.
- Internet capability.
- Competitive pricing.

We invited four vendors to demonstrate their software packages and found that **pbviews** most closely matched our needs. We purchased the software in June 1999.

By January 2000 we were ready to pilot our scorecards by a "trial" implementation on three audit projects and in one support service area, Human Resources. With the learning we gained from the development of the scorecards as well as from our pilots, we made adjustments and rolled out the entire Scorecard in September 2000. Now, a year later, we use the Scorecard on **pbviews** to manage the performance of our entire organization.

Lessons Learned

We learned a lot from the mistakes we made during the development of our Scorecard. We offer the following lessons in hope that they will save you time and money in implementing your own Scorecard.

Build Information Infrastructure. Of course this is as obvious as cowboy philosopher Texas Bix Bender's advice "Don't squat with your spurs on." Developing a sound infrastructure is critical to implementation of a scorecard. The infrastructure organizes data so it can be used to manage the enterprise. It can also help reduce the resistance to change by demonstrating how the Scorecard can help managers be more effective.

The infrastructure can help people understand that the Scorecard doesn't add more tasks to an already full manager plate, it simply describes what good managers should pay attention to. (Now, the Scorecord *will* add time to the manager's job if the manager wasn't doing a good job before implementation.) Collecting data, analyzing it, making decisions based on it, solving problems, developing staff, accountability … all result from using the Scorecard to manage.

Remember your objective. It is easy to get caught up in the creation of measures and targets and lose sight of your purpose. While measures are important, remembering *why* you want to measure performance will keep you focused on the outcomes. Measures drive performance, and performance gives you the results you want. Keep that relationship in mind as you design your Scorecard.

Go fast. As race car driving legend Mario Andretti says, "If you think you are in control, you're not going fast enough." We echo the sentiment that organizations should move quickly through design to implementation, then make corrections as the system matures. Which leads us to another lesson. The sooner you start using your Scorecard, the sooner you can make meaningful refinements.

Change is Inevitable. Don't be afraid to improve measures and targets after you roll out the Scorecard. As the Turkish proverb reminds us "No matter how far you have gone on a wrong road, turn back." However, to preserve the basic integrity of your system, make the changes meaningful by establishing a formal review process that requires management justification for the change. This prevents people from changing their measures when they don't meet their targets.

Another aspect of change is getting manager buy-in. It is essential, so make sure your managers have the resources they need to really understand and use the Scorecard. Bill Jensen of The Jensen Group (www.simplerwork.com) reminds us that in times of change, people want answers to five simple questions:

- What do you want me to do?

- What does this change mean to me?
- How will the change affect me?
- What will you do to help me make the change?
- How am I doing?

Be prepared to talk about the change and answer these questions. The result may be a smoother implementation.

Use both lead and lag measures. Lag measures tell you basically whether or not you have met your target. Lead measures tell you how you are doing along the way and allow you to adjust performance so that you can be more successful in achieving your goal. Lead measures can be identified by mapping your processes and noting critical milestones, which can be used as lead measures to flag possible performance problems.

"Technology enhances data retrieval and tracking which in turn leads to better accuracy, reliability, and timeliness."

Define measures and establish formulas for data collection. Ensure that definitions and formulas are established and are understood. This is not the time to be concise. Describe not only what is being measured, but also why the measure is important. The more details you include, the more employees focus on the performance being driven by the measure. Complete descriptions assist in learning too, as people become familiar with the purpose of the measures, their management understanding and decision making improves.

Use technology. Bill Jensen reports that 60 percent to 80 percent of the workforce can't find or translate information they need for decisions. Now, what kind of decision-making does that drive?

Technology is a facilitator of performance management that allows managers to focus on managing instead of worrying about how to collect and organize the data. Technology enhances data retrieval and tracking which in turn leads to better accuracy, reliability, and timeliness. In addition, we estimate that our office saved about $3,000 per month when we stopped generating, copying, and distributing all the paper reports we used to make management decisions in the past.

It's not over when it's over. The rollout of the Scorecard system is just the beginning. And your management team, like ours, is the critical link between the strategic vision and the day-to-day work that achieves the vision. Now, most managers would rather have a root canal than live through another change at work. So you must continue training and coaching until they feel comfortable using the system and begin to see how the Scorecard complements, rather than complicates, their work. One group of public sector agencies we know provided training on the theory of the Scorecard, but didn't follow up with training on how to translate that theory into an actual Scorecard. That doesn't work and their results are slow in coming.

Restructure management meetings. Make the Scorecard the agenda and watch how it drives performance. Using your Scorecard to run meetings is an opportunity to model how the Scorecard is used to manage. And if managers have to explain the results of their measures, they will quickly learn the system as they are "pushed" by their public accountability.

Summary

Our public sector scorecard has enhanced our ability to execute strategies and to measure results.

Our initial success influenced the Texas Legislature to enact a Rider naming three other agencies to pilot the use of the Scorecard in government. We have offered to assist those agencies, hoping that our experience can streamline their development and implementation.

For us, the Scorecard is performing as expected. It is a management method that helped us design a well-rounded strategic direction and then gave us a structure within which to involve all our employees in strategy implementation. Putting in an office-wide scorecard was a major challenge, but one that has paid off.

We are measuring what really matters. We have some of the best managers in the country working here, and we believe that the Scorecard helps them run the business better. We all know that employees' one-to-one relationships with managers are the most important determinants of individual performance. The Scorecard helps managers be clear about goals and expectations with employees, and that provides the basis for continued growth and learning.

We have seen a change in our organizational culture, too. We believe that our employees now see strategy as everybody's job: they understand our goals and how their work contributes to achieving them. We have a greater shared understanding of just what we have to do individually, departmentally, and organizationally to deliver our services to the legislature and agencies.

And most importantly our Scorecard has made accountability a part of our everyday management.

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The Office's rollout of the Balanced Scorecard was recently recognized as one of the four most successful Balanced Scorecard implementations in the country by the Society for Human Resource Management.