Fostering PEPFAR Sustainability through Leadership, Management, and Governance

A literature review

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About the LMG Project

Funded by the US Agency for International Development (USAID), the Leadership, Management, and Governance (LMG) Project (2011–2017) is collaborating with health leaders, managers, and policymakers at all levels to show that investments in leadership, management, and governance lead to stronger health systems and improved health. The LMG Project embraces the principles of country ownership, gender equity, and evidence-driven approaches. Emphasis is also placed on good governance in the health sector—the ultimate commitment to improving service delivery and fostering sustainability through accountability, engagement, transparency, and stewardship. Led by Management Sciences for Health (MSH), the LMG consortium includes Amref Health Africa, International Planned Parenthood Federation (IPPF), Johns Hopkins University Bloomberg School of Public Health (JHSPH), Medic Mobile, and Yale University Global Health Leadership Institute (GHLI).

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List of Abbreviations and Acronyms

AGPAHI	Ariel Glaser Pediatric AIDS Healthcare Initiative
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARVs	Anti-Retrovirals
CBO	Community-based organization
CCM	Country Coordinating Mechanism
CHBC	Community home-based care
CSO	Civil Society Organization
CDC	Center for Disease Control
COPI	Community Preparedness and Ownership Index
DELTAS	Developing Excellence in Leadership, Training, and Service
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
FHI360	Family Health International
GFATM	Global Fund to Fight Aids, Tuberculosis and Malaria
HDSS	Health and demographic surveillance systems
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HRH	Human Resources for Health
HRSA	Health Resources and Services Administration
HTC	HIV/AIDS Testing and Counseling
IDU	Injecting drug user
JPS	Social Projection Board
LGBT	Lesbian, Gay, Bisexual and Transgender
LMG	Leadership, Management, and Governance Project
L+M+G	Leadership, management and governance
MAP	Multi-Country AIDS Program
MDG	Millennium Development Goal
MOH	Ministry of Health

MSH	Management Sciences for Health
MSM	Men who have sex with men
NGO	Non-Governmental Organization
OECS	Organization of Eastern Caribbean States
OHA	Office of HIV/AIDS
PEPFAR	President's Emergency Plan for AIDS Relief
PLWH	People Living with HIV/AIDS
PMTCT	Prevention of Mother to Child Treatment
PPP	Public-private partnership
PPS	Pharmaceutical Procurement Systems
SID	Sustainability Index and Dashboard
USAID	US Agency for International Development
VMMC	Voluntary Medical Male Circumcision
WISN	Workload Indicators of Staffing Needs
WHO	World Health Organization

Executive Summary

When it was launched in 2003, the President's Emergency Plan for AIDS Relief (PEPFAR) emphasized rapid implementation and scale-up to combat the global HIV epidemic. At that time there was limited direct mention of sustainability, as the focus was on addressing the immediate crisis situation. When PEPFAR was reauthorized in 2008, PEPFAR 2.0 specifically included activities intended to contribute to a more sustainable HIV response in and by partner countries. Therefore, beginning in 2009, PEPFAR's focus shifted from an emergency response intended to slow the pace of the HIV epidemic to one that focused on developing a sustainable response that focused on building "collaborative planning and health systems strengthening activities with partner governments."

The Office of HIV/AIDS (OHA) in the U.S. Agency for International Development (USAID) asked the Leadership, Management and Governance (LMG) Project to investigate how country-level stakeholders applied leadership, management and governance (L+M+G) practices to support national capacity to lead, implement, manage, monitor, and fund scaled-up HIV and AIDS interventions that successfully and seamlessly transitioned from PEPFAR support and continued to improve health outcomes. As part of this overall effort, the LMG Project conducted a literature review to identify a set of promising L+M+G practices to help advance the sustainability agenda.

The purpose of this literature review is twofold: (a) to understand how a L+M+G lens can be applied across the four domains of PEPFAR's Sustainability Framework;[1] and (b) to identify examples of L+M+G practices in the transition from donor-dependent to country-owned, sustainable national HIV programs.

The PEPFAR Sustainability Framework includes four domains that subsume fifteen elements, outlined below:

(i)   Governance, Leadership, and Accountability

➢ Planning and coordination, Policies and governance, Civil society engagement, Private sector engagement, and Public access to information

(ii)   National health system and Service delivery

➢ Service delivery, Human resources for health, Commodity security and supply chain, Quality management, and Laboratory

(iii)   Strategic investments, Efficiency, and Sustainable financing

➢ Domestic resource mobilization and Technical and allocative efficiencies

(iv)   Strategic information

➢ Epidemiological/health data, Financial/expenditure data, and Performance data

The review first includes a birds-eye view of country responses to a tool developed by PEPFAR called the Sustainability Index and Dashboard (SID). The SID comprises 90 questions across the four domains and fifteen elements of the Sustainability Framework, which every country is required to complete. Each

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[1] This framework has been used by PEPFAR teams and partner stakeholders to sharpen the understanding of each country's sustainability landscape. It was therefore decided that this review be framed around this framework to be relevant to readers.

question is given a score. Once tallied, the scores offer a view of the country's current sustainability level for each element, using four categories: sustainable (meaning no additional investments required); approaching sustainability (meaning it requires little or no investment); emerging sustainability (meaning it needs some investment); and unsustainable (meaning it requires significant investment). We did not consider individual country scores but reviewed the spread of countries across the range from sustainable to unsustainable.

Given that sustainability processes are still evolving, we found the published literature lacked a comprehensive understanding of PEPFAR's sustainability efforts. It is still early and research is focused on specific cases, populations, or countries, therefore, this SID data (from 2016) provides the closest understanding on how sustainability has unfolded across PEPFAR countries. Furthermore, the SID data provides a comparative framework because all countries are using the same tool. While the SID data are self-assessments rather than independent evaluations, it is nevertheless useful to see how countries score themselves, and for the donor to get a sense of how sustainability is being mapped across countries. The tool is a joint effort to be completed by PEPFAR teams together with relevant partner stakeholders. For example, in Laos, a workshop was conducted with the government, PEPFAR and other stakeholders (WHO, UNFPA, UNICEF) to populate the tool. The fact that the SID tool is completed by more than the in-country PEPFAR team further supports why SID data was useful to include in this review.

For the literature review, the LMG Project generated a bibliography through a search of online databases including Academic Search Premier, PubMed, and Web of Science. The search terms included sustainability, transition, country ownership, national ownership, HIV, AIDS and PEPFAR. The terms leadership, management and governance were also used in the search; however, the inclusion of these terms in combination with the others did not yield additional materials of relevance. Articles related to PEPFAR (or other donor programs) but not specifically about sustainability and/or transition were excluded. Gray literature was accessed through the PEPFAR-funded projects AIDSTAR-One and AIDSTAR-Two, the resources available through the websites of the LMG Project and the Health Policy Project, through USAID colleagues, and through Management Sciences for Health (MSH) colleagues who work closely with MSH country offices.

Key Findings

Since PEPFAR is a very large multi-continent, multi-country initiative, and the transition to country ownership is still in progress and in different stages across countries, the literature review must also be seen as a work-in-progress. The oldest reference in this review that covers PEPFAR transition specifically dates back to 2011. Even though the position on the ground in many countries may have altered significantly in the years since any given work was published, the review is intended to provide an overview of the available published and gray literature on the issue and provide the reader with an account of how the process has unfolded in different contexts.

The following findings are organized first by an overview of the SID data, followed by findings from the general literature focused on civil society engagement, and then by an example from South Africa. USAID/OHA was particularly interested in the critical role civil that society has played in the sustainability process and therefore this has been highlighted. The SID findings are presented first, as this mirrors the structure of the overall review. For each domain area, we found it important to

distinguish these two different types of data.

Key Findings from an Overview of the SID

A few key takeaways emerge in an overview of how countries fall across the 15 elements in the SID.

- The element that the most number of countries (24 out of 38 countries) report as sustainable is **Planning and Coordination**. It is also the only element for which none of the countries report unsustainable levels.
- Conversely, the element that the most number of countries (17 out of 38) report as unsustainable is **Private Sector Engagement**.
- Both Thailand and China rank their **Civil Society Engagement** as "approaching sustainability". However, there are crucial differences in how the two countries answer the questions that are intended to measure the level of sustainability for this element. Thailand scored the maximum points on all five questions in the tool on civil society engagement except one, namely, domestic financing: only approximately 1-9% of civil society organizations (CSOs) in Thailand are domestically funded. By contrast, in China, all or almost all (greater than 90%) of CSOs are domestically funded. However, CSOs in China are constrained in their engagement with the national HIV/AIDS response in several ways and CSOs do not score highly on the other questions. Yet, minimal CSO engagement in policy-making or service delivery did not thwart China from receiving a high score on Civil Society Engagement.
- For the element **Service Delivery**, no country PEPFAR team self-reports as being sustainable.
- Only one country – China – reports that its level of **Epidemiological Health Data** collection is sustainable. Within this element, a large number of countries (32 out of 38) report that their current capacity is at the level of "emerging sustainability."

Key Findings on Civil Society Engagement from an overview of the literature

- It is widely acknowledged that CSOs have played a critical role in PEPFAR implementation worldwide. Given their critical importance, scholars recommend that the definitional scope of "leadership" should include non-state and non-government actors, and CSOs should be involved in **planning and coordination** in the transfer toward national ownership of PEPFAR programs.
- CSOs have been at the forefront of service delivery in contexts where national **policies and governance** structures criminalize at-risk populations. In an open letter presented to the Global Fund Board in 2014, CSOs from Eastern Europe and Central Asia stated that the decision to move funding to low-income countries will harm key populations, especially marginalized groups such as sex workers, men who have sex with men, and people who inject drugs, because many governments are not inclined to provide them with services. The letter reiterates the point made above: civil society groups should be equal partners in transition planning.
- There is now a growing body of evidence on the disruptions to **service delivery** in the post-transition period. The disruptions have occurred as a result of different management styles of donor-funded and government-funded facilities, poorly managed transitions, the inability of providers, usually CSOs, to sustain a full compendium of services in the post-transition phase, or

the inability of CSOs to be funded at all.

- A positive example of sustainable CSO funding comes from Costa Rica. Investments are being made to strengthen the Social Projection Board (JPS), a government funding mechanism which ensures local HIV non-governmental organizations (NGOs) are able to access public money. There are specific provisions for prevention of HIV among men who have sex with men (MSM) and transgender women in the Costa Rican Social Security Fund (which funds the JPS) operational plan and budget. The intention is to ensure that more NGOs working with MSM and transwomen are able to access government HIV funding.

- Even where disruptions to service delivery have been minimized, government agencies are largely concerned with testing, treatment programs, and a focus on health access and delivery. Donor programs sometimes had broader goals, and funded CSOs to work on the structural conditions that increase risk for HIV. For example, donor programs in India mobilized key populations to change the root cause of their increased risk (e.g., building the power of sex workers to negotiate condom use with clients). However, these goals are being undermined after the transition, and the focus has shifted to testing and access to HIV treatment.

- Research points to two aspects of **HRH (Human Resources for Health) management** that have implications for sustainability. First, to overcome weak HRH capacity, PEPFAR funded CSOs, clinics, and agencies to recruit and/or train a range of personnel required for HIV programming, e.g., doctors, nurses, HIV testers, adherence counsellors, community health workers, data capturers, etc. Sustainability rests on how well these positions have been absorbed in the transition to government-run programming. The findings from Namibia and South Africa point to the management challenges of absorbing these cadres during transitions. Second, research from Mozambique highlights how PEPFAR undermined volunteer community home-based health workers, which is proving to be costly in the post-PEPFAR phase.

Key Findings from a Country Overview: South Africa

The following captures one country's experience from across all four domains in order to draw broader lessons on leadership, management, and governance practices for transition of donor programs. This in-depth look at one case reveals broader takeaways that can be applied across countries, or be used as points of comparison and contrast. The data also shows that the process is not straightforward.

- Burrows et al. (2016) categorize countries in "waves" to predict the timing of transition based on four country characteristics, including the type of epidemic, domestic funding levels, enabling environment, and NGO sustainability. The first wave of transitions is occurring now (2016-2018), the second wave will occur between 2019-2023, and the third wave will be from 2024-2029. One country characteristic that distinguishes the third wave countries from the first and second wave countries are laws and policies that "still create human rights barriers to access for key populations." South Africa is included in this list, along with Botswana, Egypt, Ukraine, and Nigeria.

- Burrows et al. also point out that even though countries like South Africa are transitioning, not all donors transition at the same time and not all transition out of all program areas. Thus, South Africa is still eligible for Global Fund grants beyond 2030, and while USAID funding in South Africa's correctional facilities is transitioning its services provision to government and only

providing technical assistance, Global Fund investment for the Department of Correctional Services remains steady.

- In the domain of **Governance, Leadership and Accountability**, reports of the South African transition show that leadership at both the donor agency and the government worked together to create a new governance structure for transition planning and coordination. However, creation of governance structures and leadership at the highest levels was not sufficient. Sound management practices must accompany leadership efforts through efforts at inclusion and good communication. Civil society organizations, though well-capacitated, were excluded from discussions on planning. Moreover, communication about the transition process is key. Early reports on the South African transition urged the transition leadership to engage the media, NGOs and lawmakers to communicate clearly the goals of the transition, and be more transparent. A more recent account reports that grassroots officials continue to be uninformed of the details of the transition process.

- There have been management challenges in the domain of **National Health System and Service Delivery**. Scholarly articles published in 2014 and 2015 report that post-transition service delivery has not been managed in ways that account for patient needs, thereby hindering the sustainability of programming. Regarding the transitioning of the Human Resources for Health, there was no HRH plan in place with any specificity as of 2014. It is unclear if this has changed since.

- There are, however, regional experiences within South Africa from which one can learn a lesson. Western Cape province is an example of successful HRH transition that used principles of L+M+G: a good working relationship built on trust between the Department of Health and PEPFAR; strong leadership; clear communication of transition plans; and most importantly, creating plans that used the government's systems. In 2011, an HR database was created on PEPFAR healthcare workers based or linked to South African government facilities, with the aim of determining how best to absorb PEPFAR-funded personnel into government health centers. Transition plans were written using government terminology and aligned to South African fiscal years. When there were disagreements with or resistance from stakeholders, a Terms of Reference was developed and then used to support transition decisions and for settling disputes. In a one-year period between 2012 and 2013, 78 clinical and administrative posts were successfully absorbed by the Western Cape Department of Health.

- In the domain of **Strategic Investments and Health System Financing**, South Africa has taken leadership action by modifying existing laws to require HIV-related services within the health insurance industry.

- In the domain of **Strategic Information**, South Africa is the only country that reports sustainability in the element "financial/expenditure data" in the SID.

Recommendations on Civil Society Engagement from the literature

- In the context of HIV, CSOs have played a dual role: they have been at the forefront of service delivery, while also playing an accountability and oversight role over both government and donor funded programs. Noting a potential positive effect of the drawdown of donor funding for CSOs, scholars recommend that donor transition should prompt CSOs to reclaim their accountability and advocacy functions.

- Following from this argument, another recommendation is that donor funds should no longer be granted to international NGOs and UN agencies for major program implementation. These agencies have focused their efforts on sustaining their own programs, and have become too intertwined with the system. Instead, indigenous NGOs should be funded for outreach and advocacy for marginalized populations, and not for service delivery or project implementation.
- Other recommendations provide counter-points. First, there are limits to how much CSOs can be expected to hold government stakeholders accountable, given the many political, social, and legal barriers in doing so. Instead, the international community must push governments to make the political commitment to sustain HIV services to vulnerable populations post-transition.
- Second, donor funds should be made available to service delivery programs run by CSOs for populations that might otherwise not be the highest priority of government oversight – e.g., injecting drug users (IDUs), sex workers, MSMs, and migrant workers. As non-state actors, CSOs are better placed to work with these marginal groups.

The experience of transitioning PEPFAR programs to national country ownership presents opportunities for the donor community, government officials, civil society partners and researchers alike to learn about the dynamics, processes, and challenges of the transition of large, scaled-up donor-funded programming. The evidence is growing on various aspects of the transition process and the different ways it is unfolding in different contexts. Not all domains and elements that PEPFAR considers important to transition planning have received equal scholarly attention. Planning, policies, governance structures, civil society engagement, service delivery and human resources for health have received the most attention. There is very little research on private sector engagement, supply chain systems, quality management, laboratory facilities, technical efficiencies, and financial/expenditure data. Further research is needed to document and analyze the elements of a smooth transition and strategies to overcome challenges. An L+M+G lens can be particularly useful to examine the processes as they are unfolding as it provides insight in supporting national capacity to successfully transition from PEPFAR support.

1. Introduction

Beginning in 2009, PEPFAR's focus shifted from an emergency response that slowed the pace of the epidemic to a sustainable response that focused on building "collaborative planning and health systems strengthening activities with partner governments." [2][3] In 2015, PEPFAR took steps to "move the sustainability agenda forward and measure progress,"[4] which included developing a Sustainability Index and Dashboard (SID). The SID is a tool that is used to assess the current state of sustainability of the national HIV/AIDS response in PEPFAR countries, and track progress over time, across fifteen core elements along four domains (see Appendix A).[5]

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[2] http://www.pepfar.gov/about/strategy/
[3] "Controlling the Epidemic: Delivering on the Promise of an AIDS-free Generation", http://www.pepfar.gov/documents/organization/234744.pdf
[4] "Sustainable HIV Epidemic Control: PEPFAR Position Paper", November 2016 https://www.pepfar.gov/documents/organization/264884.pdf
[5] "The HIV/AIDS Sustainability Index and Dashboard 2.0: Guidance to PEPFAR Country Teams", December 1, 2015 https://www.pepfar.gov/documents/organization/264548.pdf

The SID is intended to: (i) help countries better understand their sustainability landscape; (ii) inform priority areas for PEPFAR investment in countries; (iii) serve as a diplomatic advocacy or negotiation tool to dialogue with partner government and multilateral counterparts; and, (iv) communicate progress towards sustained epidemic control to external stakeholders.[6]

The LMG Project, implemented by MSH is USAID's flagship project for developing competencies in L+M+G practices in public health settings in low- and middle-income countries (LMICs). USAID's Office of HIV/AIDS (OHA) asked the project to investigate how country-level stakeholders apply L+M+G practices to support the host-country capacity to lead, implement, manage, monitor, and fund scaled-up HIV and AIDS interventions that successfully and seamlessly transition from PEPFAR support and continue to improve health outcomes.

Strong L+M+G practices include, but are not limited to: building qualified, multi-sectoral (horizontal and vertical) negotiating and planning teams that participate in joint review of baseline data to determine host country readiness and capacity; developing a roadmap for sustainability; writing and reviewing drafted sustainability plans; developing a monitoring plan for the sustainability plan; and developing and implementing a strategic communications plan for transitioning programs to host country governments and civil society organizations. With support from USAID/OHA, we documented how L+M+G practices support gradual transitions and shifts in PEPFAR and national HIV programming and reflect greater political will and commitment and increased country accountability, domestic financing, data availability for strategic decision-making, and local implementation of services. [7]

The LMG Project conducted a literature review on sustainability planning, transitions, and/or donor exit strategies. The findings from this review are presented below. The LMG Project aims to identify and take a closer look at a set of promising L+M+G practices to help advance the sustainability agenda by providing programmatic considerations and guidance to countries that have yet to develop sustainability plans. This work will provide PEPFAR Country Teams Program Managers and country counterparts with an approach for applying leadership, management, and governance practices to sustainability planning, country case studies of current promising practices, and lessons for consideration as PEPFAR Country Teams implement sustainability processes.

2. Aim of the Literature Review

The purpose of this literature review is twofold: (a) to understand how an L+M+G lens can be applied across the four domains in PEPFAR's Sustainability Framework (governance, leadership, and accountability; national health system and service delivery; strategic investments, efficiency, and sustainable financing; and strategic information); and (b) to identify examples of L+M+G practices in the transition from donor-dependent to country-owned, sustainable national HIV programs.

3. Methodology

The LMG Project generated a bibliography through a search of online databases Academic Search Premier, PubMed, and Web of Science. The search terms included sustainability, transition, country

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[6] *Ibid.*
[7] OGAC presentation, Dr. Marta Levitt, September 15, 2014

ownership, national ownership, HIV, AIDS and PEPFAR. The terms leadership, management and governance were also used in the search; however, the inclusion of these terms in combination with the others did not yield additional materials of relevance. Articles related to PEPFAR (or other donor programs) but not specifically about sustainability and/or transition were excluded. Gray literature was accessed through the PEPFAR-funded projects AIDSTAR-One and AIDSTAR-Two, the resources available through the websites of the LMG Project and the Health Policy Project, through USAID colleagues, and through MSH colleagues who work closely with MSH country offices.

For this literature review to be complete it is necessary to consider the references that we did *not* include. First, there is a body of work that is critical of what transition to country ownership has come to mean in practice. Even though the idea of country ownership emerged in the early 1990s with an intent to recognize the lead role implementing countries have in their development, Cornwall and Eade (2010) argue that the use of these terms is only "buzzwords and fuzzwords." Others contend that "country ownership" is a "deliberate exercise in limiting donors' accountabilities" (Esser 2014) or is simply a new way of seeking donor legitimacy while creating new legitimacy dilemmas (Best 2007). The LMG Project did not include literature of this nature in this review.

Second, there is vast body of literature on sustainability of international donor programs, and related work on exit strategies, organizational management, and sustainability of domestic (U.S.-based) community-based programming.[8] However, given the focus in this review on *practices,* less attention was paid to research that developed conceptual models or did not present empirical evidence related to transition *processes* or L+M+G *practices.*

Third, the search was limited to HIV funding, and did not consider research conducted on other donor-funded development programs in health (e.g., family planning; for "graduation" of family planning programs)[9], or other areas (e.g., education) which have also dealt with issues of sustainability. The LMG Project contends that the transition of PEPFAR's HIV programs to country ownership is a qualitatively different effort in term of scope and desired outcomes compared to previous efforts at maintaining program sustainability.

Finally, and importantly, because PEPFAR is a very large multi-continent, multi-country program, and the transition to country ownership is still in progress and in different stages in different countries, the literature review must also be seen as a work in progress. The oldest reference in this review that covers PEPFAR transition specifically dates back to 2011. Even though the position on the ground in many countries may have altered significantly in the years since any given work was published, the review is intended to provide the reader with an overview of the available research, including an account of how the process has unfolded in different contexts.

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[8] See "Sustainability Literature Review and Resources" mentioned in Footnote 8.
[9] Bertrand, J. (2011). "USAID Graduation from Family Planning Assistance: Implications for Latin America." *Population Institute and Tulane University School of Public Health and Tropical Medicine.*

4. **Key Findings**

It is only relatively recently that scholarship has coalesced around the idea that donor transition is a dyadic relationship; that a successful transition rests on both host country government and the donor country/agency to plan, coordinate, formulate policy, collect data, and implement programs. While USAID has recommended, at least since 1999, that termination of donor funding be a "participatory process involving USAID, host-country government officials, civil society, and other donors" (Martin *et al.* 1999: viii), the idea that entire programs transfer to national governments is a relatively recent one. Earlier approaches to developing "exit strategies" aimed to assist "implementing organizations plan for the loss of donor funds rather than for a donor to plan a large-scale, orchestrated transition"[10] (see Gardner *et al.* 2005; Levinger and McLeod 2002; Slob and Jerve 2008 for gray literature on donor experiences and recommendations for such exit strategies).

The authorizing legislation of PEPFAR I emphasized rapid implementation and scale-up, with limited direct mention of sustainability. When PEPFAR was reauthorized in 2008, PEPFAR II specifically included activities intended to contribute to a more sustainable HIV response in and by partner countries.

A definition of country ownership was articulated in a U.S. Government (USG)-authored paper.

 "Countries that effectively manage their public health response demonstrate leadership over their health budgets, policies and strategies, and coordinate public health actions, including the contributions of the private sector, donors and civil society. Country ownership involves shared responsibility and mutual accountability with donors and other partners, particularly when outside financial and technical resources are needed to fully respond to the health sector needs of host countries. The USG fosters country ownership by investing in high impact and evidence-based country-led priorities, plans and systems. The USG also encourages country ownership when it promotes direct financing by recipient countries for priority interventions such as malaria and family planning commodities. Ultimately, a well-coordinated, country-led health response enhances efficient use of resources and contributes to long-term sustainability of global health programming" (GHI, 2012, p. 4, as cited in IOM, 2013).

However, there is wide variation in how mission teams, partner country governments and implementing partners perceive what country ownership means and how it should be assessed. Studies have been commissioned to understand the variations and develop a mutually agreed upon framework, e.g., OGAC consulted with McKinsey and Company to gain insights into the differences between perceptions and country ownership that it held compared to those by partner governments. As a result, OGAC identified several different areas and strategies for aligning its definition in partner countries. The current SID has evolved over several iterations.

To understand how transition processes have evolved, we look to the LMG Project's definitions of the three key terms: leadership, management, and governance. Understood as actions undertaken by empowered people and teams, "leading" is achieved when leaders scan, focus, align and inspire. "Managing" includes actions that allow individuals and teams to plan, organize, implement, monitor, and evaluate. Finally, "governing" occurs when systems cultivate accountability, engage stakeholders, steward

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[10] See "Sustainability Literature Review and Resources" conducted by Amy Paul, USAID intern – the review was shared with Reshma Trasi and Anupa Deshpande of the LMG Project by Deborah Kaliel in an August 15 email message.

resources and set shared direction.[11] We recognize that the terms "leadership", "management" and "governance" have multiple definitions, dimensions, and theories; and can be manifested beyond the individual and team level at the institutional, sub-national, national and systems level, as well. For this reason, we used the LMG Project's definition as "broad guidance" to decide whether a practice, identified during the literature review, was related to leadership, management, and governance. In short, we did not use the L+M+G practices as rigid, inclusion criteria.

The key findings section is organized around the four domains. For each domain, we first provide a birds-eye view of the overall level of sustainability of PEPFAR countries (as reported in the SID) for each element within the domain. To fill out the SID tool, countries were required to respond to a total of 90 questions across all fifteen elements. Once tallied, the scores offer a country's current sustainability level for each element. A dark green score indicates that the country is sustainable on that element, with no additional investments required. A light green score indicates that the country is approaching sustainability on that element and requires little or no investment. A yellow score reflects emerging sustainability on that element that needs some investment. Finally, a red score means the country is unsustainable on that element and requires significant investment. We do not consider individual country scores for this review. Rather, we look at how countries fall across the range from sustainable to unsustainable.

Following an overview of the SID data, we examine the published and gray literature on how an L+M+G lens, as defined above, can offer best practices of sustainability and transfer to country ownership. We take this two-pronged approach in this review so that the reader can be guided both by current data available in the SID reports, and recent literature on the topic.

It is important to note at the outset that transition processes are still underway, and it will be a long time before we can fully understand and measure sustainability of PEPFAR programming in countries. Therefore, this literature review must be placed within the context of an ever-changing situation.

Also, neither the four domains in the sustainability framework, nor the three terms "leadership," "management," and "governance", constitute clearly defined constructs, nor are they mutually exclusive. For example, good governance and leadership could lead to strategic investments and sustainable financing; and strategic information could be guided by elements of strategic investments. A particular L+M+G practice could fit equally into multiple sustainability domains; and any given practice could easily be delineated as a leadership, management or governance practice. In other words, there is significant "construct bleed" which reinforces the idea that these practices must work harmoniously to achieve the desired results. Our rationale was this: A sustainable, national HIV/AIDS response ought to incorporate or reflect appropriate L+M+G practices and all sustainability domain elements. In presenting the findings below, we have attempted to find (and had to sometimes, force) a "home" for each domain/practice, while acknowledging that a practice may "originate" in one domain and "land" in another. For example, a national multi-stakeholder human resource transition task force may represent a leadership response or a governance structure, but its effectiveness could be determined by how successful they are in planning the transition of human resources.

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[11] Per the conceptual model, L+M+G actions lead to improved health performance, which in turn results in sustainable health outcomes aligned with national health goals and MDGs 3, 4, 5 and 6.

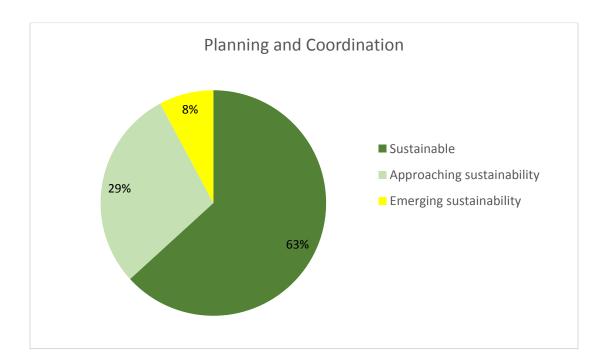# 4.1 Domain A: Governance, Leadership, and Accountability

The elements included here are: planning and coordination, policies and governance, civil society engagement, private sector engagement, and public access to information.

Planning and Coordination

Sustainability Index and Dashboard on Planning and Coordination

PEPFAR countries assess their level of planning and coordination based on: whether (a) they have a national HIV response strategy (multi-year and costed); (b) various stakeholders (host country government, civil society, private health sector, business/corporate sector, donors, and multilateral organizations) participate actively in the development of the strategy; (c) the government coordinates all HIV activities; and (d) sub-national units are accountable to national HIV/AIDS goals.

The data from the SIDs completed by 38 countries indicates that, overall, countries are performing well on this element: 24 countries scored themselves sustainable, 11 countries as approaching sustainability, three as emerging sustainability, and none as unsustainable. Across all fifteen elements, planning and coordination ranked as the element with the maximum number of countries reporting sustainability. It is also the only element for which none of the countries report unsustainable levels.

Early accounts on PEPFAR transition planning highlighted the importance of planning and coordination with host country governments. Brundage et al (2011) and Stash et al. (2012) authored reports based on high-level delegations led by the Center for Strategic and International Studies to South Africa and Botswana to examine how transition processes of PEPFAR programs were being negotiated, and to offer recommendations on how to achieve successful transition. Both reports shared the view that leadership at the highest levels in the host country government and the U.S. embassy jointly plan and coordinate

the transition, with input from the district and provincial levels.

A lack of leadership can significantly hamper sustainability efforts. In Vietnam, unclear leadership and lack of planning and coordination constrained implementation activities. Provincial governments awaited official guidance (for example, from the Ministry of Health) on how to implement outreach activities effectively during the transition period (Leadership, Management & Governance – Transition Support Project, September 2014).

Moreover, since civil society organizations (CSOs) have been instrumental in combating HIV worldwide, it is very important to include CSOs in transition planning and coordination. For example, Patterson's (2010) work on the importance of church leadership in Zambia highlights the need to expand the definitional scope of "leadership" to non-state and non-government actors, such as religious leaders, community leaders etc.

Research from South Africa, Peru, and India provide examples of the necessity of leadership, management, and governance practices to work in harmony for the planning and coordination of transition activities. The three countries also provide different experiences on the degree to which civil society actors are included in transition planning.

In the South African transition from PEPFAR, a new governance structure was put in place that created high-level oversight of PEPFAR South Africa, co-chaired by the US Ambassador and the South African Minister of Health, and a Management Committee co-chaired by the PEPFAR coordinator and Senior Advisor to the South African Deputy President. As a result, PEPFAR began taking more input from the South African Government on the Country Operational Plan, which increased transparency and accountability as South African officials reported back to constituents on uses of PEPFAR funding (Kavanagh 2014).

However, challenges remained. The US government and PEPFAR had different funding priorities, and no substantial effort was made to include the expertise of a strong, well-capacitated civil society sector representing People Living with HIV/AIDS (PLWH), Lesbian, Gay, Bisexual and Transgender (LGBT) community, sex workers, faith communities and academics in PEPFAR strategic planning (Kavanagh 2014). Chinyima (2016) also reported more recently that while the South African transition was negotiated at the highest levels of government, those at the grassroots - implementing partners, district managers, and staff – felt left out, and uninformed about the process.

Amaya et al (2014) show that in Peru's transition out of Global Fund programming, government and donor leadership worked together to align donor activities with government priorities. Governance structures were created at both the national and regional levels, which was also a donor requirement. The National Multisectoral Coordinating Center in Health represented different government sectors, civil society and international stakeholders, and Regional Multisectoral Coordinating Agencies were set up in line with the country's administrative decentralization process.

The Callao region in Peru, one of the most affected by HIV, is considered a success story of multisectoral coordination achieved through regional committees that strengthened local capacities. The government also created an HIV/AIDS Strategy Office at the Ministry of Health to coordinate the work of HIV around the country.

However, as in the South African case, considering only leadership decisions or governance structures does not provide a complete picture. It is necessary to consider the management practices that undergird governance and leadership actions.

While Peru created a centralized HIV Strategy Office, its powers were limited because the Global Fund directly funded NGOs as sub-recipients, which minimized the steering role of government bodies and allowed NGOs to make unilateral decisions. Thus, without the power to manage, the HIV Strategy Office was not able to perform its national coordinating function.

One of the key factors for a successful transition from the Gates Foundation's Avahan India AIDS Initiative to the Government of India was having clear implementation plans (Bennett et al 2015a). One strategy was to place a multidisciplinary team from Avahan within the National AIDS Control Organization of India. Avahan supported three national Technical Support Units: programs for Most-At-Risk-Populations, condom distribution and truckers. These groups were used to inform India's national and state level HIV plans and transfer Avahan's best practices and align its programs with the government's (Sgaeir et al. 2013).

Engaging all relevant stakeholders including international, national, and local NGOs as well as community-based groups of high-risk, vulnerable populations of sex workers, men who have sex with men and transgender people – was part of the strategy in Avahan's transition out of India (Sgaeir et al. 2013; Thomas et al. 2012; Wheeler et al. 2012).
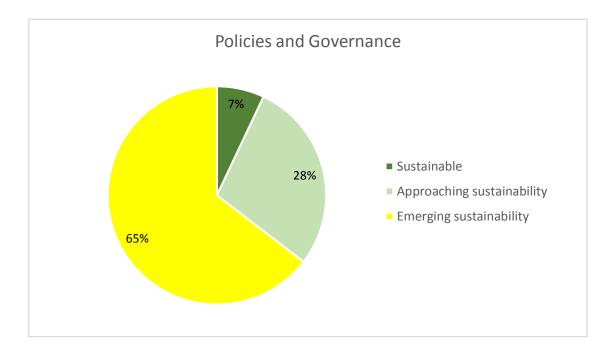
In Serbia, lack of leadership negatively affected the Global Fund's withdrawal. Despite having sound policies and frameworks, the Country Coordinating Mechanism (CCM) did not hold regular meetings, and the National Commission for HIV/AIDS which predates the CCM had not functioned in the five years prior to the writing of the report (Open Society Foundation, 2015).

Policies and Governance

Sustainability Index and Dashboard on Policies and Governance

PEPFAR countries assess their policy and governance framework based on: whether (a) the country follows the World Health Organization (WHO) guidelines on initiation of anti-retroviral treatment (ART); (b) there are policies and guidelines on HIV/AIDS service delivery; (c) there are non-discrimination laws and policies, including those laws not specific to HIV (e.g., for men who have sex with men (MSMs), sex workers or injecting drug users); (d) there are laws and policies that present barriers to HIV service delivery (e.g., laws that criminalize sexual orientation) and whether these laws are enforced; (e) the government educates and ensures the rights of PLHIV and key populations; (f) the government conducts audits on the national HIV program; and (g) whether the government responds to the findings of the audits.

The data from the SIDs completed by 38 countries shows that in contrast to the element of planning and coordination, the majority of countries (25) fall into the category of "emerging sustainability" that continue to need some investments. A smaller number (11) score themselves as approaching sustainability, and only two scored as sustainable. Similar to the element of planning and coordination, no country ranks itself as unsustainable on this element.

Policies and Governance

HIV/AIDS is different from other diseases because high-risk populations are marginalized and stigmatized, and worse, even criminalized in certain contexts. Civil society stakeholders, financed largely by donors, have been crucial in delivering services to populations that were otherwise not high on the policy agenda of countries. Therefore, laws and policies are a key component of the governance and sustainability of HIV/AIDS programs.

Amaya et al. (2014) suggest that early alignment of donor activities with national policies is one of the most important enabling factors for sustainable transitions. Burrows *et al.* (2016) categorize countries in "waves" to predict the timing of transition based on four country characteristics, including type of epidemic, domestic funding levels, enabling environment, and NGO sustainability.[12] The first wave of transitions is occurring now (2016-2018), the second wave will occur between 2019-2023, and the third wave will be from 2024-2029. One country characteristic that distinguishes the third wave countries from the first and second wave countries are laws and policies that "still create human rights barriers to access for key populations" (Burrows *et al.*, 2016: 13). Countries included in this list are Botswana, Egypt, South Africa, Ukraine, and Nigeria.

Similarly, Oberth and Whiteside (2016) put forward a conceptual framework for sustainability with six components, one of which is human rights, i.e., the right to health for populations who may be excluded from decision-making. They provide the example of Romania, citing Stracansky (2014) where a significant reduction in Global Fund investments in harm reduction services led to an HIV outbreak among drug users, in an environment where human rights for this population is not high on the country's policy agenda.

 In an open letter presented to the Global Fund Board in 2014, CSOs from Eastern Europe and Central Asia stated that the decision to move funding to low-income countries will harm key populations,

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[12] Burrows *et al.* point out that even though countries like South Africa are transitioning, not all donors transition at the same time and not all transition out of all program areas. Thus, South Africa is still eligible for Global Fund grants beyond 2030, and while USAID funding in South Africa's correctional facilities is transitioning its services provision to government and only providing technical assistance, Global Fund investment for the Department of Correctional Services remains steady.

especially marginalized groups such as sex workers, men who have sex with men, and people who inject drugs, because many governments are not inclined to provide them with services. Civil society groups should be equal partners in transition planning (Global Fund Observer Newsletter, 2015).

CSOs have been crucial in servicing at-risk populations that are not high on countries' policy agendas. EECA countries highlight the importance of an enabling governance structure even in upper- and middle-income countries.

Civil Society Engagement

Sustainability Index and Dashboard on Civil Society Engagement

PEPFAR countries assess the level of civil society engagement in the national HIV response based on: whether (a) there are any laws and policies that restrict civil society to play an oversight role in the national HIV/AIDS response; (b) there are formal channels or opportunities through which civil society actors can provide feedback on the government's HIV response; (c) civil society engagement impacts policy and budget decisions on HIV/AIDS; (d) civil society organizations (CSOs) are funded domestically; and (e) the regulatory and legislative framework is conducive to CSOs working on HIV (e.g., whether there are significant tax exemptions for non-profit CSOs).

The data from the SIDs show that only one country scored its civil society engagement as sustainable (Ghana), and at the opposite end of the range as well, and only one country scored itself as unsustainable (Mozambique). The vast majority (36 out of 38) fell in the middle, with the bulk (23) scoring in the "emerging sustainability" range and another 11 countries ranked themselves as approaching sustainability.
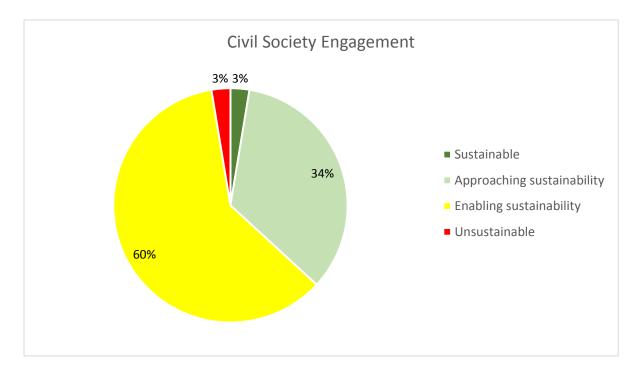
It is instructive to take a closer look at the breakdown of scores for countries approaching sustainability because it highlights the importance of domestic financing above all other criteria in the tallying of scores. Both Thailand and China rank their civil society engagement as approaching sustainability. Thailand scores the maximum points on all five questions in the tool on civil society engagement except one, namely, domestic financing: only approximately 1-9% of CSOs in Thailand are domestically funded.

By contrast, in China, all or almost all (greater than 90%) of CSOs are domestically funded. However, as reported in the SID, CSOs in China are constrained in their engagement with the national HIV/AIDS response in several ways. Under the criteria of formal government channels for civil society engagement, the SID reports that there is no CSO engagement during strategic and annual planning, in joint annual program reviews, or on government program evaluation teams. Under impact of civil society engagement, the SID scoring shows that civil society does not impact HIV/AIDS policy and budget decisions in programmatic decision-making or in the HIV/AIDS basket or national health financing decisions. Finally, in an under enabling environment of legislative and regulatory frameworks, there are: no significant tax deductions for business or individual contributions for not-for-profit CSOs; no significant tax exemptions for not-for-profit CSOs; no freedom for CSOs to advocate for policy, legal and programmatic change; and there is no national public-private partnership (PPP) technical working group or desk officer within the government in which CSOs or not-for-profit organizations can participate/engage. The contrast between the dashboard scores of Thailand and China clearly highlights the primacy of domestic funding for CSOs over other metrics of civil society engagement in sustainability.

The SID tool for China provides this narrative, "Although mechanisms have been established for continued civil society engagement after the Global Fund exit, with some representatives having been invited to attend relevant national level meetings, there is still uneven participation, difficulties in registration, inconsistent competencies, and varied quality of work. CSOs are still limited in contributing

comments in policy and decision-making processes. Currently, the government's support for CBOs focuses more on mobilizing HIV testing and other technical services, but positive support in other areas like anti-discrimination and advocacy is still lacking."

Civil Society Engagement

Civil society organizations (CSOs) often play a dual role. In the context of HIV, CSOs have been at the forefront of service delivery, while at the same time playing an accountability and oversight role over both government and donor funded programs.

Amaya *et al.* (2014) argued that in Peru, NGOs' predominant role as project implementers hindered their ability to advocate for their constituents and make the government accountable to agreements made. Per the authors, the scaling down of Global Fund funding gives NGOs the opportunity to reclaim their social accountability role, in addition to providing services. The authors recommend that the HIV Strategy Office be given more powers to play a coordinating role, provide guidance, and establish effective partnerships. More training should be given to policy-makers on technical and managerial skills and to NGOs and CSOs on social accountability and advocacy.

In addition to a general oversight role, in the case of HIV, CSOs have been instrumental in providing services to at-risk populations who are legally and socially vulnerable and marginalized. It is not surprising, therefore, that more recent scholarship is highlighting the challenges for CSOs when donors withdraw, and the impact of withdrawal on HIV programming. The Global Fund is under pressure to draw down funds in middle-income countries while ensuring programs are sustainable (Summers and Streifel, 2015). In Macedonia, HIV services for key populations – MSMs, injecting drug users, and sex workers – were entirely provided by CSOs with Global Fund grants, and the contribution of the government towards the funds was below one percent. With the transition in disarray, it is almost guaranteed that services for this at-risk population will be negatively affected (Open Society

Foundations, 2015).

Oberth and Whiteside (2016) argue that structural interventions are key to sustainability, and Wilmott (2016) adds that social networks are key to successful programming.

George *et al.* (2014) show that after oversight of interventions switched hands from the Gates Foundation's Avahan program to the government of India, the work of sex worker peer educators changed. Under the donor-funded program, sex workers mobilized their networks to address the structural conditions of inequality and vulnerability as part of their HIV prevention work. After transition of programs to country ownership, the sex worker peer educators were viewed only as providing information and access to services to their fellow workers, encouraging them to get tested and follow treatment regimens. The donor's goal of empowering women to change the structural conditions of the women's lives was undermined in the process, and the authors argue that such empowerment goals are more likely to lead to sustainable change compared to the narrower goals of health service access and delivery.

A positive example of sustainable engagement with CSOs to provide services for key populations comes from Costa Rica. Investments are being made to strengthen the Social Projection Board (JPS), a government funding mechanism which ensures local HIV NGOs are able to access public money. There are specific provisions for prevention of HIV among MSM and transgender women in the Costa Rican Social Security Fund (which funds the JPS) operational plan and budget. The intention is to ensure that more NGOs working with MSM and transwomen are able to access government HIV funding (Aidspan, 2016).
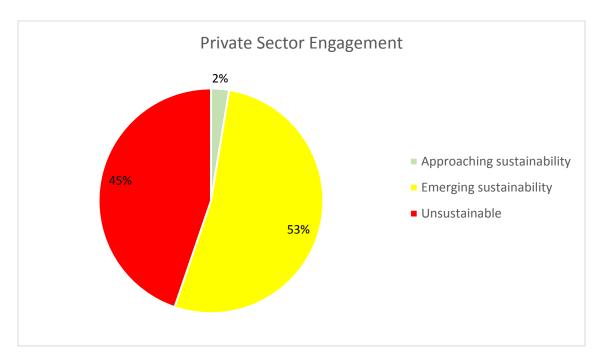
Recommendations with different foci have been proposed. Summers (2016), in line with Amaya *et al's* proposition that local CSOs are losing their social accountability function because of an over-reliance on donor funds, recommends that the Global Fund no longer make grants to international NGOs and UN agencies for major program implementation. These agencies have focused their efforts on sustaining their own programs, and have become too intertwined with the system. Instead, indigenous NGOs should be funded for outreach and advocacy for marginalized populations, and *not* for service delivery or project implementation. In an opposing view, Patcharanarumol *et al* (2013) argue that the Global Fund should continue to fund service delivery programs run by CSOs for populations that might otherwise not be the highest priority of government oversight – e.g., non-Thai MSMs, IDUs and migrant workers. As non-state actors, CSOs are better placed to work with these marginal groups compared with state actors. Rodriguez *et al.* (2016) point out that there are limits to how much CSOs can be expected to hold government stakeholders accountable, given the many political, social, and legal barriers in doing so. Instead, they recommend that governments be pushed to make the political commitment to sustain HIV services to vulnerable populations post-transition.

Private Sector Engagement

Sustainability Index and Dashboard on Private Sector Engagement

PEPFAR countries assess the level of private sector engagement in the national HIV response based on: whether (a) there are formal channels and opportunities for diverse private sector entities (private health care providers or private business) to provide feedback on the government's HIV response; (b) private sector partnerships with government result in stronger policy and budget decisions for HIV/AIDS programs; (c) the legislative and regulatory framework makes provisions for the needs of the private sector (including hospitals, networks and insurers); (d) the legislative and regulatory framework makes provisions for the needs of private businesses (local or multinational corporations); (e) there is a private health service provision for lower- and middle-income HIV patients; and (f) the percentage of people accessing HIV treatment services through the private sector similar to (or approaching) the percentage of those seeking other curative services through the private sector.

Most countries score low on this element. No country has sustainable private sector engagement practices. Only one country's score adds up to a rank of approaching sustainability. Twenty countries are enabling sustainability and 17 score their private sector engagement as unsustainable.

Private Sector Engagement

- Approaching sustainability — 2%
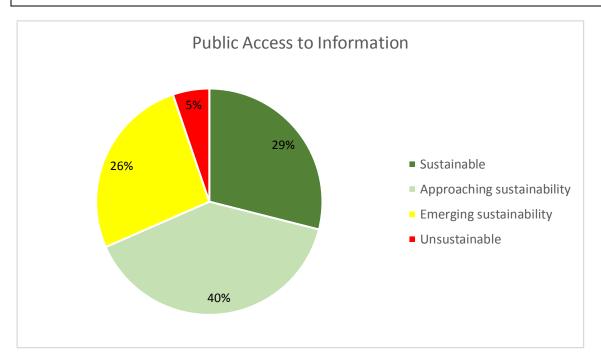- Emerging sustainability — 53%
- Unsustainable — 45%

Scholars have not paid much attention to private sector engagement when writing about sustainability of donor-funded HIV programs. When mentioned, it is in the context of private sector funding for NGOs (Burrows, 2016), but it is worth noting that neither Oberth and Whiteside's (2016) sustainability framework, nor Rodriguez *et al's*. (2016) recommendation for continued political commitment for vulnerable populations make any mention of private sector engagement.

Sustainability Index and Dashboard on Public Access to Information

PEPFAR countries assess the level of public access to information based on: whether (a) the government ensures that HIV/AIDS surveillance and survey data, or at least a summary report of the data, and analyses are made available to stakeholders and the general public in a timely way; (b) the government makes annual HIV/AIDS expenditure data, or at a minimum a summary of it, available to stakeholders and the public in a timely way; (c) the government makes annual HIV/AIDS program performance and service delivery data, or at a minimum a summary of it, available to stakeholders and the public in a timely way; (d) the government makes HIV/AIDS procurements public in a timely way; and (e) there is a government agency that is explicitly responsible for educating the public about HIV.

Country scores on this element are more evenly spread out than on other elements in this domain. Eleven countries rank themselves as sustainable, 15 as approaching sustainability, 10 as emerging sustainability, and two scored as unsustainable.

There is agreement among scholars and practitioners alike that accountability and transparency must be embraced by both the host country government and donor programs, and one strategy to achieve this is through open public access to information. Brundage *et al.* (2011), writing about the South African transition, raised the concern of a perceived lack of transparency by the U.S. in accounting for its total PEPFAR investments and how the monies were spent. The authors recommended the creation of a roadmap that outlined clearly which NGOs received funding from PEPFAR, the operational costs of the programs and salary ranges for U.S. government-supported staff. They urged the leadership to "get the facts out." Kavanagh (2014) agreed with the lack of transparency, noting that sometimes the U.S. government has an "instinct for confidentiality" (2014: 11).

A common recommendation that emerged from the transition reports on both South Africa and Botswana was to remove ambiguities and communicate that the U.S. was not abandoning in-country efforts, the partnership had shifted to emphasize country ownership, how and why the transition will unfold and what the critical shared goals are. The authors suggested that leadership engage with the media, lawmakers, and NGOs to counter criticisms that the U.S. was walking away from its obligations.

An InterAction report pointed out that USAID and the U.S. State Department made significant progress on the issue of aid transparency – the U.S. Foreign Assistance Dashboard, a publicly available, online dashboard of aid allocation, is one example. Yet, it is a mixed bag across agencies. Of the 12 departments, 25 agencies and almost 60 federal offices studied, only two were included in the Foreign Assistance Dashboard. The Millennium Challenge Corporation has the most transparent and accessible information-sharing system and the Global Fund is even more transparent (InterAction 2011).

All data collected by various organizations, institutions and research groups under the Gates Foundation's Avahan HIV program in India are now publicly available online through Harvard University's Dataverse Network (https://thedata.harvard.edu/dvn/faces/StudyListingPage.xhtml?studyListingIndex=2_74a15853f8513b995a1252387d19).

Steyn (2014) recommended better accountability between the national and district levels to overcome information asymmetries in Rwanda and Malawi. The national AIDS plans were not distributed, minutes of meetings were not shared, and there was top-down task-specific command without broader information sharing. Participation at the district level was neither consultative nor substantive. Communication channels were few and there was lack of coordination.

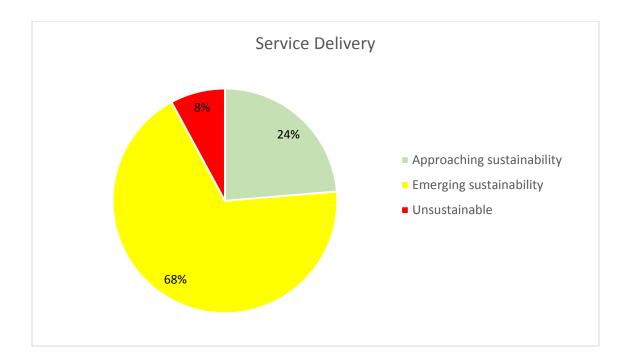## 4.2 Domain B: National Health System and Service Delivery

The elements included are: service delivery, human resources for health, commodity security and supply chain, quality management, and laboratory.

Service Delivery

Sustainability Index and Dashboard on Service Delivery

PEPFAR countries assess the level of HIV service delivery based on: whether (a) public facilities respond to and generate demand for HIV services to meet local needs; (b) the government has standardized the design and implementation of community-based HIV services; (c) host country institutions (public, private, or voluntary sector) finance the delivery of HIV/AIDS services in high-burden areas without external financial assistance from donors; (d) host country institutions deliver HIV/AIDS services in high-burden areas without external technical assistance from donors; (e) host country institutions finance the delivery of HIV/AIDS services to key populations in high burden areas without external financial assistance from donors, (f) host country institutions deliver HIV/AIDS services to key populations without external technical assistance from donors, (g) the national health authorities have the capacity to effectively plan and manage HIV services in high burden areas; and (h) sub-national authorities have the capacity to effective plan and manage HIV services in high burden areas.

No country scored as sustainable. The majority of the countries (26) fall into the emerging sustainability category and of the remaining 12, nine countries categorized themselves as approaching sustainability and three scored as emerging sustainability.

Service Delivery

- Approaching sustainability
- Emerging sustainability
- Unsustainable

There is wide acknowledgement that PEPFAR funding helped transform the delivery of HIV and AIDS treatment services in recipient countries (PEPFAR 2015). The unit cost of providing ARTs declined because of improved drug procurement and supply chains, economies of scale in program implementation, and standardization of clinical and lab monitoring (PEPFAR 2012). PEPFAR funding helped improve countries' health workforce capacity (USAID Office of Inspector General 2011).

However, there is a growing body of evidence on the disruptions to care in the post-transition period. The disruptions occur as a result of: different management styles of donor-funded and government-funded facilities; poorly managed transitions; the inability of providers, usually CSOs, to sustain a full compendium of services in the post-transition phase; or the inability of CSOs to be funded at all.

Two papers present evidence from South Africa, the largest recipient of PEPFAR grants. Writing about patient experiences after the transfer of care from a PEPFAR-funded hospital-based clinic to either primary care clinics or hospital clinics, Katz *et al.* (2015) highlight the difference in provider attitudes and approach to patient care between pre- and post-transition clinical settings. Patients complained that transfer clinics were only focused on dispensing medication rather than holistic care. PEPFAR staff was viewed as respectful and conscientious. There was free treatment at transfer sites and patients reported that there were no barriers to care. Nevertheless, patients were frustrated with the low quality of patient-provider communication, long wait times, and being treated disrespectfully. They described feelings of loss, and missing their community of peers. The transition was viewed as rushed, and without considering that retention in care and sustainability of service delivery, is not only dependent upon dispensing medication, but also on provider-patient interactions (Katz *et al.* 2015).

Other research from South Africa also points to disruptions in service delivery, including for CSOs that provided care with PEPFAR funding. The author states "...the biggest breakdown is perhaps the most

critical: despite pledges to do so in the Partnership Framework, PEPFAR failed to ensure that patients did not experience disruptions in ART and pre-ART care." The most significant problems arose where patients were transferred out of those facilities that were directly funded by PEPFAR, including NGOs (Kavanagh 2014).

Civil society organizations have a difficult time sustaining the full array of services post-transition, despite pre-transition efforts at sustainability, such as through income generating schemes. For example, in Zambia, Walsh *et al.* (2012) show that most community-based organizations (CBOs) that received funding from the World Bank's Multi-Country AIDS Program (MAP) existed prior to receiving MAP grants, contrary to national perceptions that such organizations had specifically been established to access funds rather than serve the needs of the communities. After the drawdown of World Bank funding in 2008 and at the time of the research in 2010, all CBOs were still operational. However, there was a reported reduction in service provision, home visits were reduced due to shortage of food to bring to people living with AIDS, and scarcity of funding for transport, which reduced antiretroviral treatment adherence support and transport of patients to clinics. Sustainability was promoted during MAP through income-generating activities but lack of infrastructure and training made these unsustainable. Links between health facilities and communities improved over time; however volunteers' skill levels were reduced.

The narrowing of program focus was also reported from the Gates Foundation's transition out of India. While program managers were positive about how the transition was managed, community members (of key populations) had adverse views, since the community mobilization aspect of the program suffered the most in the transition period (Bennett *et al.* 2015b; George *et al.* 2014).
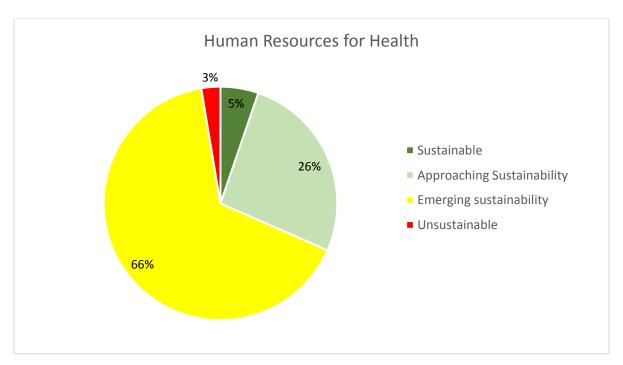
Research from across 12 countries in Eastern Europe and Latin America highlight the effect on service delivery due to recent changes in funding strategies to focus on low-income countries. Prevention and care activities for the key populations in upper- and middle-income countries remain mostly donor dependent, and lack of national funding for these services poses the biggest challenge to sustainable transition. NGO contracting mechanisms, necessary to deliver public financing, are not developed, and risks are high that CSO engagement in provision of preventive services may disappear or be reduced to sub-optimal levels (Gotsazde *et al.* 2016).

Sustainability Index and Dashboard on Human Resources for Health

PEPFAR countries asses the adequacy of their human resources for health based on: whether (a) the supply of health workers is adequate to enable the volume and quality of HIV/AIDS services needed for sustained epidemic control at the facility and/or community site level; (b) there is an inventory and/or plan for transferring PEPFAR and other donor-supported HIV/AIDS health worker salaries to local financing/compensation; (c) a certain proportion (choices are 0%, 1-9%, 10-49%, 50-89%, approximately 90% or higher) of health workers (doctor, nurses, midwives, and CHW) salaries are supported with domestic public or private resources; (d) current pre-service education curricula for health workers providing HIV/AIDS services include HIV content that has been updated in the last three years; (e) the government (through public, private, or voluntary sectors) plans and implements HIV/AIDS in service-training necessary to equip health workers for sustained epidemic control; and (f) the country systematically collects health workforce data, such as through a Human Resource Information System (HRIS) for HIV/AIDS services and/or health workforce planning and management.

HRH scores are somewhat similar to service delivery above. The majority of countries score themselves as emerging sustainability (25). However, there are two countries (Rwanda and China) that score as sustainable in their HRH capacity, while another ten score as approaching sustainability. Only one (Burma) reports its HRH capacity as currently unsustainable.

Research points to two aspects of HRH management that have implications for sustainability. First, to overcome weak HRH capacity, PEPFAR funded agencies, clinics, and CSOs to recruit and/or train a range of personnel required for HIV programming. This included doctors, nurses, HIV testers, adherence counselors, community health workers, data capturers, etc. Sustainability rests on how well these positions have been absorbed in the transition to government-run programming. The findings from Namibia and South Africa point to the management challenges of absorbing HRH during transitions.

Second, research from Mozambique highlights how PEPFAR undermined volunteer community home-based health workers, which is proving to be costly in the post-PEPFAR phase. Findings from the Western Cape in South Africa, Uganda, and Vietnam highlight successful L+M+G strategies in transitions of HRH.

In Namibia, both Global Fund and PEPFAR funding were used to overcome weak local human resource capacity. A third-party recruitment company called Potentia provided "management and recruitment" services and recruited all health workers employed on PEPFAR-funded interventions in government-run facilities. In a one-year period, 38% of Center for Disease Control's (CDC) funding through PEPFAR went to Potentia. However, the authors argue that in the transition phase, the Namibian government had not been given enough time to absorb all the health workers recruited through Potentia. In 2007, the Namibian government passed a labor law that prohibited the use of third-party contracting companies but Potentia was considered outside the bounds of the immediate applicability of the law since the health sector relied on the specialists hired through the company. Neither the government nor USAID/PEPFAR adequately thought through the implications. The authors state that the transition of health workers occurred in a "state of panic" (Cairney and Kapilashrami 2014). An additional worry was that there are no baseline data, indicators, and targets for HRH activities (Office of Inspector General 2011).

In South Africa, having policies and guidelines in place to aid transition was not enough as implementation revealed several management challenges that could not be met. Kavanagh (2014) writes that while the PFIP promised to ensure that the South African system would be able to absorb the PEPFAR programs, this was not the case. As the author states, "programs built up over a decade simply cannot be transitioned in a matter of months." There was inadequate planning. The focus was more on writing new contracts and assuming that implementers would be ready for the actual transition elements. PEPFAR had not only trained doctors and nurses, but also adherence counsellors, data capturers, HIV testers, community health workers – and this was one of PEPFAR's successes. But the South African government did not have a revised human resources plan in place when transition began. By the end of 2011, an initial plan was put in place but lacked any specificity.

Writing about Mozambique, Kalofonos (2014) states that PEPFAR improved human resource capacity but undermined the skills of volunteers in community home-based care (CHBC) in the shift to efficient, technologically driven clinically-based scale up. Even though UNAIDS claimed CHBC to be a key coping mechanism for mitigating impact of the epidemic, the author shows how as the scale-up gained momentum and life-saving technologies of ART became available, CHBC also became more technically defined. The move devalued both the non-technical skills of CHBC and the people who were seen to embody and represent them: older, poorly educated women. At a time of resource constraint and transition to country ownership, this shift seems especially costly.

However, both Kavanagh (2014) and Chiliza (2014) make the case that the Western Cape Province in South Africa was different in its approach to transition planning. Chiliza captures the elements upon which a successful transition of personnel within that particular province was based: a good working relationship built on trust between the Department of Health and PEPFAR; strong leadership; clear communication of transition plans; and most importantly, creating plans that used the government's systems. In 2011, an HR database was created on PEPFAR healthcare workers based or linked to South African government facilities, with the aim of ascertaining how best to absorb PEPFAR-funded personnel

into government health centers. The database took into account Department of Health salaries, transition plans were written using government terminology, and the absorption plan was aligned to South African fiscal years. When there were disagreements or resistance from stakeholders, the ToR was referenced and used to support transition decisions and for settling disputes. In a one-year period between 2012 and 2013, 78 clinical and administrative posts were successfully absorbed by the Western Cape Department of Health. However, 13 non-essential clinical and administrative based posts were not absorbed, nor were 418 community posts. It is possible that individual contracts were negotiated with the central hospitals or the City of Cape Town if funds were available in their budgets, but there was no monitoring of these positons.

Matovu *et al.* (2011) write about programs that developed and institutionalized in-country skills and curricula, and helped address gaps in leadership and management capacity in Uganda. Makarere University School of Public Health in Uganda, with support from the CDC, instituted a two-year full-time, non-degree fellowship that other countries facing similar staff shortages and low capacity can model. The program helps mid-level managers move up to the senior level within a short period of time. Most of the graduates were employed in-country in senior management positions at the time the paper was written.
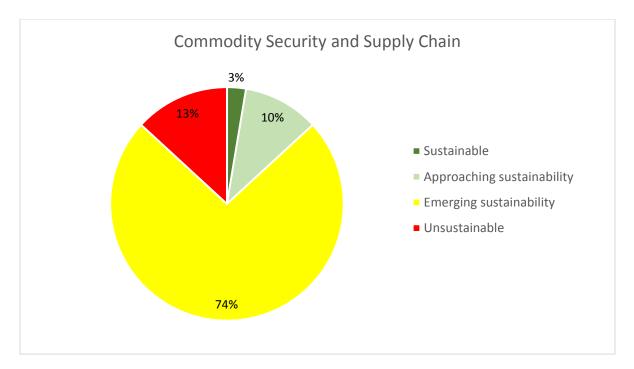
A PEPFAR-funded LMG Project report (Leadership Management and Governance – Vietnam Transition Support Project 2014) highlights an innovative approach to HRH (Human Resources in Health Planning) called WISN (Workload Indicators of Staffing Needs), successfully piloted in Vietnam's transition to country ownership. WISN gives health service and HRH managers a clear understanding of the required workload to maintain particular programs. In the future, this approach can contribute to more evidence-based decision-making on required staffing to meet emergency needs, while protecting the continuance of existing programs.

Commodity Security and Supply Chain

Sustainability Index and Dashboard on Commodity Security and Supply Chain

PEPFAR countries assess their level of commodity security and supply chain based on: (a) the estimated percentage of ARV procurement funded by domestic sources; (b) estimated percentage of HIV Rapid Test Kit procurement funded by domestic sources; (c) estimated percentage of condom procurement funded by domestic sources; (d) whether the country has an agreed-upon national supply chain plan that guides investments in the supply chain; (e) estimated percentage of financing for the supply chain plan that is provided by domestic sources; (f) whether the government manages the processes and systems that ensures the appropriate ARV stock levels; and (g) whether an overall score of above 80% was achieved on the SCMS National Supply Chain Assessment or top quartile for an equivalent assessment conducted within the last three years.

The majority of countries (28 out of 38) report that their commodity security and supply chain levels are best described as "emerging sustainability." Only one country (Thailand) reports current levels as sustainable, whereas four countries report their levels as approaching sustainability. For five countries, the current levels are unsustainable.

Commodity Security and Supply Chain

PEPFAR funding greatly improved supply chain management systems (PEPFAR, 2012; Vogus and Graff, 2015). Commodity procurement is much cheaper when done through large international donors, and therefore maintaining access to affordable procurement is a key element of sustainability (Oberth and Whiteside, 2016).

Vogus and Graff (2015) provide an example of how donor funding improved the management of commodities. In OECS (Organization of Eastern Caribbean States) countries, the establishment of the Pharmaceutical Procurement Systems (PPS) has increased bargaining power, average cost savings of 37% on selected purchases, enhanced quality control, and measurable increases in access to medicines (WHO data cited in Vogus and Graff, 2015). However, there are concerns that inadequate planning and management during transition might lead to a collapse of the PPS, and the authors recommend building capacity of the PPS and local supply chain managers, and advocating with the Ministries of Finance to ensure its funding.
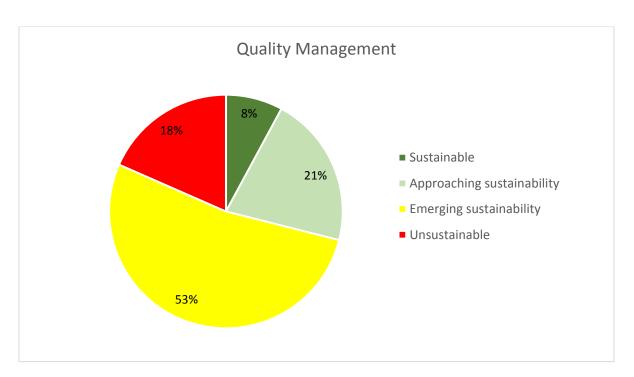
Bennett (2015b) find in their evaluation of the transition of the Gates Foundation's Avahan program in India, close to 70% of programs always had sufficient stock of condoms and medicines, but 30% had experienced commodity stock-outs within a few months post-transition because of changes in the supply source and schedule.

Quality Management

Sustainability Index and Dashboard on Quality Management

PEPFAR countries assess the level of quality management based on whether: (a) the government supports appropriate QM structures to support continuous quality improvement at national, sub-national and site levels; (b) there is a QM/QI plan updated within the last two years; (c) there are HIV program performance measurement data systematically collected and analyzed to identify areas of patient care and services that can be improved through national decision-making, policy, or priority setting; (d) the government ensures that the health workforce has capacities to apply modern quality improvement methods to HIV/AIDS care and services; and (e) the government QM system uses proven systematic approaches to QI.

Relative to other indicators in this domain, a larger number of countries (7) report unsustainable levels for quality management. Of the remaining 31, 20 countries report that their quality management levels are emerging sustainability, eight report that they are approaching sustainability, while three report that their current levels are sustainable.

A PEPFAR-funded Family Health International (FHI360) intervention in Zambia provides an example of a program that was designed with an eye towards sustainability. FHI360 worked in partnership with the Ministry of Health in Zambia to provide HIV prevention, care, and treatment services. A key component was the establishment of a robust Quality Assurance/Quality Improvement system that was grounded in national standards. The system measured and tracked quality gaps; included a structured set of data collection tools which consisted of checklists, interviews by healthcare workers, and patient reviews. The new system made district health offices recognize the value and benefits of a QA/QI system to improve program performance. By integrating data collection in this manner, the program was able to strengthen the Zambian health system, prevent duplication of efforts, and provide the groundwork for

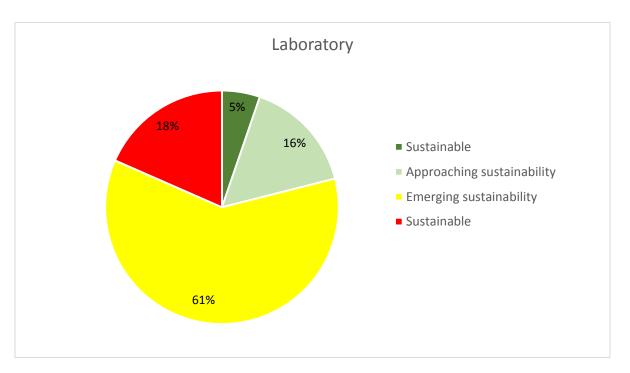transition to country ownership (Torpey *et al.* 2010.)

Writing about leadership and management capacity as a key component of sustainability, the authors highlight that health staff in OECS (Organization of Eastern Caribbean States) countries are under-trained in key management areas, one of which is performance management. Other areas include health planning, procurement, M&E, and financial management. While organizations such as the Caribbean HIV/AIDS Regional Training Network and Caribbean Health Leadership Institute are building local capacity in leadership and management, their sustainability is in question because they are funded by PEPFAR, with no clear transition strategy.

Laboratory

Sustainability Index and Dashboard on Laboratory

PEPFAR countries assess the laboratory capacity (workforce, equipment, reagents, quality) based on: whether (a) the country has a national laboratory strategic plan; (b) the extent of regulations in place to monitor the quality of laboratories and Point of Care Testing (POCT) sites; (c) there is an adequate number of qualified laboratory personnel in the public sector to sustain key functions to meet the needs of PLHIV for diagnosis, monitoring treatment and viral load suppression; (d) there is sufficient infrastructure to test for viral load to achieve sustained epidemic control; and (e) laboratory services are domestically financed by domestic public or private resources.

The country distribution on laboratory match the scores on QI. Seven countries report unsustainable levels; 23 countries report that they are in the emerging sustainability category, another six score themselves as approaching sustainability, and two report their current laboratory capacity as sustainable.

Research on laboratory personnel or workforce is subsumed within the HRH category. Using the search

term "laboratory" yielded no publications that focused on this aspect alone.

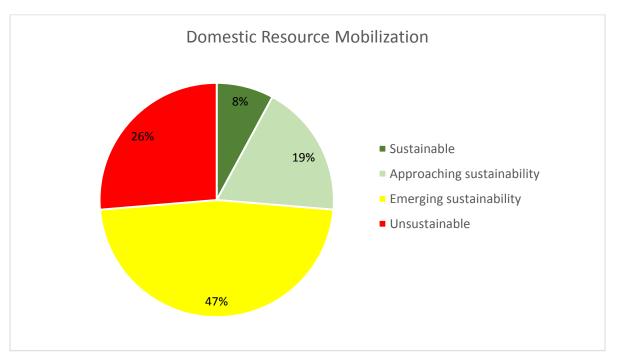## 4.3 Domain C: Strategic Investments, Efficiency, and Sustainable Financing

The elements included here are: domestic resource mobilization and technical and allocative efficiencies.

Domestic Resource Mobilization

Sustainability Index and Dashboard on Domestic Resource Mobilization

PEPFAR countries assess their domestic resource mobilization for HIV based on: (a) whether the national budget explicitly accounts for the national HIV/AIDS response; (b) whether the most recent budget as executed achieve the stated annual HIV/AIDS goals; (c) the average execution rate for budgeted domestic HIV/AIDS resources at both national and subnational levels in the previous three years; and (d) the percentage of annual national HIV response financed by domestic public and private sector resources.

Of the 15 elements, domestic resource mobilization comes on top for the number of countries that report unsustainable levels (10). Three countries have sustainable levels. Of the remaining 25, 18 are categorized as emerging sustainability and seven are approaching sustainability.

Domestic Resource Mobilization

- 8% Sustainable
- 19% Approaching sustainability
- 47% Emerging sustainability
- 26% Unsustainable

Countries have used different strategies to switch to domestic financing of HIV programs. Peru and India increased government investment in HIV in their national budgets. Some countries have changed national laws and policies so that HIV+ patients can get insurance coverage, and Zimbabwe has created a monthly tax deducted from employees' salaries to pay for HIV programs. National CSOs have been able to secure funding by affiliating themselves with a well-known "parent" organization. In addition, OECS

countries have leveraged private sector resources to boost domestic sources of funding.

In 2011, the HIV and AIDS programs were included into the national results-based budget in Peru. Peruvian government investment in HIV, AIDS and TB grew from 0.2% to 0.4% of the national budget between 2011 and 2012. However, the management of the budget was weak at best. The plan was prematurely rolled out without proper planning, training or monitoring mechanisms, which led to inappropriate identification of needs. In one instance, a region had to develop a budget in four days, with little dialogue between the central, regional and local levels and with no access to up-to-date information on health indicators and human resource distribution to inform planning (Amaya *et al.* 2014).

The Indian government showed leadership in tackling the HIV epidemic by increasing the national budget for HIV programs by 400 percent between the second (2002-2007) and third (2007-2012) phases of its national program (Sgaeir *et al.* 2013).

Countries have used innovative health financing strategies to support domestic spending on HIV services. South Africa and Namibia have modified existing laws to require HIV-related services within the health insurance industry. Uganda has expanded access for PLHAs to the private voluntary insurance market.

Chile, Cote d'Ivoire, France, Madagascar, Mauritius, Niger, and South Korea joined together in applying a tax on air travel to support international HIV activities.

Zimbabwe, considered one of the weakest economies in Africa, augmented government budgetary allocations to HIV and AIDS programs by introducing a monthly income tax from employee salaries (Palen *et al.* 2012).

Palen *et al.* (2012) also cite studies by Rusa *et al.* and Sekabaraga *et al.* that show Rwanda has implemented various strategies that are intended to address both the need for increased financing and improved efficiency of service delivery, including community-based health insurance, results-based financing, and multi-sector performance contracts between national and local governments.

A report contrasts the transition models used by the four prime PEPFAR Track 1.0 implementing partners[13] in Tanzania: Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), AIDS Relief (Catholic Relief Services Consortium), Harvard School of Public Health and Mailman School of Public Health in Columbia University. EGPAF used an "affiliate model", creating the Ariel Glaser Pediatric AIDS Healthcare Initiative (AGPAHI). AGPAHI was able to use the parent foundation's brand and reputation while offering lower costs and a local face. In so doing, it was able to ensure donor confidence, a key barrier facing local NGO start-ups. As a result, AGPAHI was able to secure new funding on its own. The author contrasts the "affiliate model" with two other models: the "hand-over model" used by the Catholic

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[13] The Track 1.0 anti-retroviral therapy (ART) program was a set of multi-country grants that collectively formed the first and largest care and treatment initiative awarded by PEPFAR to date. Track 1.0 was competitively awarded to international organizations already supporting the expansion of programs to prevent mother-to-child transmission of HIV, the idea being that by building on these existing programs, rapid scale-up could be achieved. It was administered by the Global AIDS Program of the CDC and the HIV/AIDS Bureau of the Health Resources and Services Administration (HRSA). In 2004, four partners were awarded Track 1.0 grants: Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), AIDS Relief (Catholic Relief Services Consortium), Harvard School of Public Health and the Mailman School of Public Health at Columbia University. The four partners collaborated with the Ministries of Health in 13 countries: Ethiopia, Guyana, Haiti, Kenya, Mozambique, Nigeria, Rwanda, South Africa, Tanzania, Uganda and Zambia (Aulick: Page 2).

Relief Services, where the project was handed over to a local implementing partner and the "spin-off model" adopted by Harvard and Columbia universities, where the project was given to a stand-alone local organization with no co-branding or long-term structured partnership. At the time of writing, the affiliate model has come closest to generating resources, with AGPAHI winning new projects from U.S. Centers for Disease Control (CDC) and USAID (Aulick, undated).

OECS countries have attempted to leverage private sector resources, including contracting private providers with specialty services and/or equipment not readily available in the public sector, and formalizing arrangements with providers and local corporations to provide confidential, stigma-free counseling and testing services (Vogus and Graff, 2016).
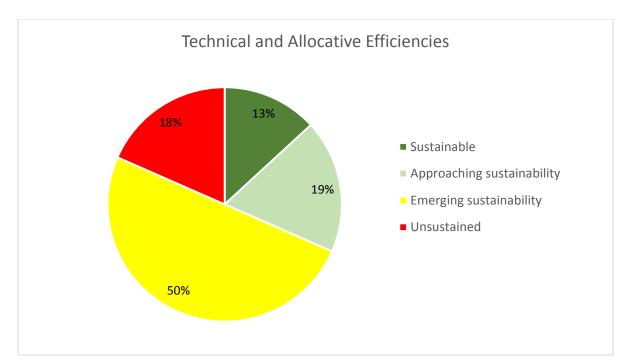
Vermund *et al.* (2012) present data that compare four nations on various capacity parameters – including literacy rates, levels of HIV and AIDS care, per capita expenditures on health and human resource capacity – to understand their ability to absorb HIV programs. Their conclusions are instructive on whether countries are in a position to manage their own programs. Botswana, with its relatively high national income, small population and advanced HIV care programs is well poised to take on management of its own programs. South Africa – despite its slower response due to AIDS denialism – has scaled up HIV services rapidly and has the national income, healthcare management and health worker capacity to succeed in local management of resources. However, the magnitude is daunting and South Africa will need continuing fiscal assistance. The authors conclude that in Zambia and Mozambique – with their lower per capita income, fewer healthcare workers per capita (especially in rural areas) and lower literacy levels – it is inconceivable that in the near future, the transition can take place such that programs are sustainable.

Technical and Allocative Efficiencies

Sustainability Index and Dashboard on Technical and Allocative Efficiencies

PEPFAR countries assess the level of technical and allocative efficiencies based on: (a) whether the government utilizes a recognized data-driven model to inform the allocation of domestic (non-donor) public HIV resources; (b) the percentage of site-level point of service HIV domestic public sector resources allocated to the provision of ART, Voluntary Medical Male Circumcision (VMMC), Prevention of Mother to Child Treatment (PMTCT), HIV/AIDS Testing and Counseling (HTC), condoms, and targeted prevention for key and priority populations; (c) the percentage of central government HIV-specific resources allocated in the highest burden geographic areas; (d) whether the government uses recent expenditure data or cost analysis to estimate unit costs of HIV/AIDS services for budgeting or planning purposes; (e) whether the government has improved efficiency in the last three years in: the areas of improved operations or interventions; reduced overhead costs; lowered unit costs by reduced fragmentation; improved procurement competition; integrated HIV/AIDS into national or subnational insurance schemes; integrated HIV into primary care services; integrated HIV into TB services; integrated HIV and MCH services; and/or developed or implemented other new and more efficient models of HIV service delivery,; and (f) whether the costs of ARVs purchased in the previous year were higher or lower using domestic resources instead of the international benchmark prices.

Five countries report sustained levels on this element, whereas seven report unsustainable levels. In the middle of the range, 50% of reporting countries (19) report levels as emerging sustainability rather than approaching sustainability (7).

Technical and Allocative Efficiencies

■	Sustainable
■	Approaching sustainability
■	Emerging sustainability
■	Unsustained

- 13% (Sustainable)
- 19% (Approaching sustainability)
- 50% (Emerging sustainability)
- 18% (Unsustained)

Dieleman *et al.* (2014) tracked development assistance aid through 2013 and concluded that Botswana, Namibia and South Africa received more aid (relative to national income and disease burden) primarily because of funds allocated for HIV, and received less aid (relative to national income disease burden) for other health areas.

Tanzania provides an example of how PEPFAR funding was used to create an M&E system that enhanced evidence-based decision-making for managing all health sector activities. Tanzania's national M&E systems were not responsive to emerging health priorities in the past. Disease program investments established systems that provided disease specific M&E data, but contributed to the weakening of the national health sector M&E system. Tanzania's Health Sector Strategic Plan III (2010-2015) articulated a new vision "to develop a culture of monitoring and evaluation that ensures that decision makers at all levels use quality data for planning and management of health sector activities." PEPFAR 2.0 and other donors aligned with this HSSP III goal. Data completeness, timeliness, relevance, and use demonstrate that Tanzania successfully leveraged those investments to re-establish a national M&E system that is responsive to disease-specific and health sector requirements. The success of M&E systems strengthening is seen in the evidence-based decision making in Tanzania's HSSP IV (2015-2020), shifts within PEPFAR 3.0 investments, and use of evidence within Global Fund grant strategies and prioritization (Perera *et al.* 2015).

4.4 Domain D: Strategic Information

The elements included are epidemiological/health data, financial/expenditure data, and performance data.

To ensure that relevant strategic information and current data are continually available and useful even after transition, researchers have emphasized the need for continued investment in research studies (Schreir 2005; Stash *et al* 2012). Specifically, for PEPFAR countries, leaders must make clear that even after transition to country ownership, the U.S. remains committed to providing technical and research expertise (Brundage *et al.* 2011). Leaders on both sides (host country and donor country/program) must
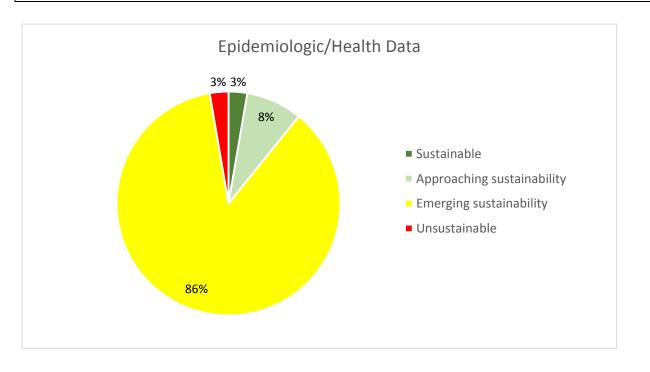
commit to data sharing.

Epidemiological/Health Data

Sustainability Index and Dashboard on Epidemiological/Health Data

PEPFAR countries assess their level of epidemiologic and health data based on: whether (a) the government or donors lead and manage the planning and implementation of the HIV/AIDS portfolio of general population epidemiological surveys and/or surveillance activities (population-based household surveys, case reporting/clinical surveillance, drug resistance surveillance etc.); (b) the government or donor leads and manages the planning and implementation of the HIV/AIDS portfolio of key population epidemiological surveys and/or behavioral surveillance activities (IBBS, size estimation studies etc.); (c) the government or donor funds the HIV/AIDS portfolio of general population surveys and/or surveillance activities (e.g., protocol development, printing of paper-based tools, salaries and transportation of data collection activities, etc.); (d) the government or donors fund the HIV/AIDS portfolio of key population epidemiological surveys and/or behavioral surveillance activities (e.g., protocol development, printing of paper-based tools, salaries and transportation of data collection activities, etc.); (e) the government or donors collect HIV prevalence and incidence data according to relevant disaggregations, populations and geographic units; (f) the government or donors collect or report viral load data according to relevant disaggregations and across all People Living with HIV/AIDS (PLHIV); (g) the government conducts IBBS and/or size estimation studies for key and priority populations; (h) a timeline for the collection of epidemiological and surveillance data outlined in a national HIV/AIDS surveillance and survey strategy; and (i) government defines and implements policies, procedures and governance structures that assure quality of HIV/AIDS surveillance and survey data

Countries are not faring well on this element of sustainability. While only one country reported unsustainable levels for epidemiological data collection, by far the vast majority (32) report only emerging sustainability levels. Only one country (China) reports levels that are sustained and the remaining three report that they are approaching sustainability.

Epidemiologic/Health Data

- Sustainable
- Approaching sustainability
- Emerging sustainability
- Unsustainable

Piot *et al.* (2015) (as cited in Burrows *et al.* 2016) assessed 21 transition plans in 13 countries, and concluded that epidemiological data is one of the key elements of the best plans[14].

The SID score of "sustainable" for China on epidemiological/health data is bolstered by the overview of Wu *et al.* (2011). The authors write about how the government of China, after the outbreak of the SARS epidemic in 2003, decided on a more integrated public health approach to address infectious diseases, including for HIV and AIDS. The first step was to standardize and unify HIV and AIDS data collection and specify common key indicators to measure implementation and effectiveness. Before integration, there were 56 forms and 225 variables in use for data collection; after integration, these numbers were reduced to 25 forms and 19 variables. While this paper does not specifically reference "transition" issues, it nevertheless is a good example of a high-level leadership decision on data management that encompasses the processes of project planning, budgeting, implementation, monitoring and evaluation.

In a just-published editorial in the *Lancet Global Health,* the authors write that in a number of African countries, "there is a dearth of reliable disaggregated data on which to base intervention programs. This data drought is the reason why so many burdens of disease estimates for the continent remain just that – best guesses based on clever modeling or meta analyses that stretch the bounds of statistical credulity by trying to combine heterogeneous small studies." (Editorial, 2017: e727). While the article does not focus only on HIV data, it is nevertheless relevant because it provides two examples of efforts that are trying to change this situation (Lancet Global Health Editorial, 2017).

The INDEPTH network brings together 42 heath research centers that oversee health and demographic surveillance systems (HDSS) across Africa and the Asia-Pacific region. Its strategic plan for 2017-2022 includes a commitment to the Sustainable Development Goals (SDGs) and to make the data publicly available. INDEPTH is aligned with the Developing Excellence in Leadership, Training, and Service (DELTAS) Africa program – a $100 million scheme funded by the Wellcome Trust to harness the knowledge of leading African researchers and to empower them to develop the next generation of researchers and leaders within a professional and collaborative environment.

Another example is the Uganda Medical Informatics Centre, which will bridge the gap between the data which is collected in low-income countries and the analyses which is conducted in high-income countries. The center in Uganda is both an infrastructural project that provides high capacity servers and computational systems with which to store and process data, and a human resource capacity development project training the next general of medical informatics professionals.
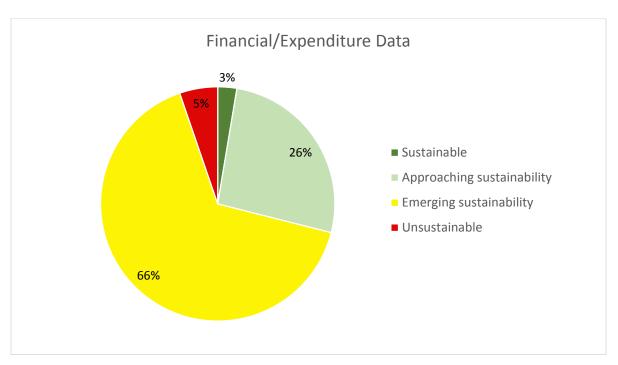
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[14] The other elements are duration of about five years; key financing or high-level political signees; clear and measurable financial targets (for donors and governments); costed HIV strategies and trusting dialogue; reliable M&E systems; and binding incentives (penalties and rewards).

Sustainability Index and Dashboard on Financial/Expenditure Data

PEPFAR countries assess the level of financial/expenditure data related to HIV based on: whether (a) the government leads and manages a national expenditure tracking system to collect HIV/AIDS expenditure data; (b) government finances the collection of HIV/AIDS expenditure data (e.g., the printing of paper-based tools, salaries and transportation for data collection etc.); (c) the government collects HIV/AIDS public sector expenditure according to funding source, expenditure type, program and geographic area; (d) the government collects expenditure data in a timely way to inform program planning and budgeting decisions; and (e) the government conducts health economic studies or analyses for HIV/AIDS.

For this element of sustainability, one country reports sustainable levels (South Africa). Ten countries report that their levels are approaching sustainability, while 25 report only emerging sustainability. Two countries report that their current levels are unsustainable. Interestingly, while China is the only country that has achieved sustainability in epidemiological/health data, for financial/expenditure data, the country reports that its current levels are unsustainable.

Financial/Expenditure Data

- Sustainable — 3%
- Approaching sustainability — 26%
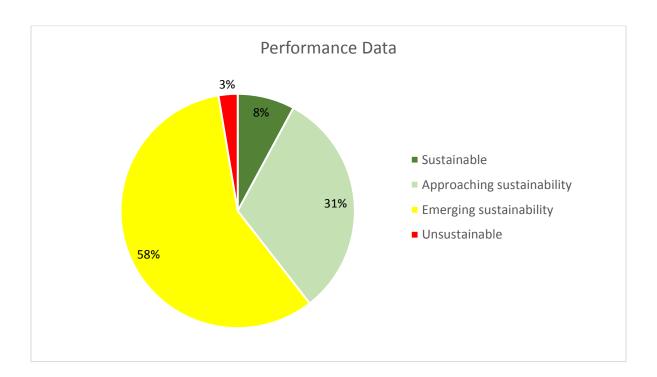- Emerging sustainability — 66%
- Unsustainable — 5%

The literature at the intersection of sustainability and data focuses mostly on epidemiological/health data, and on performance data to a lesser extent. Expenditure data is not a focus (yet) of researchers.

Performance Data

Sustainability Index and Dashboard on Performance Data

PEPFAR countries assess the level of service delivery data to track program performance based on: whether (a) the routine collection of HIV/AIDS service delivery data is institutionalized in an information delivery system and managed and operated by the government; (b) the government finances the routine collection of HIV/AIDS service delivery data (e.g., salaries of data clerks/M&E staff, printing and distribution of paper-based tools, electronic reporting system maintenance, data quality supervision, etc.); (c) the government collects HIV/AIDS data by population, program, and geographic area; (d) the HIV/AIDS service delivery data is collected in a timely way to inform analysis of program performance; (e) the government routinely analyzes service delivery data to measure program performance (continuum of care cascade, coverage, retention, AIDS-related mortality rates); and (f) the government defines and implements policies procedures and governance structures that assure quality of HIV/AIDS service delivery data.

Two countries report sustained levels whereas one country reports unsustainable levels. Of the remaining 34, 22 countries report that their levels of performance data reporting and tracking is in the category of emerging sustainability, whereas 12 countries fall into the approaching sustainability category.

There is little data on how governments are collecting and tracking performance data post-transition. There is a corpus of published data on the Gates Foundation's HIV/AIDS programming in India, but the focus is on the collection of data funded by the Foundation during the years of programming, and even during the transition. The post-transition scenario in performance data collection is written about less frequently.

The Gates Foundation's Avahan AIDS Initiative in India also emphasized data management to guide decision making. Avahan encouraged data collection and use at all levels of its program and offered trainings on data collection and use to implementing partners (Avahan 2008; Global Health Delivery Project 2012; Sgaeir *et al.* 2012).

Avahan also organized "data sharing" seminars and workshops, and organized field visits to disseminate its findings among government officials. Such sharing of best practices resonated with the Government of India and the data had significant impact on the overall development of the third phase of the National AIDS Control Program (Tran *et al.* 2013).[15]

From a governance perspective, the questions of who collects the data and for what purpose are crucial. For data use to be inclusive and participatory, it is essential that the people *from* whom data are collected, and *for* whom the results of the data will have the most impact, are involved in all stages of data gathering and analysis. The Avahan program stands out for the emphasis it placed on community-based data gathering with the purpose of project management and decision-making (Avahan 2008; Avahan 2013). Avahan-funded NGOs used a "micro-planning" approach that decentralized outreach management and planning to outreach workers and peer educators."[16] (Avahan, 2013).

However, the issue of data gathering needs careful consideration. Biradavolu *et al.* (2014) show that it is not enough to introduce community-based data collection tools. The full potential of such tools can only be realized by paying very close attention to context, ensuring that the indicators reflect on-the-ground realities, understanding the unintended consequences of the quantification process, training all actors (down to the NGO worker who works most closely with the "community") on the underlying principles of such tools and the creation of feedback loops that allow mid-course correction. Moreover, in a study on frontline users' experience with M&E systems, NGOs reported that there was a wide gap between their "real work" and indicators used. Donors value M&E in principle but are critical of the information produced. Weak M&E systems can undermine staff morale and quality (Shukla *et al.,* 2016).

During the transition period, the Avahan used the Community Preparedness and Ownership Index (COPI) with community-based groups (CBGs) to measure "transition readiness." (Thomas *et al.* 2012: ii27; see also Praxis India, undated, for more details on COPI and to download the tool). Key population groups serviced by the program were active participants in designing the tool, and data sharing with the CBGs was built into the survey design. Surveys were also conducted with both donor and government participants, once during the transition and repeated 12 to 18 months post-transition (Ozawa *et al.* 2016).

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[15] Data-driven programming has been crucial for PEPFAR (and other donors), who have possibly used strategies on data use similar to those used by Avahan. However, Avahan has the most recent, relevant donor-transition literature available on these issues. We expect that PEPFAR 3.0 will generate both peer-reviewed and gray literature on approaches and implementation on data use.

[16] The Avahan program used peer-led outreach with people at high risk of HIV infection: male and female sex workers, injecting drug users, men who have sex with men and transgender people – as well as bridge populations such as long-distance truck drivers and sex workers.

5. Way Forward

The sections above provide insights into leadership, management and governance practices that were evident in the transition of HIV/AIDS programs in several countries. The transition of PEPFAR programs to national country ownership presents a unique opportunity for the donor community, government officials, civil society partners and researchers alike to learn about the dynamics, processes, and challenges of transition of large, scaled-up donor-funded programming. The evidence is growing on various aspects of the transition process and the different ways it is unfolding in different contexts. Not all domains and elements that PEPFAR considers important to transition planning have received equal attention of scholars. Planning, policies, governance structures, civil society engagement, service delivery and human resources for health have received the most attention. There is very little research on private sector engagement, supply chain systems, quality management, laboratory facilities, technical efficiencies, and financial/expenditure data. Further research is needed to document and analyze the elements of a smooth transition and strategies to overcome challenges. An L+M+G lens can be particularly useful to examine the processes as they are unfolding.

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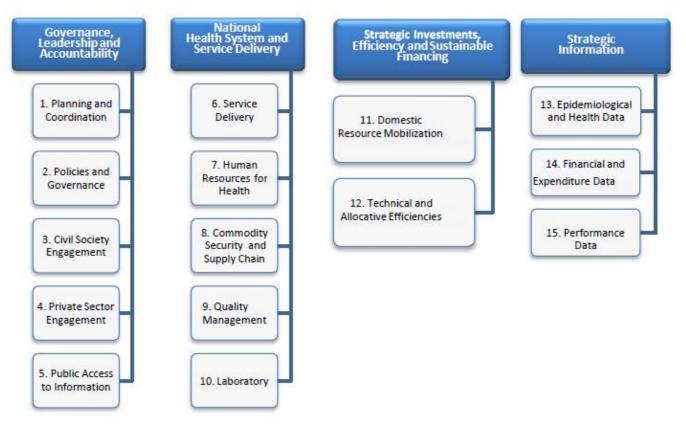
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Appendix: PEPFAR's HIV/AIDS SUSTAINABILITY INDEX AND DASHBOARD 2.0

Governance, Leadership and Accountability
1. Planning and Coordination
2. Policies and Governance
3. Civil Society Engagement
4. Private Sector Engagement
5. Public Access to Information

National Health System and Service Delivery
6. Service Delivery
7. Human Resources for Health
8. Commodity Security and Supply Chain
9. Quality Management
10. Laboratory

Strategic Investments, Efficiency and Sustainable Financing
11. Domestic Resource Mobilization
12. Technical and Allocative Efficiencies

Strategic Information
13. Epidemiological and Health Data
14. Financial and Expenditure Data
15. Performance Data

Note on Element 11: In the "Domestic Resource Mobilization" element, teams will notice a placeholder for an indicator under development to measure a country's ability to finance its HIV response. This critical indicator is not incorporated in the SID 2.0 for COP 16, but the placeholder is included to make teams aware that it will be added in the next iteration, and accordingly influence the scoring of this element in future years.