TRIANGULATING TRANSITION: CONCEPTUAL, PRACTICAL, AND ETHICAL CONSIDERATIONS FOR SUSTAINING PROGRAM IMPACT THROUGH TRANSITIONS TO LOCAL OWNERSHIP

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A dissertation submitted to Johns Hopkins University in conformity with the requirements for the degree of Doctor of Philosophy

Baltimore, Maryland
April, 2015

Abstract

Objectives: As donor investments in HIV/AIDS decline, transitioning programs to local ownership has become a key strategy to enhance the sustainability of donor investments in programming implemented in parallel to existing health systems. Many health systems, however, face constraints that may limit the extent to which transitions result in sustainability. This study aimed to 1) develop a candidate conceptual model of program sustainability that is consistent with transition goals and the process of transitioning ownership, 2) understand the challenges associated with transitioning to host-country health systems and potential threats to sustainability, and 3) explore the ethical responsibilities of donor agencies relevant to the process of transition.

Methods: Empirical aims were investigated through a case study of the transition of the Avahan Initiative from the Bill & Melinda Gates Foundation to local actors in India. Key informant interviews were conducted and data analysis employed qualitative techniques including descriptive coding, pattern coding, and explanation building. The normative aim employed standard techniques for investigating responsibilities.

Results: The candidate model of program sustainability reflects two dimensions: Continuous Service Delivery and Maintained Program Quality. These dimensions represent transition outcomes achieved when local actors effectively fulfill the responsibilities associated with five roles: *Leadership, Resource Allocation, Implementation, Strategic Program Management,* and *End-User Engagement.* Challenges associated with program transition to local ownership included aligning to a lower costing structure, having more limited flexibility, and adjusting to differences in support for community-oriented activities. These challenges contributed to several programmatic changes; limited flexibility to adapt and diminished support for community-oriented activities were perceived as the greatest threats to long-term sustainability. Normative analysis identified a compelling basis for the claim that donor agencies are in part responsible for

ensuring that threats to the basic well-being of end-users that have been averted by their programs remain averted after exit.

Conclusions: Transition can sustain program outcomes and constitute a morally responsible exit if donors make an effort to understand how their programming averts threats to the basic well-being of end-users and support capacity-building and advocacy efforts sufficient to ensure that local actors are willing and able to effectively avert these threats after transition.

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Acknowledgements

This work would not have been possible without the support and contributions of many individuals whom I have had the pleasure to work with and learn from over the last five years.

First, the opportunity to engage with Avahan-The India AIDS Initiative was only possible with the willingness of the Bill & Melinda Gates Foundation to share their experience and with the support of Sara Bennett and the Avahan evaluation team at Johns Hopkins, including Daniela Rodriguez, Sachiko Ozawa, Meghan Bohren and Vandana Tripathi. Their on-going willingness to share their experience throughout the evaluation process, support the development of my initial proposal, establish contacts in India and at the Bill & Melinda Gates Foundation, and provide opportunities for continued engagement was invaluable.

I am grateful for the support of the JHSPH evaluation team as well as colleagues in India for support during the data collection phase. I thank Suneeta Singh, Kriti Singh, and Vibha Chhabra for their hospitality in Delhi and their assistance with identifying potentially interested participants. I also thank Krishna Rao and colleagues at the Public Health Foundation of India for their willingness to provide me with an institutional "home" and for welcoming me as part of their research community while in India.

I would also like to extend my thanks to all the informants who took time to speak with me and to share their perspectives. I have great respect for their work and contributions to the success of Avahan and its transition to local ownership.

I received several forms of financial support to conduct this work. I wish to thank the Bill & Melinda Gates Foundation for travel support, as well as the Center for Global Health for a Global Health Field Research Award, and the Center for Qualitative Research in Science and Medicine for a Dissertation Enhancement Award.

I am also infinitely grateful to my advisor, Holly Taylor, for her constant commitment to my success. From my first day in Baltimore as a prospective student, to my initial years in the

program, on through my proposal development and continuing to the very last manuscript draft, Holly has always been ready to share her experience, expertise, and enthusiasm. Her encouragement and constructive feedback guided me through the dissertation process, and I am thankful to have had such a responsive, thorough, and encouraging mentor.

I would also like to recognize those who served on my departmental, school-wide and final exam committees for their constructive feedback and suggestions to shape and strengthen this project: Stef Baral, Sara Bennett, Chris Beyrer, Matthew DeCamp, Shannon Frattaroli, Jeffrey Kahn, Maria Merritt, Laura Morlock, and Daniela Rodriguez, thank you all for your contributions.

On a more personal level, I would like to acknowledge the support of many friends and colleagues that have shaped the last five years of my life and made them better by sharing the experience of being a PhD student at Hopkins. Emily, Krista, Cass, Jess, all my fellow students in Health Policy & Management, International Health, and throughout the school, thank you for making the days more fun, the challenges more surmountable, and the academic process one of growth and opportunity. To my friends outside of Hopkins, thank you for providing balance to my academic life and helping me keep "the whole me" in view.

Finally, I cannot thank enough my parents, brothers, and extended family for their unwavering support and continual encouragement. Mom, Jeff, Casey, Nathan - I feel so incredibly lucky to have grown up in your company, and cannot express how grateful I am to have you in my life. I would not be where I am without you.

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List of Acronyms

BMGF	Bill & Melinda Gates Foundation
CBO	Community-based Organization
FSW	Female Sex Worker
GoI	Government of India
HRG	High Risk Group
IDU	Injection Drug User
MARP	Most At-Risk Population
MSM	Men who have Sex with Men
NACO	National AIDS Control Organization
NACP	National AIDS Control Program
NGO	Non-governmental Organization
SACS	State AIDS Control Agency
SLP	State Lead Partner
TG	Transgendered Persons
TSU	Technical Support Unit

Introduction

This work investigates the conceptual, practical, and ethical issues associated with the process of transitioning donor-supported HIV programs implemented through parallel systems to local ownership, wherein host-country actors assume responsibilities for sustaining program delivery.

Following the articulation of the Millennium Development Goals, donor support for HIV programming increased significantly.[1] The creation of the President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund for AIDS, TB, and Malaria (GFATM) initiated an emergency response of dispersing large sums of money quickly. In the early stages of PEPFAR this was primarily through separate systems of financial management and service delivery that operated in parallel to existing health country systems.[2,3] While investments in parallel programming have contributed to significant gains in HIV control,[4] donor funding for HIV/AIDS has begun to stagnate,[1,5] prompting renewed attention to the challenges of realizing long-term sustainability for HIV/AIDS prevention, care, and treatment programming.[6-10]

At the same time, there has been an evolving discourse around the notion of "ownership" in global health and development. In 2005, the Organization for Economic Cooperation and Development published the Paris Declaration, which outlined five broad principles designed to produce more effective health and development programming: ownership, alignment, harmonization, managing for results, and mutual accountability.[11] This international agenda expressed a priority of recognizing host-country agency and taking steps to ensure developing countries play a primary role in setting development priorities and shaping development efforts to respond to country needs.

Although many donor agencies and development initiatives have incorporated language of "country ownership" or sometimes "local ownership,"[12-16] its translation into practice is not

universal. For example, the Millennium Challenge Corporation considers country ownership to be one principle that needs to be balanced with others, and allows host countries to set priorities for funding agreements after meeting certain eligibility criteria for cost-effectiveness and potential for results;[16] UNAIDS describes country ownership as a process, inclusive of key elements like strong political engagement and leadership, full participation of civil society, high quality data, capacity development and strong partnerships;[13] the Global Fund points to an award process that builds country capacity for planning, coordination, and strengthens the agency of non-government actors as exemplary of country ownership;[17] the U.S. Government's Global Health Initiative defined country ownership along a spectrum, advancing towards a state in which host-countries manage, own, and finance their health sector.[14] A recent multi-stakeholder consultation found no consensus definition of country ownership across initiatives, and emphasized that country ownership needs to recognize the roles of many local stakeholders, including government, civil society, and other local stakeholders.[18]

In the context of HIV/AIDS programming, country ownership has taken on a more particular use that emphasizes a shift away from the parallel systems of HIV/AIDS service delivery supported during the initial "emergency response" phase and increasingly shifting to local actors the lead role for designing, planning, managing, delivering, and eventually financing HIV/AIDS programming to host country actors.[19] Taken together, the slowing of donor resources for HIV, the shifting in priority from "emergency response" to "sustainability" and the evolution of the discourse around "ownership" have contributed to increasing efforts to transition programs operating through parallel, donor-funded systems to "local ownership" as a means to sustainability.[20,21] However, given the multiple interpretations of ownership and diversity of actors relevant to considerations of "local" or "country" ownership, the relationship between transition, ownership and sustainability is not entirely clear. Many developing country health systems continue to face challenges related to human resources, health systems capacity, resource

availability, and civil society engagement,[22-25] raising concern that premature transition may undermine, rather than enhance, the sustainability of gains made toward HIV/AIDS prevention and control.[26]

Given the current momentum for transitioning programs to local ownership, there is a need to understand with greater clarity how the process of transition is envisioned to achieve sustainability and local ownership. What aspects of programs need to be transitioned to sustain their positive outcomes, and who ought to take them on? What challenges does transitioning from a donor-supported parallel implementation system to a host-country system present, and how might they present threats to long-term sustainability of impact? What responsibilities do donor agencies have with respect to transition?

This dissertation takes steps towards answering these questions through a case study of a large scale HIV-prevention program that has been relatively successful in transitioning to local ownership: the transition of Avahan – the India AIDS Initiative from the Bill & Melinda Gates Foundation to local actors in India. The Avahan transition was evaluated by a research team at Johns Hopkins University.[27] This project complements the larger evaluation of the transition by investigating some of the conceptual, practical, and ethical issues that surround the notions of sustainability, ownership and program transition.

Avahan began in 2003 in response to the increasing HIV disease burden in the world's most populous country.[28] Chief among Avahan's articulated goals were focusing prevention efforts on high-risk groups, achieving rapid scale-up of HIV prevention best-practices for high risk groups across a wide geographical area, and eventually transitioning the program to its "natural owners" of the government of India and local communities in order to achieve a sustained response.[28] As a large scale HIV-prevention program with a clearly articulated intention of achieving sustained impact through a transition to local ownership, the Avahan transition was an opportune case in

which to explore the conceptual, practical, and ethical questions raised above, which correspond to the three manuscripts comprising this dissertation.

The first manuscript triangulates perspectives of 22 key informants interviewed as part of the empirical case study to develop a model of program sustainability that is both consistent with the intended outcomes of transition and the process of transitioning ownership as envisioned in the Avahan case. The manuscript describes how the model was informed by the data and demonstrates its consistency with the envisioned process of transitioning ownership as described by key informants in order to illustrate the relationship between the process of transition and the outcomes it sought it achieve.

The second manuscript describes in further detail key informant perceptions of the challenges experienced in transitioning the Avahan Initiative to the National AIDS Control Program of the Government of India, the programmatic changes that resulted, and the extent to which these changes were perceived as threats to the long-term sustainability of Avahan's impact.

The third manuscript uses the empirical experience of the Avahan transition as a motivating example for a normative analysis of donor responsibilities in the context of donor exit and their implications for the process of transition. The argument begins by exploring the moral intuition expressed by a donor informant in the Avahan case to understand and characterize the morally relevant concern regarding transition, and then engages in a critical analysis of two existing normative accounts of responsibility to identify a moral basis for donor responsibilities in the process of transition.

As a whole, these three manuscripts take on the conceptual, practical, and ethical challenges of program transition. The findings from these manuscripts may inform future program transitions by facilitating more transparent discourse about the intended goals of transitioning programs to local ownership, setting realistic expectations about the positive and negative consequences of transitioning to existing in-country health systems, and developing ethically informed guidance for donors seeking to transition in way that both protects the vulnerabilities of

end-users and enhances the sustainability of the positive impacts of donor investments in HIV/AIDS control.

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Paper 1: Program sustainability as a system of roles and responsibilities: A conceptual model to bridge the goals of sustainability with the process of transitioning ownership

Abstract

Sustaining improvements in health outcomes beyond the life of specific donor-funded health initiatives has been a persistent concern for global health initiatives, yet one that has historically been overshadowed by the urgency of achieving results quickly. As global health initiatives increasingly seek to transition programs to local ownership to enhance sustainability, there is a need to understand with greater clarity the relationship between the process of transitioning to local ownership and the outcomes it is intended to achieve. This project used a case study approach to triangulate perspectives of 22 key informants involved in the transition of the Avahan Initiative from the Bill & Melinda Gates Foundation to in-country actors. This article presents a candidate model for program sustainability that relates the responsibilities transferred through transition to two dimensions of sustainability, Continued Service Delivery and Maintained Program Quality, which correspond to the intended sustainability outcomes of transition. These outcomes are conceptualized as the results of the actions of actors filling a system of five interconnected roles: *Leadership, Resource Allocation, Implementation, Strategic Program Management, and End-user Engagement.* Taken together, these roles form a complete system in which there is a feedback loop between service providers and end-users that sustains program outcomes over time. This project further identifies a defining characteristic of ownership as the *willing acceptance* of the roles being transferred, and suggests that in order for transition to achieve the sustainability outcomes desired, it must include capacity-building and advocacy efforts sufficient to ensure local actors are both willing and able to carry out the responsibilities being transferred. The model offers a candidate approach to transition planning as a transparent reallocation of roles within a system, and may facilitate the setting of clear and realistic transition goals.

Introduction

Sustaining gains of HIV/AIDS programming beyond the life of donor-funded initiatives has been a recognized concern,[1-6] yet one that has until recently been overshadowed by the urgency of achieving results quickly. Emergency-response initiatives such as the President's Emergency Plan for AIDS Relief (PEPFAR), have primarily used vertical programming approaches to deliver prevention, care, and treatment services in parallel to host-country delivery systems, prioritizing investments in rapid scale-up over investments in health systems.[7] As donor assistance for HIV/AIDS programming has begun to stagnate in recent years,[8,9] considerations for increasing aid effectiveness, strengthening country ownership and supporting country-owned capacity building have gained higher priority in HIV discourse as a means to promoting sustainability.[4,10,11]

While there has been extensive discourse around the concepts of country ownership and sustainability, there remain uncertainties about how they translate into practice.[12-15] Country ownership remains an imprecise term, articulated in multiple ways by different stakeholders without a shared definition or common translation into practice.[10,16-18] Within HIV discourse, country ownership and local ownership communicate intentions of strengthening host country capacity and gradually shifting to host-countries greater responsibilities for leadership, technical capacity, and financial accountability.[10] Moving towards greater use of host-country systems and strengthening country ownership as articulated in HIV/AIDS discourse would at some point necessitate a transition from the parallel donor-supported programs currently in place. This sort of transition has recently occurred or is anticipated to occur in multiple countries, for example, South Africa, [14,19] Ethiopia,[19] Botswana,[19,20] Vietnam,[21] and Nigeria.[22] For many countries, however, the prospect of absorbing donor-supported programs presents significant financial, practical and political challenges[20-23] and has raised concerns that rapid pursuit of country ownership may undermine, rather than enhance, the gains made in HIV/AIDS prevention and control.[24] Further, transitioning to country ownership has been criticized for becoming a process

of offloading donor accountability rather than strengthening host country capacity to address its own development priorities.[15] This apparent tension between transitioning ownership of HIV programming and sustaining gains of donor investments in HIV suggests that the relationship between the process of transitioning ownership and the goal of sustainability may not be straightforward.

Sustainability has multiple definitions, in particular with respect to *what* is being sustained. Interpretations within public health literature range from a singular focus on sustainability of specific program interventions[25,26] to more complex processes of institutionalizing new innovations[27,28] to yet more comprehensive aims of building the capacity of a system to address changing population needs over time.[29,30]

While there is overlap between the concepts of sustainability and ownership, there remains a lack of clarity about how to facilitate sustainability while simultaneously transitioning to host-country systems. In order to plan for the long-term sustainability of the gains made with investments in parallel programming, there is a need to be transparent and specific about how transitioning such programs to local ownership is envisioned to sustain program outcomes.

There are few examples in the academic literature of large-scale program transitions from which to gain practical insight into the outcomes that constitute sustainability following a transition in financing, management, or delivery, or what it means to have "ownership" of a program. Evaluations of program sustainability are fragmented both in reference to the definition of sustainability employed as well as empirical outcomes measured,[30-33] which makes it hard to define any broad consensus about the outcomes that represent program sustainability. Further, conceptual models of sustainability largely focus on identifying capacities,[34] or types of influencing factors,[26,29,35] without linking them to particular actions or responsibilities that would track with the concept of ownership.

In the gray literature, there are multiple sets of best-practices for donor exit that describe general recommendations for completing the transition process,[36-38] yet they do not relate the process to specific outcomes representative of ownership or sustainability. Case examples of donor exit in agriculture and family planning suggest that transitions vary with respect to what they intend to sustain and the approach taken to transitioning ownership, for example, sustaining program delivery by building new institutions to take over implementation functions,[39] or sustaining financing for commodities by transferring procurement responsibilities to existing government ministries.[40] These reports capture different approaches to transition, and both are associated with sustainability and a version of ownership. Yet, there is an absence of conceptual work regarding sustainability in the context of large-scale program transition that would assist practitioners in determining *what* needs to be sustained through transition and *how* transitions to local ownership can achieve it.

This study aimed to take an initial step in clarifying the relationship between sustainability, ownership, and transition through an exploratory case study of transition of Avahan – The Indian AIDS initiative (hereafter referred to as "Avahan" or the "Avahan Initiative"). This project aimed to develop a candidate model of program sustainability that clarifies how the roles transferred between actors in a program transition relate to specific outcomes of sustainability, and that can reflect the roles that local actors are understood to have in the ideal end-state of "ownership." The candidate conceptual model aims to reflect an idealized concept of program sustainability that may not be fully realized through transition, but serves as a starting place for identifying a vision of sustainability that is compatible with multiple stakeholder groups involved in a program transition. Given that there may be different understandings of what transition is intended to achieve, as well as different understandings of what sustainability and ownership mean, the purpose of developing a candidate model from this case is to identify a potential vision of sustainability that could be sought through transition. Although this vision may not be universally shared by all stakeholders, it nonetheless makes transparent a particular understanding

of how the concepts of sustainability and ownership are operating in the context of program transition. It may also open a discussion among diverse stakeholders that facilitate progress towards a mutually compatible vision of transition and its intended outcomes.

The transition of the Avahan initiative was selected as the case for the study as an example of a program initially designed to achieve results quickly, and delivered through a parallel financing, management, and delivery systems that later transitioned these responsibilities from the Bill and Melinda Gates Foundation (BMGF) and partners to the Government of India (GOI) and other local actors.

The Avahan Initiative has been described in detail elsewhere.[41,42] Briefly, the Avahan Initiative began in 2003 with funding from BMGF, which supported a variety of HIV prevention programming activities that included HIV testing and counseling, STI care and prevention, as well as community mobilization and outreach activities. These interventions were implemented through a network of non-governmental organizations (NGOs) that were managed and provided with technical support through larger, often international NGOs, known as a State Lead Partners (SLPs). The SLPs contracted smaller NGOs and some community based organizations (CBOs) to deliver targeted interventions to key populations of female sex workers (FSW), men who have sex with men (MSM), transgendered persons (TG) and injection drug users (IDUs) in four states in South India and two states in Northeast India. Over the course of the next six years, Avahan scaled up to serve more than 280,000 key population members with HIV prevention services.[42] By 2006, BMGF had stated its intention to achieve a "sustained HIV response" by transitioning the program to "natural owners" of the program, the Government of India (GoI) and local communities.[42] The Avahan transition involved transferring responsibility for the financing and management of Avahan programming from the BMGF to the GOI's National AIDS Control Organization (NACO). At the time of transition, NACO was supporting the majority of interventions targeted to key populations in India, supporting over 1000 targeted interventions

across India.[43] Thus, India had a robust HIV/AIDS control program under which Avahan programming could be absorbed after transition. As a large scale initiative with the stated intention of achieving sustainability through a transition in ownership, the Avahan transition presented an opportune case through which to explore the sustainability outcomes sought through transition, the responsibilities that were transferred in the process of transition, and the practical meaning of local ownership.

Methods

This study employed a case study approach treating the transition as the main unit of analysis. The case study aimed to develop a conceptual model that relates the process of transitioning ownership to specific sustainability outcomes. Informed by the perspectives of a diverse sample of key informants involved in the Avahan transition, the candidate model is the analytic product of triangulating key informant perspectives about the concepts of transition, sustainability, and ownership in order to identify a candidate conceptual model that represents the convergence between these related yet distinct concepts. The candidate model aims to provide a conceptual basis for understanding the interpretation of sustainability that transition is intended to achieve, and at the same time, illustrate which roles and responsibilities are important to transfer through a transition in program ownership in order to achieve the sustainability outcomes sought.

Data collection. One author (AP) conducted 22 in-depth interviews with key informants representing the perspectives of BMGF, GoI, and SLPs (Table 1). Key informants were purposively selected to provide perspectives from different transition contexts. Specifically, informants were selected to provide perspectives from the transition in two different geographic areas: Andhra Pradesh (referred to in the manuscript as the "South"), where programming focused on FSWs and MSM and where transition was completed relatively smoothly in three rounds spanning from 2009-2012, and the Northeast Region, where programming focused on IDUs and transition occurred later from 2012-13, following a more compressed timeline than in the South. Sampling was additionally driven by the aim of including perspectives from both the

"giving" and "receiving" sides of transition. Stakeholders from the BMGF and their contracted SLPs represented those on the "giving" side. Stakeholders from the GoI at the national and state level, including representatives from NACO, SACS, as well as stakeholders in specialized Technical Support Units (TSUs) funded to provide technical support to NACO and SACS, were included from the "receiving side." Although some TSU informants had prior experience working with the Avahan Initiative and were not government employees, they were included as part of the "receiving" side as informants who had familiarity with the National AIDS Control Program and shared the experience of "receiving" programming previously supported by the Avahan Initiative. Because the intention was to explore informants' understanding of somewhat abstract concepts of "sustainability" and "ownership," sampling was limited to high level informants who were anticipated to have a "big picture" understanding of transition, its goals, and its relationship to broader concepts; thus, frontline staff were not included as their perspective on transition was at a more granular level. Interviews were conducted in English at multiple sites in Delhi, Hyderabad, and Guwahati, India between April and June 2013. This timing coincided with the conclusion of the final stages of transition in the Northeast and the final period of post-transition support in the South. Informants were thus able to reflect on the transition in retrospect yet still have relatively recent experience to inform their responses. Interviews were open-ended and followed an interview guide exploring informants' understandings of the intended goals of transition, the concepts of ownership and sustainability, how the transition process was intended to achieve its goals, and the facilitating and challenging aspects of transition in achieving the intended goals.

Data Analysis. Interviews were digitally recorded, transcribed by the interviewer, and uploaded into Atlas.ti for analysis. Initial coding[44] was applied following broad deductive categories corresponding to interview topics including the goals of transition, the conceptual understanding of sustainability and ownership, and the facilitators and barriers of the transition process as understood by informants. These categories were intentionally broad given that the nature of the

project was to explore concepts and construct concepts informed by the collective experience of key informants. Based on initial application of categories to the data, a set of codes and sub-codes were developed. Codes replaced categories and codes were further refined into a set of sub-codes (e.g., "ownership" was broken into two emic categories of codes corresponding to "government ownership," "community ownership;" "sustainability" was broken into categories of "facilitating factors" and "constraining factors.")

Once the new set of codes and sub-codes were applied to the data, a second level of analysis, or second cycle coding[44 (p86)] involved examining patterns within and between codes and sub-codes. First the relationship between the parent code and related sub-codes was defined. For example, sub-codes of the parent code 'sustainability' were related as 'facilitating functions' or 'roles', sub-codes of the parent code 'ownership' were related as 'actions' corresponding to "responsibilities," and sub-codes for the parent code 'goals of transition' were grouped into sub-codes including " 'continued delivery of services', 'maintained quality of services', 'retained capacity', and 'accountable relationships.' Narrative descriptions, analytic memos,[44(p91)] jottings,[44(p93)] and data displays were used to further develop and refine these patterns of codes and sub-codes into emerging themes that characterized the concepts of sustainability, ownership, and described the goals of transition.

After developing themes for each concept, the process of explanation building[45] was used to identify the relationships between the concepts and develop a model that "explained" the intended outcomes of transition by relating *factors of sustainability* to the *actions of ownership* in a coherent way. This was a process of identifying patterns between and among parent codes and sub-codes and identifying whether and how some emerging themes were relevant across the concepts of 'sustainability', 'ownership', and the 'goals of transition'. For example, the theme of 'leadership' was found as important for both concepts of 'sustainability' and 'ownership' and consistent with the goals of transition. In terms of 'sustainability', 'leadership' was a facilitator

of sustainability in the sense of sustaining attention and priority to HIV prevention. In terms of 'ownership', 'leadership' was consistent with actions demonstrating desire or want to take on responsibility. In terms of the 'goals of transition', strong leadership was consistent with supporting resource mobilization and policy priority to continuing service delivery and supporting a commitment to quality. Similarly, the theme of 'ability to innovate and change according to data' was related to the concepts of 'sustainability' and 'ownership' and consistent with sub-codes of 'goals of transition'. In terms of 'sustainability', the ability to innovate and change was described as a facilitator of sustainability. In terms of 'ownership', 'ability to innovate and change according to data' was consistent with several actions described as part of government ownership. 'Ability to innovate and change according to data' was also consistent with the goal of maintaining program quality. Identifying relationships across concepts and themes in this way led to the construction of a candidate model of program sustainability constructed in terms of roles and responsibilities and informed the placement of each role within the model.

A further step was to test the hypothesized relationships in the model against the data. This was an additional part of the explanation-building process of testing an initial proposition or explanation and against the data.[45(pp148-9)] This was an iterative process of rearranging and refining the components in the model to make it consistent with the data. Specifically, the relationships between particular roles and responsibilities in the model and outcomes of transition were tested against the description of the roles and responsibilities transferred through the process of "transitioning ownership" and its intended outcomes. This tested whether the model could "explain" how the process of transitioning ownership described in the case would result in the intended outcomes described. That is, this process ensured that the roles and responsibilities described by key informants in terms of "transitioning ownership" were captured by the model and the relevance of each role with respect to an intended outcome of transition was similarly consistent with the configuration of the model; there was not a key role or responsibilities

identified in informants' descriptions that was not somehow represented in the model; nor were there aspects of the model completely absent from description.

Table 1: Key Informant Characteristics

Stakeholder Perspective	N	Region	Program Affiliation
BMGF	6	Multi-state	Avahan
State Lead Partners	10	South (n=5) Northeast (n=5)	Avahan
Government of India	2	South (n=1) National(n=1)	NACP
Technical Support Units	4	National (n=1) South (n=1) Northeast (n=2)	NACP
TOTAL	22		

Results

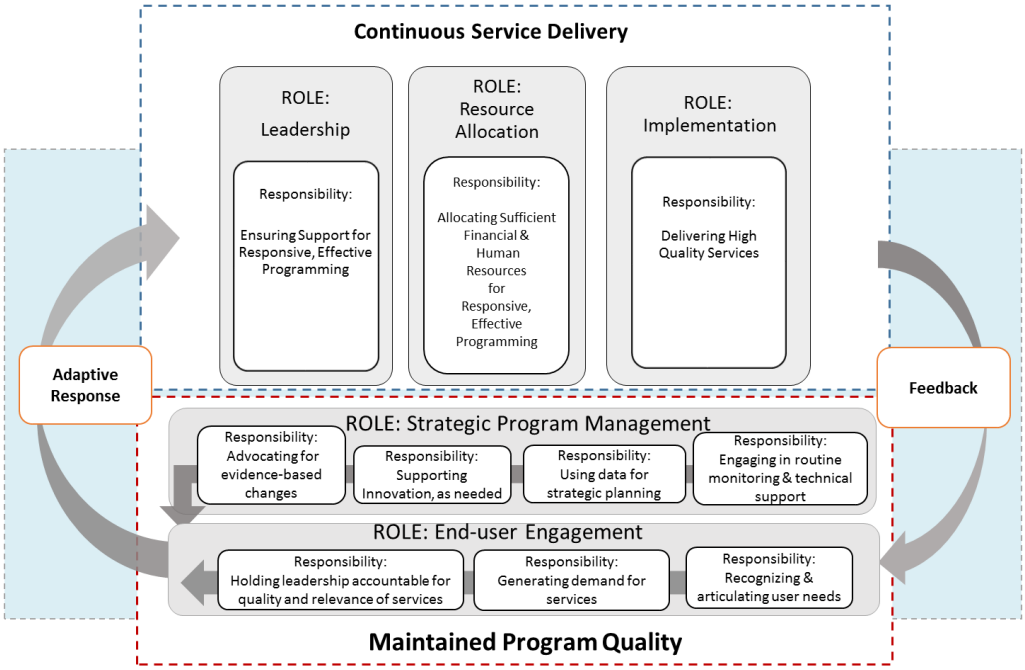
Results are presented in two sections. Section 1 explains a candidate model of program sustainability that was developed inductively by triangulating the views of all key informants about the intended outcomes of transition and their understandings of the concepts of sustainability and ownership. The components of the model are first described as a whole, followed by a description of how the components of the model were derived from the main themes of key informant perspectives. The inductive model illustrates two dimensions of sustainability: Continuous Service Delivery and Maintained Program Quality. These dimensions correspond to the intended outcomes of transition and are represented by a system of interconnected roles and responsibilities that work together to sustain health outcomes over time. Section 2 illustrates how the model described in Section 1 is consistent with the process of transitioning ownership as described by key informants in the Avahan case. This section demonstrates the consistency between the roles and outcomes in the candidate model and the intended outcomes of transitioning ownership as described by key informants. Taken together, the two sections reflect an understanding of the relationship between the process of transitioning

ownership and the goal of sustainability as follows: The sustainability outcomes associated with transition include Continuous Service Delivery and Maintained Program Quality. These outcomes are achieved when actors are effectively filling each role, forming an interconnected system of roles and responsibilities. The actors in this system each fill a role associated with either Continuous Service Delivery or Maintained Program Quality, that together form a complete system in which there is a feedback loop that supports the detection of changes in program performance and responsiveness to end-user needs, as well as a process of adaptive response that allows the program to change over time and remain effective in dynamic environments. The process of transitioning to local ownership results in the intended sustainability outcomes when it includes capacity-building and advocacy sufficient to ensure that local actors are both willing and able to take over responsibilities previously filled by non-local actors, thereby maintaining a complete feedback loop within the system.

Section 1: A Candidate Model for Program Sustainability as a System of Roles and Responsibilities

The candidate model of program sustainability developed from this work focuses on two dimensions: Continuous Service Delivery and Maintained Program Quality (**Figure 1**). The two dimensions of Continuous Delivery and Maintained Program Quality reflect the intended outcomes of transition; the five key roles and their associated responsibilities included in the model reflect the main themes of key informant understandings of the concepts of sustainability and ownership, and the goals of transition.

Figure 1: Candidate Model of Program Sustainability as a System of Roles and Responsibilities



The Continuous Delivery dimension is represented by the roles of *Leadership*, *Resource Allocation*, and *Implementation*, which are associated with the responsibilities of ensuring support for effective, responsive programming, allocating sufficient financial and human resources, and delivering high quality services, respectively (**Figure 1,** top row). The outcome of Maintained Program Quality is represented by the roles of *Strategic Program Management* and *End-User Engagement* (**Figure 1**, bottom row). The role of *Strategic Program Management* is associated with the responsibilities of routine monitoring and technical support, using data for strategic planning, supporting innovation, and advocating for evidence-based change. The role of *End-User Engagement* is associated with the responsibilities of recognizing and articulating end-user needs, generating demand for services, and holding program leadership accountable for the quality and relevance of services. By framing program sustainability as a system of roles and

responsibilities, this model brings together the key facilitating factors of sustainability as *roles* with the representative actions associated with ownership as *responsibilities.*

The dimensions of Continuous Service Delivery and Maintained Program Quality are linked by a feedback loop that is created when there are actors effectively filling all the roles in the model, ensuring there are mechanisms to both detect and respond to change (**Figure 1**, middle row). This feedback loop creates a level of accountability between actors within the system that sustains the impact of the program over time. The following narrative shows how the empirical data support the component roles and responsibilities in the model.

Continuous Service Delivery

The Continuous Service Delivery dimension is represented by three roles: *Leadership*, *Resource Allocation*, and *Implementation*, which reflect the main themes that emerged as facilitators of the intended outcome of continuing service delivery post-transition. Of these, leadership had an overarching importance given its potential to affect resource mobilization, allocation, and the future direction of the program. As one informant commented,

> *"I think the most critical [thing] is leadership. From the government, not just to acknowledge, but also to actually take on a role – a proactive role – in terms of prioritizing the right things, pushing the central government to put in the money they need, or donors or whoever it may be. Really prioritizing HIV and making it have the resources that it needs. Not more than it needs, not less than it needs, but exactly what it needs… So at the time, and even today, high risk groups or MARPs … remain still to be the focus. Or the most strategic investment for India. So one of the key goals was to make sure that the government is really focused on that, and the government is evidence based in where it puts its resources.." - #22 (BMGF)*

Leadership was associated not only with mobilizing resources and having a strong influence on resource allocation, but also with ensuring that the direction of the program remained evidence-based, and that the policy approach supported effective programming. This was corroborated by the importance that BMGF informants ascribed to aligning policy approaches with government leadership and pursuing transition at a time of strong government support for effective, evidence-based approaches to HIV prevention. As indicated in the above quotation,

sufficient resource allocation was another facilitating factor because of its influence on the ability to support the costs of continued service delivery at scale. Resources included both the financial costs of commodities and implementation, but also the human resources with necessary expertise to manage and support service delivery.

Key informants also identified the organizational and technical capacity of the implementation system, meaning the existing capacity of the public health system to support an effective body of implementing organizations, as a third facilitator of continuing service delivery post-transition. As the informant below describes, sustaining service delivery through transition in the Avahan case was in part possible because of the prior investment in building the capacity of the implementation system, providing a relatively high level of functionality that made it possible to take on the additional organizations that Avahan had supported:

"*A lot of investment has gone into the public health system, in terms of infrastructure, equipment, human resources and capacity building, especially the front-line workers. So it isn't as if the health system is not really functional. And therefore, transition is feasible in our context." – #3 (TSU)*

Leadership, *Resource Allocation*, and *Implementation* are represented in the model as interconnected roles that together facilitate continuous service delivery (**Figure 1** top row). The responsibilities of *Leadership*, which include acting as a policy champion to gain support for HIV prevention as an important political priority, mobilizing resources, and ensuring that the strategic approach is evidence based, are summarized in the model by the responsibility of ensuring effective, responsive programming. The role of *Resource Allocation* carries the responsibility of ensuring sufficient resource allocation to support program implementation, inclusive of financial and human resources, and the role of *Implementation* is associated with the responsibility of delivering high quality services. Continuous Service Delivery is thus the result achieved when all roles are filled: leadership ensures that sufficient resources are allocated to support a body of technically and organizationally competent implementing organizations to continue service delivery.

Maintained Program Quality Dimension

The dimension of *Maintained Program Quality* includes two additional roles: *Strategic Program Management* and *End-user Engagement* (**Figure 1,** bottom row), which reflect key themes that emerged from key informant discussions about ensuring that the quality of the program did not diminish post-transition.

Strategic Program Management captures the importance of being able to remain effective over time by reacting to changing trends in program performance. This is partly accomplished by routine monitoring and evaluation, but additionally requires using data to inform future programming activities and change the program when current strategies cease to be effective. As one informant reflected about the challenge of sustaining high quality services in the Northeast,

"So, for example, in drug use – drug use is never the same. The trend keeps changing, depending on the availability [of drugs] – it's very dynamic and unless you change yourself according to the trend, then, you know your program can become very irrelevant. …. So changing, adapting your program from your data, from what your data tells you and what you observe is tougher, you know, but I think that brings out quality in a program." - #14 (SLP)

An additional element to this process of adaptive change was the notion of advocacy to encourage the adoption of new practices. Advocacy was a key theme relating to the role that the management staff played in both the Avahan and NACP programs in facilitating changes in program delivery based on monitoring data, or in some cases, the results of pilot projects undertaken by an implementing partner. Key informants from SLPs, who were engaged in management for BMGF, described the importance of advocating to and negotiating with those in leadership positions at NACO and SACS to ensure that new, more effective approaches to implementation continued after transition and maintained program quality.

The importance of the ability to identify and respond to change is captured by the *Strategic Program Management* role in the model, and is associated with the responsibilities of routine monitoring, using data for strategic planning, supporting innovation, and advocating for the adoption of evidence based change. These actions together ensure that the program is able to detect changes in performance and respond by either adjusting current practices or identifying

new, more effective approaches. The responsibilities of *Strategic Program Management* have a critical role in connecting the feedback produced through monitoring with strategic planning, mechanisms of innovation and advocacy for evidence-based changes. Each of these responsibilities contributes to a process through which changes in program performance are detected and an adjustment or novel approach is identified and proposed. The advocacy responsibility loops back to the *leadership* role by conveying the needed adjustment or novel approach to those who have the authority to modify guidelines and allocate resources as necessary to support the identified approach. Together, the actors fulfilling these responsibilities ensure that this aspect of program quality is translated back into the service delivery dimension.

End-user Engagement is the final role in the model, representing the significance that key informants attributed to the role of key population communities in sustaining the quality of the program post-transition. SLP informants from both the South and the Northeast emphasized the role of end-user communities in the long-term prevention of HIV. As one informant explained their contribution to sustainability:

"…educating their peers, in terms of motivating their peers to get into the program, to go get enrolled in the program and seek services from the program. And once they have seen people who accept them, with their sex workers identity, they felt very much comfortable in that forum. They have started asking for services, they have started expressing their problems, their hindrances with the system. And they've asked them to seek services from government, for STI…They have started expressing their difficulties with the program and slowly the program hand-holding them in negotiating with the government officers… Without that empowerment and without that people taking ownership, it would not sustain." – #6 (SLP)

GoI informants also expressed the view that the ability of end-users to advocate for their needs and hold government accountable was critical for sustaining program quality over time:

"…The sense of accountability, responsibility to yourself - that you matter to yourself! It is important that that feeling is really there among each one of them. That is what will sustain the program. That we care so much that after Avahan left, this wretched government fellow, he has come in and he is asking for a bribe for things that we are entitled to, and which we want – I'm going to protest! … The [people living with HIV/AIDS] will not take any nonsense… if the drugs are not there, they'll be at my table saying, where are the drugs? - #5 (NACO)

Thus, the role of *End-user Engagement* captures several responsibilities that enhance the quality of service delivery, including recognizing and voicing local community needs, generating demand for services, and holding leadership accountable for the relevance and quality of services.

Summary of Section 1

The candidate model of program sustainability reflects a system of interconnected roles and responsibilities that, when filled, create a feedback loop that supports mechanisms to detect and respond to change within a system. The roles and responsibilities of *Leadership*, *Resource Allocation*, and *Implementation* constitute the political support, resources, and capacity to continue service delivery, while the roles and responsibilities of *Strategic Program Management* and *End-User Engagement* allow for the identification of effective implementation strategies, recognition of how responsive programming is to user-identified needs, and advocacy from those in management to put effective approaches into practice and from end-users to respond to their needs. When the actors in the *Leadership* role are receptive to the feedback offered by those in the roles of *Strategic Program Management* and *End-user Engagement*, the system gains an internal accountability that supports both outcomes of Continuous Service Delivery and Maintained Program Quality.

Section 2: Transitioning Ownership as a Process of Reallocating Roles and Responsibilities

This section describes the intended transfer of roles and responsibilities in the Avahan transition, and illustrates how the process of "transferring ownership" as described by key informants is consistent with achieving program sustainability through the system of roles and responsibilities described in Section 1. Because this section is intended to apply the candidate model of program sustainability proposed above by explicating the transition of ownership as the transfer of roles and responsibilities, specific key informant stakeholder groups are identified throughout the narrative to clarify how the roles and responsibilities were intended to be

redistributed from "Avahan" actors (BMGF, SLPs) to GoI actors (e.g. NACO, SACS, or TSU) and key population communities.

Key informants from BMGF and SLPs characterized the goal of the Avahan transition as the transfer of ownership, relying on both government and community actors to play a role in the long term sustainability of the program's impact, as one informant from BMGF explained the overarching goal of transition:

"So just think, you know, you build a great college in a town. A nice building, you know you get some good, some reasonably good faculty in there, but, if the people in the town or the village that this college is built in don't actually sign up to go use the college, if they don't understand how to work together to hold the college responsive to their needs, i.e., provide the types of courses that are relevant to the needs of the population, don't understand how to hold the college accountable for good quality education, right, it just becomes an edifice. So, in some sense, a lot of what was built and what gets transferred to the government is the edifice. What keeps it actually a vital, vibrant, long-lasting institution is the community ownership. And that balance has to happen" - #1 (BMGF)

Transition thus represents a process of transferring the roles previously filled by BMGF and partners to GoI and key population communities in order to ensure continued service delivery as well as the quality and relevance of services delivered.

Government Ownership: Transferring Roles of Leadership and Resource Allocation and Strategic Program Management to Government.

Informants from BMGF, GoI, and SLPs were in consensus that one primary goal of transition to government was the continuing provision of HIV prevention services to the communities that had been served by the Avahan Initiative. Through NACO's acceptance of responsibility to continue to provide support for HIV prevention and to allocate resources sufficient to finance programming that was previously supported by BMGF, the roles of *Leadership* and *Resource Allocation* were transferred to NACO. Multiple informants additionally felt it was important for the specific organizations that had been supported by BMGF to continue to be supported by NACO in order to retain the capacity that had been built and the relationships with communities that had been developed under Avahan. The process of aligning the practices of these NGOs to the NACP norms in advance of transition facilitated their transition to NACO financing and

management and made it possible to retain their role in implementation. One informant from a TSU explained the goal of sustainability achieved by the transition to government, as follows:

"…these NGOs had been supported by Avahan financially as well as through management support, through capacity-building support, Avahan had invested their time even to build up the organizational capacity. And this had happened for 5-6 years, almost for a decade, so, when Avahan is stepping out, these NGOs have the capacity to bid independently, even to NACO.… But suppose there is a gap. Then what happens on the ground is, the NGO dissipates very quickly. The empowerment, the capacities that you have sort of built, that you have worked with the community – the people just sort of move out very quickly. Sustainability ensured that these NGOs were transferred and NACO gave a commitment that it would continue to support these NGOs so that they could continue to work with the communities that they had been working with." - #3 (TSU)

By making a commitment to continue to provide support for HIV prevention and to allocate resources sufficient to finance and support the Avahan programming, the roles of *Leadership* and *Resource Allocation* were transferred to NACO. In order to retain the service delivery capacity and relationships with communities that had been built with Avahan support, many of the same organizations remained in the implementation role and contributed to the achievement of continuous service delivery.

BMGF also sought to transition to government the management aspects of the program. Prior to transition, the BMGF-funded SLPs had filled the management role, engaging in intense monitoring, use of data for strategic planning, and periodic innovation by conducting pilot projects of new approaches to improve quality. In order to ensure the management role remained filled after transition, BMGF felt it was important that the government system support a management role comparable to that filled by SLPs, which was described as being filled in part by the TSUs. As one informant explained, the introduction of TSUs into the national system was a way of transferring multiple management responsibilities associated with the quality of programming:

*"….most of the government machinery is built around delivering programs, right. But what actually monitors the appropriateness of the programs, the quality of the programs, the consistency of those programs? [The role of TSUs] was really to help the government to make the changes they needed to make to keep the program true, and of good quality. The second role of the TSU, that the SLPs played critically, is to actually be a thinking, strategic unit…f*or *example, a new typology of sex worker has come about… So these are sex workers who don't aggregate, on the street or in brothels…. Yet, the entire [intervention]*

protocol has been built around people who can be physically identified and physically accessed….so is there someone actually thinking about that and is there someone actually saying, what can we do about it?" - #1 (BMGF)

By facilitating support for TSUs within the government system, BMGF and other actors sought to ensure that there remained actors able to take on responsibilities of monitoring, using data for strategic planning, and, innovating when necessary, to respond to new threats and keep program quality high. The TSUs also took on responsibilities for putting new practices into action. As one informant explained,

"See luckily, in all the states the TSU was very helpful because TSU was like professional management agency. They understand the nuances, the quality of the program. Whatever they proposed, with some amendments, it was actually accepted and taken up. It really helped the government as well as NGOs." -#9 (SLP)

Thus, the transfer of the strategic management role from the BMGF-supported SLPs to TSUs represented a transfer of the *Strategic Program Management* role and its responsibilities from the donor to local actors.

An overarching theme among key informants in describing transition to government was the notion of acceptance, emphasizing that transferring ownership required not only that government be able to take on these roles and responsibilities, but that they *want* to take them on, which would be expressed in policy as well as among individuals in leadership positions. As one informant remarked,

"For the programs to run successfully and sustain the quality after we leave, and for it to be funded, the background is that the government should have in its policy the fact that they want to work with high risk groups, that they want to saturate high risk groups, and they have operational guidelines on how to implement programs with high risk groups. So in a way that is the heart and soul of transition and if that happens, fine, then they take over the programs and stuff will work." - #20 (BMGF)

Similarly, an informant from the TSU remarked on a defining feature of successful transition:

"I would call it a success the moment that the government feels that, I mean, it's our program…. When you see a [project director] talking about this, and <u>my</u> state and <u>my</u> program and all, you see kind of an ownership happening. They should start talking like that at different forums at the state level, the district level and the NACO level. So that kind of ownership should come from the government there. That is very, very important." - #8 (TSU)

Accordingly, the willing acceptance of relevant responsibilities by government is a key condition for the successful transfer of ownership and the achievement of the sustainability outcomes desired.

Community Ownership: Transferring the Role and Responsibilities of End-User Engagement to Communities

The roles transferred to communities, described by key informants as transferring ownership to communities, were perceived by many informants to be of primary importance for the maintained quality of program implementation. In transferring ownership to end-user communities, BMGF sought to transform the role of communities from passive recipients of services to engaged users, and eventually, empowered advocates for the continued quality and relevance of services.

Transferring this role to communities was described as a process that starts with engaging individuals as active participants and later spreads to create empowered communities. SLP informants in both the South and the Northeast described the value of the community mobilization activities supported by BMGF as understanding the underlying needs of the communities, generating demand, and empowering individuals to become advocates capable of holding government accountable for the provision of services. In the Northeast, community participation was in the beginning stages at the time of transition, and one critical aspect of transition for SLP informants in the Northeast was to ensure that SACS continued to encourage such participation from communities, as one informant explained:

"Now, sustainability depends on the seriousness and the importance that the SACS give to that aspect- the role that these communities play… Quality everyone would like. And to actually ensure quality, you need the active involvement of the community…. there are actually some very, some have become real advocates in their communities and it is all a result of the community mobilization process." # 11 (SLP)

In the South, key population communities had progressed much further in the process of empowerment, and it was seen as more feasible to transfer the responsibilities of *End-User Engagement* to the community members themselves. This was in part related to the nature of key

population communities; in the South, there was an existing history of community activism among the FSW and MSM communities served and some baseline level of community capacity, whereas in the NE, the IDU communities faced extreme marginalization and the continual challenges of addiction, which further complicated the development of individual agency and community collectivization that were part of the empowerment process. As one informant in the South explained the long-term vision of transferring ownership to the FSW community,

"You know, metaphorically speaking, there is a table at which partners sit, and citizens of India could sit, saying, We want what is our right. And the sex worker literally could have a seat at the table saying, 'We want HIV prevention, we want clinic access, we want X and Y.' And that was our effort… So, what are we transferring to communities? Build their capability to get that seat at the table and to manage themselves." - #17 (BMGF)

Thus, while the transition of ownership to communities was further along in the South, in both cases, it was important to ensure the role of *End-User Engagement* remain filled to ensure the continued quality of services delivered. This was instrumental to the long-term goal of empowering key population communities to be effective advocates for their own interests.

Similar to the notion of transferring ownership to government, the transition of ownership to key population communities was only viewed as successful if the communities wanted to continue to engage in the programs delivered. Informants from BMGF, SLPs, and GoI felt that ownership was demonstrated by community members' wanting to engage with the program for the intrinsic value of HIV prevention and encouraging others to do so. As one informant from government explained,

"…ownership is a big word, but I'm just saying sense of accountability to yourself, to the program, and then from there, you know, you want it so you'll see that your other colleagues also in the program behave accordingly, so then that it becomes a community ownership. That we are doing this for ourselves. And we are the gainers in the bargain." - #5 (NACO)

Thus, the long-term goal of transferring ownership to communities was envisioned as a process of reallocating the role of *End-User Engagement* from the SLPs and NGOs who had been actively supporting the community mobilization and empowerment activities that supported end-

user communities in becoming effective advocates, to the end-user communities who would eventually become effective advocates on their own. Through the process of empowerment, key population communities were envisioned to gradually take on the responsibilities of recognizing and voicing their own needs, generating demand among their peers, and holding government accountable for the provision of services they needed to protect themselves from HIV.

While the Avahan transition also included efforts to transition the role of *Implementation* from NGOs to grassroots CBOs comprised of members of key population communities, their role as implementers was described by BMGF and SLP informants as having secondary importance for sustaining service delivery. Although supporting grassroots CBOs in an implementation role was endorsed by both NACO's policies and by BMGF, BMGF and SLP informants suggested that the critical responsibilities for community members to take on post-transition were to generate demand among their peers and act as advocates for their needs. BMGF and SLP informants explained that transitioning some implementation responsibility to CBOs enhanced sustainability to the extent that it allowed some members of end-user communities to have first-hand experience with service delivery and better understand what was necessary to deliver high quality services. Having this practical experience within end-user communities was perceived to enhance their ability to hold government accountable for the quality, relevance, reliability, and availability of services they need.

Summary of Section 2

Taken together, the vision of successful transfer of ownership to government and community actors described by informants amounted to filling all the roles and responsibilities in the system: *Leadership* and *Resource Allocation* were transferred to government actors (NACO), the previously BMGF-supported implementing organizations were retained in the role of *Implementation*, the TSUs took on the role of *Strategic Program Management*, and end-user communities were envisioned to eventually take over the responsibilities associated with the role

of *End-user Engagement*. For both government and key population communities, the notion of ownership was characterized not only by having capacity to perform the responsibilities associated with the role being offered, but truly *wanting* to take it on.

Transferring ownership in this sense is only possible when government and community actors are both willing *and* able to carry out the responsibilities for the roles transferred to them. Successful transition of ownership was envisioned as filling all of the roles and responsibilities in the model in Section 1 with willing and able actors: Government would be willing and able to mobilize and allocate the resources necessary to support implementing organizations in the delivery of high quality services to end-users, who, in turn, value the services enough to continue to engage in the program, and are collectively able to hold government to account for the provision of high-quality services that are responsive to their needs. This distribution of roles creates a level of accountability between service providers and end-users that is consistent with the feedback loop in the candidate model proposed in Section 1. Ultimately, it is this accountability that drives the long-term sustainability of HIV control in these communities.

Discussion

Through a case study of the Avahan transition experience, this project sought to clarify the relationship between the process of transition and the intended outcomes of program sustainability and local ownership. The candidate model of program sustainability resulting from this work frames program sustainability as inclusive of the outcomes of Continuous Service Delivery and Maintained Program Quality, which result from a system of interconnected roles and responsibilities. The candidate model allows for a transparent representation of the shift in roles and a responsibility sought through transition, and further, suggests that the outcomes of Continuous Service Delivery and Maintained Program Quality are determined by the extent to which roles remain filled post-transition. The candidate model reflects sustainability as an

emergent outcome that results from successfully transferring all key roles in the system to actors both capable and willing to take to on the responsibilities associated with the role.

The internal validity of the candidate model is strengthened by the high level of convergence of perceptions between informants regarding the roles that were transferred through transition and their relevance to the sustainability outcomes of Continuous Service Delivery and Maintained Program Quality. The consensus on the relationship between the process and intended outcomes was strong, and likely reflects a "mature" understanding of the transition that became clearer in hindsight. Further, many of the key roles identified in the model of program sustainability are supported in prior literature identifying leadership or political commitment, resource availability, organizational capacity, and participant or community engagement as facilitating factors of sustaining effective interventions or innovations.[26,34,35,46,47] Similarly, the overarching ability to change and adapt has also been identified as a critical facilitator in maintaining impact over time.[34,47-49] There is substantial overlap between the roles identified in this model and key components of health systems.[50] This reinforces the notion that strong health systems can enhance program sustainability, and offers additional support for the importance of ensuring there is an actor both willing and able to fill the roles identified in the model in order to sustain program outcomes through transition.

The candidate model of program sustainability as a system of roles and responsibilities also builds off of existing sustainability literature in multiple ways. While others have applied a systems approach to develop broad conceptual models of sustainability,[30,49,51] the candidate model is novel in that it organizes key functions of sustainability in a way that is both descriptive of the facilitating factors of sustainability and illustrative of their relationship to specific sustainability outcomes of Continuous Service Delivery and Maintained Program Quality. The presence of a feedback loop in the model takes a step away from traditionally linear logic models of program outcomes and closer to that of complex adaptive systems, arguably a more realistic frame for

health systems.[52] By linking the facilitating factors of sustainability with responsibilities that can be assigned to specific actors, the candidate model may facilitate the operationalization of sustainability in practical policy settings characterized by actions of stakeholders rather than by the presence or absence of "factors" or "facilitators."

The candidate model may facilitate more transparent discourse around transitions to local ownership and sustainability. Employing the candidate model in transition planning could clarify which roles are intended to be transitioned to specific in-country actors. For example, the candidate model could clearly distinguish a selective transition involving only the transfer of the role of financing from a donor to a government actor, leaving a donor's fulfillment of other roles and responsibilities unchanged, from a more comprehensive transition in which multiple roles are transferred. Such an approach might allow for the identification of typologies of transition that could inform more directed capacity-building and advocacy efforts in preparation for transition, depending of the type of transition being pursued. The candidate model may also allow planners to anticipate consequences of transitioning specific roles to actors either unwilling or unable to carry out the responsibilities of their role. For example, successfully transferring the roles of *Leadership*, *Resource Allocation* and *Implementation* but not *Strategic Program Management* or *End-user Engagement* might succeed in achieving continuous service delivery post-transition, but might result in declining quality over time.

Further, the candidate model can inform discourse around the meaning of "ownership" in the context of transition by providing a way to translate the concept of ownership into a specific constellation of roles assigned to specific local actors. For BMGF, the concept of ownership motivating transition was labeled "natural ownership" wherein government was assigned roles of *Leadership* and *Resource Allocation*, and key population communities were assigned the role of *End-user Engagement*. While the remaining roles of *Implementation* and *Strategic Program Management* were equally important to fill for the outcome of sustainability, and in this case

Strategic Program Management was assigned to government supported TSUs, and *Implementation* to grassroots NGOs and CBOs, these roles could potentially have been filled by a variety of actors so long as they were both willing and able to take them on. By providing a framework with which to illustrate the specific roles transferred to specific local actors, the candidate model can serve to illustrate what is meant by "country ownership" in a particular transition setting. This model would allow for variation with respect to which local actors filled these roles, avoiding the assumption that ownership necessarily requires host country governments to fill all of the roles in the candidate model, or that civil society organizations necessarily take on the role of implementation, or even that there is a unique distribution of roles that constitutes country ownership. Rather, the strength of the candidate model is ultimately in its suggestion that what is important to ensure is that there is some actor effectively fulfilling the responsibilities of each role. When all roles are effectively filled by local actors, the program supports mechanisms of accountability between service providers and end-users that ultimately drives the sustainability of impact in the absence of continued donor support. The concepts of government and community ownership described in this case study suggest that the critical roles that government should take on are that of *Leadership* and *Resource Allocation*. Government was perceived to be the actor with the decision-making authority and ability to mobilize the magnitude of resources needed to ensure continued programming of similar quality. The critical role transferred to end-user communities in the Avahan transition was that of *End-user Engagement*, as key population communities are the actor in the system in the best position to articulate their needs, generate demand among their peers, and hold government to account for continued provision of quality, relevant services. The remaining roles could be filled by a variety of actors, depending on their willingness and capacity to effectively fulfill the responsibilities of a given role at the time of transition.

Finally, the notion of ownership as a willing and able acceptance of responsibilities suggests that transition cannot succeed as a unilateral endeavor of donors. While donors can do much to facilitate the transition of roles in terms of capacity-building prior to transition, capacity-building alone may be insufficient without commensurate investment in dialogue, advocacy, and negotiation with transition partners to ensure their willing acceptance of the roles being transitioned. This requires flexibility on the part of the donor to develop transition plans constructively and collaboratively with host-country actors, and to be willing to adjust timelines and levels of investment when necessary to ensure successful transfer of ownership.

The limitations of this model and its application to the Avahan transition process are as follows. First, the candidate model presupposes that sustaining the impact of the program requires on-going implementation; program sustainability is therefore assumed to be a means to addressing an on-going health threat, rather than a goal in itself. Additionally, the roles identified in the model are general representations, and likely embody many responsibilities of smaller scope that cumulatively fulfill the responsibilities of each role. The nuance of what specific responsibilities are representative of each of these roles is an area for further inquiry. Finally, the candidate model is the reflection of a process as it was envisioned by one donor in one country for one program. The value and transferability of the candidate model can be tested in a variety of other settings. While the specific reallocation of roles that occurred in the Avahan transition is likely highly context specific, the candidate model may be applicable to donor supported HIV prevention programs in other settings that involve transition of fewer or different combinations of roles to different sets of actors.

Further, while this model was informed by perspectives of key informants affiliated with government, donor, and implementing organizations, the informants interviewed in this work more heavily represent the "donor" or "Avahan" perspective on transition, with relatively few informants sharing government views and no representation from end-user communities. While this study did not identify divergent or incompatible views about the goals of transition within

this sample of informants, the candidate model described here is not intended to represent a universal understanding of sustainability, ownership, and the goals of transition. Rather, it provides one way of conceptualizing program sustainability that may or may not resonate with other stakeholder groups. A model such as the one developed here may provide a basis for discussion between stakeholder groups with respect to their understandings of sustainability, ownership and the intended outcomes of transition, and may facilitate the identification of where perspectives on these core concepts overlap and where they diverge. Ultimately, this may inform the development of a transition strategy that is compatible with multiple perspectives on sustainability and the intended outcomes of transition.

By suggesting that successful transfer of ownership requires both the willingness and ability to take on the responsibilities of roles transferred, this work may also facilitate an open discussion as to whether transitioning specific responsibilities at a given time is likely to undermine or enhance the long-term sustainability of a donor-supported program, and lead to clear and realistic expectations about the outcomes of transition.

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Paper 2: Understanding the challenges of program transition and potential threats to sustainability: a case study of transitioning a donor-driven program to local ownership

Abstract

This case study reports on the challenges of transitioning a donor-driven program to local ownership, the programmatic changes that resulted from adapting a donor-developed program to function within the government system, and the potential threats these changes pose to long-term sustainability of outcomes. Key informants from both the donor and the national programs identified challenges related to the lower costing structure, limited flexibility of budgeting and implementation, and limited technical expertise with community-oriented activities within the national program. These challenges led to numerous programmatic changes including reduced investment in program management, interruptions in context-specific activities, heightened barriers to innovation and data-driven change, and diminished focus on community mobilization and empowerment. Of these changes, the reduced opportunity for data-driven change and diminished focus on community mobilization and empowerment were perceived as the strongest potential threats to the long-term sustainability of the program's impact. These findings suggest that even when transition is successful in maintaining service delivery outcomes, there may nevertheless be potentially significant changes to program implementation that merit additional commitment from donors, particularly with respect to activities that require high flexibility and specialized technical expertise. These findings further suggest that it may be important to monitor a variety of outcomes post-transition. Measures of user retention, staff turnover, and behavior change among end-user populations may provide more nuanced information about potential threats to the long-term sustainability of outcomes following program transition.

Introduction

The long-term sustainability of HIV epidemic control has increasingly raised concerns in the global health community.[1-6] Recent reports document stagnation and in some cases decline of donor commitments to global HIV support[7,8] as well as private sector contributions to HIV financing.[9] Although domestic contributions have increased substantially in the last decade, donor funds still account for nearly half of all HIV/AIDS financing,[10] raising concern for the potential consequences of diminished investment in HIV prevention, care, and treatment. Diminishing donor investment is particularly concerning in countries where significant portions of HIV programs are financed and implemented through donor-supported systems working in parallel to domestic public health systems that have little capacity to absorb and finance additional programming. While inconsistent with recognized principles of aid effectiveness promoting use of in-country institutions and delivery systems,[11] parallel programming has nonetheless been supported as a means to achieving results quickly, as illustrated by early, emergency-response phases of the President's Emergency Plan for AIDS Relief (PEPFAR) and, to a lesser extent, the Global Fund for AIDs, Tuberculosis, and Malaria (GFATM).[12,13] However, as priorities begin to move beyond emergency response programming, there is increasing interest in transitioning the parallel systems of donor-supported programs to host-country delivery systems as a means to both scaling-up effective practices and facilitating the long-term sustainability of program delivery.[14-17]

For this project, the notion of transition is intended to convey an intentional process of transferring programming responsibilities from one set of actors to another, in contrast to relatively abrupt cessation of donor support without a coordinated transfer of responsibilities to new actors. To use the language applied to type of donor exit strategies, transition here is understood as a version of phase-over, through which programming efforts are intended to

continue after the cessation of donor support by new actors, as opposed to phase-out, which involves a cessation of program support without intention to transfer a program to new actors.[18]

In the context of transitions to local ownership in the current HIV landscape, transitioning a program that has been developed using a parallel, donor supported system to an existing host-country system will likely involve some degree of change. Such programs, even if generally similar to national programs focused on HIV prevention, care, and treatment, may nonetheless operate with different programming priorities, costing structures, and management practices, and thus may require some degree of adaptation, or "alignment," to function within the norms and constraints of public health systems. This alignment process would include reconciling differences in budget allocations and operational norms, but may also include modifications to the broader approach of program implementation that are not captured through operational guidelines, such as the priorities, values, and general character of program function. Thus, although transitions are intended to sustain program benefits over the long-term, transition is ultimately a process of change, and its impact on the programming that continues after the withdrawal of donor support is unclear.

While there are few examples of large-scale program transition in the academic literature, there are many evaluations of sustainability following transitions in financing at an organizational level in public health programs. Evaluations of sustainability following transitions in funding have shown that some level of change is common,[19,20] and that an outcome of "partial sustainability," in which some but not all aspects of programming are continued, is most common.[19-21] For example, organizations experiencing a transition in financing have been shown to deliver a reduced range of services, continue services at fewer location sites, or change some aspects of the quality of services.[20] Evaluations of community based programming have come to similar conclusions, noting changes in organizational mission and program focus following

transitions in funding, which subsequently influence the types of services offered and the populations that benefit.[22]

There are fewer evaluations addressing transition in a development context and at a systems level, in which large-scale programs have been transitioned to new funding or delivery systems, which more closely represent the kind of transition relevant to global HIV/AIDS programming. A report documenting the graduation of several Latin American countries from USAID support to host country financing for family planning suggests a high level of sustainability in terms of the numbers of local organizations that remained post-graduation, yet significant changes were reported with respect to the populations served following the initiation of user-fees, which was a strategy adopted to achieve financial sustainability.[23] Initial reports of the transition of PEPFAR HIV services in South Africa suggest that, while the government continued to provide services after the cessation of PEPFAR funding, large numbers of patients may have fallen out of care, and those who were retained experienced increased wait times and changes in the experience of service utilization.[24] A review of sustainability of upper-middle income and high-income Global Fund countries found that countries were more likely to prioritize public funding for treatment drugs and prevention activities targeting youth, but not for HIV prevention services directed to most-at-risk populations.[25(p35)] These experiences suggest that transitions in financing, management, and implementation are often accompanied by a variety of significant programmatic changes at both the level of individual organizations and delivery systems as a whole. Yet, categorical assessments of sustainability that measure only the persistence of service delivery or the portion of organizations that continue to deliver services in any form mask many of the more nuanced changes in program delivery that may occur through the process of transition.[20] Further, there is little consensus on how to identify and interpret the changes that do occur.[19] Not all types of programmatic changes are necessarily undesirable. For example, changes in the types of activities provided may reflect updated practice norms or, conversely, these changes may reflect a

drift from the true needs of the target population; reductions in implementation sites may reflect a more efficient system or, conversely, higher burden for those accessing services. Thus, the notion that transitioning financing, management, and implementation to in-country actors will result in sustainable impact rests on multiple currently underexplored assumptions about the consequences, both positive and negative, of transition.

Through a case study of the transition of the Avahan-the India AIDS Initiative (hereafter referred to as "Avahan" or "the Avahan Initiative") from the Bill & Melinda Gates Foundation (BMGF) to the Government of India (GoI), this study aimed to explore the ways in which transitioning a donor-supported, parallel HIV prevention program to an existing national program resulted in changes to the donor program and the extent to which such changes may present threats to sustainability. Operating in India from 2003-2013, Avahan was an HIV-prevention initiative funded by the Bill & Melinda Gates Foundation (BMGF) that has been described in detail elsewhere.[26,27] Briefly, the Avahan Initiative began in 2003 with funding from BMGF, which supported a variety of HIV prevention programming activities targeted to key populations of female sex workers (FSW), men who have sex with men (MSM), transgendered persons and injection drug users (IDUs) in four states in South India and two states in Northeast India. Avahan supported a variety of HIV prevention approaches including STI care and prevention, HIV testing and counseling, and community mobilization and empowerment activities. These interventions were implemented through a network of mostly grassroots non-governmental organizations (NGOs). In each state, BMGF funded a larger, often international NGO, known as a State Lead Partner (SLP) to manage implementation and provide technical support to the implementing organizations.

Between 2003 and 2008, Avahan scaled up these interventions to serve more than 280,000 FSW, MSM, transgendered persons, and IDUs.[27] By 2006, BMGF had stated its intention to achieve a "sustained HIV response" by transitioning the program to "natural owners."[27] These

included the National AIDS Control Organization (NACO) and State AIDS Control Societies (SACS) of the GoI, and communities of key populations constituting the end-users of the services provided under the Avahan Initiative. BMGF and the GoI invested significantly in preparing for transition, working collaboratively to develop a phased transition strategy that involved planned coordination and alignment with the National AIDS Control Program (NACP) implemented by NACO.[26] As part of the transition effort, BMGF and GoI signed a memorandum of understanding to mark a mutual intention of a smooth transition of programs funded by BMGF to NACO when BMGF funding terminated.[28] GoI supported a highly inclusive consultative process in the development of the third phase of NACP, and BMGF had the opportunity to inform the operational guidelines of NACP with practical experience from the Avahan Initiative.[29] The budget for NACP increased markedly between the second and third phases of the NACP, and the budget for the third phase of NACP took into consideration the costs of absorbing additional programs previously funded by Avahan.[26]

The context of the Avahan transition therefore included a relatively well financed national AIDS control program, with relatively strong implementation capacity and strong political commitment to transition, all of which created a highly favorable context. As a middle income country with an existing national program already implementing targeted interventions at a national level, India had significant advantages in having a large resource base to finance additional programming and prior experience implementing "targeted interventions" for key populations, which additionally contributed to the feasibility of transition in the Avahan case. Indeed, Avahan has been largely viewed as a successful transition.[26,30] A significant portion of implementing organizations were re-contracted by NACO and continued implementing targeted interventions following the norms of the NACP; [26] additional management structures, known as Technical Support Units (TSUs) were included within NACP guidelines to facilitate continued investment in program management;[26] and initial evaluations suggest that coverage and condom

distribution outcomes were comparable or better in the initial years following transition.[31,32] While perhaps an exceptional case of transition, the Avahan experience offers valuable insight into not only the level of service continuity that is possible with significant planning, resources, and commitment, but at the same time, the types of programmatic changes that may be especially difficult to avoid, despite extensive planning and investment. This work explores the latter by investigating challenges of aligning the approach of the Avahan initiative to the national system, the changes to Avahan programming that resulted, and the extent to which these changes may present potential threats to sustaining Avahan's long-term impact.

Methods

One author (AP) conducted 22 in-depth interviews with key informants representing the perspectives of both the Avahan Initiative (BMGF and SLP informants) and NACP (NACO, SACS, and TSU informants) (Table 1). Of note, multiple TSU informants had prior experience working with programs outside of the government system. One informant included here had previously worked for Avahan, and others came from the private sector or had past experience with donors and thus represent a view not uniquely "government." However, informants from TSUs were designated as representing the "NACP" side of transition given their role of assisting with implementation of NACP and familiarity with the operations of the government system. Key informants were purposively selected to provide perspectives from two different geographic areas, Andhra Pradesh, a Southern state where programming focused primarily on FSWs and MSMs and where transition was completed relatively smoothly in three rounds spanning 2009-2012, and Manipur and Nagaland in the Northeast states, where programming focused on IDUs and transition occurred later from 2012-13, with less preparation time than in the South. Interviews were conducted in English at multiple sites in Delhi, Hyderabad, and Guwahati, India between April and June 2013. This timing coincided with the conclusion of transitions in the Northeast and the final period of post-transition support in the South, and was more than three

years after the first round of transitions. Informants were thus able to reflect on the transition in retrospect yet still have relatively recent experience to inform their responses. Interviews were open-ended and followed an interview guide exploring the types of changes experienced during alignment process and the ways in which informants felt they might negatively influence the long-term sustainability of the reduction in HIV incidence. Interviews were transcribed by the researcher. Initial coding was applied according to categories of the interview guide, including the challenges of transitioning to the national program and types of programmatic changes. A second round of pattern coding[33] identified relationships between the challenges of alignment during transition and resulting changes to Avahan programming. The perspectives of key informants with respect to the magnitude of threats presented by transition-related changes were summarized using qualitative content analysis.[34]

Table 1: Key Informant Characteristics

Stakeholder Perspective	N	Region	Program Affiliation
BMGF	6	Multi-state	Avahan
State Lead Partners	10	South (n=5) Northeast (n=5)	Avahan
Government of India	2	South (n=1) National(n=1)	NACP
Technical Support Units	4	National (n=1) South (n=1) Northeast (n=2)	NACP
TOTAL	22		

Results

Key informants identified three challenges of aligning the Avahan and NACP programs prior to transition. Relative to Avahan, NACP had lower costing structures, limited flexibility of budgeting and implementation practices, and limited technical expertise in implementing community mobilization and empowerment activities. Of these, the challenges related to lower

costings were related to aligning operational norms; the challenges related to limited flexibility and expertise with community mobilization and empowerment were reflective of changes in the general nature of the national system compared to Avahan. These challenges, either together or independently, contributed to four programmatic changes that were perceived by informants as presenting potential threats to the long-term sustainability of Avahan's impact: 1) reduced investment in program management 2) interruptions in context-specific activities 3) heightened barriers to innovation and data-driven change 4) diminished support for community mobilization and empowerment activities (**Table 2**).

Table 2: Relationship Between Programmatic Changes and Challenges of Alignment

Programmatic Change	Alignment Challenges		
	Lower Costing Structure	Limited Flexibility	Limited Technical Expertise with Community Interventions
Reduced investment in program management	✓		
Interruptions in context-specific activities	✓	✓	
Heightened barriers to innovation and date-driven change	✓	✓	
Diminished support for community mobilization and empowerment activities	✓	✓	✓

Reduced investment in program management. One change directly related to the lower costing structure was the change in the resources allocated to program management. About half of informants including Avahan (n=6) and NACP informants (n=4) described reductions in the investment in program management post-transition, and particularly the human resources allocated for program management. Informants from both the South and Northeast described the struggle that the management personnel within SACS experienced in supporting the additional implementing organizations post-transition. One informant from government explained:

".. post transition, see, as the number of [NGOs] has increased, the burden is up more. For example, I used to handle some 80 [NGOs] – that was 3-4 years back. Now, it's 175 [NGOs] – so it's a big number.

And at the same time, the human resources should also be increased… I feel that there should be some more hands in the program, and [Joint Directors] they can be – assistant directors. Because the program has expanded. And now in fact we work for 16 hours." – #7 NACP

Informants varied with respect to their perception of the magnitude of this threat to sustainability. Avahan informants described that BMGF continued to support additional management capacity post-transition by funding TSUs in some states, which assisted government with techno-managerial needs, and also offered additional human capital for a limited period post transition, but this was not an indefinite commitment.

Avahan informants expressed some concern that the reduced investment in management relative to Avahan might lower quality over time, but that this threat might be mitigated by the timing of transition, which coincided with an increasingly controlled state of the HIV epidemic. As one informant from Avahan explained:

"I think that [the investment in management] was needed at the time when the program was scaling up; now we're in a different mode – [the next phase] is more about maintaining and you may not need the same intensity of effort … The management capacity they fund at a lower level than we would like, but you don't win all battles. And at least now the need is slightly less, you could say. It would have been bad if they didn't want to support that in the first five years of scale-up, but now I think genuinely there is a maintenance mode, which might need less intensity." –#19 Avahan

From the government side, one informant recognized that the larger investment in management by Avahan had some value, yet suggested it was difficult to determine how large an investment in management was necessary to maintain quality:

"Now, it's a question of judgment call - you pay well you get good quality. You pay a little less you may get a lesser quality person, because skills are scarce. Now whether it was worth that much of money that they [BMGF] were paying…it's the management [level] which matters, and they paid hugely.…So it's all a question of, 'How can you get a similar outcome at the lowest cost?' That's very challenging. And if anyone comes and says, 'Look, I've got the same outcome at the lowest cost,' the government will just jump into it. But that's not what happens in reality. In reality they come with these very nice fancy models with huge amount of things and huge costs….." -#5 NACP

Although recognizing the lower allocation in management relative to Avahan, NACP informants did not articulate concern that having fewer management personnel had lowered program quality, at least up until the current time.

Thus, the investment in management was a change resulting from the lower resource allocation to management supported under NACP. However, there was some uncertainty about the extent to which it had negative consequences for program quality in the long-term. There was recognition on both the Avahan and the NACP sides of transition that program management resources were reduced post transition. At the same time, the long-term impact of this change was potentially mitigated by the lower demands of program maintenance vs. scale-up, and by having existing staff absorb additional duties.

Interruptions in context specific-activities. In addition to the differences in costing structures, key informants described NACP as having limited flexibility with respect to budgeting and implementation, which was associated with interruptions in the delivery of activities that were tailored to a specific program location, or context-specific activities. More than half of informants including both Avahan (n=10) and NACP informants (n = 3) commented on limited ability to continue practices specialized for the contexts in which Avahan worked. In both the Northeast and the South, transition resulted in a disruption to aspects of programming that were either not included within or differed from the existing operational norms of the government program. These included modified staffing ratios for areas with disparate populations of end-users, specialized service delivery approaches for hard-to-reach populations, and populations with specialized needs, for example, female IDUs.

Transition in the Northeast coincided with the end of several pilot projects testing new strategies designed to increase coverage in the rural setting of the IDU-driven epidemic in the Northeast. Avahan piloted a number of initiatives, including interventions targeted specifically to female IDUs, nurse-led STI testing to increase access in the absence of doctors, and rotating drop-in centers between multiple physical locations spread out over a larger area. Although effective, all informants from the Northeast (n=7) commented on challenges of continuing these activities after transition given that they diverged from the NACP implementation norms. While some of these activities were within the overall budget allotment for NACP, the lack of flexibility

in budgeting and implementation limited the extent to which these were supported post-transition. Although negotiations for the adoption of these approaches into the next phase of NACP were on-going at the time of data collection, these strategies were not integrated into NACP guidelines prior to transition and their continuation was subject to interruption. Informants from the Northeast described NACO as generally receptive to the possibility of supporting effective, context-specific practices, but nevertheless constrained by the challenges of supporting variations from the standard norms for the rest of the country. All of the informants who described the challenges of continuing context-specific activities viewed it negatively.

In the South, Avahan programming deviated from the NACP norms in having more designated clinics for key populations and flexible ratios of peer educators per key population in order to accommodate the more disparate concentration of individuals in rural areas. To accommodate NACP budgetary and operational norms, Avahan-supported implementers began referring key populations from Avahan clinics to government clinics or preferred provider clinics, which changed the physical service location for key populations. Avahan informants in the South indicated that this sometimes increased the distance that key populations traveled to access services. Additionally, the ratio of peer educators to key populations was reduced in some instances in order to align with NACP norms, which was described by Avahan informants as adding additional burden to peer educators working in rural areas where key populations are farther apart. In both the Northeast and the South, the limited continuation of these context-specific approaches after transition changed the way in which services were delivered to rural populations, and some informants perceived these as threats to the extent that they may have contributed to additional burdens for end-users in accessing services in rural areas.

Heightened barriers to innovation and data-driven change. The combination of a lower costing structure and more limited flexibility within NACP additionally contributed to the perception of heightened barriers to innovation and data-driven change post-transition. Nearly one third of informants, including NACP (n=1) and Avahan (n=5) described concerns about the

ability to pilot new approaches, engage in innovation, and ultimately use data to adapt and improve the quality of implementation. Engaging in research and implementing new, effective approaches required both dedicated resources for research and the flexibility to rapidly change program practices based on evidence, both of which were perceived as limited within the government system. As one government informant from NACP explained, it was not that innovation was impossible or absent within the government system, but was nonetheless perceived as difficult to continue without some continued support from donors:

"I think, dialogue with donors, and academics, and others outside, those who are directly involved in implementation is absolutely critical because this program will die the day they stop innovating….This is where the donors can play when they come with a bit of money. What happens typically in government is, first of all, money is tight, and you are literally keeping your head above water and trying to fund what is essential. ...It's not that [innovation] is not there –this place is full of innovation – but that we should keep apart some budget , that we must do operations research , that we must try and encourage innovation, must give models – that area is slow in coming" – #5 NACP

The reduced budget and flexibility for continued innovation and change was described as a particular concern in the Northeast, where maintaining the effectiveness of program activities required frequent change, as one informant explained,

"..one thing that we tried to do quite a bit is that we allow the NGOs to be able to monitor the trends and the change that they see along in their data. And, also change our program according to that. So that flexibility sometimes is very difficult in a government set up because you have like, one set of guidelines and you all fall under it. So, for example, in drug use – drug use is never the same. The trend keeps changing, depending on the availability – very dynamic and unless you change yourself according to the trend, your program can become very irrelevant." – #14 Avahan

Even in the South, where the epidemic has largely stabilized among FSW, MSM, TG populations, having the budget and flexibility to innovate was seen as important to remain effective through changes in the risk environment. Informants from Avahan described changes in the typology of sex work, shifting from street-based to mobile-phone based solicitation, which required new approaches to prevention. While some states were able to continue to fund operations research without relying on donor resources, all six of the informants discussing the importance of innovation indicated that the limited resources and flexibilities of government

made it more difficult for government to support opportunities for continual research and implement changes related to quality improvement without continued support from donors.

Diminished support for community mobilization and empowerment activities. A third challenge in transitioning Avahan programming to the national program related to differences in the existing technical capacity to support community mobilization and empowerment interventions. Combined with the reduced investment in management and limited flexibility, limited technical capacity contributed to changes in support for community mobilization and empowerment activities. More than half of informants, including Avahan informants (n=10) and NACP informants (n=4) described diminished support for community mobilization and empowerment activities post-transition. This manifested in a number of ways, including a lapse in routine monitoring of indicators related to community mobilization, diminished budgetary support for food, tea and incentives offered at drop-in centers, loss of funds for community outreach events, and limited flexibility within the budget for implementing organizations to fund these types of activities at their discretion. While still communicating support for strengthening community-based organizations, one informant from government acknowledged it as a lower priority:

"NACO encourages CBOs but the first priority is the program…The thing is you grow - the CBOs, you grow. But at the same time, don't forget the program – HIV prevention, STI prevention." - #7 NACP

While not all informants offered explanations for this difference in focus, those that did varied in their explanations of why this occurred. While a few Avahan informants perceived these community-oriented activities to be valued less by government than biomedical ones (n=2), there were also informants from both Avahan (n=2) and NACP (n=2) who perceived the diminished focus on community-oriented activities as a combined consequence of NACP having insufficient resources, flexibility, and technical expertise to be able to support the management intensive, complex nature of the interventions, as one informant explained:

"…and probably because of the sheer managerial support that the Avahan program could actually give to the NGOs, it could focus on these programs because these cost money. So when you are talking

about what crisis-management is, I think it's essentially, it boils down to the budgets and the money that is available. So, when you are talking about crisis management – how do you mobilize the police, and the municipal and the elite? These are urban and peri-urban programs so, how do you mobilize these key stakeholders and get them involved? And this costs money. Probably, I am not sure, probably they have more flexibility in financing these to the NGOs than the government." – #3 NACP

Further, at the time of transition, one informant highlighted that the government system was not technically prepared to support these interventions at the time of transition, explaining:

"I don't know how far it is feasible to the government or not. But positioning a specialist at the [NGO] level or the government level who would handle that community mobilization aspect. As I told earlier this is one area where government is not very comfortable doing that. They don't have the resources, number one, and they don't have skills also. This is something different ballgame for them. If donors can negotiate with NACO and then SACS and try for a position in SACS which can handle this process there, I think that's going to continue the program. " – #8 NACP

Separate from perceptions about the level of support for community-oriented activities post transition, many Avahan informants (n=10) and some NACP informants (n=3) emphasized the importance of continued community strengthening for long-term sustainability. In the Northeast, community mobilization activities were viewed as critical for assisting IDUs in realizing alternative life prospects, as one informant explained:

" …this is what will make or break a long-term sustainability of programs… [The IDU community's] involvement in service is one thing, but on the other when you look specifically at communities like IDUs, the only thing that they have in common is that they inject…. but once they come on to OST or once they switch on to another kind of drug, other livelihood options and all this open up for them…So, actually we talked about community mobilization, it's not just the NGO services and mobilization, it's helping a community get back on their feet, isn't it? So it's a long process. But it is so very essential. And it all starts with mobilizing the communities because it opens up their eyes in a different perspective: from a sense of hopelessness to something of hope."- #11 Avahan

In the South, community mobilization and empowerment activities were viewed by Avahan informants as key in allowing key population communities to become independent organizations capable of advocating for their rights and addressing their own needs. While this was a more ambitious goal than continued engagement in the Northeast, it was seen as feasible given the existing capacity of communities, albeit not nearly complete at the time of transition. As one Avahan informant reflected,

"…for many CBOs, although we organized them into community based organizations, the ownership has not yet come to the level that we would like them to. That means, this program is our program. We need to make sure that the communities are healthy…For us we need to do. That ownership has not yet really ingrained into the communities also. They see that it is a program, which is a program. But not necessarily that it is there for themselves." – #10 Avahan

Avahan informants explained that although BMGF had committed additional support for community mobilization activities for one year post-transition, they remained concerned that it would not be sufficient to ensure communities remained motivated, engaged, and empowered to protect themselves from risk of HIV. Thus, diminished support for community mobilization and empowerment activities was perceived as a significant threat to sustainability in retaining demand for HIV prevention services and, ultimately, sustained behavior change in key population communities.

Discussion

These findings offer insight into the challenges involved in transitioning a donor-funded program delivered through a parallel system to an existing publicly funded program delivered through a national public health system. Key informants on both the Avahan and NACP "sides" of transition described challenges arising from the lower costing structure, more limited flexibility of budgeting and implementation, and limited technical expertise with community empowerment activities within NACP. These challenges were associated with programmatic changes including lower investment in program management, interruptions in the delivery of context-specific activities, heightened barriers to innovation and data-driven change, and diminished support for community mobilization and empowerment activities. While there was high consensus on the ways in which the program changed, not all changes were perceived to present similar magnitude of threat to sustaining reductions in HIV incidence long-term.

These findings corroborate changes in budget, flexibility and community-oriented activities identified through evaluations of the Avahan transition[31,32] and add further insight into the

interpretation of these changes by illuminating the nature of the challenges and the perceived significance of different types of changes.

This study benefitted from perspectives of key informants from both Avahan and NACP, but has several limitations with respect to the views it reflects. Although multiple stakeholder groups were included, this study does not represent the perspectives of those involved in frontline implementation. This was a deliberate omission in aiming to reach informants with an overarching perspective on the challenges of transitioning to the national system and potential threats to long-term sustainability, yet it may under-represent programmatic changes that were more acutely experienced by stakeholders on the frontline of implementation, and misrepresent the perceived magnitude of threat presented by these changes. A complementary study of key population experience of transition offers additional insight in how these changes were experienced at the frontline, particularly the diminished support for community empowerment interventions.[35] Further, although none of the changes described here were unique to either Avahan or NACP perspectives, the majority of key informants represented perspectives from the "Avahan side" of transition, and several informants affiliated here with NACP had prior experience working with Avahan and deep familiarity with Avahan implementation. It is possible that these findings under-represent the diversity of views that may be held by those on the "receiving" side of transition. The changes and potential threats to sustainability identified in this work are thus examples of possible changes and threats to sustainability, but in no way exhaustive or definitive of the ways in which transitioning from a parallel, donor-supported system to a national system may present threats to sustainability. Finally, as acknowledged earlier, the Avahan transition experience had many contextual factors that may not be mirrored in other transition settings. Avahan was distinct with respect to its large resource base, flexibility, and tailored community approaches; India similarly represents a specific context of being a middle-income country with a particularly large and heterogeneous population, and a national HIV/AIDS program with experience implementing programs for key populations. Nevertheless,

the Avahan experience has multiple implications for future transitions in less exceptional contexts.

Avahan initially sought to achieve high impact quickly and was designed with the purpose of scale-up, investing as needed to fill gaps in capacity and coverage of the national public health system. These findings suggest that even when there have been significant investments in capacity building and systems strengthening prior to transition, it may not be possible to transition programs developed through a parallel, donor-supported system without first adapting the program to "fit" within the constraints of the host country health system. Other programs that have been developed through donor-supported parallel systems, like many PEPFAR programs, may experience challenges with respect to transitioning to national delivery systems.

While Avahan had high financial allocations for program management that exceeded those of India's relatively well financed program, more modest programs may require even greater down-sizing in order to fit within the tighter budgetary constraints of lower income countries. Given concerns for internal "brain drain" and existing challenges retaining highly skilled personnel within the public system,[24,36-38] aligning donor-supported initiatives to the budgetary constraints of publicly financed programs may similarly reduce availability of human resources, and management personnel may be an additional cadre that is particularly hard to retain in the public sector.

Similarly, the challenges related to flexibility may have been exacerbated by Avahan's high flexibility, while India is a particularly large and diverse country that may require a greater level of standardization than smaller, more homogenous countries. However, there may be still be discrepancies in flexibility between less flexible donor-supported initiatives and national systems in other contexts when transition involves shifting from a specialized focus on specific sub-populations or geographic areas to programs that cater to a broader, more heterogeneous population. Transitioning to a program that covers a broader are or more diverse populations may

require a level of standardization that could result in disruptions of activities tailored to populations with specialized needs.

Finally, although NACP had prior experience implementing programs for key populations in a concentrated epidemic, the differential expertise with biomedical interventions compared to community mobilization and empowerment interventions suggests that even programs that share a broadly similar focus may support different activities, and thus may require extended efforts in capacity building and technical support for unfamiliar types of interventions.

The Avahan experience additionally points to several possible roles donors can continue to support post-transition that may mitigate potential threats to sustainability. For example, the one year period of post-transition support offered by BMGF temporarily extended support for community mobilization activities to at least delay and potentially mitigate negative consequences of having diminished support for these activities under NACP. While these findings suggest that a limited period of post-transition support may not be sufficient to eliminate threats to long-term sustainability, continuing donor support for some time after transition may be important to prevent and to some extent minimize negative effects of change in other transition settings.

Further, the Avahan experience suggests that reconciling differences in financial resources represents only part of the challenge of sustaining program impact through transitions to in-country health systems. While NACO could potentially have mobilized and allocated more resources towards management, and with extended planning, some of the context-specific activities of the Northeast may have been adopted prior to transition, preventing changes related to flexibility may be more difficult to address. Donors and other actors with more flexible resource commitments may be needed to support operations research and innovation for programs working in highly variable risk environments that stretch the limits of a standardized approach to implementation. The challenges of maintaining flexibility have been previously recognized with

respect to the process of scale-up,[39] yet this work suggests that flexibility and adaptation may also be relevant considerations for sustaining impact after scale up.

Technical expertise for interventions addressing social risk factors, such as the community mobilization and empowerment activities supported by Avahan, may be a further area for continued donor support. Despite sharing a focus on targeted interventions for high-risk groups, NACP had limited experience implementing community mobilization and empowerment activities, relying on continued support from BMGF to continue community strengthening activities. While one could argue that transition simply occurred before sufficient capacity-building for these sorts of interventions had occurred, it is also possible that the complex, cross-sectoral nature of community mobilization and empowerment interventions [40] requires greater flexibility and coordination than institutions with an HIV-focused mandate can take on alone. PEPFAR's experience transitioning some responsibilities for orphans and vulnerable children programming, which, like the community empowerment activities can involve working across multiple sectors to address social and economic risk factors, has shown that building relationships across multiple social sectors can be beneficial.[41] Donors may have opportunity to enhance the sustainability of these interventions by making efforts to identify diverse sets of actors with complementary skills who may share an interest in supporting these activities and building relationships between these actors prior to transition.

At the same time, while there was high consensus among the informants with respect to the challenges of transitioning from Avahan to the government implementation system and the resulting programmatic changes, the variability in the magnitude of the perceived threat associated with these changes suggests that some changes may be more important to avoid than others. Of the changes reported here, the ones provoking the greatest concern from informants were the limited flexibility to adapt activities in response to contextual changes, and the limited ability to support continued community mobilization and empowerment activities. Both of these

were seen as threats to long-term sustainability: the former by compromising the ability to remain effective for populations with specialized needs and through changes in the risk environment that occur over time, and the latter by undermining the demand-generation aspect of programming that would keep service utilization high. These concerns suggest several possible implications for long-term consequences of programmatic changes following transition: 1) it may be that these types of changes are significant threats to long-term sustainability and their consequences on HIV outcomes are not yet apparent, or 2) it may be that while these changes have some negative consequences for program quality and demand for services, the consequences are not strong enough to threaten the sustainability of long-term outcomes. This uncertainty makes it particularly challenging to determine whether specific changes in a particular context constitute threats to sustainability, and suggests it may be important to continue to monitor a wide variety of indicators post transition to determine whether the changes may have negative consequences in the long term.

Measuring short-term output indicators, such as the measures of coverage and condom distribution for transitions of HIV prevention programming like that supported by the Avahan Initiative, does not indicate other potentially significant outcomes of transition, for example, whether the same individuals are using services post transition as opposed to new individuals, whether skilled personnel stay in their positions post-transition, and whether previously marginalized individuals retain a greater agency in the promotion of their own well-being. Indicators reporting on user-retention, social stigma, health worker turnover, and individual behavioral indicators, for example, may capture some of the potential changes of transition that may not be immediately evident in short-term output indicators. For programs with interventions addressing social and economic risk factors, such as the community mobilization and empowerment activities supported under Avahan, these types of indicators may be especially important to ensure transition does not reintroduce individuals to vulnerabilities that contribute to HIV risk.

Moreover, the perspectives of key informants from the Avahan transition suggest that in order to understand whether transition will introduce programmatic changes that may undermine sustainability, it is necessary to first understand how the program being transitioned fits within the context of the epidemic and the capacity of the existing health delivery system. In contexts where epidemics are uncontrolled and risk environment dynamic, transitioning to government systems may have significant consequences for quality and impact, which could be mitigated by transitioning at a later point in the evolution of an epidemic. It has been argued that the determination of when to reintegrate programs with national health systems is context dependent, and should include considerations of feasibility, as well as the existence of clear plans to manage integration and ensure continued monitoring and evaluation to detect lapses in quality or performance that occur in the process.[42]

In contexts where community empowerment remains low, changes in community mobilization activities and demand-generating activities generally may present more significant challenges to continued utilization and similarly constitute a persistent threat to sustainability of impact. While potentially more complex and with longer time horizons than biomedical interventions, the perspectives of informants in this case would suggest that continuing to support community empowerment activities and interventions that address structural risk factors is critically important to sustaining gains in HIV prevention within marginalized and vulnerable populations.

Ultimately, this work suggests that prior to any transition, it will be important to consider which aspects of a program are critical to its effectiveness, and the extent to which they fit within the constraints of the system to which it is transitioned. Recognizing the ways in which aligning with host-country systems is likely to induce change in the program can help inform a process of "down-sizing" or "right-sizing" in a way that limits the introduction of changes that potentially undermine sustainability. While it may not be possible to fully understand how programs will change post-transition, making an effort to understand likely changes prior to transition may also

facilitate discussion of the realistic outcomes of transition and the identification of a transition strategy most likely to enhance the long-term sustainability program outcomes.

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Paper 3: A responsible exit: exploring the normative basis of donor agency responsibilities at the end of a programming engagement

Abstract

This article considers the ethical responsibilities relevant to donor exit, the process through which donor agencies end support for health and development programs. Motivated by a real-world case example, this article identifies vulnerability to threats to basic well-being as one morally relevant feature of donor exit. This article critically considers two normative theories that may support the premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit. Leif Wenar's *Least Cost Theory* is argued to provide a compelling basis for distributing responsibilities in the context of exit. Drawing from a real-world case example of donor exit, the practical implications of applying the *Least Cost Theory* are explored. The argument concludes with preliminary recommendations for donor agencies seeking to discharge their responsibilities prior to exit by empowering host country actors to effectively avert threats to basic well-being.

Introduction

Long-term sustainability of the benefits produced by health and development aid is a prominent concern in global health, particularly with respect to HIV prevention, care, and treatment. While donor investments in HIV prevention and control increased rapidly from 2003-2011, funding has remained stagnant or slightly decreased in recent years,[1,2] raising concern for the consequences of diminished donor support.[2-6] While the scale and gravity of the HIV epidemic has brought heightened attention to the challenges of sustainability and possible harms of diminishing donor resources, HIV is not unique in experiencing variable levels of support. All donor-supported programs are ultimately finite endeavors making the practice of ending effective programs a routine occurrence in both global and domestic health work. Yet despite the eventual necessity of ending support, the ethical implications of declining donor investments have been relatively little explored in global health and normative literature.

In global health the process of withdrawing resources from a programming context is known as donor exit. While there are multiple sets of "best practices" for exit,[7-10] they are generally recommendations for facilitating exit with little to no consideration of the ethical aspects of exit. Although many practitioners characterize exit as a difficult and sometimes painful process,[10] there is little guidance to inform what it means to exit *well* and what responsibilities global health funders owe to the populations their programs serve.

Within political and moral philosophy there are many potential accounts of responsibility that may inform guidance around the practice of exit, yet it is not obvious what the nature of donors' responsibilities would be. Accounts of global justice have discussed the responsibility of global actors, including governments, donor agencies, or other international institutions in the context of responsibility to initiate aid, with no clear consensus on either the scope or magnitude of responsibility for any global actor, much less international donor agencies specifically.[11] Further, there is little attention to what additional responsibilities donor agencies may take on *in the*

process of supporting aid projects, thus leaving unclear what might be required of them before ending an engagement in which they have achieved some benefit. Similarly, normative accounts of beneficence have been applied to understand the content and limit of the general responsibilities that individuals have to aid the global poor,[12] yet are also subject to debate. Many have argued that the extension of a general duty of beneficence to the global poor is simply too demanding to reasonably require of individual actors[13] and seems duly considered supererogatory or extending beyond what is morally required. Human rights frameworks offer an alternative frame to consider donor responsibilities, yet rights-based approaches to health are concerned with creating conditions in which states can fulfill their responsibilities to their citizens for the fulfillment of basic human rights rather than the responsibilities of specific donor agents.[14]

In the absence of a clear theoretical approach to understanding responsibilities related to exit, this work instead begins with a premise inspired by a real word case example of donor exit and then looks to normative literature to identify a moral basis to support the premise. By identifying an approach that is consistent with the empirical premise and has theoretical support, this work seeks to provide a normative basis for the development of ethically informed practical guidance for donor exit.

This paper is constructed in three parts. Section 1 begins with the moral intuition of an informant from a donor agency with respect to a real-world example of donor exit. This section argues that the morally relevant feature of donor exit is the vulnerability of end-user populations that arises from being dependent upon others for the continued provision of services that effectively avert threats to their basic well-being. Framing donor exit in this way takes as a starting point that there unequivocally exists a responsibility to protect vulnerable populations from threats to their basic well-being, and it points the normative analysis toward approaches of allocating responsibilities to avert threats to basic well-being among multiple actors potentially in a position to do so.

Section 2 draws from the normative literature on distributing responsibilities to identify an approach consistent with the premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit. Through critical examination of multiple approaches to distributing responsibility, this section argues that Leif Wenar's *Least-Cost Theory* offers a compelling basis for the premise above.

Section 3 considers the challenges of translating the *Least-Cost Theory* into practice drawing from the case example of the Bill & Melinda Gates Foundation (BMGF)'s experience with the Avahan-The India AIDS Initiative to clarify the content of donor responsibilities in the context of exit. The paper concludes with an initial set of action-guiding recommendations for donors seeking to discharge their responsibilities prior to exit.

Section 1: The Moral Relevance of Vulnerability

This work is motivated by a real-world example of a BMGF funded project called Avahan-The India AIDS Initiative, which supported HIV prevention activities for high risk populations of female sex workers (FSW), men who have sex with men (MSM), transgendered persons (TG), and injection drug users (IDUs) in six states in India. BMGF focused on scaling up effective HIV prevention interventions in the first phase of implementation (2004-2008).[15] The second phase of implementation (2008-2013) engaged in a concerted effort to transfer the financing and management aspects of an HIV prevention program to the government and have it continue under the existing National AIDS Control Program.[16] The Avahan case represents a particular type of exit in which the donor agency, BMGF, sought to transfer the responsibility for continued program implementation to host-country actors in order to sustain the benefits that the program offered to high risk populations after the cessation of BMGF support. During an interview with an informant from BMGF, it was suggested that transition was motivated at least in part by a moral concern, as the informant expressed:

"… it wouldn't be the right thing to just build a program and then just leave. Because then you've actually, while you may have had impact in terms of the aversion of deaths and you know more AIDS cases, you've also got an entire community, you know, dependent on a roster of services that are critical for their health and their life…" – Donor informant

The above quotation suggests that the cause for moral concern in this case was the dependency of the communities that the program served on the continuation of these services. The context of donor exit could thus be characterized as one of vulnerability in the sense that the end-user communities are dependent on the actions of others for the continuation of services that avert threats to their basic well-being. Goodin defines vulnerability as a matter of being under threat of harm, and argues that the matter of vulnerability is indifferent to the cause of potential harms.[17p(110)] He suggests that vulnerability can arise either from manmade or natural threats, and that people are vulnerable to harms that come about through the omissions of others just as well as they are vulnerable to harms that arise through positive actions.[17(p100)] Dependency is identified as an example of vulnerability to harm that may arise from inaction rather than action.[17(p110)] Understood this way, it is the community's vulnerability to potential threats to health and basic well-being that may arise in the absence of donor support that gives rise to moral responsibility.

Indeed, approaching donor exit through the lens of vulnerability appears more defensible than alternative framings. Viewed through the lens of beneficence, the provision of aid – even the language of "donor" – suggests a voluntary act of good will. That a *donor* informant would express a moral concern (i.e. doing the *right thing*) in the process of exit would suggest it could be morally wrong to stop engaging in a non-obligatory act of assistance even after having a great deal of positive impact. This is, at least to some, a counterintuitive claim. While some theorists have argued that engaging in a non-obligatory act of assistance can and often does create additional responsibilities to do more to help,[18] it is not obvious that continuing to finance services that ultimately protect vulnerable populations from harm is one such additional responsibility. The notion that international donor agencies would take on this additional responsibility raises concern both because it again risks being too demanding to be obligatory and

because it runs counter to widely held claims in "statist" conceptions of global justice that argue governments, not international actors, have primary responsibilities to ensure their citizen's well-being.[19,20]

Yet, if the responsibilities relevant to exit are understood as responsibilities for protecting end-user populations from harms to basic well-being, the issue in the context of donor exit is not *whether* the end-user communities ought to be provided with the services they need to protect themselves from the risk of HIV and related threats. Theories of global justice, duties of general beneficence, and human rights all agree that individuals ought to be protected from threats to basic well-being. The normative question relevant to donor exit is rather *who*, of many possible actors, holds responsibility to ensure that these individuals are protected from threats to basic well-being?

The remainder of this paper takes steps toward resolving this question. In the following sections, the morally relevant feature of exit is taken to be the vulnerability of the individuals served by donor-supported disease prevention programs to threats to basic well-being, and the objective of the analysis is to understand whether and to what extent donor agencies are responsible for protecting the vulnerability of the end-user populations by ensuring that the threats to basic well-being that have been averted by their programs remain averted after exit.

As a disclaimer, this approach to donor responsibilities does not preclude the existence of additional responsibilities that donor agencies may have arising from other moral concerns. For instance, while this argument considers the circumstances in which donors may have responsibilities to continue to protect end-user populations from threats to basic well-being in contexts where end-users are dependent on donors for the aversion of such threats, it is also possible that donor agencies would have additional responsibilities to compensate for harms produced through their actions, and potentially other responsibilities. The scope of this argument is confined to the subset of responsibilities arising from the dependency of end user populations on the actions of other actors for the aversion of threats to their basic well-being.

Section 2: Characterizing Donor Exit as a Problem of Distributing Remedial Responsibilities and Defending the Least-Cost Theory of Allocating Responsibility

This section considers the normative literature to identify an existing theory that would support the premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit.

There are several background features of the context of donor exit that are important to keep in mind when considering the normative basis for this premise. First, in any developing country context, there are many actors potentially in a position to provide services needed to ensure the basic well-being of vulnerable end-user communities. Country governments, multiple international donors, international or domestic organizations involved in service delivery, front-line service providers, and at-risk individuals themselves are all potential agents with some relationship to the vulnerable end-user communities that might give rise to responsibilities to protect them from harm. Further, the populations in the Avahan case example were considered most at-risk populations, signaling the extent of their exposure to threat. Many were considered to be at once economically poor, socially marginalized, and engaged in behavior patterns that put their health at risk. Thus, the context is one in which the population regularly experiences threats to their basic well-being and in which there are multiple agents potentially in a position to avert them.

In the normative literature, this context aligns with the problem of "remedial responsibilities" explained by David Miller in "Distributing Responsibility,"[21] as well as Leif Wenar's *Least Cost Theory* of assigning responsibility to avert threats to basic well-being described in "Responsibility and Severe Poverty."[22] Both Miller and Wenar are concerned with situations in which people are deprived of basic requirements for living decent lives and no one disputes that their situation ought to be remedied, but yet it remains unclear who is morally responsible for ensuring they are protected from harm and threats to their basic well-being. Thus, the challenge of assigning

responsibility to a particular agent in the context of donor exit is conceptually similar to the problems motivating both Miller's and Wenar's approach to distributing responsibility.

While there are many similarities in the arguments made by Miller and Wenar, they ultimately come to different conclusions; and as will be argued below, the *Least-Cost Theory* provides a more secure basis for the premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit.

Miller develops a theory to identify agents that hold remedial responsibility which he describes as follows: "...to be remedially responsible is to be picked out, either individually or along with others, as having responsibility toward the deprived or suffering party that is not shared equally among all agents." [21(p468)] Miller develops the *Connection Theory* of distributing remedial responsibilities by systematically considering four principles he identifies as plausible candidates for guiding the assignment of responsibility: *causal responsibility,* which assigns responsibility on the basis of direct contribution to harm; *moral responsibility*, which assigns responsibility on the basis of indirect contribution to harm; *capacity,* which assigns responsibility on the basis of ability to remedy harm; and *community,* which assigns responsibility on the basis of the connection and history of interaction shared with the agent experiencing harm.[21] He ultimately concludes that each of these principles may be appropriate in different settings and that none is appropriate for all settings; rather, the appropriate principle for assigning remedial responsibility will vary from case to case and should be determined by the strength of the relationship between actors and those in need.[21] The *Connection Theory* therefore recognizes a plurality of principles that may assign responsibility by allowing for different principles to guide the assignment of responsibility in different cases. Miller acknowledges that the principle that assigns responsibility to a specific agent in a given case is determined by shared moral intuitions

about which actors hold the strongest relationship, or "connection," to the individuals under threat.[21]

Wenar's *Least-Cost Theory,* in contrast, argues that responsibility for averting threats to basic well-being should always be located in the agent who can most easily avert the harm, all things considered, which is described as the *Least-Cost Theory* to allocating responsibility.[22] In order to see how this diverges from a simple adoption of Miller's *capacity* principle, it is necessary to describe Wenar's argument in more detail. According to Wenar, *the Least-Cost Theory* aligns with everyday intuitions about how we assign responsibility to avert threats to basic well-being, and he develops his argument around several everyday examples. As a general norm, he argues, competent adults are deemed responsible for protecting themselves from harm. Where this is not possible, for example, in situations where adults interact with others and rely on them to refrain from inflicting harm, or where individuals are incapable of protecting themselves from harm, assignment of responsibility steps back to the agent who can most easily avert the harm. Wenar develops examples using traffic laws, where responsibility is assigned to each driver to refrain from colliding with the car in front, and conventions of parental responsibilities that assign parents the responsibility to feed their children. In this way, the least-cost approach can identify roles such as "drivers" or "parents" that have predictable responsibilities and thereby allow for easy assignment of responsibilities.[22]

For predictable threats, such as those from known hazards, Wenar offers the concept of "systems of roles," through which multiple actors are assigned different responsibilities on the basis of the role they are best situated to fill, and which, taken together, effectively avert threats to basic well-being. The example Wenar develops to illustrate role responsibility is the way organized societies avert threats of fires: firefighters are in the role responsible for actually putting out fires, while government agents are assigned the role responsible for ensuring adequately trained and equipped firefighters, and civilians are assigned the role responsible for

paying taxes to provide the resources for government to support firefighters.[22] Thus, the system represents a distribution of responsibilities based on what each can do with least-cost, all things considered, representing the most efficient system that effectively prevents threats to basic well-being. A final element of the *Least-Cost Theory* is Wenar's notion of primary and secondary responsibility. While the *Least-Cost Theory* assigns responsibility first to the agent most proximal to the threat, so-called *primary* responsibility, the assignment of responsibility shifts to the next-most-proximal agent or role when the primary agent is either unwilling or unable to avert the threat. This more distal agent then takes on *secondary* responsibility for averting harms to the individual under threat. Wenar's example of vulnerable children illustrates this concept: parents are assigned primary responsibility for protecting their children but when for whatever reason they do not, that responsibility shifts outward, to a family member, to their community, and eventually, if no agent can satisfactorily protect the child from harm, the responsibility falls to the state.[22] Although the responsibility of these agents is secondary to that of parents, they are nonetheless responsible for the aversion of threat to basic well-being as the most proximal agent to the threat who is both willing *and* able to do so. Thus, like Miller's *Connection Theory*, Wenar's *Least-Cost Theory* places priority on assuring that the threat is actually averted by allowing responsibility to be assigned to more distal agents even if it is not their primary responsibility.

Up until this point, it seems that both Miller's *Connection Theory* and Wenar's *Least-Cost Theory* could both support the original premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit. According to Miller, the *capacity* principle that connects donor agencies to the end-users their programs serve would have to be shown as the strongest connection from among others available in the setting - stronger than connections characterized by the principles of *community* or *causal responsibility*. If this were true, Miller's

Connection Theory would support the premise that donor agencies have a responsibility to avert the threats to basic well-being for which they have the capacity to avert, essentially by continuing to provide the resources for effective programs. Similarly, Wenar's argument would assign such responsibility to donor agencies if it were the case that it would be easier for the donor to provide the resources necessary to effectively avert harms to basic well-being than for other agents.

While both may seem reasonable arguments at first, further consideration of the two approaches shows how they begin to diverge. While Miller acknowledges that in the case of immediate threats, the *capacity* principle ought to be applied to assign responsibility in order to ensure that those under threat of harm are "rescued," he argues that in many remedial contexts, such as those of persistent poverty, the threat to well-being, while real, is not urgent in the same way as rescuing someone from a fire or drowning.[21(p468)] Although those experiencing poverty are vulnerable to harm, intervention by a highly capable actor is unlikely to remedy the situation immediately. Thus, Miller argues, in less urgent situations, it may be more appropriate to apply other principles, such as *community* or *causal responsibility,* and not default to the *capacity* principle to assign responsibility. In this case, it would seem that donor exit is more similar to the less urgent scenario Miller has in mind: while the cessation of disease prevention program services may make end-users vulnerable to harm, their continuation will not alleviate such threats immediately– the risk is persistent and requires sustained investment. In such a case Miller's *Connection Theory* might instead assign responsibility to other agents who have a stronger relationship based on another principle. For example, it may assign responsibility to host-country governments, who, although in some cases are less *capable* than donor agencies to provide resources to continue services that effectively avert threats to well-being, may nonetheless by assigned remedial responsibility based on the strength of connection of shared nationality and *community.* In a similar way, the *community* principle might be applied to assign some responsibility to the implementing agencies that are connected to the end-user communities through years of shared experience during the initial period of donor-funding. In this case, while

it is recognized that these other actors may experience higher burden in protecting end-user vulnerabilities in light of their relatively lower *capacity,* Miller's *Connection Theory* would accommodate arguments claiming that it would be justifiable to impose this burden based on the moral significance of their relationship.

In contrast, Wenar's *Least-Cost Theory* is unwilling to compromise capacity to avert threats to basic well-being in order to recognize the moral significance of other types of relationships between agents. As Wenar's "stepping back" mechanism of assigning responsibility makes clear, the overarching concern to ensure the threat is averted by an agent both willing and able to do so effectively, even if the agent in the position to avert the threat with least-cost may not have the strongest connection to those under threat. Instead, the *Least-Cost Theory* has two ways in which agents with other meaningful relationships to those under threat may be assigned responsibility. First, the "system of roles" concept may distribute among multiple agents the various actions required to continue to avert a given threat. So while donor agencies may have responsibility to continue to provide resources to support continued programming, for example, implementing agencies, who are connected to the end-user populations by a principle of *community* or shared experience, would have responsibilities to continue to deliver high quality services and engage in other activities that are more easily fulfilled by actors with a more proximal relationship to those under threat of harm. Secondly, Wenar argues that the responsibilities assigned by the *Least-Cost Theory* can be discharged in one of two ways: direct aversion of threat; or, alternatively, empowering agents more proximal to the threat to be able to effectively avert it themselves, thereby transferring the responsibility towards the agents with primary responsibility to avert the threat. This mechanism effectively limits the demandingness of donor responsibilities by not requiring them to avert threats to well-being indefinitely, and at the same time, creates an incentive for capacity-building and empowerment of more proximal actors that is absent from Miller's *Connection Theory*.

It is this notion of shifting responsibility inward by empowering more proximal actors that provides the more compelling basis for the premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit. The *Connection Theory* may or may not assign donors such responsibilities, and if it did, would require them to continue to support programming indefinitely, until the threat is averted. However, the *Least-Cost Theory* allows donor agencies to discharge their responsibility through a process of capacity building, empowerment, and, if necessary, advocacy to ensure that more proximal actors are both able and willing to effectively protect the end-user populations from threats to basic well-being in the absence of continued donor support. This process of discharging responsibility by empowering others essentially creates a system in which the *least-cost* distribution of responsibilities assigns responsibilities to host-country actors without having to "step back," to use Wenar's term, to donor agencies. Further, the *Least-Cost Theory* assigns responsibility based on the efficiency of the system of actors and limits undesirable outcomes of assigning the responsibilities to avert threats to basic well-being to agents that may not have capacity to fulfill effectively or without excessive burden, which may result from relying on the strength of relationships in Miller's *Connection Theory*. As a result, Wenar's *Least-Cost Theory* of assigning responsibility to avert threats to basic well-being offers the more compelling normative basis for the premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit.

When operationalized in the context of exit, the *Least Cost Theory* would support the following argument: Donor agencies constitute a class of moral agents, or a 'role' in Wenar's terms, that are assigned responsibilities to avert threats to basic well-being in international settings when more proximal actors are either unwilling or unable to do so. When donor agencies are engaged in projects that effectively avert threats to basic well-being which are not being met by agents more proximal to the threat, they effectively function in the *Least-Cost* position to avert

those threats, and thereby take on responsibility to ensure that the individuals whom they are protecting from threats to basic well-being will remain protected from harm. When preparing to exit from a programming engagement, donor agencies may discharge this responsibility by either averting the threat directly, or alternatively, by empowering more proximal actors to avert threats to well-being. This effectively shifts responsibility inward toward the agents in the role with primary responsibility to avert the threats. Exit, then, becomes ethically permissible when a new agent is sufficiently empowered to ensure that threats to well-being will not be reintroduced following the cessation of donor support.

The next section takes steps towards developing action-guiding recommendations for donors seeking to exit in an ethically responsible way by raising and responding to some practical challenges of translating the least-coast approach into practice.

Section 3: Practical Implications of Applying the Least-Cost Approach to Donor Exit

This section discusses in greater depth the practical challenges and implications of operationalizing the *Least-Cost Theory* of assigning responsibility in the context of donor exit. We will consider four questions likely to arise in working towards action guiding recommendations for donor agencies:

1. *What counts as a threat to basic well-being?*
2. *How might a donor identify which threats it is responsible for averting?*
3. *If a donor seeks to discharge special responsibilities by empowering others, how can they determine which of the numerous more proximal actors they ought to empower?*
4. *How would one know when a more proximal actor is sufficiently empowered to protect the vulnerability?*

Each question is followed by a general response and then contextualized using examples from the Avahan case, explained in detail elsewhere [15,16], to further illustrate how the *Least-cost Theory* would translate to practical settings.

1. What counts as a threat to basic well-being?

Wenar's least cost principle of assigning responsibility applies specifically to a certain class of threats he identifies as threats to basic well-being. Taking the right to an adequate standard of living as his starting place, his concept of basic well-being is consistent with the notion that there are particular types of threats that are more serious, and more worthy of protection, than others. Yet Wenar offers no exhaustive or even exemplary list of such threats, leaving to other theorists the question of what constitutes a threat to basic well-being. This question is addressed in two parts: first by discussing the practical interpretation of "basic well-being," and then by considering what might constitute "threats to basic well-being."

Basic Well-Being: There are multiple existing normative accounts that may provide insight into the practical translation of "basic well-being," in both human rights theory as well as social justice theory. In *The Idea of Human Rights,* Beitz characterizes human rights as protections of "urgent individual interests" against standard threats to which individuals are vulnerable.[23(p109)] Beitz suggests that things like personal security and liberty, adequate nutrition, and protection against arbitrary use of state power would be considered urgent interests in that they are widely recognized as important to most lives; noting that not everyone needs to consider something an urgent interest, but that one ought to be able to understand why some would consider it urgent. Shue's minimalistic concept of basic rights, which he defines as rights necessary for the enjoyment of other rights, gives similar priority to states of physical security, subsistence, and participation, including political participation.[24]

Similarly, there is an emerging consensus in social justice theory suggesting that "well-being" is a multi-dimensional concept inclusive of multiple distinctively meaningful functions of life which may operate with varying levels of importance in any particular life.[25-27] Taken together, these works offer significant support for understanding basic well-being as a composite measure of health and other centrally important functions, such as individual agency, personal dignity or

respect, and attachments or affiliation with others. The important implication for the context of donor exit is the notion that basic well-being includes more than a narrowly defined notion of "health."

Finally, the notion of "basic" also denotes that there is some distinction between basic well-being and well-being broadly construed. In their Twin Aim Theory, Power and Faden argue in favor of "sufficiency" for each dimension of well-being.[25] While they argue that sufficiency is context-dependent,[26(p60)] the general notion is that basic well-being can be understood as having "enough" of each dimension of well-being such that overall well-being is sufficient for a decent life. And while it is acknowledged that defining the exact threshold of sufficiency is very difficult in practice, there are many contexts in which it is clear that well-being is far below sufficiency, and these are often precisely those in which donor agencies work.

Threats to Basic Well-Being. Given the multi-dimensionality of basic well-being, threats to basic well-being would be constituted by policies, practices, and circumstances that undermine any dimension of basic well-being. Risk factors for disease would constitute threats to health but are not the only kind of threat that may be averted by a disease-prevention program. In the Avahan case, for example, threats to basic well-being would include the clear threat to health presented by risk of HIV infection. However, given the multi-dimensional nature of well-being, there are multiple other manifestations of threat in the Avahan context. Social stigma, if significant enough to deter FSW, MSM, TG, and IDU populations from accessing services, forming social attachments or participating in civil society, would be considered a threat to basic well-being. Police brutality threatening the personal security of sex workers would constitute a threat. Lack of education or skill that prevented gainful employment and a means to securing sufficient food and housing would similarly be a threat to basic well-being. Again, the practical implication for donor agencies is the need to recognize the underlying vulnerabilities of end-user populations and the extent to which a donor's exit may reintroduce threats to basic well-being.

2. How might a donor identify which threats it is responsible for averting?

The *Least Cost Theory* would assign donor agencies responsibility for averting only those threats to basic well-being that it is in the least-cost position to avert. While it may not be clear which threats these are, a conservative interpretation would suggest that a donor agency would assume responsibility for averting threats to well-being that are currently being averted by the program they fund *and* that no other agent is effectively averting for the current population of end-users. Thus, it would not suggest that a donor agency necessarily be assigned responsibility for averting all threats to basic well-being that its population of end-users may face. The intended consequence of applying the *Least Cost Theory* is rather to ensure that the cessation of donor support does not reintroduce the end-user population to threats to basic well-being from which they were previously protected by the donor.

Donor agencies would accordingly take on responsibilities to avert threats to well-being only if their programs are effectively averting them. The *Least-Cost Theory* generates no responsibility for donor agency to ensure the continuation of ineffective programs, nor to continue to provide services that avert threats to well-being when there are other, more proximal actors who are willing and able to avert them with no external assistance.

With that in mind, a critical part of preparing for exit is understanding the multiple ways in which the current program affects the well-being of the target population in order to identify precisely which threats a given donor agency is responsible for averting either directly or by empowering others. Outcome and impact evaluations are one tool that could inform donors of the threats their programs are currently averting; however, in order for evaluations to successfully identify the threats to well-being, it would need to look at more than health related outcomes – as noted above, there would need to be ways to tell whether the program averted threats to other dimensions of well-being. Many health and development programs include a variety of interventions, some of which address health needs directly, but others of which work through more complex social pathways to influence health outcomes. In the process, they may

intentionally or unintentionally have impact on other dimensions of well-being. Thus, to fully understand the impact of a program may require empirical work that engages end-users directly in describing how the program affects their well-being.

For instance, Avahan programming was primarily developed to control the spread of HIV in key populations in India. However, the Avahan Initiative also supported community-oriented activities to address underlying vulnerabilities of key population communities. For female sex worker populations, for example, the program initiated community mobilization and empowerment activities to reduce violence, including the support of crisis response centers, legal literacy and advocacy training. These interventions were important not only for gaining the support from at-risk populations that later generated demand for biomedical and behavioral interventions, but for their independent value of averting threats to personal security and individual agency. Thus, assuming no other actor was providing similar protections from threat to personal security and individual agency, donor agencies would be responsible for ensuring that these threats also remain averted after exit.

To determine which threats to basic well-being a donor agency is responsible for averting, then, would require proactive efforts to understand which threats are averted by the donor-supported program, and further, whether the donor is the only actor currently averting those threats. Donor agencies can begin to understand the full range of threats to basic well-being which their programs avert by designing and implementing evaluations that would identify impact on multiple dimensions of well-being. Further, donor agencies would also have to engage in dialogue and coordination with other in-country actors to determine whether the threats would likely remain averted in the donor's absence. Importantly, these efforts would have to occur well in advance of exit in order to not only identify the responsibilities one has but allow time to sufficiently empower others to transition the responsibility as needed.

3. *If a donor seeks to discharge special responsibilities by empowering others, how can they determine which of the numerous more proximal actors they ought to empower?*

According to the *Least-Cost Theory,* Wenar suggests that responsibilities that have been shifted to a distal actor with secondary responsibility, such as a donor, should ideally be transitioned inward towards the actor with primary responsibility. To determine who holds primary responsibility for averting threats to basic well-being we can refer back to Wenar's construct of "role responsibility" and systems of roles, under which responsibilities are assigned to individuals according to their belonging to a general category of roles that would be able to avert a threat with least burden.[22] For health and development programs, the role of financing health programs is generally assigned to governments or private sector actors or some combination of public and private actors. Delivery of services is assigned to a group of trained providers supported by implementing organizations that may be either part of public system or grantees of the government. Responsibility for engaging in healthy prevention behaviors may be assigned to at-risk individuals. The system of roles that results in the aversion of a threat with least burden may differ from place to place, and the overarching implication of this approach is that a donor agency would need to understand how the activities of a program align with the capacities of the agents present in the program setting. Because a donor program may fill many roles in terms of threat aversion – for example, providing monetary resources as well as managerial expertise and support for key personnel – it may be that shifting responsibility to the role with primary responsibility may involve empowering multiple sets of actors each filling only the roles they can do with the least burden.

In transitioning the Avahan Initiative BMGF identified two sets of actors to take over certain responsibilities, which were referred to as "natural owners." Informants from BMGF described the process as essentially two transitions: transition of financing and management responsibilities to the government, and transition of demand-generating and advocacy, including to some extent implementation of activities, to at-risk communities. This is reflective of the system of roles

concept described by Wenar in which different actors take on the specific roles they are in position to support with least cost. Informants described government as a natural owner given its unique access to resources and its national reach needed to implement an initiative of Avahan's size. Key population communities were similarly identified given their central stake in the continuation of services - ultimately, they are the agents most proximal to threat and are responsible for doing what they reasonably can to protect themselves from harm, including taking a role in mobilizing their peers and eventually developing the capacity to run organizations that meet their needs.

Interestingly, while Wenar suggests responsibility ought to be transitioned inward, the key objective of the *Least Cost Theory* is to ensure that threats to well-being remain averted. If there is no more proximal agent who is willing to take on responsibility or if sufficient empowerment is not feasible with a reasonable level of effort, then the *Least Cost Theory* would suggest that transitioning inward will not result in a most efficient system of averting threats to basic well-being. Further, the *Least-Cost Theory* leaves open the possibility of a lateral transition of responsibility to another donor agency or other actors with *secondary responsibility* who are willing and more easily capacitated than host country actors who are more proximal to the threat. This option would not accomplish the long-term objective of transitioning responsibility to the agent with primary responsibility, but may fulfill a donor's ethical responsibilities in cases where exit is certain and transitioning responsibility inward is overly demanding.

4. How would one know when a more proximal actor is sufficiently empowered to avert threats to basic well-being?

Arguably the most important, and challenging, aspect of applying the *Least Cost Theory* is determining when the responsibility to avert threats to well-being has been fully discharged. Because in most cases it will not be the case that the threat to basic well-being is completely averted - short of eradicating disease and eliminating poverty - discharging responsibility will likely occur through the act of transitioning responsibility to another actor willing and able to

avert the threats to basic well-being which a donor agency previously averted. Following Wenar's approach of transitioning responsibility inward, this will involve empowering host country actors to be able to do so, which could consist of a variety of actions consistent with organizational and technical capacity building, resource mobilization, advocacy and policy development, and other efforts that work to build willingness and capability to effectively avert threats to basic well-being.

Multiple development tools exist to facilitate assessment of organizational capacity,[28] health system strengthening,[29] good governance and democracy,[30] and progress towards the realization of human rights.[31] However, there currently is no universal standard for measuring capacity at a system, institutional, or individual level, nor consensus around the benchmarks that indicate sufficient strength to avert specific threats to basic well-being, which would likely vary widely from place to place. Despite the plethora of tools to measure capacity, the question still remains: what would indicate sufficient empowerment to effectively avert threats to well-being?

One possible indication of sufficient empowerment would be ensuring that the new agent to whom responsibility is transferred would be able to avert threats to well-being without exacerbating other threats, in other words, to be able to avert the threat without introducing another. This is similar to the concept of inverse cross-category risk described by Wolff and de-Shalit, which refers to risks that arise from efforts to mitigate a different type of risk. [26(p70)] For example, the Avahan Initiative supported service delivery at program supported clinics with drop-in centers, which were physical spaces in which otherwise marginalized populations could come at their convenience, without threat of stigma or discrimination, to receive care and interact with other individuals with shared interests. This safe physical location served to avert threats of stigma and discrimination, and at the same time, promote well-being by enabling marginalized populations to form social affiliations and receive a level of dignity and respect otherwise lacking in their lives. In the process of transitioning responsibility from BMGF to the Government of India, a number of program-supported clinics were closed to reduce costs, and end-users were

instead referred to government clinics to receive services. According to this preliminary standard of determining whether a new actor is sufficiently empowered to fully discharge a donor agency's responsibility, the referral to government clinics would have to ensure that the services needed to avert threats to health remain accessible, and also that the transition to government facilities does not reintroduce threats to personal security, dignity and affiliation that were protected by the safe, stigma-free environment the program-supported clinic and drop-in center. For example, if social stigma towards individuals served by a donor-supported program remained so high at the time of transition that end-users would forego access to services provided at government clinics, they would essentially be put in a position of having to trade-off protection from threats to health for protection from threats to respect, dignity, and affiliation. In such a case, this standard of determining empowerment would suggest that government actors would not be sufficiently empowered to avert the threats to basic well-being of end-users that had previously been averted, and that additional support would be required to ensure end-users could receive services free from such threats. This might include support for alternative service venues, continued support for structural interventions to reduce stigma, or some combination of actions that effectively work to secure continued access to services without compromising other aspects of basic well-being. Conversely, if end-users accessing services at government facilities did not incur threats to other dimensions of well-being that were previously protected, it would be an indication that government actors are sufficiently empowered to take on this responsibility, and donors would have discharged their responsibility. The multi-dimensional understanding of well-being suggests that the cessation of a particular program activity in conjunction with donor exit is not necessarily a threat to basic well-being, nor is the continuation of an activity necessarily indicative of the continued aversion of a threat to basic well-being. Instead, the multi-dimensional nature of basic well-being results in a more nuanced relationship between a specific program activity and well-being, and part of the preparation for exit ought to include a careful

analysis of how the cessation of donor support will impact the multiple aspects of well-being experienced by end-users in the specific context of the program.

To put such an approach into action, it is necessary to have metrics that indicate more than a general capacity to deliver services, and specifically the capacity to avert threats to multiple dimensions of well-being. Given that discharging responsibilities through transition can involve multiple different sets of actors fulfilling different roles, it would also be necessary to consider each actor's level of capacity to avert threats to well-being separately. So for example, in the Avahan transition, discharging responsibilities to government and community actors would involve assessing government and institutional capacity to fulfill their roles as funders, program managers, and implementers separately from the capacity of end-user populations to advocate for the needs and hold service providers accountable for the continued provision of services they need for their well-being.

Determining which capacities are representative "sufficient empowerment" for government and institutional actors may be feasible given the available metrics for health systems and program performance, if approached with the intention of assessing threats to well-being. The exact indicators and level of performance would need to be identified on a case-by-case basis, depending on which threats to basic well-being were relevant. Developing a process to identify which tools and indicators would best address the capacities needed to effectively avert threats to basic well-being in a particular case is an area for further inquiry.

Determining how to assess sufficient empowerment at an individual level seems potentially more challenging partly because the capacity to avert threats to one's own well-being may be quite different in different settings. At minimum, end-users ought to be able to articulate their needs and advocate for the services they need to protect themselves from harm. Thus, some measures of advocacy capacity and behavior change may be important components for determining empowerment particularly for vulnerable and marginalized populations. As end-user

communities gain agency, they may reach a level of empowerment to engage in service delivery and implementation taking on a larger role in the aversion of threats to basic well-being.

The Avahan transition case provides one example of how empowerment might be monitored in preparation for transition. A specialized index was developed to assess "community ownership" and included measures of leadership, governance, decision-making, and capacity to engage with both state and other social actors.[32] The Avahan experience additionally showed that the process of empowering vulnerable communities to generate demand for needed services and to advocate for their rights can be a much longer process than that of empowering government institutions to have sufficient capacity to finance and deliver health services. BMGF invested in continued community strengthening activities for at least a year following the transition of financing and management responsibilities to government. BMGF's hesitancy to disengage while community empowerment remained relatively low further supports the notion that transitioning responsibility to more proximal agents before they are willing and able to do so effectively does not fully discharge a donor's responsibilities, and additional investment of time and resources may be ethically required.

Ultimately, the true indication of whether new actors have been sufficiently empowered is the continued absence of threats to well-being. Given that there may be a lag between the exit of a donor and the actual occurrence of threat, a final implication of applying the *Least Cost Theory* to assigning responsibility is that the exit should be a gradual process, and donor agencies who may have ethical responsibilities remain available to support local actors, even after responsibilities for continuing service implementation has occurred, to ensure that local actors are actually effective in averting threats to basic well-being.

Conclusion

This paper has explored the nature of the responsibilities that donor agencies may have in the context of exit, and argued that that Leif Wenar's *Least Cost Theory* of distributing responsibilities to avert threats to basic well-being provides strong support for the premise that

donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit. Further, this argument also suggests that donor agencies can discharge this responsibility by empowering more proximal host country agents to be able to avert the threats themselves. Through a process of sufficient capacity-building and advocacy, which renders agents more proximal to the threat both willing and able to avert threats previously averted by a donor-support program, donor agencies may effectively shift their responsibility inward toward actors better situated to perform the duties necessary to avert threats to basic well-being.

This analysis further provides practical insight into what an ethically responsible exit entails. In its basic application, the *Least Cost Theory* provides a moral basis for assigning to *donor agencies* the responsibility to ensure that resources sufficient to continue averting the harms threatening the well-being of end-users are committed prior to exit. Thus, rather than requiring implementing agencies to bear the sole burden of mobilizing resources to continue to implement services that effectively protect end-user populations from threats to basic well-being, the *Least Cost* principle would put the onus on *donor agencies* to identify, empower, and if necessary, convince a new actor to commit sufficient resources in their absence. As a result, the application of the *Least Cost Theory* ensures that vulnerable end-user populations are not re-exposed to threats to basic well-being after donors exit from a funding engagement.

Extending the application of the *Least-Cost Theory* in a more specified way gives rise to further recommendations about how donor agencies should approach the process of discharging their responsibility.

Understand how the program affects end-user well-being.

In order to determine which aspects of a program are important to continue to protect end-user vulnerabilities, donor agencies should approach the process of exit by understanding how the program affects end-user well-being. This could be accomplished by engaging in prospective, empirical evaluations using indicators that capture multiple aspects of basic well-being. These

may include evaluations not only of the program's impact on health outcomes, but also of the program's role in mitigating other types of threats, for example, those posed by stigma, discrimination, and violence. Further, it may require empirical research to understand the program's role in averting other threats to well-being identified from the user's perspective.

Identify what capacities are needed to continue to avert threats to well-being.

In order to know what more proximal actors need to be empowered to do, it is necessary to determine what capacities are necessary to avert the threats that a donor supported program is currently averting. While evaluations aimed at understanding threats to well-being may identify program components which need to continue, this step represents a more internal process of understanding the functions of the donor-supported program that are critical to averting threats to basic well-being. This will identify not only which aspects of programming need to be transitioned, but also provide insight into the types of capacities that host-country actors would need to have to effectively shift responsibility inward.

Identify actors within the existing system who can be empowered to take on responsibility with a reasonable level of effort.

In order to identify actors to whom a particular responsibility should be transitioned, donor agencies need to understand the local context in which a program operates, and determine who is best situated to take on the responsibility in question. Ideally, one could identify a host country actor who holds primary responsibility. If not, donor agencies may have to look to other actors who are both willing and able to take over responsibilities with a reasonable level of effort by the donor. This may be accomplished through dialogue and continued engagement with other in-country actors to determine what the strengths and interests are, and how much effort would be required to sufficiently empower them to take over the donor agency's role in averting threats to basic well-being. Determination of a "reasonable" level of effort is subjective, but ultimately, the donor agency ought to be realistic about the level of capacity-building it can support, and identify transition partners accordingly.

Determine when to transition using a variety of indicators that assess capacities to avert threats to well-being.

In order to determine when it is appropriate to transition responsibility to a new actor, there should be a reasonable level of confidence that the new actor actually will be able to fulfill the responsibility effectively. This will likely require consideration of a wide range of indicators to assess "readiness" to transition responsibility. While criteria for determining readiness for exit, or "graduation" as it is sometimes called, often include measures of economic strength and resource availability, the *Least-Cost Theory* would suggest that the capacity of a country government to fund a program is not enough; rather, it is the capacity of the entire system of roles that together contribute to the continued aversion of threats that needs to be considered. This would mean considering a broader scope of indicators, including but not limited to, the technical and organizational capacity of host country health systems, as well as behavioral indicators of at-risk populations to determine willingness to continue to engage with the program.

Exit gradually to ensure new actors effectively do avert threats to basic well-being.

Given the challenges of assessing "sufficient empowerment" a responsible exit will likely require a gradual process of exit in which a donor agency remains available to provide additional resources in the event that threats to basic well-being are reintroduced after transition. While this may be a substantially greater commitment than a donor may desire, it may lead to more realistic goals for projects constrained by a fixed timeline and budget, and ultimately, it may enhance the likelihood that exit does not reintroduce prior threats to well-being to the end-user populations they intended to benefit.

While these recommendations in many ways reinforce existing recommendations for exit, specifically, to consider capacity indicators in the consideration of "readiness" to transition, to allow time to build capacity prior to exit, and to exit gradually and on a flexible timeline, these recommendations go further in explaining why these practices are important. Furthermore, the underlying objective of existing recommendations is to sustain impact; considering the process of

exit through an ethical lens highlights the additional motivation of protecting end-users from harm in the process. By considering exit through the lens of transitioning responsibility for the continued aversion of threats to basic well-being, the process of transition becomes one of empowerment through which vulnerability is ultimately diminished as end-users and host country actors are able to effectively protect and promote their own well-being.

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Appendix A: Methods

Overview of Study Design

This dissertation included both empirical and normative projects. The empirical project sought to describe and understand the phenomenon of program transition with respect to the concepts of sustainability and ownership through a single case study of the Avahan Initiative's transition to local ownership. Methods were developed with guidance from Robert Yin's guide to case study research. Data collected for the empirical project included in-depth interviews with key informants representing multiple stakeholder views on transition; analysis consisted of multiple qualitative techniques to break down and reconstruct the data, including qualitative description, pattern-matching, and explanation-building.

The normative project aimed to explore the nature of donor responsibilities relevant to the process of donor exit and identify a theoretical normative basis to inform the development of action guiding recommendations for an ethically responsible exit. Methods followed an adapted version of a standard philosophical method of investigating specific types of responsibilities, and drew from the empirical data to inform practically relevant guidance.

This methods appendix provides an overview of the phenomenon of transition, provides a justification for the methodological approach, and details the procedures followed for case selection, primary data collection, and data analysis for the empirical project, as well as the process of philosophical analysis employed for the normative project.

Phenomenon of Interest: Program Transition

This case study sought to understand the phenomenon of transition, which has gained currency in light of increasing efforts to improve the sustainability of global health initiatives, and of HIV prevention and control in particular. Sustaining improvements in HIV control beyond the life of specific donor-funded health initiatives has been a persistent goal for global health initiatives,[1-3] yet one that has historically been overshadowed by the urgency of achieving results

quickly. Particularly for HIV/AIDS programming, donor-supported delivery systems have been the primary means for prevention, care, and treatment services, with relatively little investment in designing programs to be sustainable within domestic health systems.[4] Transition has thus emerged as a process of transferring responsibilities for program implementation from donors to in-country actors in an effort to promote sustainability, building country ownership and capacity.[5-8] Transition remains an ill-defined concept, however, as some have questioned the extent to which greater "ownership" by in country actors enhances sustainability,[9-12] and worried that premature transition may undermine, rather than enhance, the gains made in controlling the HIV epidemic.[13] This apparent tension between transitioning ownership of HIV programming and sustaining gains in HIV control suggests that the relationship between ownership and sustainability may not be straightforward, and points to a need for greater conceptual and practical clarity on the phenomenon of transition, the way in which it may enhance or hinder the impact of donor investments in HIV, and what responsibilities donors have for the long-term sustainability of their programs. The empirical project aimed to:

1. Identify the conceptual relationships between transition, sustainability and ownership.
2. Describe how programs change in the process of transition and the significance of change with respect to the sustainability.

The normative project aimed to:

3. Explore potential responsibilities donors may have for the long-term sustainability of their work in order to inform practical guidance for donors seeking to transition responsibly.

Methodological Approach: Empirical Project

This study employed a case study approach treating the Avahan transition as the main unit of analysis. According to Yin case study methodology is defined in two parts: the first part of the case study method involves defining the scope, the second part provides ways of handling the technical challenges of data analysis and design.[14(p16)] Case study methods are bounded in scope to research questions that aim to complete an in-depth investigation of 1) a contemporary

phenomenon, and 2) a phenomenon that occurs within a real-life context where the boundaries between phenomenon and context are not easily apparent. Given the highly contextual experience of program sustainability, case study is an ideal method to investigate the process of transition within the contextual factors to which it is bound.

Case study methodology is additionally characterized by specific approaches to data collection and analysis. Yin explains that because case studies are highly context dependent, there will be more variables of interest than data points available, which means that data collection will include multiple sources that ultimately converge through a process of triangulation.[14(p17)] For this study, key informants were the primary source of data and triangulation was employed in reference to the perspective from which informants experienced transition, representing multiple stakeholder perspectives including the "giving" side of transition (e.g. donor and donor-supported implementers) as well as the in-country partners "receiving" the program. Triangulation was also employed in reference to the conceptual frame of understanding; the phenomenon of transition was explored as it related to the concepts of ownership and sustainability.

Human Subjects Note

This project involved interviews with human beings and was therefore submitted for review to the Johns Hopkins Bloomberg School of Public Health (JHSPH) Institutional Review Board. The project assigned IRB # 4895 was reviewed and determined exempt on Feb. 28th, 2013 on the basis that the research collected data from humans and not about humans and therefore did not require IRB approval. As part of good research practices, oral consent was obtained prior to each interview **(Appendix A1).**

Case Selection

The Avahan transition was selected as a single case in which to explore the concepts of sustainability, ownership, and their relationship to transition. The Avahan transition was selected

for a single case-study approach for several reasons. First, as one of the first planned and well-documented transitions of a large-scale HIV program, the Avahan transition was unique in the level of investment given to transition and a case study of this transition offered revelatory value[14(pp51-2)] on its own. Second, because it was occurring in India, a middle-income country with a relatively strong health budget and health delivery systems relative to other countries in which large scale, donor-supported HIV program were occurring, the Avahan transition was also a critical case because it would provide insight into transition outcomes that occur in contexts where donors invest substantial resources and planning in the transition process *and* health system constraints are relatively low. Third, JHSPH had an existing relationship with BMGF through a contract to perform a structured evaluation of the transition,[15] which made the Avahan transition a convenient one in which to engage in further exploratory research.

Two smaller regions in which Avahan was implemented, the state of Andhra Pradesh in South India and the states of Manipur and Nagaland in the Northeast region, were chosen as sub-cases in which to explore the experience of transition in-depth.

These states were selected to provide maximum variation with respect to a) the key population served, b) the underlying organizational capacity the public health system, and c) differences in the timing and preparation for transition. Avahan programming in Andhra Pradesh served primarily female sex worker populations. South India is generally accepted as having higher institutional capacity than the Northeast, and a history of community based movements around other public health and social issues. The transition experience in the South was characterized by more or less timely execution and success in sustaining outcomes one year post-transition, as indicated by preliminary data collection from JHSPH colleagues. Avahan programming in the northeast region concentrated in two states, Nagaland and Manipur, and served primarily injecting drug user (IDU) populations. The Northeast is characterized by low institutional capacity, political instability, high level of social stigma, and experienced multiple

delays in the timing of transition, with transition occurring over a condensed time period of one year rather than the three rounds spread across four years, as occurred in the Southern states.

The case study sought to explore perspectives from the donor institution (BMGF), implementing partners (SLPs), and GoI counterparts about their understanding of the intended goals of transition and relationship to the concepts of sustainability and ownership, elucidate tensions or challenges experienced during the transition process with respect to concepts of sustainability and ownership, and explore perceptions of ethical responsibilities related to the process of withdrawing support from a long-term funding engagement.

Key Informant Sampling

Primary data included 22 open-ended key informant interviews. Sampling of specific key informants was purposive and driven by several considerations.

First, the researcher sought maximum variation sampling[16] with respect to the informants' position in transition, striving for diverse perspectives from both the "giving" and "receiving" side of transition. Informants were selected to represent perspectives from the Government of India (GoI), BMGF, and grantees managing the implementation of Avahan programming (SLPs) and/or the transition specifically (BMGF supported specific "transition managers" to oversee transition after the first round of transition in 2009). Informants from the GoI included one informant each from the National AIDS Control Organization (NACO) and State AIDS Control Societies (SACS), and four informants from Technical Support Units (TSUs) at the national and state level. From BMGF, informants represented perspective both from the head office as well as Program Officers working in two different states. Of the implementing partners sampled, participants represented perspectives from three different grantees (See Table 1 for participant characteristics).

Sampling was also limited by several constraints. Because the case study required deep knowledge of the transition and background planning, sampling was limited to individuals that

had been in some position related to Avahan or the National AIDS Control Program (NACP) for at least one year. Additionally, because the nature of the case study was an exploration of somewhat abstract concepts of sustainability and local ownership, informants were limited individuals having higher-level positions and greater opportunity to reflect on the underlying issues driving transition. Additional participants were identified by informants in the above groups as having key information relevant to the objectives of the study.

Participant Recruitment

Key informants were identified in consultation with JHSPH/Indian colleagues with existing relationships based on previous data collection for a BMGF-supported evaluation of the transition. The initial list of participants included key stakeholders with Avahan at the national and state level, in addition to persons involved in the planning and implementation of transition within the NACO of the GoI, and external to Avahan but active in the transition, such as individuals engaged in technical assistance to government or grantees at some point prior to or after transition.

Informants were contacted first by email with a general recruitment script **(Appendix A2)** describing the aims of the research and requesting participation in a 45-60 minute interview. A phone call followed the initial email if no response was received within 7 days **(Appendix A3)**. Of those contacted, all agreed to participate, although one was subject to multiple rescheduling attempts and ultimately not completed.

The distribution of informants by stakeholder groups and regions is listed in **Table 1.**

Table 1: Key Informant Sample Characteristics

Stakeholder Perspective	N	Region	Program Affiliation
BMGF	6	Multi-state	Avahan
State Lead Partners	10	South (n=5) Northeast (n=5)	Avahan
Government of India	2	South (n=1) National(n=1)	NACP
Technical Support Units	4	National (n=1) South (n=1) Northeast (n=2)	NACP
TOTAL	22		

In-depth Interview Process

One researcher (AP) conducted all interviews in English; 19 were conducted in-person and three over the phone. Interviews took place at various sites in New Delhi, Hyderabad, and Guwahati India, and one interview at the Bill & Melinda Gates Foundation headquarters in Seattle between May 1st and July 30st, 2013. Oral consent was asked of each participant before beginning the interview (**Appendix A1)**. Informants spoke in their professional role or with respect to their former role related to the Avahan transition if they had since moved to a new position. They were not asked to provide confidential or personally identifying information about themselves.

Interviews followed an interview guide **(Appendix A4)** that explored broad conceptual interpretation of transition, sustainability, and ownership as understood by key informants; their perspectives on the goals of transition; as well as their reflections on how the challenges associated with transition facilitated or limited the achievement of its goals. All interviews were transcribed by the researcher; names and any other personally identifying information that had arisen during the interview were redacted from transcripts, and they were uploaded to qualitative data analysis software Atlas.ti.

Prior to and throughout primary data collection, the researcher reviewed substantial documentation and additional data associated with the on-going evaluation of transition, including qualitative reports from longitudinal case studies supported by the larger Avahan evaluation occurring by JHSPH colleagues, initial measures of post-transition quantitative outcomes, as well as project documentation regarding transition planning, the Avahan mid-project evaluation, and published, publicly available reports on the Avahan Initiative. While these documents enriched the researcher's background understanding of the Avahan transition, these documents did not include significant content related to the conceptual understanding of the stated goals of "sustained response" and "local ownership" and thus were not considered data collected or analyzed as part of the case study. Qualitative data from the longitudinal case studies conducted for the overarching evaluation did include some content related to the changes experienced at the level of implementing NGOs. However, these interviews were conducted with informants from the implementing organizations, one level below the SLPs. While they were not reviewed as part of analysis, they did offer further validation of the changes and challenges related to transition reported by key informants in this study.

Data Analysis

In qualitative research, analysis occurs concurrently with data collection. Data analysis began with recording interview summaries and jottings after each interview. These activities helped identify initial patterns in the data and informed future interviews by identifying areas of informational redundancy and, conversely, areas of inquiry to continue to pursue, facilitating the determination of when informational redundancy had been reached. Because the first 18 interviews were conducted within a relatively short time period of five weeks, analysis during collection was limited to initial summaries and memos, with the bulk of analysis occurring after return from the field.

Data analysis included techniques for descriptive analysis, interpretative analysis, and philosophical analysis, corresponding to the multiple lines of inquiry pursued through the case

study. Analysis was guided by descriptive and analytic questions about the phenomenon of transition, including:

Descriptive:

- What were the intended outcomes of the Avahan transition?
- In what ways did Avahan programming change in the process of transition?
- How were the changes that occurred through transition viewed with respect to the sustainability of the program's impact?

Analytic:

- What conceptual understanding of "sustainability" and "local ownership" motivated the Avahan transition?
- What does transition have to accomplish, in terms of what is transitioned to whom, in order to achieve sustainability and local ownership?

Descriptive analysis. Descriptive analysis included identifying the intended outcomes of the Avahan transition as well as the types of programmatic changes that occurred as a result of transition. Descriptive analysis therefore focused on the content within interview data that corresponded to these topics. Analysis began with an initial or "first cycle" coding[17(p70)] that captured the main ideas in the text in response to the "what" questions of the case. First cycle coding included deductive codes based on interview guides to identify transition goals, types of changes, and challenges associated with aligning to the host-country system identified by key informants. Content analysis[18,19] as a method of qualitative description[20] facilitated the formation of descriptive summary categories, the outcomes of transition, types of programmatic changes, and perceived significance described by key informants.

Interpretive analysis. Interpretive analysis included some similar approaches as the descriptive analysis, but moved beyond description in order to abstract higher-level themes from the data in order to develop a conceptual model to relate the concepts of sustainability and ownership to the intended outcomes of transition. Similar to the process for the descriptive questions, initial coding was applied.[17(p70)] Initial coding followed broad deductive categories corresponding to interview topics including the goals of transition, the conceptual understanding of sustainability and ownership, and the facilitators and barriers of the transition process as

understood by informants. These categories were intentionally broad given that the nature of the project was to explore concepts and construct concepts informed by the collective experience of key informants. Based on initial application of categories to the data, a set of codes and sub-codes was developed (Appendix A5). Codes replaced categories and codes were further refined into a set of sub-codes (e.g., "ownership" was broken into two emic categories of codes corresponding to "government ownership," "community ownership;" "sustainability" was broken into categories of "facilitating factors" and "constraining factors.")

Once the new set of codes and sub-codes were applied to the data, a second level of analysis, or second cycle coding[17(p86)] involved examining patterns within and between codes and sub-codes. First the relationship between the parent code and related sub-codes was defined. For example, sub-codes of the parent code 'sustainability' were related as 'facilitating functions' or 'roles', sub-codes of the parent code 'ownership' were related as 'actions' corresponding to "responsibilities," and sub-codes for the parent code 'goals of transition' were grouped into sub-codes including 'continued delivery of services', 'maintained quality of services', 'retained capacity', and 'accountable relationships.' Narrative descriptions, analytic memos,[17(p91)] jottings[17(p93)] and data displays were used to further develop and refine these codes and sub-codes into emerging themes that characterized the concepts of sustainability, ownership, and described the goals of transition.

After developing themes for each concept, the process of explanation building[14] was used to identify the relationships between the concepts and develop a model that "explained" the intended outcomes of transition by relating *factors of sustainability* to the *actions of ownership* in a coherent way. This was a process of identifying patterns between and among parent codes and sub-codes and identifying whether and how some emerging themes were relevant across the concepts of 'sustainability', 'ownership', and the 'goals of transition'. For example, the theme of 'leadership' was found as important for both concepts of 'sustainability' and 'ownership' and

consistent with the goals of transition. In terms of 'sustainability', 'leadership' was a facilitator of sustainability in the sense of sustaining attention and priority to HIV prevention. In terms of 'ownership', 'leadership' was consistent with actions demonstrating the desire or want to take on responsibilities for continuing to support and finance program delivery and maintain its quality. In terms of the 'goals of transition', strong leadership was consistent with goals of continuing service delivery and quality because it was perceived as necessary to support resource mobilization and a commitment to continued quality. Similarly, the theme of 'ability to innovate and change according to data' was related to the concepts of 'sustainability' and 'ownership' and consistent with sub-codes of 'goals of transition'. In terms of 'sustainability,' the ability to innovate and change was described as a facilitator of sustainability. In terms of 'ownership', 'ability to innovate and change according to data' was consistent with several actions described as part of government ownership. 'Ability to innovate and change according to data' was also consistent with the goal of maintaining program quality. Identifying relationships across concepts and themes in this way led to the construction of a candidate model of program sustainability constructed in terms of roles and responsibilities and informed the placement of each role within the model.

A further step was to test the hypothesized relationships in the model against the data. This was an additional part of the explanation-building process of testing an initial proposition or explanation and against the data.[14(pp148-9)] This was an iterative process of rearranging and refining the components in the model to make it consistent with the data. Specifically, the relationships between particular roles and responsibilities in the model and outcomes of transition were tested against the description of the roles and responsibilities transferred through the process of "transitioning ownership" and its intended outcomes. This tested whether the model could "explain" how the process of transitioning ownership described in the case would result in the intended outcomes described. That is, this process ensured that the roles and responsibilities described by key informants in terms of "transitioning ownership" were captured by the model

and the relevance of each role with respect to an intended outcome of transition was similarly consistent with the configuration of the model; there were not key roles or responsibilities identified in informants' descriptions that were not somehow represented in the model; nor were there aspects of the model completely absent from description.

Identifying and Mitigating Threats to Validity

Yin identifies four dimensions that can be used to assess the quality of case study designs and the validity of the results they yield: construct validity, internal validity, external validity, and reliability.[14(pp45-9)] Miles, Huberman, and Saldana offer alternative set of corresponding criteria for qualitative research, which are credibility, transferability, dependability, and objectivity.[17(pp312-14)] The following section considers how the methodological design of this case study meets these criteria.

Construct Validity

The traditional view of construct validity is as a test of whether the researcher has truly measured the phenomenon of interest. While qualitative case studies do not "measure" with quantitative indicators, there is still concern that the phenomenon of interest is truly occurring in the chosen case.[14(p45)] In this case study, the construct of transition was itself under study given there currently is not a precise or universally accepted definition for it.

The Avahan case was selected in part because BMGF had a clearly articulated objective of obtaining a sustained response by transferring ownership to local actors, and therefore represents a case that can provide hypothesis-generating conclusions about a potentially generalizable phenomenon of transition. The construct of transition captured in this case study is strengthened by triangulating perspectives of multiple stakeholders involved in the process and therefore limits the potential bias of using only one perspective. By including in the findings of this case study a clear description of what the Avahan transition entailed, this case study makes transparent the

processes taken to constitute transition and allows outsiders to determine whether other case examples reflect the same underlying phenomenon.

Internal Validity/Credibility

The criterion of internal validity relates to the veracity of the conclusions made about the case. For qualitative work, this criterion is about whether the conclusions are believable from the perspective of those who participated. In order to enhance the internal validity of the conclusions drawn from this case study, several analytic techniques, including pattern-matching and explanation building were relied upon to ensure the findings accurately represent the data in the case.

External Validity/ Transferability

External validity relates to the transferability of case study findings. Similar to the consideration construct validity, this criterion is addressed by providing a rich description of what transition entailed as well as the context in which it occurred. This allows outsiders to understand the contextual factors that shaped the findings of the case, and determine the extent to which they are represented in another setting.

Reliability/Dependability

Reliability or *dependability* refers to the ability for another researcher to reach similar conclusions about the same case. The reliability of this case was strengthened by creation and use of several techniques to document and catalogue the process of the case study, including a case study protocol and case study database. The protocol includes detailed documentation of the collection of evidence (e.g., sampling criteria, interview guides, recruitment scripts, and guiding questions for analysis). The case study database is a catalogue of the documents showing the progression of line of inquiry, from initial research questions to the data collected through interviews (e.g. redacted transcripts), case notes, analytic memos and data displays, which were saved and easily available for consultation during the iterative process of analysis. Taken together, this demonstrates a consistent chain of evidence linking the initial research questions of

the case study to the case study protocol, primary data collected, analytic process and findings of the case study to enhance reliability.

Objectivity/Confirmability

The criterion of objectivity or confirmability has to do with the extent to which the researchers own biases may influence the finding. Throughout the research process, the researcher engaged in the practice of *reflexivity* to reflect upon the ways in which personal experiences shape interpretations and remain cognizant of these during data analysis in order to minimize negative effects of bias on data representation.

Methodological Approach: Normative Project

The normative aim of this dissertation was to characterize the morally relevant concern of the context of donor exit, and identify a normative basis for developing a practically useful account donor responsibilities related to the process of exit. The method of normative analysis for this aim applied a standard method of philosophical inquiry for analyzing a specific type of responsibility. The standard approach is to critically consider 1) why the responsibility should be said to exist, 2) what might limit the demands of the responsibility, and 3) how the contents of the responsibility would be specified.[21]

Because moral and political philosophy have only recently begun to address issues related to global health and global justice, there is not yet consensus about the kinds of responsibilities that are most relevant to the practice of global health aid, nor what they require.[22] As such, the approach to addressing the first criterion, *why a responsibility should be said to exist,* was to investigate a premise consistent with a moral intuition voiced in the empirical investigation of the Avahan Initiative's transition, and then critically examine existing normative accounts of responsibility to identify one that supports the premise. This process identified the normative concept of "vulnerability" as the moral concern in the context of transition, and specifically, the vulnerability of end-users to the donor agency's actions with respect to the services that protect

them from threats to basic well-being. This is consistent with a type of responsibility in the normative literature related to the aversion of harms or threats to basic well-being, and directed normative inquiry in the direction of examining theories of distributing responsibilities that would support the premise that *donor agencies* are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted by donor-supported programs remain averted after exit.

To identify a normative approach consistent with the premise, theories of responsibility were limited to those concerned with the assignment of responsibilities in contexts similar to that of transition, in which a donor *is already* engaged in an effective program, where the programs are targeting populations facing many potential threats to health and well-being, and in which there are multiple other moral agents present. Through these considerations, two theories were identified: David Miller's approach to distributing remedial responsibilities described as the *Connection Theory*[23] and Leif Wenar's approach *Least Cost Theory*[24] for assigning responsibility for the aversion of threats to basic well-being. These two approaches to distributing responsibility for the aversion of harms to basic well-being were critically examined to determine whether they would support the premise identified above, and also against other potentially constraining factors that *might limit the responsibility*, corresponding to step two of the analytic approach identified above. Considerations of demandingness and fairness were identified as potential constraining factors. For example, a possible outcome of Miller's *Connection Theory* was the assignment of responsibility for the continuation of needed services primarily to implementing organizations, rather than donors, on the basis of the strength of the relationship that develops between end-user and providers; this was considered a weakness of the *Connection Theory* because it would result in an unfair distribution of responsibilities by overly burdening implementing organizations. After critical consideration, Wenar's *Least Cost Theory* was identified as providing a strong normative basis for the premise that donor agencies are in part responsible for ensuring that threats to the basic well-being of end-users that have been averted

by donor-supported programs remain averted after exit. Appling the *Least Cost Theory* to the context of exit results in a distribution of responsibilities that was ethically preferable given the fairness of the distribution of responsibility that results, and the mechanism it describes for discharging responsibility through empowerment, which both prevents donor responsibilities from being overly demanding and provides additional support for diminishing vulnerability in the long-term.

As the final step in analysis, the least-cost approach was specified to determine the contents of what it requires, following the third consideration of philosophical investigation: *can the contents of the responsibility be specified.* The case description developed during the empirical project provided a practical setting in which to apply the least-cost principle and specify the contents of the responsibilities it would assign to donors regarding the process of exit.

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Appendix A1: IRB Disclosure Form

	Exempt Determination Date: February 28, 2013 Consent Version No.: 1 PI Name: Holly Taylor IRB No. 4895

JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH

DISCLOSURE STATEMENT DOCUMENT:
Institutional Review Board Informant

Study Title: Trade-offs in Transition: Understanding Shared Responsibility for Sustainability through Transition to Local Ownership

Principal Investigator: Holly Taylor

IRB No.: IRB00004895

PI Version Date: 2.0 3-05-13

What you should know about this study

- You are being asked to join a research study.
- This consent form explains the research study and your part in the study.
- Please read it carefully and take as much time as you need.
- You are a volunteer. You can choose not to take part and if you join, you may quit at any time. There will be no penalty if you decide to quit the study.
- During the study, we will tell you if we learn any new information that might affect whether you wish to continue to be in the study.

Purpose of research project

The purpose of this study is to find out how public health practitioners involved in the design and implementation of program transitions understand the long-term implications of transition. I also want to find out how practitioners involved in transitions think about the relationship between transition, program sustainability, and local ownership. In addition, this project aims to describe how different stakeholders think about the responsibilities that they take on during the transition process.

Why you are being asked to participate

You are being asked to participate in this project because you were involved in the Avahan program's design, implementation, or transition at some point between 2003 and today.

.

Procedures

If you agree to join this study I will interview you. This means I will be asking you questions about a number of topics related to your experience with transition, the decisions made about when to transition and which aspects of the program are most important, and how you understand the long-term implications of program transition. I will also ask about how you think about the responsibilities different stakeholders take on during transition. **There are no right or wrong answers to the questions I will ask; I am interested in your experiences and opinions on these topics.** The interview will last 45-60 minutes. With your permission, I will record the interview and have it transcribed. If you are not willing to be recorded, with your permission I will take notes.

Risks/discomforts

There are no physical risks to you for being in this study. The main burden of your being in this study is the time it will take to complete the interview. There is also a very small risk to your privacy by sharing personal information. Because your voice will be recorded, the interview will

not be completely anonymous. I will do all that I can to make sure your information is not shared with anyone other than those working on this study. If you become uncomfortable at any time during the interview, you are welcome to discontinue your participation.

Benefits
You will receive no direct benefit from participating in this study. With this information I hope to develop an understanding of the ways that transition affects the long-term outcomes of a prevention program initiative. It will help other people preparing for program transitions understand the opportunities and challenges of transitioning to local actors. It will also help make guidelines for program officers to improve the design of other program transitions.

Payment
You will not receive any payment for participating in this study.

Protecting data confidentiality
I will label all interview forms, recordings, and transcripts with an identification number, and never with your name. Any references you make to specific people or places during the interview will be deleted from the transcripts of the interview. The tapes of the interviews will be stored on a password protected computer and destroyed once the analysis of the data is complete. All study materials will be kept in a locked file in the office of Amy Paul, the student researcher in this study. Quotes used in oral or written presentations will not be labeled with your name.

Who do I call if I have questions or problems?

Call the principal investigator, Holly Taylor, at 410-614-5358 if you have questions, complaints, or get sick or injured as a result of being in this study.

Call or contact the Johns Hopkins Bloomberg School of Public Health IRB Office if you have questions about your rights as a study participant. Contact the IRB if you feel you have not been treated fairly or if you have other concerns. The IRB contact information is:

Address:	Johns Hopkins Bloomberg School of Public Health 615 N. Wolfe Street, Suite E1100 Baltimore, MD 21205
Telephone:	410-955-3193
Toll Free:	1-888-262-3242
Fax:	410-502-0584
E-mail:	irboffice@jhsph.edu

Voluntariness:
Your participation in this research project is completely voluntary. You have the right to withdraw from the research study at any time.

	Exempt Determination Date: February 28, 2013 Consent Version No.: 1 PI Name: Holly Taylor IRB No. 4895

Do you agree to participate? May I begin?

Interview #: _____

_____	_____	_____
Print name of Person Obtaining Consent	Signature of Person Obtaining Consent	Date

Appendix A2: Email Recruitment for Subjects Sent from India

[MONTH _DAY], 2013

Potential Subject Name
Address 1
Address 2

Dear [Potential Subject's Name]:

I am currently conducting a research study to describe and consider how public health practitioners involved in the design and implementation of program transitions understand the long-term implications of transition. I am also interested in how practitioners involved in transitions think about the relationship between transition, program sustainability, and ownership. Because you were involved in the planning, design or implementation of the Avahan transition, you are eligible to participate in this study.

If you agree I will conduct an in-person or phone interview (45-60 minute) at a time and place that is convenient for you. Additional information about the study can be found in the attached disclosure statement.

If you are interested in participating or have questions about the study, please contact me at apaul@jhsph.edu or by phone at *[local number in India*]. If I haven't heard from you after one week, I will re-contact you by phone to see if you would like to participate. If you do *not* wish to receive a phone call, simply contact me at one of the methods listed above.

Thank you for your consideration, and I look forward to hearing from you!

Sincerely,

Amy Paul, MPH
Ph.D. Candidate
Department of Health Policy and Management
Johns Hopkins Bloomberg School of Public Health

Holly Taylor, PhD, MPH
Associate Professor
Department of Health Policy and Management
Johns Hopkins Bloomberg School of Public Health

Appendix A3: Telephone Script

Hello, my name is Amy Paul. As a doctoral student at Johns Hopkins Bloomberg School of Public Health, I am conducting a qualitative research study for my dissertation work. I am writing in the hope you would be willing to participate in this study. [*Insert name of reference person*] suggested that you might be a useful contact for the study due to your experience with the Avahan transition.

The purpose of this study is to explore how global health practitioners understand the long-term implications of transition. I am also interested in how global health professionals think about the relationship of transition to the ideas of sustainability, ownership, and responsibility.

If you are interested in participating, you would be asked to participate in an in-depth interview that would take 45-60 minutes of your time, at a time and place of your convenience between *[dates of site visit]*. In this interview, I will ask you about a number of topics related to your experience with transition, the decisions made about when to transition and which aspects of the program are most important, and how you understand the long-term implications of program transition. I will also ask about how you think about the responsibilities different stakeholders take on during transition.

If you have any questions about the study and what it would entail, you can reach me by phone at [local phone number] or by email at apaul@jhsph.edu. Thank you - I appreciate your time.

Appendix A4: Sample In-Depth Interview Guide

Trade-offs in Transition: Understanding shared responsibility for sustainability through transitions to local ownership

ID# :_____Current Position:_____
Position with Avahan:_____ Period of involvement:_____

1. ***Thank you very much for taking time to speak with me today. As you know, I am interested in your experience with the Avahan transition and your thinking about its long-term impact. To start off with,*** Tell me about your experience with Avahan?

   I would now like to ask you some questions specifically about the period of transition.

2. When I say "transition," what does that mean to you?

3. What do you think were the long-term goals of the Avahan transition?

   - When you first began working with Avahan, what did you think the program would look like post-transition?
   - What aspects of Avahan did you want to be continued? Why?

4. In what ways did you expect the program to change post-transition?

5. What have been some of the unanticipated changes following transition?
   a. What aspects did not continue post transition?
   b. Were there new or additional things that began after transition?

6. How do you think these changes, anticipated or not, will affect the long-term impact of the program?
   - *Program services?*
   - *Program goals – impact on HRGs, HIV incidence overall (perceptions)?*
   - *Capacity of ngos/cbos/government?*
   - *Relationships between ngos/cbos, ngo/cbos and SACs, SACs and NACO, SLPs and SACs*

7. I understand that during the transition phase, you've adapted the original transition strategy in subsequent rounds.
   - What changes did you make to the transition strategy between rounds?
   - How did you prepare TI's differently?
   - What was the process of making changes to the transition strategy?
   - What were the motivations for changing the strategy?

- What did you feel was at stake if you didn't make changes to the transition strategy?

I would like to ask you more about transition, specifically how it relates to the concept of sustainability.

8. To begin with, what does "sustainability" mean to you?

9. How does your current understanding of "sustainability" differ from what you might have said before your involvement with Avahan?

10. In what ways do you think transition results in sustainability?

    - What do you think would be indicative a having achieved sustainability?
    - Do you think transition is sufficient for sustainability? What, if anything, would you think may also need to happen?
    - In what ways could transition hinder or inhibit sustainability?

As you know, one of the intentions of evaluating Avahan is to understand the learning that has occurred and help inform the future of HIV program transitions in other countries in the future. In the U.S., the future of HIV programming is happen within a dialogue of "country ownership" and "shared responsibility," and I would like to ask some questions about how you see Avahan in relation to these concepts.

11. What does "ownership" mean to you?
    - Is country ownership different from local ownership?
    - Who needs to "own" the program?
    - How can you tell if they do?

12. In what ways does transition enhance ownership?

13. In what ways do you think transition can hinder or create challenges to ownership?

14. Knowing what you do now, how might you plan a transition to be consistent with the idea of ownership?

At this point, I would like to ask you some questions about motivations and responsibilities for different aspects of transition. I would like to reiterate that there are no right or wrong answers to these questions. I am interested in your perspective based on your professional experience and the lessons from the Avahan transition.

15. When you think about the idea of "shared responsibility" and Avahan, what comes to mind?
    - What do you see as your role and responsibilities during transition?

- How do you think about the role and responsibilities of your transition partners?
- What role and responsibilities do you think communities have?

16. What, if any, responsibilities do you think the Gates Foundation has for the program post-transition?

- For health outcomes of KPs?
- To community partners?
- To government?

Finally, I would like to ask you some broad questions about the long-term impact of the transition for HIV prevention in India.

16. What do you think was gained or improved by completing transition?

17. What, if anything, did you felt you had to give up during the transition process?

18. What do you think will be the lasting impact of Avahan for HIV prevention in India?

Thank you very much for your time. Is there anything else you would like to add? Is there anything that we've talked about today that you would prefer I exclude from this interview? Do you have any questions for me?

Appendix A5: Descriptive Coding Scheme for Empirical Project

Goals of Transition		
Code	**Definition**	**Illustrative Quote**
Continue Services	Refers to program continuing to function - TIs having continued financial support and program continues to operate	*…we had to transition this HIV prevention program, particularly the prevention program to the government. So that it is sustainable, so you know? That the government then runs it. It is not like we are closing the program.*
Maintain Quality	References to TI performance, keeping indicators high, maintaining impact in terms of reduction in HIV incidence	*I would measure the success of transition from the government perspective is to have reduced HIV prevalence … they just continue to have reduced HIV.*
Retained Capacity	Refers to keeping institutional memory, retaining people who have had training, retaining skills,	*The goal was really to be able to take all of the investment – and I'm not talking in dollar values, I'm talking in building systems and building a program and achieving certain outputs and outcomes and making sure that these sustained, even after the donor was out.*
Accountable Relationships	Refers to being able to hold program partners accountable for quality of implementation – refers to relationship between government and communities as well as internal to the program, between implementing organizations and management	*… to be comfortable with SACS's system and to uh, yeah, to, like when they are not showing 100% at the clinic, to be able to say, well, you know, maybe the guy next door claims he's getting 100% - no comment on that – but this is the real picture. And to see the value of, um, uh, yeah, honest measurement, and a genuine concern to see the program improve in real terms rather than on paper.*
Sustained learnings	Refers to wanting to continue new practices, approaches, activities developed by Avahan after transition	*…the goal was that the learning and the good works that we have done, what we have tried, be transitioned to the government and if possible they can adopt it*

Facilitators of Transition		
Code	Definition	*Illustrative Quote*
Leadership	Refers to instances where leadership was helpful in making transition happen – leadership to make transition work, adopt Avahan program, accept changes, motivate others	*It's not so straight-forward, there is a whole set of considerations, there is alignment of agendas, there's – the people in both organizations shift around. Um, you know, ideally yes, but not everyone's agenda is the same as the donors, so it's easier said than done. But that's where the government can play a role. Because the government can say, 'Look, we want your supports and so, to take over this work that BMGF has done, because we think it's important to sustain.' Unless that directive exists, it won't happen.*
Aligned Priorities	Refers to references to of how the Avahan program aligned with existing government or community priorities	*…so it all depends on the model, what results it's showing, and how it, uh, in line and in sync with the challenges and the problems of the government on the day it's being faced with. If it's relevant and in line with that, you'll find the money.*
Negotiation and Dialogue	Refers to references where dialogue, negotiation, or advocacy were part of transition process – also includes references to talking with SACs, constructive discussion, etc.	*…if you look at some other things and let's say –the criteria. We worked out a criteria for transition point, so we looked at I mean, what factors would go in to the criteria there and then, what are the positive things. We talked to government and then – that it how we negotiated with the government and developed the criteria.*
Good relationships	Refers to the way in which relationships were helpful to transition process	*So when you call for a meeting you see both the people coming in and they see each other there. So there is kind of already an interaction happening between those two people there, and then you – both of them knowing each other and what is happening in that TI, what is happening this TI there – so that kind of understanding and sharing happening between these two TIs – it was there right from 2010. July onwards. So that really contributed and that helped us in convincing the NGOs that SACS program or government program is not very difficult to manage. They have seen it!*

Facilitators of Sustainability		
Code	Definition	*Illustrative Quote*
Ability to Change	Refers to importance of being able to change in order to sustain impact – includes references to innovation, adapting, using data to inform program activities	*… there have been a lot of change and flexibilities as we go along. So many of these data are actually informing the program. You know, its' not, many a times, um, in some set-up we collect data and that is for reporting – it does not make any sense and as long as you get on the 5th of this month you are happy and it is stashed away on somewhere. But one thing that we tried to do quite a bit is that we allow the NGOs to be able to monitor the trends and the change that they see along in their data. And, also change our program according to that.*
Leadership	Refers to the role of leadership in sustaining program – similar to leadership for transition but this refers more generally to the role of leadership in maintaining program quality and implementation over time – could apply sustainability of organizations or program as a whole	*I think the most critical [thing] is leadership. From the government, not just to acknowledge, but also to actually take on a role – a proactive role – in terms of prioritizing the right things, pushing the central government to put in the money they need, or donors or whoever it may be. Really prioritizing HIV and making it have the resources that it needs. Not more than it needs, not less than it needs, but exactly what it needs*
Resources	Refers to importance of resources, budget, money, human resources in continuing effective programming	*Sustainability in the context of continuous program funding. That is how I see it. Uh, because HIV prevention program is more – at least in AP the majority of the interventions are run by the NGOs, of course, funded by NACO through APSACS. And only one donor has funding for this program which is BMGF. So if the BMGF withdraws funding, then what would happen is almost all the HIV funding for that particular area will collapse. So I would say that sustainability in the context of continuous program funding.*

Wanting program	Refers to the importance of having genuine desire for the program to be successful – to actually care about the impact and not just the duty of the job	*…to have them be competent and be able to defend their performance competently before SACS – as they moved into SACS to be comfortable with SACS's system and to uh, yeah, to, like when they are not showing 100% at the clinic, to be able to say, well, you know, maybe the guy next door claims he's getting 100% - no comment on that – but this is the real picture. And to see the value of, um, uh, yeah, honest measurement, and you know a genuine concern to see the program improve in real terms rather than on paper.*
Implementation Capacity	Refers to capacity of implementing organizations – could include technical skills, organizational skills, ability to be financially sustainable and function well enough to win grants	*…it is the inherent capacity – it is not about HIV knowledge – it's about just how a good NGO functions. In terms of membership, in terms of its rules and regulation and registration, you know, and it's just normal performance of an organization. So that is how they have been there to build capacity, identify some non-TI NGOs and work to build their capacity.*
Addressing Community Priorities	Refers to significance of responding to underlying needs, community priorities, community vulnerabilities	*We were like, naïve people with---oh, ok, let's just go there and distribute a lot of condoms and—within 12 months realized that these sex workers and MSM don't care about condoms or health – they care about violence. And if you're not able to solve violence for the, there is, you know, so we had to address that. And slowly it became apparent that unless they are driving the interventions, you don't see the results.*
Advocacy	Refers to role of advocacy in sustaining program impact – could refer to advocacy to make a change to program management or activities based on data or to allocate resources differently	*… Advocacy with the government, through the communities to ensure that whatever the voices of communities are heard by the government and also, if there need to be policy changes or need to be – you know going to be a shift in the program, which – community sees it as important for them, to be those voices are brought to the notice of government.*

Learning	Refers the importance to continue to try to improve program and learn better or more effective approaches	*So that way, I think, dialogue with donors, and academics, and others outside, those who are directly involved in implementation is absolutely critical because this program will die the day they stop innovating. And they stop thinking. And they just keep doing the routinely, one after the other, same thing.*

Barriers of Sustainability		
Code	Definition	*Illustrative Quote*
Unreliable leadership	Refers to instances in which turnover or uncommitted leadership	*…especially in the higher level leadership. So there is stability of leaders in Nagaland. In Manipur, if I had to speak, Manipur actually, yes the government is also taking responsibility, no doubt about it, but then because of its own unique challenges, you know, unique system that they follow, there is a lot of uh, issues and concerns related to manpower. Frequent change of project directors, frequent change of the commissioners, you know. It really hampers the implementation of the program*
Misaligned priorities	Refers to challenges relating to divergent priorities either between BMGF/SLP and government of BMGF/SLPs and communities, or government and communities	*So let's say we built a program focused on MARPS, and the government decided they wanted to work on a mixed population setting, or a general population setting, or a completely different typology of MARPs, or a different group of, perhaps people who are at a secondary level of risk, like truckers or migrants or people like that. And there is some sign that the government is starting to move towards those kinds of programs. Then that's a huge mismatch. So at its highest level, transition means that there had to be alignment in policy.*
Insufficient Resources	Refers to discontinuation or cessation of some aspect of program because of differences in cost	*The remote areas strategy may or may not get off the ground. It may not be funded. I'm not sure what they agreement has been reached on that because it does involve additional funding,…. I don't know if that will be accepted by SACS really, because it costs more than a standard program.*

Low implementing capacity	Refers to challenges relating to lack of capacity – either organizational or technical	*The NE context is slightly different than the rest of the India states. We are a little behind in terms of development, in terms of capacity, in terms of so many things, you know? So …we actually started out with a lot of capacity-building – that's why we are actually late in the first phase. So our first phase was on intensive capacity building of the partners that we work with. So um, they um, over the years, they have grown with us and we also have grown with them, so um, it, they have reached certain stage where they were able to deliver certain things – so those really need to get transferred and continue.*

Government Ownership		
Code	Definition	*Illustrative Quote*
Paying for program	Refers to expressions of government funding program, financing program, allocating resources for program	*The role of the state is in supporting and providing a budget of course so they can run the program. Providing technical support and mentoring.*
Managing program	Refers to government role in supporting NGOs/CBOs and maintaining the quality of the program	*…it means, that they, um, have, uh, the technical capacity to run the programs, i.e., they understand what you know a targeted intervention is about, right? Uh, and they have the capacity not only to run it but they have the capacity to continue to innovate and make improvements on it. They have the management capacity to administer and run a program across the country, with this degree of intensity,*
Accepting learnings	References to government being receptive to changes/suggests – adopting practices shown effective under Avahan	*So I feel government ownership is actually accepting whatever it is that Avahan is giving. …Again, it's not, ok, they have taken over from Avahan for one year, thereafter because a lack of resources, they could leave it. But I think NACP-4 that they are going to continue with all the sites with which Avahan was working, as well as in other states where Avahan was not working they want to scale-up also. Learning from the Avahan experience – learning from the Avahan experience*
Wanting program to work	Refers to government motivation and genuine commitment to program and its goals – applies to accepting responsibility for program outcomes, wanting to improve program, aligning with	*… I have a responsibility, I have an accountability. I can understand what is going on, make mid-course corrections if I want. I know what is good, what is not working – I have complete ownership of the whole thing.*

	policy priorities of program	
Responsive to end-users	Refers to government's role in ensuring services remain available to end-users and being responsive to end-user input in program	*I feel that they are both important. It is the state's responsibility for our health, isn't it? For rights and health. But on the other hand it is the individuals who need to realize they have a right to health and a right to other rights and human rights, isn't it? So it's a combination of both really. So the government ownership, definitely, they know that all of these things has to be there for them, but it's not enforced by them. Facilitated or make sure that these things are available, the government has to work on, that will make them sustain.*

Community Ownership		
Code	Definition	*Illustrative Quote*
Participating in program	References to coming to drop-in centers, counseling, basic engagement with program	*..it's more like involving at a level where they influence the program and they are part of the program – they can reach out to you know, decision-making role at the table, and also advocate for changes that is required.*
Valuing program	Refers to end-user motivations for engaging in the program and the extent to which they think HIV prevention is relevant to them	*Now the ownership part of it is kind of a thing – for many CBOs, although we organized them into community based organizations, the ownership has not yet come to the level that we would like them to. That means, this program is our program. We need to make sure that the communities are healthy...we don't want communities to get HIV/AIDS. We look at all the parameters – these are the programs for the people, by the people. For us we need to do.*
Building organizational skills	Refers to gaining skills to run a CBO	*I mean we focus on building up certain things, like strengthening crisis response, advocating for HIV resources, and talking to government to get them to give resources. We work to get both cash and in-kind resources, you know, so if not money then we help them maybe get rice or something in exchange for services. We help them save money and get bank accounts. We want communities to be able to form cooperatives, and go to a lot of effort to have them gain financial inclusion.*

Building peer network	Refers to collectivizing, forming communities, end-users teaching other individuals what they know	*We also work on mapping schemes and helping key populations within communities connect with each other. Another thing we do is try to give them land so they have space to meet*
Advocating for rights	Refers to community role in advocating, demanding their rights, expressing complaints to government about program quality	*…that 1000 population there, for example, they all need to take ownership, irrespective if the services given by the NGO or the Government, they have to go and demand for the – as owners – in my perspective.*
Building confidence/agency	Refers to changes in the way end-users see themselves and the extent to which they are comfortable and able to address their own needs	*…I think these things that they have worked on has helped them you know with building their confidence, building their negotiation skills, not only with um their clients and partners but also with the larger society. Which is more important for them because it's important that stigma comes down. The community that we are working in, they have a high level of stigma. Today, they are like any other normal woman….*

Programmatic Changes		
Code	Definition	*Illustrative Quote*
Priority of Community Interventions	Refers to differences in the support for community-oriented activities, includes changes in monitoring, changes in money allowed, changes in attention given to activities	*We also had a unit of community mobilization which, uh, the government had components of that but ours was much stronger and we put much more focus on that, so I don't think that the government has the same focus on their programs of community mobilization.*
Priority of HIV interventions	Refers to changes in emphasis on HIV, including changes in testing requirements, frequency of testing, iCTC performance	*In the government program was a large push and tried to see that high risk women are tested for HIV so that they could help them by putting them on treatment if required, …So we added testing component to our program and started referring women who are positive to the government centers for ART.*
Delivery sites (place)	Refers to changes in clinics- includes changes in NE where mobile clinic changes and referrals to government clinics in south – anything where location of drop-in center or clinic changes	*Uh, they started realizing that it was important for the government to um, see that the high risk groups, especially sex workers and MSMs, were referred to government facilities. Uh so we added that component.*

End user experience (treatment/interaction/stigma/respect)	Refers to changes in the experience of receiving services, including changes in "incentives," changes in the tone of interactions with doctors, changes in who provides services, etc	*Their state clinics do not have designated doctors, they do not have designated ANMs, they are, um, they HIV clinics are run by the counselors…. So the whole clinical system has systems failures. The stigma is still also there; discrimination is there.*
Overall cost of program	Changes in the costing structure and overall cost of program	*We reduced the cost of our program, especially on the ground, the cost of our program, and we standardized the core components earlier if they were different for different partners, and we – the team standardized it.*
Human resources, staffing	Refers to changes in number of staff supported for management, amount paid to management	*…as the number of Tis has increased, the burden is up more. For example, I used to handle some 80 Tis – that was 3-4 years back. Now, it's 175 Tis – so it's a big number. And at the same time, the human resources should also be increased. That's what uh –the burden has come up now.*
Human resource, clinic/ TI	Refers to changes in staffing at TI level (counselors, M&E, PE)	*What you say is their allowance is only 400 as per NACO guidelines. They wanted the same thing for Avahan also. But for our people, outreach workers might make 2-3 times that, one is an administration block here. So to travel one to the other is a lot of money and so 400 is not sufficient….*
Monitoring	Changes in indicators monitored, monitoring process	*.Some of the elements which were handling, which were monitored by the donors when they were part of the donor program, those indicators are not part of the government indicator there. … For example let's take community mobilization element. CBO membership indicator. CBO membership was part of [program name] monitoring system. But that is not in government monitoring process*

Flexibility of budget	Refers to changes in ability to use budget flexibility to pay for additional/different activities	*See since they had a lot of flexible budgets and flexibility, they have given the program and as for the requirement of the geography, the population, and uh, the kind of resources that they have available there. But the government is completely fixed. I mean everything is fixed there. During the transition process also, we had a lot of difficulty negotiating with the TIs and then bringing them back to the mainstream and then supporting them in the alignment process*
Flexibility to do research/ pilots	Refers to changes in ability to deviate from standard implementation norms and try out new approaches	*So, there has been a lot of modifications that we've done basically because our people are, you know, could be up to 3 days walk from the DIC, or clinic, and they have been very successful and a lot of our thinking about what our responsibility is, is having, having I guess uh, along with the NGOs come up with these ideas and developed them, and worked hard to develop them and we don't want to see them dropped because SACS are unwilling to have anything except the standard model…*
Investment in management	Refers to changes in amount of time allocated to management, people dedicated to management position, overall investment in management	*The function the government often doesn't fund, and often forgets to fund, and doesn't pay enough attention to is the middle layer – the management layer. And, uh, it's always tough to pitch that to the government because it's something they feel, if they do it, they do it themselves, and if they want to contract it in, they want to do it at rates that you can't get good quality folks.*

Alignment Challenges		
Code	Definition	*Illustrative Quote*
Resources	Refers to differences between Avahan and NACP budgets, costings, staffing allowances	*…first round it was very tough because they had several other components which was not in our program. They were paying more than what we could afford and so on and so forth.…*
Flexibility	Refers to challenges in supporting variations from standard implementing norms that non-Avahan TIs follow	*See since they had a lot of flexible budgets and flexibility, they have given the program and as for the requirement of the geography, the population, and uh, the kind of resources that they have available there. But the government is completely fixed…*

Community Technical Skills	Refers to differences in technical expertise with community empowerment, community mobilization activities	*…I don't know how far it is feasible to the government or not. But positioning a specialist at the [NGO] level or the government level who would handle that community mobilization aspect. As I told earlier this is one area where government is not very comfortable doing that. They don't have the resources, number one, and they don't have skills also. This is something different ballgame for them…*

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PERSONAL

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EDUCATION

Johns Hopkins School of Public Health, Baltimore, MD
Ph.D. Health Policy and Management **Expected 2015**
Bioethics and Health Policy

University of Washington, Seattle, WA
M.P.H. Public Health Genetics **2010**

University of Washington, Seattle, WA
B.S. in Biology, minor in Chemistry **2005**

SELECTED TEACHING ASSISTANTSHIPS

Ethical Issues in Health Policy: Public Health and Health Care
Instructor: Holly Taylor, PhD

Health Policy Analysis in Low and Middle Income Countries
Instructor: Sara Bennett, PhD

Ethics of Public Health Practice in Developing Countries
Instructor: Maria Merritt, PhD

Human Rights for Public Health Practitioners
Instructor: Leonard Rubenstein, JD

Social and Economic Determinants of Health
Instructor: Thomas LaVeist, PhD

SELECTED PUBLICATIONS AND CONFERENCE PRESENTATIONS

Amy Paul, Maria Merritt and Holly Taylor. "A responsible exit: using normative theories of responsibility to inform donor practice of transitioning health programs to in-country partners." American Public Health Association. New Orleans, LA. November 2014.

Paul, A. Doocy, S, Tappis, H, and Funna S. 2014. Preventing malnutrition in post-conflict, food insecure settings: a case study from South Sudan. *PLOS Curr*. Jul 7; 6 ii: ecurrents.dis.54cd85fa 3813b0471abc3ebef1038806.

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Doocy S, Tappis H, **Paul A**, Klemm R, Funna S. 2013. Preventing malnutrition in children under two (PM2A): a case study in the food insecure context of South Sudan. *World Health Popul.* 14(4): 12-22.

Paul, A. 2011. Growing Respect for Opposition. *Hastings Center Report, 41,* no. 3: 17-19.

Amy Paul, Lauren Redstone, Shannon Doocy, and Maria Merritt. "Making food aid (a little) more ethical: a rapid assessment tool for community selection." American Society for Bioethics and Humanities. Minneapolis, MN. October 2011.

Amy Paul, Valerie Segrest, and Jon Sharpe. "Native tradition, environment, and community health: Reframing environmental health in tribal communities." American Public Health Association. Washington, D.C. October 2011.

WORK HISTORY

Global Health Fellows Program/USAID May-Nov 2014
Country Ownership and Sustainable Transitions Intern
Completed analysis of PEPFAR Country Ownership indicators tracking direct funding to local partners; contributed to the development sustainability planning framework; provided technical assistance for sustainability analysis.

Johns Hopkins School of Public Health Sep 2010-May 2014
Research Assistant
Dept. of International Health, Dept. of Health Policy & Management
Berman Institute for Bioethics
Engaged in variety of research and teaching initiatives involving literature reviews, manuscript writing and preparation, course development, and teaching.

Center for Ecogenetics and Environmental Health Jul 2008-Aug 2009
Research Assistant - *Community Outreach and Ethics Core*
Core member of community-based research team to develop environmental health curriculum consistent with values of tribal communities; project involved community outreach, survey analysis, and development of teaching tools.

Seattle Biomedical Research Institute Jan 2008-Mar 2008
Malaria Research Technician – *Placental Malaria Vaccine Development*
Responsible for tissue culture, basic assays, PCR.

Literacy*AmeriCorps King County Nov 2005-Oct 2006
Math and Literacy Tutor – *Basic Skills Division*
Led conversation classes for ESL students, individual and group tutoring for ESL, ABE, and GED prep.