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Exploring Partnership Governance in Global Health

PROCEEDINGS OF A WORKSHOP

Rachel M. Taylor and Joe Alper, *Rapporteurs*

Forum on Public–Private Partnerships for Global Health and Safety

Board on Global Health

Health and Medicine Division

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This Proceedings of a Workshop was reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this independent review is to provide candid and critical comments that will assist the National Academies of Sciences, Engineering, and Medicine in making each published proceedings as sound as possible and to ensure that it meets the institutional standards for quality, objectivity, evidence, and responsiveness to the charge. The review comments and draft manuscript remain confidential to protect the integrity of the process.

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Although the reviewers listed above provided many constructive comments and suggestions, they were not asked to endorse the content of the proceedings nor did they see the final draft before its release. The review of this proceedings was overseen by **ROBERT S. LAWRENCE,** Johns Hopkins Bloomberg School of Public Health. He was responsible for making certain that an independent examination of this proceedings was carried out in accordance with standards of the National Academies and that all review comments were carefully considered. Responsibility for the final content rests entirely with the rapporteurs and the National Academies.

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Acronyms and Abbreviations

ACHAP	African Comprehensive HIV/AIDS Partnership
CBO	community-based organization
DREAMS	Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe
Gates Foundation	Bill & Melinda Gates Foundation
GSK	GlaxoSmithKline
IFPMA	International Federation of Pharmaceutical Manufacturers and Associations
MOU	memorandum of understanding
NGO	nongovernmental organization
PEPFAR	The President's Emergency Plan for AIDS Relief
PPP	public–private partnership
PPP Forum	Forum on Public–Private Partnerships for Global Health and Safety
UICC	Union for International Cancer Control
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

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1

Introduction[1]

Solving the world's health challenges requires multidisciplinary collaborations that bring together the talents, experiences, resources, and ideas from multiple sectors. These collaborations in global health frequently occur through public–private partnerships (PPPs) in which public and private parties share risks, responsibilities, and decision-making processes with the objective of collectively and more effectively addressing a common goal, said Dan Mote, president of the National Academy of Engineering, in his welcome remarks at the National Academies of Sciences, Engineering, and Medicine's workshop on Exploring Partnership Governance in Global Health. PPPs bring together talents and experiences, thereby enhancing the strengths, perspectives, and resources of the collaboration. This diversity, along with the commitment to work together, can lead to the development of the creative and multidisciplinary solutions required to tackle system challenges such as those in global health.

It is assumed that both government (public) and industry (private) will be partners in a PPP; however, the range of stakeholders engaged in global health partnerships includes entities such as national governments, bilateral development cooperation agencies, United Nations agencies, multilateral and regional development banks, hybrid global health initiatives, philanthropic organizations, local and global civil society organizations and nongovernmental organizations, private businesses, and academic institutions. Given the broad range of determinants that affect and are affected by health, there are many subcategories within these stakeholder groups that engage in global health partnerships, for example, within national governments, ministries of health, finance, telecommunications, and transportation. The number of stakeholders beyond government and industry engaged in and often critical to the success of these partnerships was mentioned frequently throughout the workshop and even led to discussion on potential new terms to replace "PPP."

These numerous stakeholders bring varying strengths and resources to global health partnerships, but they also bring their own organizational cultures, regulations, and expectations. Managing partnerships among them is complex and requires intentional and thoughtful governance. Over the last several decades, as the number of interested stakeholders, resources invested, and initiatives launched within the global health field has grown, effective governance of global health PPPs has become increasingly critical.

[1] The planning committee's role was limited to planning the workshop and the Proceedings of a Workshop was prepared by the workshop rapporteurs as a factual summary of what occurred at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants, and are not necessarily endorsed or verified by the National Academies of Sciences, Engineering, and Medicine, and they should not be construed as reflecting any group consensus.

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Broadly, governance is the art of steering partnerships, said Clarion Johnson from ExxonMobil, and specifically refers to the structures, processes, and practices for decision making and ultimately accomplishing the PPP's goal. While the importance of governance in global health partnerships has been identified, there is, in general, a lack of agreement on best practices (Stenson, 2010). This lack of agreement is partly a result of the significant variation across global health partnerships in size, including the number of partners engaged, resources allocated, and geographic focus; issue area; level of formality; and intended outcomes. An examination of PPPs in global health revealed some common shortcomings in their governance, including weakness in or absence of strategic direction, accountability mechanisms, monitoring and evaluation systems, and risk management; lack of clarity in roles and responsibilities; confusion between the roles of management versus governance; and inadequate attention to resource mobilization and to the human resources required to deliver programs and achieve objectives (Bezanson and Isenman, 2012).

To explore the role of governance in PPPs for global health and potential best practices for design and operations, the Forum on Public–Private Partnerships for Global Health and Safety (PPP Forum) created an ad hoc committee to plan a workshop with the following objectives (see Box 1-1):[2]

- Examine the role of governance and its dimensions in PPPs for global health.
- Consider the range of stakeholders and sectors engaged in global health partnerships and how specific organizational attributes impact a partnership's governance and decision-making processes.
- Explore best practices, common challenges, and lessons learned in the varying approaches to partnership governance.
- Illuminate key issues in the governance of PPPs for global health with the goal of increasing their effectiveness in improving health outcomes.

The workshop focused on governance of partnerships that are defined by the following parameters: (1) a clearly defined, shared goal that centers on meeting the health needs of disadvantaged populations; (2) the inclusion of at least three partners with a government entity and business represented among them; (3) development of a formal joint agreement among the partners with a defined set of rules; (4) contributions of resources from all partners (resources can include financing, technical expertise, innovation, personnel, relationships, and research); and (5) expected value for all partners.

[2] The PPP Forum was launched in late 2013 with the objective to foster a collaborative community of multisectoral health and safety leaders to leverage the strengths of multiple sectors and disciplines to yield benefits for global health and safety. PPP Forum workshops are an opportunity to share lessons learned and promising approaches, and to discuss how to improve future efforts in areas of global health and safety promotion that have been prioritized by forum members.

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BOX 1-1
Statement of Task

An ad-hoc committee will be appointed to plan a public workshop to explore lessons learned and best practices in governance mechanisms for global health-focused partnerships. The workshop will focus on governance mechanisms for global health partnerships varying in size, focus areas, and intended outcomes. The workshop will feature invited presentations and discussions with the objective to share lessons learned, discuss best practices, and illuminate knowledge gaps within the following dimensions of partnership governance:

- Partnership Formation, including what determines the need for a partnership to be initiated; how decisions are made during the formation of the partnership's focus area, intended outcomes, and size; who makes decisions during the partnership formation stage; and how decisions are made about which stakeholders are included at the formation stage
- Partnership Operations, including challenges and best practices in developing memoranda of understanding (MOUs); establishing common terminology; managing conflicts of interest, particularly when engaging the private-sector companies to leverage their core competencies; establishing decision-making mechanisms that are inclusive and equitable; aligning partnership governance mechanisms with varying internal processes and expectations of different partners; and allowing for flexibility to course correct as needed
- Partnership Accountability, including the role of monitoring and evaluation for increased transparency and trust; and principles for defining metrics based on what different partners value
- Engagement of Host Governments and Civil Society, including formal and informal mechanisms for inclusive and legitimate engagement of impacted communities throughout decision-making processes
- Application of Lessons Learned from Successful Partnerships Models across global health challenges

The committee will develop the workshop agenda, select and invite speakers and discussants, and moderate the discussions. Experts will be drawn from the public and private sectors as well as academic institutions to allow for multilateral, evidence-based discussions. A summary of the presentations and discussions at the workshop will be prepared by a designated rapporteur in accordance with institutional guidelines.

ORGANIZATION OF THE PROCEEDINGS

An independent planning committee organized this workshop in accordance with the procedures of the National Academies of Sciences, Engineering, and Medicine. (See Appendix D for the agenda.) The planning committee members were Clarion Johnson, Regina Rabinovich, Jo Ivey Boufford, Kevin Etter, Lauren Marks, John Monahan, Cate O'Kane, and B.T. Slingsby. The workshop was held in Washington, DC, on October 26, 2017, and included invited presentations, panel discussions, and small group discussions. This publication summarizes the workshop's presentations and discussions, and it highlights common challenges, lessons, practical strategies,

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and suggested ideas for improving PPP governance in global health. The content of the proceedings is limited to what was presented and discussed at the workshop and does not constitute a full or exhaustive overview of the field.

In accordance with the policies of the National Academies of Sciences, Engineering, and Medicine, the workshop did not attempt to establish any conclusions or recommendations about needs and future directions, focusing instead on issues identified by the speakers and workshop participants. In addition, the organizing committee's role was limited to planning the workshop. The workshop proceedings was prepared by workshop rapporteurs Rachel Taylor and Joe Alper as a factual summary of what occurred at the workshop.

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2

Global Health and Governance of Public–Private Partnerships in the Current Context

The workshop opened with a presentation by Michael Reich from the Harvard T.H. Chan School of Public Health on the core roles of transparency and accountability in the governance of global health public–private partnerships (PPPs) and was followed by a panel discussion on the challenges in PPP governance in global health. The four panelists—Steve Davis from PATH, Mark Dybul from the Georgetown University Center for Global Health and Quality, Muhammad Pate from Big Win Philanthropy, and Tachi Yamada from Frazier Healthcare Partners—discussed transparency and accountability as well as additional dimensions of PPP governance, board structure, terminology, power dynamics and equity, and the management of real and perceived conflicts of interest.

THE CORE ROLES OF TRANSPARENCY AND ACCOUNTABILITY IN THE GOVERNANCE OF GLOBAL HEALTH PUBLIC–PRIVATE PARTNERSHIPS

This section summarizes Michael R. Reich's presentation based on the commissioned paper "The Core Roles of Transparency and Accountability in the Governance of Global Health PPPs" (see Appendix A) and the discussion that followed.

To begin, Reich provided the definition of a PPP for global health that has been used by the PPP Forum: PPPs are formal collaborative arrangements through which public and private parties share risks, responsibilities, and decision-making processes with the goal of collectively addressing a shared objective within the global health field. A key point here, he said, is that PPPs involve a wide range of actors, stakeholders, and types of partnerships, and that different types of partnerships may require different governance structures, processes, and practices. Partnerships, said Reich, can be domestic or global, informal and sealed with a handshake or formal and finalized with a signed document, use existing structures in a contractual joint venture or create a new special purpose entity, and be for profit or nonprofit (see Figure 2-1). He also noted that a single PPP can evolve from one type to another and engage different actors and stakeholders over its lifetime.

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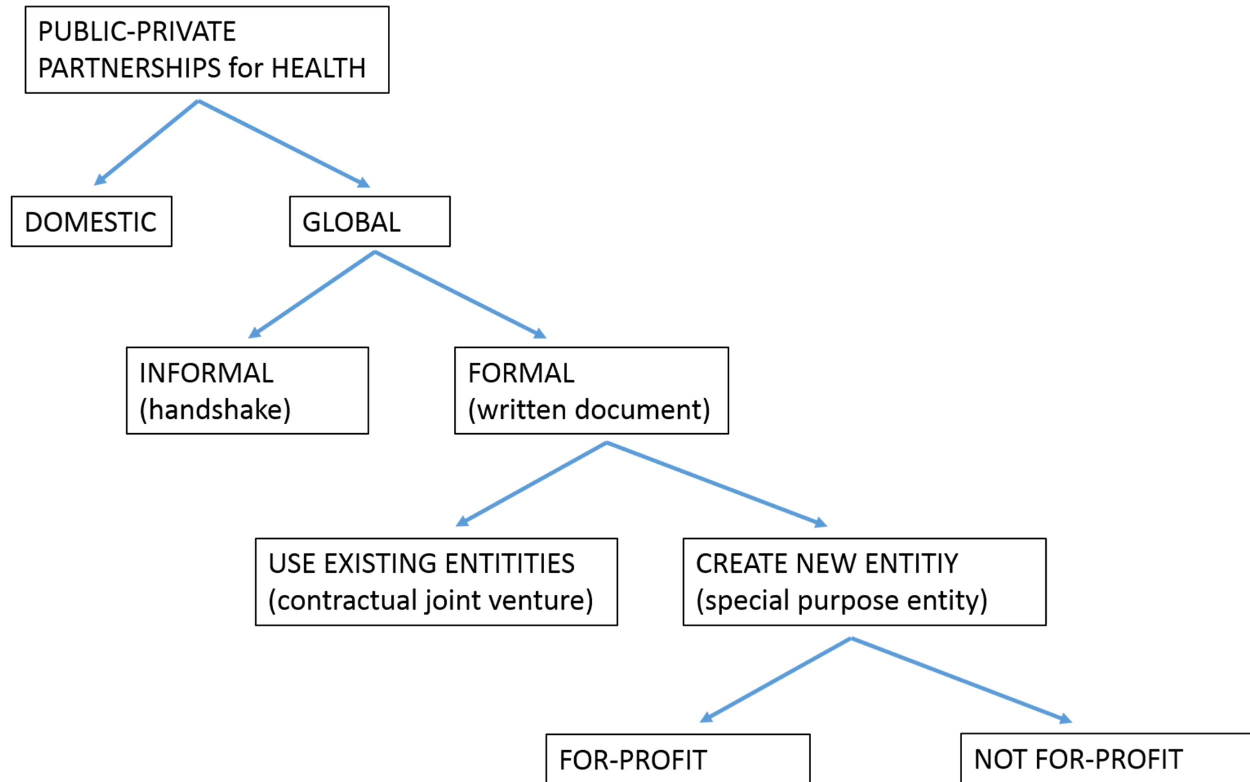

FIGURE 2-1 Different types of public–private partnerships.
SOURCE: As presented by Michael R. Reich on October 26, 2017.

Governance is a relatively new term, said Reich, and as such it does not yet have a stable definition. To frame the workshop's discussion, the PPP Forum borrowed the definition of governance as "the art of steering societies and organizations" from the Canadian Institute on Governance, which admits that the complexity of governance is difficult to capture in a simple definition.[1] This is particularly true, Reich acknowledged, when dealing with global health PPPs, given the multiple partners, languages, cultures, and expectations involved in these partnerships. He suggested governance of global health PPPs is less about steering a process and more like herding cats.

In preparation for the workshop, the National Academies Research Center provided Reich with a review of the literature on PPP governance. His initial impression after reading through 519 titles and abstracts and identifying 42 that were directly relevant was that the large volume of publications contained many recommendations but there was little application of proposed models to real-life partnerships. He did, however find within the literature two commonly discussed terms—*transparency* and *accountability*—and decided to focus on those concepts as separate and orthogonal dimensions of designing and evaluating PPPs.

Transparency and accountability are not simple concepts, acknowledged Reich. For example, a partnership might have low transparency to the public but high accountability to a specific group or entity, he explained, and in addition, his proposed two-dimensional model does

[1] https://iog.ca/what-is-governance (accessed January 19, 2018).

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not specify how much transparency or accountability is good or desirable. Further, these two dimensions represent only two of several possible aspects of governance. Some might claim, for instance, that participation should be considered as a third variable of governance, though Reich said that he preferred to view participation as a means to achieving transparency and accountability. Reich therefore decided to propose a simple two-dimensional model in order to help improve conceptual clarity about PPP governance and to provide a model that could lead to concrete options for action to plan, assess, and change PPP governance.

For transparency, Reich presented three relevant questions: who gets the information; what is the information (i.e., inputs, processes, outputs, and outcomes); and how does information dissemination occur. Transparency is important because it allows for learning, contributes to democracy, shapes organizational performance, and contributes to a positive public perception of the PPP. It also contributes to accountability: it is difficult to be held accountable if information on PPP performance is not available.

For accountability, Reich noted that the literature identifies two core elements: answerability and sanctions. His favored definition of accountability, from Edward Rubin (2005), is that accountability is the "the ability of one actor to demand an explanation or justification of another actor for its actions and to reward or punish that second actor on the basis of its performance or its explanation." As with transparency, Reich presented three relevant questions: to whom is the partnership accountable; what is the partnership accountable for in terms of metrics, processes, outputs, and outcomes; and how is the partnership held accountable. Accountability is important because it assures a PPP is achieving its public interest objective; changes and improves organizational performance; contributes to democracy; and contributes to a positive public perception of the PPP.

Using these two dimensions of transparency and accountability, Reich created a PPP governance matrix (see Table 2-1) that can serve both analytical and planning purposes. As an analytical tool, the matrix can help assess the characteristics and levels of transparency and accountability for an organization. As a planning tool, the matrix can help design transparency and accountability relationships and mechanisms for new PPPs.

TABLE 2-1 PPP Governance Matrix: Assessing Transparency and Accountability for a Hypothetical PPP

	Relationship: Party B	Contents	Mechanisms	Level (High/Low)
	Information to?	*Information on?*	*How informed?*	
Transparency: Party A (PPP)	General public	Limited number of outputs	Annual report available on PPP webpage	Low
	Beneficiaries	Information on a few outputs	Written report and public meeting	Low
	Board of directors	Detailed reports on key inputs, processes, outputs	Board meetings, financial and operating reports	High
	Accountable to?	*Accountable for?*	*How accountable?*	
Accountability: Party A (PPP)	General public	Limited number of metrics	PPP webpage, public hearings	Low
	Beneficiaries	A few metrics on outputs	Ombudsman and complaints, using	Low

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		public pressure and reputation	
Core partners	Detailed metrics on inputs, processes, outputs	Annual reviews of key staff, with firing or bonus, and of key partners	High

NOTES: Contents include inputs, processes, and outputs. PPP = public–private partnership.
SOURCE: As presented by Michael R. Reich, October 26, 2017.

The relationships described in this matrix led Reich to the ethical question of how much transparency and accountability should be required. One person suggested to him that minimum standards could be set, while someone else raised the idea of creating bronze, silver, and gold levels to rank PPP governance. The more complicated questions, said Reich, are who decides on those standards and how. There are national laws, for example, that govern requirements for nonprofit organizations' tax reporting and corporations' regulatory filings. An international standards organization could set standards, or a self-regulatory PPP association could establish good partnership best practices. He observed that, in the current environment, PPPs are left to set up their own standards.

Reich noted that, within a partnership, different stakeholders or partners may demand different levels of transparency and accountability, which raises the question of how to align those different interests and how to deal with the "multiple accountability disorder" that such disagreements can create (Ebrahim et al., 2014) while seeking to achieve the goals of the PPP. One of the tangible questions for PPP governance is what happens when partners disagree. Reich's impression is partnerships work best when there are relationships of trust between the core partners. "It is those relationships of trust that are underappreciated in the field of public health and their role both in policy making and in making organizations work well," said Reich.

In closing, Reich said he hoped the paper helps clarify what governance means for partnerships and that the matrix of transparency and accountability as the two core dimensions would prove useful in helping partnerships organize their governance structures and strategies.

Responding to a question from Jo Ivey Boufford from New York University about why he chose not to include inclusiveness and engagement as part of his matrix, given issues with power relationships in PPPs, Reich noted the decision-making problem with who and how many to include in the governance structure. He suggested that too many representatives on a board can make it difficult for the board to serve its strategic functions, and in a sense, the board becomes more of a representation assembly rather than overseeing transparency and accountability. In addition, he added, total transparency to all stakeholders is a difficult goal to achieve given that the board will need to make certain decisions based on sensitive information to which not everyone should have access. "This gets down to questions of what kind of information should be available and to which groups," said Reich. "If you want serious discussions of sensitive information, it is difficult to do it with representatives from all the groups sitting at the table."

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ADDRESSING MAJOR CHALLENGES IN THE GOVERNANCE OF GLOBAL HEALTH PUBLIC–PRIVATE PARTNERSHIPS

In her introduction of the four panelists, session moderator Regina Rabinovich shared that in conversations with them before the workshop she discovered that each was "looking at different parts of the elephant based on their various experiences." Given the diversity of their experiences, she asked the four panelists to talk about the major challenges they encountered in governing global health PPPs based on the partnerships in which they have engaged and examples of how they worked to manage them.

Steve Davis remarked that many global health partnerships today are developing as one-off activities that bring together public-, private-, and social-sector partners for a specific project. These partnerships are not intended to have sustained continuous life cycles that characterize some of the largest partnerships on global health; however, they still require effective governance structures. Based on his observations and experience engaging in these partnerships from the social sector,[2] Davis made an appeal for the global health field to stop using the term *public–private partnership*. "First of all, it is old and outdated," he said, "and second, most of these [collaborations] need to be thought of as multisector, and PPP leaves out the whole idea of where the social sector fits in." In addition, he said, it has been shown that most industry–government partnerships do not function as well as they could unless they include a social-sector partner. For Davis, the term *multisector partnerships* reframes the conversation and brings different sectors to the table from the beginning.

Going forward, Davis predicted there will be an increase in the types of mechanisms used to create partnerships; however, literature demonstrating the effectiveness of emerging forms of partnership is lacking. "We have some real work to do in the next few years to make sure that as these grow, their effectiveness grows," said Davis.

On transparency and accountability, Davis agreed with Reich's position that both are key dimensions in the success of multisector partnerships. He emphasized that more details are needed about who should be accountable for what and transparent about what. In addition to transparency and accountability, Davis proposed three more dimensions that are important for governance. First is altitude, as in at what altitude is the steering committee or advisory board being asked to operate compared to the partnership's management. The second is alignment around the objective. Successful partnerships, said Davis, have a clear objective and are usually well resourced to achieve that objective. The third added dimension is adaptability.

Mark Dybul began his remarks by agreeing with Davis that the term *PPP* is outdated in the current global context. From a philosophical perspective, he said, it is important to examine the 2003 Monterrey Consensus,[3] which set the path for the two largest partnerships in global health—the Global Fund to Fight AIDS, Tuberculous and Malaria (Global Fund), and Gavi, the Vaccine Alliance. The Monterrey Consensus focused on several principles: country ownership, results-based financing, accountability and transparency, and multisector involvement. Dybul noted that the negotiations to produce the Monterrey Consensus almost broke down over the inclusion of the private sector.

Turning to the governance of the Global Fund and Gavi, Dybul explained that the structures established to govern them are not boards, but rather parliamentary or congressional structures. These governing bodies exist for a number of reasons, and a primary one is to raise

[2] Davis defined the social sector to include philanthropic, nongovernmental, and academic actors.

[3] See https://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf (accessed January 24, 2018).

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money. One of the reasons these two partnerships have succeeded is the strong support they have received from civil society as well as from the public and private sectors, and that support has come, at least in part, because the parliamentary structure allows all sectors to be involved. Yet, one downside of this structure has been around accountability and transparency, Dybul shared. Another has been deciding on membership and voting privileges.

The Global Fund's parliamentary body is structured to have 10 voting seats for implementers; 10 for external funders, including industry; and 20 alternates plus nonvoting members. Seats for external funders are based on the amount of money an entity provides, with industry holding one of the seats. When the governance structure was established, the expected role of the governing body's members was unclear. "Constituencies for a long time have come strictly to represent their constituency and vote according to their constituency and their constituencies' desires rather than saying this is what our constituency thinks but when you vote you have to vote in the context of what is best for the organization or structure," said Dybul. Dybul advises newly forming PPPs to be careful and clear about membership requirements and expectations.

The Global Fund's voting structure has proven to be problematic because it created two voting blocs—the funder bloc and implementer bloc—as if they were against each other, said Dybul. He continued, "this immediately tells people you are not trying to get to a common goal." An additional challenge is the provision in the governance agreement that any four members of the funder or implementer blocs can vote no to block a decision. The problem, he said, is that once this voting provision was in place, it cannot be changed because the blocking minority votes against it. Dybul explained, one consequence is that the Global Fund is stuck with an antiquated voting structure that prevents the inclusion of new partners. "The world has changed in 15 years," said Dybul. "There are big countries creating big development structures, and we cannot bring them onto the board. If you cannot be on the board and you cannot vote, why would you give money or engage with an institution?"

Moving from the institutional governance of the Global Fund, Dybul emphasized that, in many respects, the in-country mechanisms of a partnership are more important than the global structure. The country coordinating mechanisms that were developed as part of the Global Fund have not worked well in many countries, he suggested, because of government dominance and difficulty engaging civil society at the country level. "We are still not good at the country ownership principle," said Dybul in concluding his remarks. "We need to focus on what is happening in the countries as much as on what is happening in the central structures."

Muhammad Pate joined with Dybul and Davis in suggesting that the term *PPP* be retired given the preponderance of multisector partnerships today. Also problematic, he said, is the perception of governance in global health as hierarchical sets of institutions. "What we have in reality is networks of institutions and individuals with formal relationships and informal relationships," said Pate. Governing in the context of networks operating in global health requires different structures than those that govern top-down partnerships.

Complicating this operating environment are the differences in world views of some members of the external funding community, Pate noted. China, for example, may have a different world view than the United States or Europe about country ownership. In the same way, he explained, agendas and values can differ, making it challenging to align interests of the global PPPs and the countries where they are operating. "That divergence between supranational partnerships and the way they are governed, and the national governance arrangement I think is a very fundamental issue that may explain some of the disconnect that you see," said Pate.

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He emphasized that there are asymmetries in the way some governance arrangements are configured, particularly regarding legitimacy. State and federal governments are the legitimate authorities in their own respective spaces; however, there may be other entities linked to global partnerships that do not have the same legitimacy and may not be accountable at the local level. In addition, there are asymmetries in information, finance, and influence that should be acknowledged when structuring governance arrangements for partnerships in global health, said Pate.

Reflecting on Reich's matrix, Pate observed the dimension missing is the ethical dimension. Public health has ethical principles derived from medicine, but Pate worries that the diverse group of actors in global health may not share those ethical principles. One effective multisector partnership that he feels does share these principles is the Global Polio Eradication Initiative (GPEI). The GPEI partners have been able to come together and steer the world collectively to near polio eradication. Pate noted within GPEI, each partner's role and the role of the monitoring board were well defined.

On the other hand, the global response to the 2014 Ebola outbreak in West Africa was "a miss," said Pate. Across the many partners in this effort, none were held accountable for the failed response to the outbreak and resulting loss of lives. "There were many local nongovernmental entities and national and regional governmental entities that played a role, but where is the accountability?" asked Pate. "We need more work in terms of accountability to the local entities."

Turning to the final panelist, Tachi Yamada focused his remarks on experiences and observations regarding board structures for PPPs. When he joined the Bill & Melinda Gates Foundation, he encountered partnerships and other entities with boards composed primarily of largely self-interested individuals with no sense of accountability for the overall welfare of the organization. In addition, many boards were too big to make substantial and wise decisions on behalf of the entities they represented. He also observed the tendency of boards to usurp the role of management in deciding what programs to support or decline. One of his biggest surprises was that the Gates Foundation did not have a board seat on many of these partnerships despite often being the largest funder.

Regarding the term *PPP*, Yamada said it describes a clash of two cultures with different expectations. Understanding these differences can help create better governance structures. Boards in the private sector have three straightforward responsibilities: fiduciary, strategy, and selecting the chief executive officer. Boards do not interfere with management; instead, management is delegated to the authority that runs the organization and makes day-to-day decisions. In the public sector, there is an additional responsibility to ensure that a program is meeting public needs, and Yamada emphasized this responsibility is a very different from the role of a private sector governing board. The board of a private-sector company recognizes the company cannot survive if it fails to meet the needs of its customers; however, he explained, shareholders not customers drive the board's decisions. A PPP board, on the other hand, is accountable to its customers, defined as the public. "Ultimately, we have to think of governance as not being controllers but people who are invested in the best interests of the entity that they are working with," said Yamada.

He concluded his remarks with an example of a governance structure that he helped create 6 years earlier for the Global Health Innovative Technology Fund (GHIT Fund) (the GHIT Fund is described in greater detail in Chapter 4). The tiered governance structure of GHIT has different components, each with specific roles and responsibilities. A council, whose only job is

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to select the board chair, is made up of funders. The board consists of independent experts none of whom are funders or funder representatives. There is an advisory board of individuals appointed because of their expertise on relevant subjects and who have some representational connections, and a selection committee of domain experts who select the grant applications to approve and fund. "It is possible to create a structure in which different pieces have different functions, and maybe that is how best to bridge this gap in culture between the public and private sector," said Yamada.

DISCUSSION

Rabinovich asked the panelists to address a governance issue that the PPP Forum members often encounter: managing conflict of interest when involving industry partners. Yamada responded that in general, conflicts are acceptable as long as they are declared. Dybul added that most other individuals on boards have far more significant conflicts than the industry representatives. Grantees, whether it is civil society or implementing governments, as well as funders are all conflicted. He agreed with Yamada that disclosure and transparency are critical. Davis agreed with Dybul, and noted that in the private sector, board members often have conflicts and they sit on the board because they bring expertise that benefits the company. The solution, he suggested, is to disclose and recuse on conflicted matters.

Kevin Etter from the United Parcel Service (UPS) Foundation commented that in addition to retiring the phrase *PPP*, there is a need to change perceptions about private-sector engagement. He has found that there is an expectation for the private sector to change the way it engages with the public sector and civil society but an unwillingness for the public sector and civil society to change the way they interact with the private sector. "Change the conversation entirely and quit talking about private-sector engagement and start talking about public sector engagement and civil society engagement and what it is that has to change in all sectors," said Etter.

Sonal Mehta from Avahan and the India HIV/AIDS Alliance, commented that while nongovernmental organizations (NGOs) are expected to be transparent and accountable in a partnership, there is often little discussion about government accountability. Yamada replied that government accountability is very important, and one issue he has encountered is government being a passive partner rather than an active participant that contributes resources and commits to the success of a PPP.

"The lack of government engagement is often a two-sided problem," said Yamada. "The first is that the PPP does not think about how the government could engage and take over a project. Second, they do not think enough about how to provide the funding to initiate that effort. On the government's side, these programs are fine as long as they are funded, but there is no sense that the programs are important enough to put its own money behind it." In his opinion, PPPs need to have a strategy to engage governments in their projects. Dinesh Arora from the National Institution for Transforming India commented that government agencies may not be equipped legally or financially to engage with the private sector.

Yamada noted the importance of legitimacy as a partner. He joined the Gates Foundation about 4 years after it started, and he discovered that, "like the nouveau riche investment banker that moved into the neighborhood and built this huge home, everybody hated us because we had no legitimacy." His approach was to form partnerships with seven leading global organizations, including the World Health Organization (WHO), UNICEF, U.S. Agency for International

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Development, and the Global Fund, who had their own legitimacy and the foundation could provide legitimacy through funding. In the end, WHO became the Gates Foundation's largest grantee and the funds it provided gave WHO the flexibility it needed to implement a number of their programs. This arrangement situated the foundation as a partner rather than just a funder. In Pate's opinion, the best multisectoral partnerships are those that have a diversity of values that individuals bring to the table, and that acknowledging the various sources of legitimacy, whether it is through providing financing, technical expertise, or political legitimacy, will level the playing field. He noted, too, the importance of developing a common language among partners from various sectors.

Davis said there is a need to work on multidimensional engagement models that help get rid of the presumptions about how each sector behaves, such as the NGO sector can be inefficient, the public sector can be lazy, and the private sector can be greedy. He suggested building a cohort of individuals with experience in all three sectors who could bridge the various sectors and help reduce, though not eliminate, asymmetry and help structure governance to deal with inherent power asymmetries. Davis also emphasized the need to stop treating the partners who provide funding to a partnership as customers who need to be pleased. The real customers, he said, are national governments, health ministers, health systems, and the people on the ground who are trying to improve quality of life. This change in attitude, he said, would also help reduce asymmetries, as would building trust among partners and recognizing and understanding the important role each partner plays.

Sir George Alleyne from the Pan American Health Organization wondered if accountability could be viewed through a principal–agent relationship in which there is a relationship between the person who has the account and the person who renders the account, and in which transparency is not just another method of ensuring that information asymmetry is reduced to a minimum.

Reich concluded the discussion period with several comments. Addressing the issue of changing the terms used to describe public-private partnerships in global health, Reich said that PPP has become a brand name, covering a wide range of organizations. He recommended against renaming these organizations as "multisectoral partnerships." A more useful term might be "hybrid partnerships," since there is a literature on hybrid organizations that addresses social enterprise.

Reich appreciated Dybul's point on the difficulty in changing a system of rules once it is in place, noting that institutional arrangements are "sticky." According to the concept of path dependency, positive feedback loops frequently develop that make it hard to change an institution or a policy once it is established. "The lesson here is be careful what you set up at the beginning, when you have limited information on the effects of particular decisions, because it can have longstanding unanticipated consequences," said Reich. He also agreed with Pate's point about networks of institutions; Reich noted that many partnerships are a collection of organizational entities, each with their own set of rules and cultures that can clash.

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3

Legal Considerations for Public–Private Partnership Governance in Global Health

Through a problem-solving exercise, panelists in the workshop's second session explored legal considerations within different sectors when developing global health public–private partnerships (PPPs). The problem-solving exercise, posed by session moderator Lauren Marks from the U.S. Department of State, was framed through a hypothetical scenario in which a pharmaceutical company has developed a relatively new drug used to vaccinate children and intends to donate one million doses for children in sub-Saharan Africa in partnership with a consortium of organizations. The partners have a shared vested interest in children's health and goal of vaccinating one million children. The partners include a philanthropic organization that makes strategic investments in children's health, a multilateral alliance representing country governments and their ministries of health and that is the lead coordinating body for global vaccination programs, a nongovernmental organization (NGO) that implements programs on the ground, and a U.S. government agency that has an office dedicated to setting policy and providing foreign assistance for children's health. This office, explained Marks, happens to provide funding to the NGO to implement programs and the undersecretary who heads the office has a seat on the board of the multilateral alliance. After describing the scenario, Marks a set of related questions to the panelists—Douglas Brooks from Gilead Sciences, Anthony Brown from Gavi, Kenneth Miller from the Bill & Melinda Gates Foundation, Nina Nathani from Matalon & Nathani, LLP, and Valerie Wenderoth from the U.S. Department of State.

To begin, she asked the panelists how joining a PPP would differ from being part of a joint venture, corporate deal structure, or similar arrangement that brings parties together. Brooks responded first by noting the firewall at a pharmaceutical company between its commercial activities, and public affairs, grant-making activities, and community engagement efforts where this PPP would fall. Miller added that for a foundation, all partnerships it enters would have a charitable purpose and mission to improve the lives of the target beneficiaries, regardless of how the arrangement is structured.

In the next phase of the scenario, Marks stated the parties decide to put together a memorandum of understanding (MOU) outlining their respective roles and responsibilities in the partnership. Similar to any corporate deal, the parties start doing due diligence on each other. The routine due diligence search reveals several potential sources of conflicts of interest: the pharmaceutical company was recently involved in litigation related to its business operations; the undersecretary of the child health office at the U.S. Department of State owns stock in the pharmaceutical company; and the president and benefactor of the philanthropic organization is on the board of the NGO. Marks asked the panelists to describe how they would evaluate these potential conflicts and weigh the relevance of them versus the value entities may add to the partnership.

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At the Gates Foundation, Miller would try to weigh the risks against the rewards of involving a conflicted party. "I think conflict of interest can be challenging for all of us, but at the Gates Foundation conflict is not a binary event where there is a conflict and you cannot be involved," said Miller. In this scenario, the president of the philanthropy's seat on the NGO board could provide beneficial insight into how the NGO partner is using the funds. On the other hand, the president would have fiduciary responsibilities to both the foundation and NGO. If the partnership is not achieving the desired impact or is off mission, it could be difficult for the president to represent the interest of both the NGO and the philanthropy. Other complications include potential confidentiality issues and reputational risk for the foundation if favoritism for the NGO is perceived. Depending on the specific goals of a PPP, one solution Miller might suggest would be for the foundation president to have a role as a nonvoting observer on the NGO board.

When the issue of conflicts of interest comes up, Brown noted that attention usually turns to the industry partner. However, he stressed that conflicts must be evaluated for all partners. "When we think about conflicts, we have conversations around how we manage conflicts in an environment where a number of stakeholders are receiving funds or have other aspects of their role that is a conflict," said Brown. The challenge, he said, is to develop a balanced approach where pros and cons are weighed before making a final decision.

Marks added that from a programmatic perspective evaluating conflicts based on risks and rewards gets tricky. "You want people who are knowledgeable experts and who are committed involved in the project," said Marks. What is important to ensure is that the conflicted party's interests are aligned with the partnership's interests. In some cases, added Brooks, it is enough to be intentional about disclosing potential conflicts and be thoughtful about dealing with them.

Nathani agreed with Brooks's statement about disclosure. Disclosure opens the door to weighing the value of moving forward given whatever conflicts exist. The first step she advises for clients when they start talking to potential partners is execute nondisclosure agreements. From a U.S. government perspective, Wenderoth's first step in due diligence is assessing internal conflict of interest, that is, do any individuals within the department have a relationship with a potential partner. "We cannot have an actual or even perceived conflict of interest in terms of any financial gain that a person within the department might receive from that partner," said Wenderoth. The State Department requires an internal agreement with department lawyers before even engaging in formal discussions with potential partners. In the hypothetical scenario, she would challenge the undersecretary's participation in the partnership given that he owns stock in the pharmaceutical company.

Marks stated that one of the functions of an MOU is to identify the contributions each partner will make. Identifying contributions raises the question of how to value them and leads to discussion on whether the value of a contribution equates to voting power. In the hypothetical scenario, the pharmaceutical company wants to value the research and development that it put into the drug development. Wenderoth emphasized that *contribution* is a bad word at the U.S. Department of State because it requires statutory authority to make contributions. In the case where a partner wanted to value what each entity brings to the table, she would advise the U.S. Department of State to stay out of the conversation. She also noted that a valuation process does not happen with every partnership,

Miller shared that the Gates Foundation would examine the overall cost of a project and the percentage that the foundation would be funding, and then weigh it against the impact its

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funds will have and how it relates to the foundation's charitable mission. Relative valuation might influence the structure of a deal, but from the foundation's perspective it is not a critical component. Brown said that Gavi takes the same basic approach that Miller described when joining a PPP and does not necessarily value what each partner or stakeholder brings to the table. He did note that Gavi sometimes enters into what he calls opportunistic partnerships that are partnerships with a commercial organization or an NGO to achieve a very specific outcome. "In those instances, we have to value what has been provided to us," said Brown. Gavi uses generally accepted accounting principles and market determination. To value vaccines, for example, Gavi uses publicly available data posted on the UNICEF website. Gilead values its contributions using a set formula for calculating fair market value, said Brooks, and it has a policy that its contributions will never be more than a small percentage of any organization's budget. Cate O'Kane, an independent consultant, commented from the audience on the challenge of navigating being a partner versus a procurer when the organization is compensated for services or products. She noted, too, that many partnerships are based on intangibles, such as expertise in a country or government connections, rather the money. Valuing those intangibles can be an issue for an NGO that is trying to maintain its 501(c)(3) status, for example.

The hypothetical scenario dealt with intellectual property (IP). As part of its contribution to the partnership, the philanthropic foundation will fund the pharmaceutical company to adapt its drug compounds to make them more fit for purpose in developing countries. "Who owns the intellectual property, which in this case would be the drug compound that has been adapted with funding from the philanthropic organization?" asked Marks. Brooks replied that his company would own what it brought to the table, but any decision on who would own any new formulations of products that resulted from this funding would be negotiated. Miller responded that, in negotiating IP ownership, the Gates Foundation would need assurances that the intellectual property is used to meet its charitable objectives. Typically, that would mean allowing the pharmaceutical company to own the IP and, in return, the foundation would expect the company to agree that it would provide access to the drug at an affordable price in developing countries. "If we are thinking about sustainability and engagement and how we incentivize the for-profit world to work with us on these charitable projects, allowing them to retain ownership of their intellectual property provides that type of incentive and a pathway for engagement," said Miller. He added that IP ownership is one of the biggest "hot-button issues," along with liability, when negotiating partnerships.

In the hypothetical scenario, the U.S. government will provide funding through an existing, openly competed grant to the NGO to handle supply chain distribution and programmatic implementation on the ground. Marks asked the panelists, in this scenario, what the NGO's role would be in the partnership, whether it should be a party to the MOU, and if it can have a seat on a steering committee of any governance body. Nathani responded that most NGOs would want a seat on the steering committee and perhaps even a coequal role in the partnership. The NGO, she said, is participating in the partnership because it is consistent with its own charitable mission rather than acting as a general service provider. In many instances, the NGO will have worked in the geographic area and therefore brings needed expertise to the partnership. "Most NGOs would feel they have just as much to bring to the partnership as the other members," said Nathani. "They would want to be a party to the MOU." Wenderoth emphasizes to her colleagues at the U.S. Department of State that a grantee can be a partner, but the organization will still be held accountable to its grant agreement. Including an NGO as a

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partner with a seat on the steering committee would require a justification beyond being a grantee.

In the hypothetical scenario, the NGO would conduct monitoring and evaluation, including data collection and analysis. This raises the question of who owns the data and who has the right to publish the results of the evaluation. Nathani explained that a recipient of a U.S. government grant has the right under current regulations to own all intellectual property developed or created during the performance of the grant. However, "there is always the responsibility to share intellectual property developed under a federally-funded grant with the federal government," said Nathani, and there may be additional requirements to deposit data and the intellectual works that support that data with the Development Data Library and the Development Experience Clearinghouse of USAID, for example. Beyond compiling with government requirements, she suggested that most NGOs would take the position that sharing data with all members of the partnership would be appropriate. She noted that some countries assert the right to own the data from any projects conducted in their country. In this cases, the NGO often will have to request permission from the government to share data with other members of the partnership and allow other members to analyze the data and publish the results. "That definitely can be a tricky issue and has to be explored very carefully, and everybody's potentially prior obligations have to be understood by all members of the partnership so it can be addressed upfront," said Nathani. "This is not something you want to be addressing 6 months into the partnership when the data has already been collected."

The Gates Foundation, said Miller, has an open-access policy that requires that any publication resulting from a project it funds be published in an open-access, peer-reviewed journal and that the underlying data is made available. The foundation has encountered issues when the data is owned by the Ministry of Health and the ministry may be concerned that the data will reflect poorly on its programs. Other issues arise when partners have access policies that conflict with the foundation's policy. In these cases, negotiations are needed to determine how to comply with those different policies.

In addition to the planned donation, the hypothetical scenario includes both the U.S. government and the multilateral alliance procuring additional drugs from the pharmaceutical company to treat more children. Marks asked the panelists to describe their view on the difference between procurement and partnership. "When are we partnering with the private sector, and when are we contracting for its services?" she asked. Brown said Gavi often has several relationships with the same entity, and the question he asks is whether the company is simply providing goods and services or if it is making a high-level commitment to Gavi's mission. If it is the latter, they are a partner, and if it is the former or if there is some sort of tender process or competitive process, that lends itself to a procurement relationship. This is a complicated process, he emphasized, because being a partner in a PPP can give a company a competitive advantage in a country over a company that makes a similar product but is not part of the PPP.

Brown explained that partners agree to an MOU with aspirational goals on how the partner will use its expertise to help the PPP achieve its goals, while a procurement arrangement uses a formal contract with delivery terms and prices of goods and services. There are also hybrid arrangements that involve donated services that need to be valued. He added that risks are allocated differently in each of these relationships and noted that there are different individuals in Gavi who manage these different types of relationships. Marks added that it is important when entering into these different types of relationships to understand the potential partners'

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motivations. "Partnership does not mean all the motivations have to be the same, but I think it means you have to agree on the end goals," said Marks. Miller added that it may be necessary to think more holistically about governance when organizations have multiple relationships with the same entities. Marks agreed and noted that the U.S. Department of State has had conversations with other government agencies about creating a standard MOU template.

Through the hypothetical scenario, the panelists were asked how the PPP should approach liability. Nathani replied that liability can extend to the NGO that participates in the supply chain, and the NGO should request that a quality assurance agreement or a pharmacovigilance agreement be executed with the company donating or supplying the vaccines. "That would be an important aspect of the legal part of the MOU and governance to ensure that those responsibilities were addressed appropriately," said Nathani. In addition to a quality assurance agreement, the MOU should also require that the drug manufacturer take responsibility for giving the NGO instructions on storage and use of the drug. She also noted there could be additional issues regarding which organization is responsible for registering the drug with national regulatory authorities in the countries in which it is to be distributed.

Miller said the Gates Foundation tries to structure agreements in a way that limits or eliminates its potential liability on the grounds, typically by only providing funding and not being involved in operationalizing or implementing programs. In general, though, liability is a difficult issue for partnerships. He explained that while the presumption would be that the pharmaceutical company would bear most of the liability, the NGO is ultimately responsible for the storage and distribution of the drug and it could be argued that the NGO would be liable for issues that arise on the ground. However, few NGOs would have the resources to represent all in-country partners who are also part of the supply chain. Thus, it is necessary to consider various risk mitigation strategies, such as insurance.

Brown said that Gavi indemnifies and holds harmless any of the parties that fund a program regarding product liability. It also builds into its MOUs with national governments provisions that they will be responsible and Gavi will not be liable for in-country issues. He acknowledged that these provisions do not prevent a class action lawsuit being brought in the United States, but the reality is that the NGO is implementing a program on behalf of the national government in this scenario. One thing that often happens with PPPs, said Brown, is that many of the partners have privileges and immunities and they invoke those and drop out of the PPP, leaving a limited number of partners, often foundations, to bear the cost of litigation.

Marks returned the panel to a point Brown raised earlier regarding how to handle a situation where more than one company manufactures a vaccine. One approach would be to issue a tender or request for proposal that would be inherently competitive, but that would not be appropriate when one of the manufacturers is a member of the PPP. Wenderoth said this situation is why the U.S. Department of State has internal discussions with the program office, before considering being part of a PPP, that delve into why one particular company will be a partner over its competitors. "We cannot be seen as giving preference to any individual or company," said Wenderoth. "It is critical that the program office explain that objective criteria were applied in each instance where a private-sector partner is engaged in a potential partnership with us." If the program office cannot define those objective criteria, the U.S. Department of State will not join the partnership.

This would be a difficult situation for Gavi, said Brown, because it is hard to imagine a situation where a pharmaceutical company would have competitors and donate products without an ulterior motive, such as the desire to be first in a market or to be perceived as being endorsed

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by association with the U.S. government or an organization such as Gavi. The key issue here, he said, is to examine those ulterior motives and deal with them in an MOU. "This is a complex situation because you may have a specific goal that you want to address and there could be a clear reason why this manufacturer is appropriate for this scenario," said Brown.

Changing topics, Marks noted that an important question to answer when establishing a governance structure for a partnership is to decide on what that structure will be. "Do you create an independent organization or will it be nested within one of the partner organizations?" she asked. "What does voting power look like? How do you resolve conflict? How do you ensure that you are representing the fiduciary duty of your own organization *vis a vis* that of the partnership itself?" Brooks said that answering those questions starts with the core group of organizations who are coming to the table with a common goal. In his experience at Gavi, Brown has found that operating as an independent entity, rather than being nested within an international organization, allows the entity to enter into creative deals to meet the projects goals that might not be possible within the rules and procedures of a parent organization. He shared that he has conversations at least once a year with partnerships and programs that want to move outside of a nested relationship.

Unlike a large-scale partnership like Gavi, said Nathani, most PPPs have a defined end, and it is important to define the ultimate objectives of a particular PPP before deciding on a governance structure. If there is a limited objective, a secretariat structure where every partner has an equal seat at the table is appropriate. However, the issue of governance structure becomes far more complicated and difficult to navigate when the PPP has a broader objective and scope.

Marks added a final dimension to the scenario: the partners agree on the objective but are divided on the approach. In this case, the NGO and multilateral organization want to ensure broad coverage and are willing to take great efforts to find hard-to-reach children. The U.S. government has prioritized impact. The foundation is focused on sustainability and wants to ensure that there is a plan for absorbing costs in the future. The pharmaceutical company wants to operate at scale. None of these goals conflicts with the objective, said Marks, but it is still necessary to find a way to harmonize the philosophical, strategic, and cultural differences among the partners. Miller shared that this situation arises regularly and the important first step is developing the MOU in a way that is transparent about the different motivations, roles, and responsibilities of each party. In his experience, if the overall goal is important enough to all of the partners, these questions can be addressed and the details worked out, but getting these issues on the table early is critical. He added that it is important to include provisions for a dispute resolution process in an MOU to deal with the inevitable unexpected developments that can lead to conflict.

DISCUSSION

Muhammed Pate asked the panel how a PPP might address conflicts between the partnership agreement and laws of the nations in which the partnership will work. Brown said that most MOUs would include language stating that each party must comply with national and local laws regardless of where the organization is established. Wenderoth agreed that this must be dictated in the MOU. She noted that this can create an issue for the U.S. Department of State if it has an employee on the governing board or secretariat because that individual cannot bind the U.S. government to another country's laws. She said that if the U.S. Department of State

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oversaw procurement, for example, it would follow U.S. federal rules on procurement while ensuring that it is not overtly violating an in-country regulation.

Justin Koester from Medtronic commented that a manufacturer may be incentivized to join a PPP if the PPP itself has the potential create a market where one does not exist. Wenderoth responded with her concern that these PPPs may not be a place where the U.S. Department of State should get involved. Miller responded that in these situations the foundation ensures its funds are used to further charitable purposes and not create a profit motive for a commercial enterprise. Gavi, as well as the Global Fund, recognize that it often creates market opportunities for a company and they have a framework to evaluate these scenarios. He noted that innovative companies seeking market opportunities can play an important role in helping Gavi find solutions to difficult problems with the potential to create a winning situation for everyone.

Cate O'Kane also pointed out that giving a company first-in-market status can also mean that company was first to raise its hand and be ready to act. It may be possible, then, to structure an agreement that allows competitors to join the partnership or provide products later. Wenderoth replied that this was a new insight for her and gives her a new way to think about participating in a partnership if it provides a mechanism that would allow similarly situated private-sector entities to join later. Brooks commented that his company often learns of new ways to address problems or improve the way it does its business by participating in PPPs. He added, as someone who worked in government before joining industry, he believes there is a role for the U.S. government in creating opportunities to solve difficult problems in public health.

Jeffrey L. Sturchio from Rabin Martin noted that the United States has the Millennium Challenge Corporation, an independent U.S. foreign aid agency, as well as the U.S. Agency for International Development, the U.S. Trade and Development Agency, and others that have been shaping markets in developing economies for decades. The President's Emergency Plan for AIDS Relief, through its contributions to the Global Fund and the establishment of the Partnership for Supply Chain Management, has been instrumental in creating one of the largest markets in Africa and other parts of the developing world for antiretroviral medicines. The key to each of these mechanisms is that the partners disclose their interests, that there is transparency, and that the partnerships create a fair opportunity for companies to participate and benefit. "Creating those markets actually does help to accomplish the good that many of these partnerships are set up to do, so I do not see those as in conflict," said Sturchio. "It is just a question of using these principles to manage issues of transparency, accountability, and impact."

Brenda Colatrella from the Merck Foundation noted that risk and risk management are important components of managing conflicts of interest. When working with lawyers to structure partnerships, she has perceived a desire to manage to zero risk. Miller said that the Gates Foundation does not manage to zero risk because that would severely affect its ability to have an impact, so it tries to be solution focused. "In some cases there may be a high degree of risk but the potential reward and impact on our target beneficiaries is such that it is worth taking that risk," said Miller. He said he does not see his role as managing to zero risk but to find solutions. Nathani said her role is not to manage to zero risk but to make sure everyone understands the potential risks so they can make informed decisions about costs and benefits.

Responding to a question about whether it would be possible to develop a gold standard agreement or framework that could guide PPPs, Miller replied that there can be best practices and lessons learned, but each partnership is unique in terms of the nature of the participants, the geographies, and goals. As a final comment, Brooks said the critical question to ask is what is the

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purpose of the PPP. In his opinion, staying focused on the partnership's central purpose can help mitigate the other challenges.

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4

Examining Lessons Learned from the Development and Iterative Improvement of Public–Private Partnerships and Their Governance

In the workshop's fourth session, five panelists shared lessons learned from development and operations of public–private partnerships (PPPs) and their governance structures. The panelists—Danielle Rollmann from Pfizer, Lauren Marks from the U.S. Department of State, BT Slingsby from the Global Health Innovative Technology Fund, Jeffrey L. Sturchio from Rabin Martin, and Sonal Mehta from Alliance India—discussed lessons learned from experiences in determining governance needs and mechanisms based on partnership goals and engaging partners and other stakeholders in decision making. In addition, the panelists delved into the creation of iterative processes for continuously improving governance and how they approached change to adjust to the evolving priorities of PPP partners and the global health environment. Table 4-1, included at the end of the chapter, provides an overview of the five partnerships included in the session. The text in the chapter summarizes the experiences and lessons learned shared by the panelists. Following the panel presentations, Clarion Johnson moderated an open discussion with the workshop participants.

ACCESS ACCELERATED

Access Accelerated (AA), explained Danielle Rollmann, is a multiyear program to sustainably address access barriers to care for noncommunicable diseases in low- and middle-income countries. The collective goal was conceived of and endorsed by the chief executive officers of the 20+ companies that belong to this partnership. AA is composed of three elements. The first, said Rollmann, includes a commitment from the member companies to do more with their individual programs. The second element is a broad partnership with the World Bank on pilot programs in lower-income countries focused on strengthening local health systems by enhancing primary care, screening, diagnosis, and treatment of noncommunicable diseases. The third element is disease-specific partnerships, the first of which provided seed funding for the Union for International Cancer Control's City Cancer Challenge, a multisectoral initiative supporting cities with over one million people to take the lead in designing, planning, and implementing cancer treatment solutions as a means of increasing the number of individuals with access to quality cancer treatments.[1]

Since launch, AA partners have initiated or expanded over 20 company-driven programs. At the time of the workshop the World Bank was in the process of designing three pilots that were pending formal announcements and the Union for International Cancer Control (UICC) had started working with three "learning cities." The World Bank-partnered Kenya pilot[2] has now

[1] See https://www.uicc.org/what-we-do/convening/ccan-2025-city-cancer-challenge (accessed January 25, 2018).
[2] See https://accessaccelerated.org/day-1world-bank-access-accelerated-county-pilots-launched-tackle-ncd-crisis (accessed April 4, 2018).

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begun operations, with a second due to launch in Spring 2018, and the UICC has begun working with a fourth learning city. AA has been working with the Boston University School of Public Health to measure and evaluate progress. The expectation is that these activities will improve patients' lives in ways that can be quantified and that the partnership will be able to leverage the results from the pilots toward a roadmap for how to sustainably address noncommunicable diseases in low- and middle-income countries. "Knowing that we cannot do this alone, we are hoping that through working together in these types of collaborations that we will build more robust multisector partnerships to drive these types of improvements, and that we will serve as an illustration of the impact that PPPs can have as we advance toward sustainable health system environments," said Rollmann.

AA has three forms of governance, one for the 20+ participating companies, a second for its relationship with UICC, and a third for its partnership with the World Bank. The governance structure for its corporate partners reflects the differences among the companies, each with its own starting point with regard to existing programs, processes, resources, and footprint. Rollmann explained that the companies are goal oriented and share a belief in collective decision making. The governance structure includes committees, working groups, nomination processes, and a secretariat. A primary role of the secretariat, which is hosted by at International Federation of Pharmaceutical Manufacturers (IFPMA) and has a dedicated staff, is to ensure there is robust information sharing among the partners. Each participating company has a seat on the steering committee that meets regularly and serves as the core decision-making body. There is an operating committee, comprising the two co-chairs of the initiative, the chairs of each of the six working groups, representatives from one smaller company and one Japanese company (as steering committee calls may not always be convenient for all given time zones), a representative of the secretariat, and the IFPMA director general. The focus of the six working groups are: interface with the World Bank, interface with UICC, and interface with the companies, metrics, communications, and stakeholder outreach. AA is flexible and allows members to choose on which working groups they serve.

In Rollmann's opinion, AA has effectively built into its governance structure a process for continual learning and refinement. Twice yearly, the secretariat contacts each member company to do a formal check-in to make sure everyone is informed about the program's progress, to answer questions, and to get feedback. She noted that each of the World Bank and UICC partners has their own governance structures that AA respects while still ensuring there is alignment and accountability for the initiative. As a result, AA established explicit rules of engagement that were influenced strongly by the governance principles of the companies, as well as the World Bank and UICC. Stakeholder engagement, said Rollmann, is handled by each of the partners, including UICC and the World Bank.

The company CEOs have been clear about the importance of measuring results and sharing learning. The independent Boston University team has established a framework with common metrics across programs to enable aggregation of the data from each partner's efforts (the measurement framework described in detail in Chapter 6). "We are hopeful that through this [initiative] we will know the impact we had and also start to build the knowledge … for a road map," Rollmann explained. In closing, she said the lessons Access Accelerated has learned include the value of establishing a common vision and upfront commitment, being thoughtful about where consistency is needed and where flexibility can be designed into the partnership, and the importance of communication and face-to-face meetings. Other lessons have included

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building a common language across partners and allocating the time and resources to solicit feedback from the partners.

DETERMINED, RESILIENT, EMPOWERED, AIDS-FREE, MENTORED, AND SAFE (DREAMS)

The President's Emergency Plan for AIDS Relief (PEPFAR) DREAMS program is a $385 million multisectoral partnership devoted to prevent HIV transmission among adolescent girls and young women. To achieve this objective, explained Lauren Marks, she and her colleagues realized they would need to focus beyond the health system and address education, economic empowerment, and family planning. By broadening the scope beyond health, DREAMS has been able to engage a broader group of stakeholders who may not have had a primary interest in joining a partnership focused on HIV/AIDS.

DREAMS' approach is to layer services to prevent HIV infection, explained Marks. Its core package of interventions includes empowering girls to reduce their risk for HIV and violence; characterizing the "typical" sexual partners of adolescent girls and young women in order to target highly effective HIV interventions; strengthening families economically and in terms of their ability to parent positively; and educating girls, young women, and young men and mobilizing communities. DREAMS started out in 10 sub-Saharan East African nations and later added five more countries.

The five partners in DREAMS include the Bill & Melinda Gates Foundation; Girl Effect; Johnson & Johnson; Gilead; and ViiV Healthcare, and each provides a unique contribution to the partnership. Girl Effect is launching a culture brand to reach the most vulnerable girls and boys with DREAMS messaging. In addition to informing programming and amplifying messaging, Johnson & Johnson listens to and brings girls voices to life to tell success stories and helps the project understand who these girls' influences are, what their family life is like, and who their sexual partners are to enable human-centered design of the interventions. The Gates Foundation has taken the lead in and funds implementation research and impact evaluation, and Gilead is providing a financial contribution to purchase pre-exposure prophylaxis (PrEP). ViiV Healthcare provides grants to community-based organization to provide capacity building.

The partnership began with the development and signing of a nonbinding memorandum of understanding (MOU). The MOU, said Marks, serves to hold the partners accountable to their commitments to the partnership. "When people have to quantify, write down, and sign a document that says these are our roles, responsibilities, and contributions, I think it adds a level of formality to the partnership," she explained. "It is also where we lay out the framework for some of our governance."

One of the hardest things the partnership had to do in its early meetings, said Marks, was to name the initiative; coming up with an acronym that conveys a sense of hope and positive thinking and takes into account political sensitivities was a challenge. Then the partners had to develop a logo. The private-sector partners were able to bring their expertise in branding and marketing to facilitate the naming and logo development process. The partners then had many discussions about the governance structure, particularly on membership, how to add new members, and how much of a financial commitment would be needed for a new member to have a seat at the table. The partners discussed whether there should be a partnership director and if the secretariat should have its own leadership, governance structure, or staff, where it would be housed, and what its role should be. The partners also established working groups, which Marks

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said were similar to those of AA, and developed provisions for decision making, dispute resolution, and responsibilities. One challenge was accommodating the U.S. government's role as the largest funder and its veto power over how the partnership spent its funds. The partnership wanted some flexibility in its governance structure so it would be able to adapt to changing circumstances and add new partners and subcomponents. She noted that the partners had to agree on what success looked like so the partnership could have the proper metrics in place to measure success.

During the development phase, DREAMS was able to hold workshops in each of the 10 countries where it initially worked to listen to the beneficiaries' vision of what the program should provide. That engagement lead the partners to take a proactive approach to identify partners who could provide unique value. Marks explained that effort included a landscape analysis of current related initiatives.

GLOBAL HEALTH INNOVATIVE TECHNOLOGY FUND

The Global Health Innovative Technology (GHIT) Fund, based in Japan, grew out of a 2011 conversation between BT Slingsby and Tachi Yamada about the Japanese pharmaceutical industry's absence from global health initiatives despite ranking third in the world in new drug development. "We were trying to create a fund to act as a catalytic entity to bring more partners from Japan to the global fight against these diseases like malaria, HIV/AIDS, tuberculosis, and many of the neglected tropical diseases," explained Slingsby. By June 2013, Slingsby had cultivated eight partners to form the GHIT, a partnership with an initial endowment of $100 million. The government of Japan, working with the United Nations Development Programme, provided $50 million, with five companies and the Gates Foundation matching the amount. As of June 2017, the fund had grown to 26 partners, an endowment to $350 million, and six sponsors who provide in-kind donations that lower the fund's management costs to under 5 percent of its annual budget.

In August 2011, the eight founding partners met and formed a launch committee that over the course of a year through biweekly meetings developed the articles of incorporation, bylaws, iterative processes, and governance structure, including committees, councils, and boards. The launch committee also established the fund's investment scope and mechanism and access policy, as well as a launch strategy. Today, the fund has invested in over 60 global partnerships, each of which includes a Japanese entity and a non-Japanese entity. As of November 2017, these partnerships have started six clinical trials in South America and Africa.

The fundamental purpose of the fund is to act as a catalyst for engaging Japanese entities in global health initiatives, and in that respect the fund has been successful, said Slingsby. He noted that the governance structure established by the launch committee was designed to manage conflicts of interests and balance power among partners. The basic governance question the launch committee sought to answer was how to create a PPP in which the same entities that are funding the partnership can become beneficiaries of it. The answer was to create a firewall between the council and the rest of the organization. The managing council includes all corporate partners as well as the major funders, but the council is not involved in any of the decision-making process regarding investments, strategy, scope, or portfolio decisions. As a result, the partner companies can apply for grants from the Fund.

The fund's board includes only one funder, the Japanese government, with the philanthropic partners, the Gates Foundation and Wellcome Trust, holding observer seats on the

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board. The Gates Foundation and Wellcome Trust sit on the selection committee that makes recommendations to the board. The governance structure includes a criterion for investment that states every funded partnership must be global, consisting of at least one partner from Japan and one from outside of Japan.

Slingsby described some persistent governance challenges for GHIT. The diversity of partners and their participation at different levels of the governance structure necessitates active awareness raising on the overall governance structure and process. Members serving on governing bodies volunteer their time, and sustained leadership and engagement from high-level experts requires thoughtful management. GHIT is a public Japanese entity with a global mission and international partners that at times requires aligning differing legal standards.

AFRICAN COMPREHENSIVE HIV/AIDS PARTNERSHIPS (ACHAP)

When ACHAP[3] was established in 2000, some two-thirds of HIV-positive individuals lived in Africa, and very few had access to treatment. Jeffrey L. Sturchio, who was involved in ACHAP's development and now serves on its board, noted that in Botswana, HIV/AIDS had become an existential crisis. Life expectancy, which reached almost 70 years of age in the 1990s, had plummeted to the low 30s.

At the time, Uganda had been experiencing success in addressing its HIV/AIDS epidemic using a prevention strategy, but no initiative had tried to deal with the entire spectrum of prevention, treatment, and care, and build a health system infrastructure to deal with the epidemic in a country like Botswana. ACHAP was founded to test whether that it was possible to tackle HIV/AIDS on that scale and to ascertain if involving the private sector to help organize and manage projects might increase the impact. Merck & Co., Inc. began looking for partners in this effort, and the government of Botswana and the Bill & Melinda Gates Foundation joined Merck and The Merck Company Foundation to create ACHAP. Structured as an NGO in Botswana, the board included two members from the Gates Foundation, two from Merck, and an independent expert well known to key stakeholders in Botswana.

ACHAP's goal, said Sturchio, was to address the threat of the epidemic through an integrated, country-led approach to prevention, treatment, and care. During its first few years, the drop in life expectancy reversed through the partnership's support of a broad-based national treatment program[4]. An important element for success was the president of Botswana's strong public support for the country's efforts to control the HIV/AIDS epidemic. This was exemplified by his direct involvement in establishing routine testing for HIV throughout the country. "It helped individuals feel more comfortable about getting a test and then becoming eligible for and enrolling in treatment," said Sturchio. He added that the opt-out testing procedure that Botswana pioneered was soon adopted by the World Health Organization, Joint United Nations Programme on HIV/AIDS (UNAIDS), and the U.S. Centers for Disease Control and Prevention as the worldwide standard for HIV/AIDS testing.

One of the lessons learned from ACHAP has been the critical importance of political will and commitment that was evident in Botswana by the president leading the charge. At the same

[3] For more additional background on the origins and early years of ACHAP see Distlerath et al., 2004; Ramiah and Reich, 2005; Ramiah and Reich, 2006; and Hilts, 2005.
[4] For more information on this program see http://apps.who.int/iris/bitstream/handle/10665/43065/9241592400.pdf;jsessionid=3382DEDC60C338C50F221DF6CB3BDE64?sequence=1 (accessed April 4, 2018).

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time, said Sturchio, it was important for the Gates Foundation and for Merck to realize that they were working in a different organizational and national culture, which had a critical impact on the partnership. Country ownership was also fundamental, he said, and ACHAP was integrated into national strategies and priorities. Building local capacity and engaging affected communities were also key elements of the strategy. ACHAP's governance structure included clearly identified objectives, roles, and responsibilities, as well as an effective mechanism for communicating among stakeholders and agreed-upon metrics. Among the key metrics, said Sturchio, were how many individuals were treated and the mortality rate.

To promote alignment, transparency, and accountability, ACHAP worked closely with the National AIDS Coordinating Agency, participated in the national forum of development partners, and established the Madikwe Forum[5] for the ACHAP board and permanent secretaries of all government departments involved in the AIDS response to meet regularly to identify and work through bottlenecks. The permanent secretaries would assign specific ministries to tackle those bottlenecks and report back at the next meeting of the forum.

The ACHAP board, said Sturchio, had its own processes for ensuring that the two funding partners were able to work closely with management on critical issues. In addition, an international advisory group provided information and counsel about the global response and what was working elsewhere on how to deal with HIV/AIDS. The ACHAP board also decided to invest in monitoring, evaluation, and dissemination of the results with partners and other audiences.

From ACHAP's inception, the founding members were concerned about sustainability but it did not come to the forefront in the board's planning in the early years, as the focus was on coping with a crisis situation. In time, however, there was discussion and planning to move from dealing solely with HIV/AIDS to a broader emphasis on population health in the country. The resulting sustainability plan involved building on ACHAP's core capabilities in program management and implementation and on diversifying sponsors. The formal partnership ended in 2014 (although Merck continued to donate its antiretroviral medicines to Botswana until 2016), but ACHAP is still operating in Botswana. It has worked with PEPFAR and the U.S. Centers for Disease Control and Prevention and has also become the first private-sector principal recipient of the Global Fund in Botswana. ACHAP is also working with the World Bank and has begun a project with 10 members of the Southern African Development Community on various health challenges, such as tuberculosis among mine workers.

Regarding ACHAP's impact, Botswana went from being the country with the highest adult prevalence of HIV infection to becoming the first to achieve universal antiretroviral therapy coverage and the first African country to reach UNAIDS's 90-90-90 goal.[6] Life expectancy had rebounded to 66 years of age by 2015, and adult HIV prevalence had fallen from nearly 40 percent to 22.2 percent in 2015. ACHAP also supported Botswana's introduction of universal coverage for prevention of mother-to-child transmission, which cut the percentage of

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[5] For more information on the Madikwe Forum see George, G., C. Reardon, J. Gunthorp, T. Moeti, I. Chingombe, L. Busang, and G. Musuka. 2012. The Madikwe Forum: A comprehensive partnership for supporting governance of Botswana's HIV and AIDS response. *African Journal of AIDS Research* 11(1): 27-35.

[6] By 2020, 90 percent of all people living with HIV will know their HIV status. By 2020, 90 percent of all people with diagnosed HIV infection will receive sustained antiretroviral therapy. By 2020, 90 percent of all people receiving antiretroviral therapy will have viral suppression (http://www.unaids.org/en/resources/documents/2017/90-90-90 [accessed January 29, 2018.])

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HIV-positive infants from 40 percent to under 4 percent. With ACHAP's collaboration and financial support, Botswana also built a national network of HIV clinics; developed national counseling and testing infrastructure and services; developed a cadre of physicians, nurses and community health works to build the national response; implemented and scaled-up safe voluntary male circumcision and behavior changes programs for prevention; and developed local capacity to address TB/HIV co-infection. The important factors that led to these successes, said Sturchio, were that ACHAP focused on alignment with government and all partners, on being adaptable as circumstances changed, on learning by doing, and on being willing to change what it was focusing on if it became clear that an activity was not going to have the desired impact.

"We have to realize that partnerships like this are a process, not just an event," said Sturchio in concluding his remarks. "When you create it, that is just the beginning. As ACHAP's experience clearly shows. A focus on adaptability and learning is really critical to long-term success." He noted that while today's ACHAP looks nothing like ACHAP in 2000, it continues to make an important contribution both to progress against the HIV/AIDS epidemic in Botswana and more broadly now to population health issues in southern Africa.

THE AVAHAN EXPERIENCE

The Avahan program, which ran from 2004 to 2014, was implemented in two phases in six Indian states that accounted for 70 percent of those infected with HIV in the country at the time. Sonal Metha explained that the first phase of Avahan focused primarily on controlling HIV through scaled prevention response; the second phase focused on the sustainability of Avahan's achievements during the transition from external funding to local government ownership. Mehta emphasized that a significant change between the phases was the strong focus on community engagement in the latter phase. Partnerships were formed with 46 government clinics working in rural areas, and the program trained hundreds of outreach workers.

Prior to Avahan, the India's government health system focused solely on HIV/AIDS treatment rather than prevention, said Mehta. Much of Avahan's work, she said, was with female sex workers in rural areas, and between 2007 and 2010, the number of female sex workers accessing services at the partnership clinics increased from 1,627 to more than 15,000 (Kokku et al., 2014). "It is relatively easy to talk about HIV and sexually transmitted diseases in urban centers, but to talk about that in rural areas is that much more difficult," said Mehta, "and to involve government clinics was even more difficult." However, opinion surveys found that most female sex workers accessing services at the partnership clinics expressed confidence that they would continue to receive effective services from the government facilities even if the program ended, which Mehta observed was one sign that the program was successful. Another measure of success, she said, has been the extent to which the HIV epidemic has been reduced significantly in the southern states where Avahan worked.

Avahan had five levels in its governance structure: organizational governance focused on processes and systems, donor oversight to regularly review progress, partner meetings for ongoing coordination and mutual accountability, government oversight to monitor role clarity and expectations, and the community advisory group. Mehta commented that the community advisory group was the most effective governance mechanism for increasing accountability across the partners; the community advisory group was also more effective at demanding the government be accountable for meeting its responsibilities than Avahan would have been by itself.

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One of the most important lessons Mehta learned from this project was that each actor had to have a clear responsibility and role, and that it was important that each actor understand their stake in the success of the project. Another lesson was to involve the individuals most affected by the work. Real advocacy, said Mehta, came from the targets of the interventions. It was also important to set realistic expectations and clear boundaries for the partners. She also noted the importance of respect and ideological agreement.

DISCUSSION

Clarion Johnson opened the discussion with a question for the panelists: When they began putting their programs together, did they decide at what point they would consider their efforts a failure and stop their programs? Mehta replied that her program had a few small failures. Early on, the program came to a point where the Gates Foundation was not happy with Avahan's formation of community-based organizations (CBOs). "We had decided that if they really take a stand, 'no CBO formation, only HIV control,' then we would withdraw from the program," she said. Marks said that the DREAMS partnership has set a 2-year deadline for reducing HIV incidence by 40 percent, with the 2 year window ending in December 2017. Sturchio said that while ACHAP was having "tremendous success" with treatment, HIV incidence was not declining at the desired rate, particularly among young people. As a result, ACHAP started focusing on prevention and what needed to be done regarding behavior change, using insights from social marketing, behavioral economics, and learning from work that had been done on health promotion and prevention.

Scott Ratzan from the Anheuser-Busch InBev Foundation noted that many of the programs discussed over the course of the day focused on infectious diseases and, for the most part, delivering effective treatments. He asked the panelists if there were lessons to learn from their efforts that could be applied when there is not an easy product, such as a drug or vaccine, available as the answer to the global health challenge being addressed. Marks replied that a multidisciplinary approach, one that engages doctors, engineers, anthropologists, and representatives of a variety of industries, will enable lessons from these programs to be applied to public health to change behavior and bring a focus on wellness and prevention to PPPs. "I think it is going to take some creativity and doing things differently and not talking to the same public health people, but really looking outside of our usual orbits," said Marks.

Rollmann remarked that industry alone will not be able to drive solutions, which is why AA is engaging with the World Bank and nongovernmental organizations. She said that she and her colleagues have heard from individuals they work with that the demand for efforts on noncommunicable diseases is increasing, and they are looking for the right partners to advance this conversation. As far as forming new partnerships to address noncommunicable diseases, Sturchio said that governments need to be more proactive about approaches in which they can use existing instruments and tools, including laws and regulations, to engage more systematically with the private sector. He suggested if there are more individuals who can work comfortably across sectors, who know how to translate what government thinks into the way that private industry and civil society think, and vice versa, progress could be facilitated.

Regina Rabinovich asked the panelists if any of them had established mechanisms for dealing with disagreements among partners. Sturchio answered that the Madikwe Forum was established in part for that purpose. While there were not many disputes, the Forum proved to be an effective mechanism for addressing and resolving them, by having the right people around the

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table and a clear process for identifying the issue, fact-finding, brainstorming for potential solutions and following up on implementation. Marks shared an example of how data served to solve a disagreement. The U.S. Department of State was adamant that it wanted the DREAMS program to work with adolescent girls ages 15 to 24, but one partner wanted to work with younger girls. The solution was to commission some research that showed the importance of working with younger girls, and so the U.S. Department of State changed its policy and DREAMS now reaches those younger girls. Slingsby said that formally GHIT addresses disagreements through the committees, the board, the selection committee, or the council. However, there have not been many disagreements, and in his opinion soft diplomacy within the organization to align partners behind closed doors is the key.

Robert Bollinger from the Johns Hopkins University School of Medicine asked the panelists how they define sustainability or scale. Mehta said that in India, most states have transitioned successfully from Avahan support to government support. Her concern, though, is that technical knowledge can be lost during such transitions.

Jo Ivey Boufford then asked if any of programs had been supportive of or resistant to transitioning from a disease-specific program to using the same infrastructure for broader care. Sturchio said that when ACHAP facilitated and financially supported building a network of clinics, the clinics were initially intended to serve as infectious disease control centers, but ultimately served as an investment in building health care infrastructure for delivering a range of primary care interventions. He also noted that when the new elected president of Botswana had different priorities, ACHAP adapted to that reality and discovered that its capabilities in program design and implementation were transferable to other areas and to countries outside of Botswana. Moreover, those capabilities were sought out by new funders, and ACHAP is now a major implementer of the work on voluntary male circumcision that PEPFAR has been supporting in Botswana and is working with the Global Fund in other countries.

Rollmann said that one of the goals of AA's pilots with the World Bank is to explore how existing infrastructure can be used for additional purposes and that building a health system infrastructure can address one of the barriers to appropriate care in general in these countries. In addition, AA is looking for ways to extend the impact of the programs companies already have to have a greater benefit to patients in the countries in which its partners work. In Mehta's opinion, the services her program delivered had to be specific to context and population and would not have worked if those facilities were delivering general health care.

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TABLE 4-1 Partnerships Presented at the Workshop on October 26, 2018

Overview of Partnerships Presented in Workshop Session IV. Examining Lessons Learned from the Development and Iterative Improvement of Public–Private Partnerships and Their Governance

	Operating Years	Target Country/ Region	Partners	Focus	Partnership Goal	Governance Structure (publicly available)	Documented Partnership Outcomes/Impacts
Access Accelerated	2017 to ongoing	Worldwide	Initial Sponsors: 23 pharmaceutical companies and associations: Almirall, Astellas, Bayer, Bristol-Myers Squibb, Celgene, Chugai, Daiichi Sankyo, Eisai, Eli Lilly and Company, GlaxoSmithKline, Johnson & Johnson, Menarini, Merck, MSD, Novartis, Pfizer, Roche, Sanofi, Shionogi, Shire, Sumitomo Dainippon, Takeda, UCB, and The International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), BIO, EFPIA, JPMA, and PhRMA Partners: The World Bank, Union for International Cancer Control (UICC)	Moving noncommunicable disease (NCD) care forward: access to NCD prevention and care	To support the United Nations Sustainable Development Goal to reduce premature deaths from NCDs by one-third by 2030	http://www.accessaccelerated.org (accessed April 16, 2018)	http://www.accessaccelerated.org/initiatives (accessed April 16, 2018)

DREAMS	2014 to ongoing	Sub-Saharan Africa; Haiti (Botswana, Cote D'Ivoire, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe)	The U.S. President's Emergency Plan for AIDS Relief (PEPFAR); the Bill & Melinda Gates Foundation; Girl Effect; Johnson & Johnson; Gilead Sciences; ViiV Healthcare	Prevention among adolescent girls and young women	To reduce HIV infections by 40 percent among adolescent girls and young women in 10 sub-Saharan African countries by 2017 Country-specific targets: https://www.pepfar.gov/partnerships/ppp/dreams/c69041.htm (accessed April 16, 2018)	http://www.dreamspartnership.org (accessed April 16, 2018) https://www.pepfar.gov/partnerships/ppp/index.htm (accessed April 16, 2018) http://ghpro.dexisonline.com/sites/default/files/PEPFAR%20Final%20DREAMS%20Guidance%202015.pdf (2015) (accessed April 16, 2018)	https://www.pepfar.gov/documents/organization/252380.pdf (2017) (accessed April 16, 2018) https://www.pepfar.gov/documents/organization/247602.pdf (2017) (accessed April 16, 2018) http://www.genderhealth.org/files/uploads/change/publications/CHANGE_Dreams_Report_Updated.pdf (2016) (accessed April 16, 2018) Innovation Challenge: http://www.dreamspartnership.org/innovation-challenge/#innovation (accessed April 16, 2018)

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GHIT FUND	2013 to ongoing	Worldwide	*Full partners:* Japanese Ministry of Foreign Affairs; the Japanese Ministry of Health, Labour and Welfare; UNDP; Astellas; Daiichi Sankyo Company; Eisai Company; Shionogi & Co.; Takeda; Gates Foundation; Wellcome Trust; Chugai Pharmaceutical Co.; Eisai Co.; Fujifilm; Shionogi *Associate partners:* Otsuka Pharmaceutical Co.; Sysmex *Affiliate partners:* GlaxoSmithKline; Johnson & Johnson; Kyowa Kirin; Merck; Mitsubishi Tanabe Pharma; Nipro; Sumitomo Dainippon Pharma	Research; product development	To facilitate international partnerships that bring Japanese innovation, investment, and leadership to the global fight against infectious diseases and poverty in the developing world	https://www.ghitfund.org/about/governance/leadership (accessed April 16, 2018) https://www.forbes.com/sites/medidata/2015/04/30/investing-in-drugs-that-wont-make-money/#1024b2c83bb6 (2015) (accessed April 16, 2018) http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(13)70055-X/abstract (2013) (accessed April 16, 2018) http://www.nature.com/nm/journal/v19/n12/full/nm1213-1553.html (2013) (accessed April 16, 2018)	https://ghitfund.org/impact/impact (accessed April 16, 2018) http://5th.ghitfund.org/replenishment/en (2017) (accessed April 16, 2018) https://www.ghitfund.org/general/annualreport (2016) (accessed April 16, 2018)

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Avahan	2003 to ongoing	India (Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu, Manipur, Nagaland)	Bill & Melinda Gates Foundation; lead implementing partners; capacity building partners; other supporting partners; monitoring and evaluation partners; knowledge building partners	Prevention, education, and service	To reduce HIV transmission and lower the prevalence of sexually transmitted infections in vulnerable high-risk populations—female sex workers, men who have sex with men, transgender individuals, people who inject drugs—through prevention education and services	http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0136177 (2015) (accessed April 16, 2018) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287554 (2011) (accessed April 16, 2018) http://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1027&context=spnareview (2009) (accessed April 16, 2018) https://docs.gatesfoundation.org/documents/avahan_hivprevention.pdf (2008) (accessed April 16, 2018)	http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(13)70083-4/fulltext (2013) (accessed April 16, 2018) http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)61390-1/abstract (2011) (accessed April 16, 2018) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287556 (2011) (accessed April 16, 2018) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287555 (2011) (accessed April 16, 2018) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287553 (2011) (accessed April 16, 2018) https://docs.gatesfoundation.org/documents/avahan_hivprevention.pdf (2008) (accessed April 16, 2018)

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ACHAP	2000–2014[1]	Botswana	Merck & Co., Inc.; the Merck Foundation; the Bill & Melinda Gates Foundation; and the Government of Botswana	Prevention, care, treatment, capacity-building, systems strengthening	To prevent and treat HIV/AIDS in Botswana; ACHAP, established in July 2000, supported the goals of the government of Botswana to decrease HIV incidence and significantly increase the rate of diagnosis and the treatment of the disease, by rapidly advancing prevention programs, health care access, patient management, and treatment of HIV/AIDS.	http://web.archive.org/web/20030322045745/http://www.achap.org:80/ http://www.fsg.org/publications/adapting-through-crisis#download-area (2014) https://www.cgdev.org/sites/default/files/archive/doc/events/6.06.07/ACHAP_Presentation_June_6_Event.pdf (2007) http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1080&context=yjhple (2004)	http://www.fsg.org/publications/adapting-through-crisis#download-area (2014) http://www.msdresponsibility.com/wp-content/uploads/pdfs/key-initiatives_access-to-health_african-comprehensive-hivaids-partnerships.pdf (2014) http://www.achap.org/annual.php (2014, 2013, 2012)

SOURCE: Information in table was compiled from speakers Danielle Rollmann, Lauren Marks, BT Slingsby, Jeffrey L. Sturchio, and SOnal Mehta, and distributed at the workshop as preparatory material for their respective session.

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5

Evaluating and Reporting on Public–Private Partnerships in Global Health

The workshop's fifth session presented an initiative to develop a framework to standardize measurement and reporting across private-sector initiatives to improve access to noncommunicable disease treatment and care. The presentation by Veronika Wirtz and Peter Rockers from Boston University focused on the decision-making process for the framework's design and how it is being applied. Following the presentation, the workshop participants engaged in a discussion with the presenters, moderated by John Monahan from Georgetown University.

Rockers began the presentation with a comment about the proliferation of PPPs in recent years and the worry that they may not have achieved their desired impacts. In his opinion, this is where measurement can benefit global health PPPs. "There is the opportunity that measurement provides to identify those programs that do have the greatest impact and start to invest more in them," he said.

The framework that he and Wirtz presented was developed as part of their work with the Access Accelerated (AA) initiative that Danielle Rollmann described in the previous session. Rockers reminded the workshop that AA had multiple partners involved in multiple programs taking place at the same time. The framework's unit of analysis focuses at the level of the individual programs. In addition to developing the measurement framework, Rockers and Wirtz's role in AA includes three other primary aspects: creating the Access Observatory reporting system, building capacity among the partners for measurement, and project support to help specific programs with measurement.

Rockers said that just as it was important for the partners to be transparent about their principles, so too, was it important at the beginning of their engagement with the project to clearly articulate their principles as academics and independent evaluators. These principles included being transparent as partners, which manifested itself as building a system that would be fully transparent in terms of the information and data that the partners collect and report on as well as being transparent in their relationship with AA. Toward the latter, the Boston University team put its master service agreement that they signed as independent evaluators onto their website for every partner to see.

A second principle was the need to be flexible while maintaining consistency. Flexibility was important, said Rockers, because of the heterogeneity across the different programs operating under the AA umbrella. At the same time, the framework had to be consistent to enable synthesis across the programs. The third principle was to be practical while maintaining rigor. Any framework, said Rockers, is only as valuable as its usefulness in the field, but at the same time, the Boston University team was engaged to bring rigor to measurement and assessment activities.

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The framework Rockers, Wirtz, and their collaborators developed has three main components. The first is a taxonomy of 11 strategies to take the hundreds of different programs in AA and develop a simplified approach to categorizing them. The 11 strategies within the framework's taxonomy are community awareness and linkage to care, health service strengthening, health service delivery, supply chain, financing, regulation, manufacturing, product development research, licensing agreements, pricing scheme, and medicine donation. Rockers noted that many programs use multiple strategies. A logic model for each strategy laid out the pathways through which program activities aimed to achieve the intended outcomes and impacts, and each concept in each logic model had a corresponding indicator with a clear definition. These indicators enabled the partners, program designers, and implementers to collect and report standardized data.

The Access Observatory that he mentioned earlier is a public website that complements the framework and fulfills the Boston University team's transparency principle, said Rockers. It houses descriptions of every Access Accelerated program, and it will serve as a resource both for the approaches to collecting data it provides and for the data. He noted that everyone will be able to access all information the partners are collecting on these programs to compare programs and synthesize across them. From his and Wirtz's perspective, the Observatory will be the vehicle for generating a body of evidence across the various strategies and programs to determine which ones are working best and which ones are not meeting their goals and to start to move the entire initiative toward greater investments in those strategies that are most cost-effective.

Wirtz then described the process by which the Boston University team developed the framework, which included two points in the process when the team received formal feedback from corporate partners, the World Bank, and the Union for International Cancer Control (UICC). The first feedback received at 5 months, she said, helped the team clarify terminology and descriptions of the metrics. The second feedback opportunity, regarding the forms used to report into the Access Observatory, occurred several months later.

To Wirtz, the most interesting part of the development process was the tensions that arose, and the opportunities and challenges those tensions created to strengthen interactions among the partners. The sources of tension included the commercial aims versus social aims, practicality versus rigor, and confidentiality versus transparency. For example, the programs in AA often had both commercial and social aims, and the tension between these two was explicit in some of the training activities when corporate partners questioned why measuring social aims would benefit their objectives. The tension between confidentiality and transparency can be seen in the pharmaceutical sector, a pharmaceutical company may want to report issues but is unable to because of regulatory restrictions. Similarly, the tension was apparent when the Boston University team had to negotiate with the university's legal team to post the master service agreement on the Access Observatory.

Having a shared language enabled effective communication with and among the partners when addressing these challenges. Developing a shared language required careful listening, said Wirtz, to develop familiarity with how the various partners used informal language. She and her collaborators and the partners went through a collective and iterative process to develop that shared language and terminology and agreement on concepts. As an example, Wirtz said that some of the corporate partners said they use the term *patient journey*, and the Boston University team had to understand what that meant, translate it into words all partners could understand, and find an adequate place for that concept in the framework.

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Turning to the two dimensions of governance that Michael Reich discussed in his opening presentation—transparency and accountability—Wirtz said the framework addresses transparency to the public regarding the scope of the program activities and the social impact of those programs through the Access Observatory. However, the mechanism by which measurement will address accountability is still a work in progress. "It is important because measurement for measurement's sake is not what we want," said Wirtz. "We want measurement to result in actionable progress and strategies in making these programs better." Her final point was that measurement requires commitment from the global health community. Achieving better measurements, she said, requires public investments, and the return on those investments would be transparency, accountability, and shared learning.

DISCUSSION

John Monahan asked Wirtz and Rockers how many people they and their colleagues had to speak with to develop the shared language and how did they know when they had succeeded in developing it. Wirtz said she could not identify exactly how many people the Boston University team spoke with other than to say that they spoke with representatives from all 23 corporate partners, the World Bank, UICC, and the metrics groups. Developing the language was an iterative process, and even now, that process continues. An important part of the process, she said, was to document these discussions and iterations. Rockers added that the public health literature also contributed to development of the common language, and the team is now immersed in the business literature to help further develop the shared language.

Danielle Rollmann, who is engaged in the metrics efforts of Access Accelerated, remarked that one of the requests of the Boston University team was that it develop a framework to measure the aggregate results of diverse programs. She noted that there are a range of companies within the AA initiative, and while one company may have questioned Boston University about the need for measurement of social aims, there are others that design programs with social aims in mind and regularly publish results. That difference, she said, stems from the diversity of experience of types of companies, which are varying in size and levels of experience in designing and implementing programs supporting health system strengthening to help advance patient noncommunicable disease care and treatment

Brenda Colatrella asked Wirtz and Rockers to describe further the debate about practicality versus rigor and who makes the ultimate decision about what is practical. Rockers replied that the point about practicality versus rigor is one that comes up in every conversation he and his colleagues have with the corporate partners. From his perspective, learning what is practical is a process and not something that is self-evident. The hope is that the process of instituting measurements within the corporate partners will evolve over time regarding the capacities that can be built and the resources that can be made available. While his expectations are modest, he believes that companies will report on the scope of program activities to start, with a few instances of more rigorous evaluation. "The companies that are at the point where they are ready to invest in that kind of evaluation are the ones that have a history of understanding the value of that kind of evidence," said Rockers.

Wirtz added that the Boston University team had extensive interactions with companies on their current data collection processes and what would be feasible in those contexts. She and her colleagues then offered advice and support on what could be feasible in those specific contexts. "Having the right balance is important and requires an intensive listening exercise to

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understand what is done and how it is done and then with our expertise in data collection to think about what could be done and what resources are available," said Wirtz.

Robert Bollinger asked how the team optimizes the quality of the data when there are such diverse sources of data and a range of quality. Rockers said that since the Access Observatory has his team's name on it, it has the responsibility to ensure the data are of high enough quality to put them out in the public. However, the team cannot go to every project site and validate the data, so the approach is to have as much transparency as possible in reporting on the processes the program used to collect the data. That information is captured on a form that each program completes that says where every indicator they report came from. In fact, he said, part of what his team has been instilling in the programs and partners is a commitment to understand clearly where the data come from and how they were collected. That can be an issue because often it is the nongovernmental partner that collects the data.

Hanna Kettler from the Bill & Melinda Gates Foundation applauded AA's embrace of impact measurement as a core part of its activities, particularly given the diversity of the programs within the initiative. She asked if the companies or programs are collecting the data or if there has been an investment in additional capacity to do evaluation at the program level. Wirtz replied that the Boston University team and AA have started an initiative to involve other institutions that are interested in evaluation. In fact, one of her team's aims is to be a convener for bringing together interested institutions and building evaluation capacity in the global health area in general.

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6

Identifying Key Issues in the Governance of Public–Private Partnerships in Global Health

The objectives of the workshop's final session were to identify the key issues in the governance of global health partnerships and apply what has been learned to decision making in the establishment of new partnerships. To achieve those objectives, session moderator Cate O'Kane guided the workshop participants through a role-playing exercise to apply lessons learned from the workshop and identify key messages. In this role-playing exercise, participants in groups of 6 took on identities reflecting six key organizations together to form a new partnership and were guided through a process of collectively developing a governance structure for the partnership. At the end of the exercise, participants shared some reflections.

Brenda Colatrella said her group was able to reach a consensus to put the responsibility for leading the partnership in the hands of the partner they felt was best positioned to do it. Kenneth Miller said his group had more hard than easy decisions, in part because the focus of the partnership in the exercise was outside of everyone in his group's expertise. A workshop participant said that dealing with opposing views from outside the partnership was challenging. Another participant noted that there was some conflict over how quickly the partnership needed to make its decisions about governance, with some members being more impatient than others. A second participant in the same group said there was some question about why the nongovernmental organization representative was feeling so urgent and whether it had to do with a near-term financial need. O'Kane said that seemed like a trust issue.

Continuing the discussion, two workshop participants felt there was a need to bring in additional parties to move the partnership's work along more quickly. In one group, the corporate partner took the stance of not wanting competitors to be part of the initiative, with her reasoning being that her company could provide the value added that was needed from the private sector. A satisfactory compromise was to create an external advisory committee that could include competitors.

CLOSING REMARKS

Clarion Johnson and Regina Rabinovich began the closing workshop discussion by sharing their key takeaways from the workshop. Johnson said he had developed a new-found appreciation for restraint with regard to when to use various governance mechanisms. Rabinovich was taken by the need to spend time getting the governance structure right from the start. She wondered if those within the global health community could lay out the questions a governance structure needs to answer as a guide for groups starting new partnerships. Her second takeaway was that the structure matters, and it is important to understand the ramifications of choosing a specific structure. Her third key lesson was that conflicts of interest are common in

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all sectors, not just the private sector, and that there are effective approaches for managing conflicts. She wondered if the Forum on Public-Private Partnerships for Global Health and Safety could better characterize and understand the many approaches available to resolving conflicts of interest in public-private partnerships. Rabinovich was also struck by the idea of the ethical dimension of governance and expressed interest in exploring that idea further.

Jo Ivey Boufford was surprised by the power of the preexisting stereotypes each sector has of one another and by the ubiquity of conflict of interest outside of the private sector. She also observed that language chosen to describe governance may present a challenge to the public health community, a comment Robert Bollinger seconded. She noted that the language used in the public administration literature is much clearer than the literature coming out of public health or business. Bollinger provided the final comment, which was that it troubled him how difficult it remains to put together these partnerships and how easy it is to exclude key players and miss opportunities for progress.

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Appendix A

Commissioned Paper: The Core Roles of Transparency and Accountability in the Governance of Global Health PPPs

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Prepared for the Forum on Public–Private Partnerships for Global Health and Safety
Exploring Partnership Governance in Global Health: A Workshop
October 26, 2017
The National Academies of Sciences, Engineering, and Medicine
Washington, DC

Over the past 2 decades, the field of public–private partnerships (PPPs) in health has expanded enormously, both in the number of such organizations and in the study of this phenomenon. This growth reflects rising societal expectations about what partnerships can and should do to contribute to social welfare. The National Academies of Sciences, Engineering, and Medicine's Forum on Public–Private Partnerships for Global Health and Safety (PPP Forum) reflects this growth in interest in PPPs and has contributed to better understanding what these organizations do and how they contribute to society. Within this sphere, the question of "governance" of PPPs remains an important topic for additional analysis and discussion.

This paper was prepared as background for the National Academies workshop, to examine "the evolution and trends in the governance of global health PPPs," and provide "reflections on significant issues and current challenges with these governance structures, processes, and practices."[1] The PPP Forum staff suggested that I draw on my own work in considering the trends and challenges for PPP governance. Over the past 2 decades, I have had multiple engagements with PPPs in public health. I have studied various partnerships,[2–5] and helped establish and oversee (as a board member) a new PPP. In April 2000, I organized a conference in Boston to examine PPPs and subsequently published a book based on that meeting with several case studies and analytical chapters.[6] Many of the issues raised in 2000 persist today. In some ways it is comforting that the book could identify core challenges for global health PPPs 17 years ago. In other ways it is discouraging that certain major problems persist, especially related to governance, perhaps reflecting fundamental challenges in getting public and private organizations to work together effectively.

Diverse engagements with PPPs in global health over many years have highlighted for me the importance of transparency and accountability in partnership governance. In this paper, I first briefly review the literature on PPP governance. I then propose a simplified model of governance, with a focus on transparency and accountability, and discuss the implications of this model for assessing the governance of PPPs in global health and for designing the governance of a new PPP.

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THE LITERATURE ON PPP GOVERNANCE

The first question is: "What do we mean by governance?" The National Academies invitation to the workshop gave a brief answer, defining governance as "the art of steering societies and organizations." The source of this definition is the Institute on Governance, a not-for-profit public interest institution based in Canada (an interesting choice for the U.S.-based National Academies).[7] This definition is useful in its emphasis on governance as an "art" form—something that involves both creativity and execution—and its goal of seeking to "steer" both societies and organizations, which implies knowing the course that the organization is expected to follow. The term *governance* is a relatively recent word, as shown by a Google graph of usage that demonstrates an impressive surge in the past two decades (see Figure A-1).

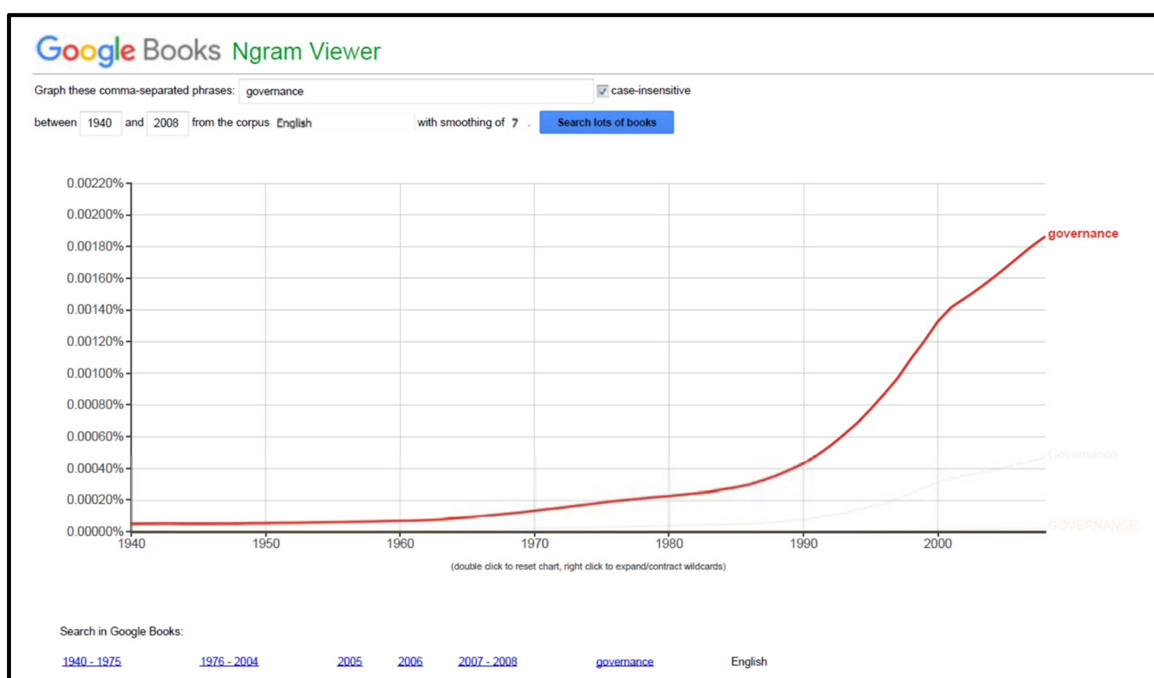

FIGURE A-1 Graph of usage of "governance" in Google Books, 1940–2008.

But as the workshop invitation also noted, definitions of governance are "varied"—an understatement. Even the Institute on Governance recognizes the limitations of the steering metaphor,[7]

> Some observers criticize this definition as being too simple. Steering suggests that governance is a straightforward process, akin to a steersman in a boat. These critics assert that governance is neither simple nor neat—by nature it may be messy, tentative, unpredictable, and fluid. Governance is complicated by the fact that it involves multiple actors, not a single helmsman.

The ambiguity in definition and understanding of governance is heightened when applied to PPPs, precisely because these organizations are partnerships and do not fit neatly into the

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accepted categories of "public" or "private" organizations, businesses, or agencies. In addition, partnerships often involve multiple partners with no single "owner" or governor. The nature of partnerships creates both strengths and weaknesses for PPPs. As I wrote previously, "both public and private actors are being driven towards each other, with some amount of uneasiness, in order to accomplish common or overlapping objectives" in situations where "neither public nor private organizations are capable of resolving such problems on their own."[8]

These endeavors thus bring together organizations with strikingly different cultures—"different values, interests, and worldviews"—to a space where "the rules of the game for public–private partnerships are fluid and ambiguous."[8] These cross-sector collaborations between public entities and private entities are complicated and time consuming because societies lack adequate standards or norms about how these new organizations should work (compared to collaborations between only private or only public entities). As a result, each PPP typically needs to invent de novo how it will operate and be governed.

In planning for this meeting, the National Academies staff conducted an initial literature review of PPP governance. The annotated bibliography on "partnership governance in global health"[9] listed 27 documents published since 2000, including peer-reviewed articles, conference reports, consultancy reports, and books, with analyses of single organizations and comparisons of multiple partnerships. Many of the documents adopt a tone commonly found in the business management literature (sold in airports) on how to make your partnership work better. One report[10] provides "five characteristics of successful PPPs."[a] Another publication—based on a review of the "governance structures" of 100 global health partnerships—identifies the "seven habits of highly effective global public–private health partnerships,"[11] specifying seven contributions and seven unhealthy habits, followed by seven actions to improve their habits.[b] Another article concludes that the governance structure of a partnership is a key determinant of success, according to an analysis of the voting rights of different parties in organizational boards.[12]

My initial impression of the literature on PPP governance, based on this review, was of a field characterized by a plethora of recommendations and an ambiguity of actions. The number of publications about PPP governance has undoubtedly grown, but it was difficult for me to identify any evolution or trends in the literature. I was impressed by the increased volume, but did not see increased clarity. One review of the "governance of new global partnerships" identified a series of interesting challenges, weaknesses, and lessons from 11 partnership assessments, but did not specify a model for PPP governance and focused exclusively on the role of boards.[13] (One conclusion of this study was that many PPP boards were designed to allow the participation of multiple constituencies, which reduced the ability to function as accountability mechanisms; to assure representation of many stakeholders, board meetings included 40 to 50 people, making it difficult to have in-depth discussions and resolve complex problems.) These reflections on PPP governance led me to think about an alternative approach focused on the concepts of transparency and accountability.

Following this initial review, the National Academies research center conducted a more detailed literature scan on partnership governance of three databases (OVID, Scopus, and Web of Science) for materials published since 2000.[13] The search included the terms *partnerships* and *global health* and *transparency*, *accountability*, and *governance* in various combinations. The search also examined the publications of 14 global health organizations. The search produced a total of 519 titles and abstracts. A review of these 519 summaries found 42 directly relevant, 268

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of some relevance, and 209 not appropriate. (The full search document of 166 pages is available from the author.)[c]

It is worth noting that the broader literature on "governance of health systems" has also grown significantly in recent years. A systematic review of "frameworks to assess health systems governance" between 1994 and 2016 found 16 different frameworks in the literature.[15] The frameworks were based on various theoretical approaches in new institutional economics, political science, public management, and development. But this review also found that only 5 of the 16 frameworks have been applied. The authors concluded that the existing frameworks need to be tested and validated in order to understand "which frameworks work well in which settings." They also emphasized that "health system governance is complex and difficult to assess" and that "[t]here is no single, agreed framework that can serve all purposes."[15]

Based on this situation, it seemed to me that it would be more useful to focus on a higher-level model for PPP governance, in hopes that it could be applied. I have adopted that approach in this paper. My goal was to create a model of governance that could simplify the complex challenges of PPP governance, and that could be applied by implementers and analysts involved in the design, assessment, and revision of how actual partnerships work in practice.

A SIMPLIFIED MODEL OF PPP GOVERNANCE

My approach envisions PPP governance as consisting of two key dimensions: transparency and accountability. These dimensions are operationalized through various measures and mechanisms, which I discuss below. I begin with a focus on clarifying these two dimensions, which are among the most widely discussed concepts in writing about governance. As Jonathan Fox notes, "a wide range of actors agree that transparency and accountability are key to all manner of 'good governance'."[16] These two concepts also appeared as common themes in the NASEM literature scan on PPP governance.[9,14]

Many analyses of organizational governance consider transparency and accountability as part of the same category.[16,17] For example, the authors of an analysis of the Medicines Transparency Alliance wrote, "Transparency is a necessary but not sufficient condition of accountability."[18] In this paper, I take a different approach. Instead of seeing one concept as a condition of the other, or one inside the other, or one leading to the other, I consider transparency and accountability as orthogonal (and independent) dimensions of organizational governance (see Figure A-2). This approach takes one step beyond what Fox does when he considers transparency and accountability as parallel concepts and examines their overlaps and "uncertain relationship."[16]

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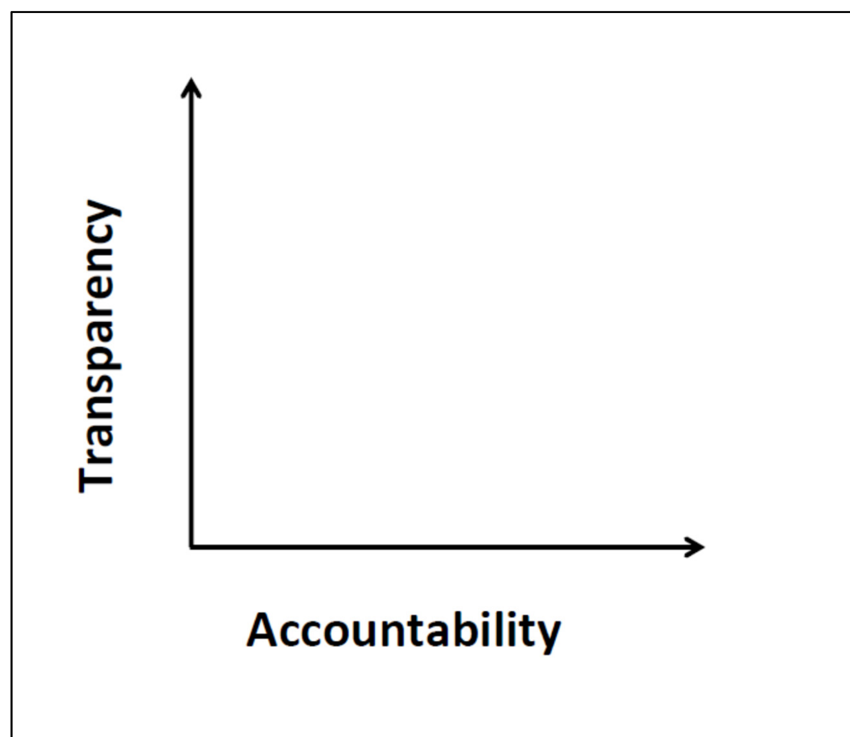

FIGURE A-2 Two dimensional model of governance, with transparency and accountability.

By viewing transparency and accountability as separate orthogonal dimensions of governance, one can then think about organizations with high and low transparency and high and low accountability, leading to a two-by-two table of governance (see Table A-1).

TABLE A-1 Two-by-Two Table of Low and High Levels of Transparency and Accountability

	Low Accountability	High Accountability
High Transparency	High T, Low A	High T, High A
Low Transparency	Low T, Low A	Low T, High A

Let me underline two caveats about this simplified model. *First, I am not asserting that these two dimensions represent all possible aspects of governance for PPPs.* The proposal is not

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intended as a grand theory of governance; instead, it is a "simplified" model. I argue that transparency and accountability are two core components of governance, and that these two dimensions can be used for planning new partnerships and for assessing and improving the operations of existing partnerships. Other dimensions no doubt could be included—for example, participation (or civil society engagement) is sometimes proposed as a separate aspect of governance.[19] I prefer, instead, to see participation as a mechanism for expanding transparency and/or assuring accountability.[d] For the purposes of thinking about PPP governance, however, I suggest that these two dimensions provide improved conceptual clarity and operational implications. In addition, and most importantly, improved transparency and improved accountability may lead to improved performance by the partnership in achieving its organizational and societal goals. We should care about these two dimensions of governance because they can influence the partnership's impacts on society, as I discuss below.

My second caveat is that this simplified model does not tell us how much transparency or accountability is good or desirable. This normative question about the level of governance (along these two dimensions) has to be provided through other social processes. Partners and stakeholders may disagree about how much transparency they want for a particular partnership, and they may also disagree about how much accountability, and to whom, is desirable. Our ethical intuition would probably tell us that the lower-left quadrant, with low transparency and low accountability, is not desirable for a PPP, since this would probably contribute to lower social benefits from the partnership. Our intuition would probably point to somewhere in the upper-right quadrant as desirable, although how far along each axis (and for which stakeholders) would be debatable and contested. Indeed, it is this intuition, I would suggest, that brought both practitioners and researchers to the National Academies workshop on PPP governance. Understanding how to move an organization along these dimensions of governance, then, is critical.

This simplified model of a two-by-two table does not, by any means, solve the complex problems of governance of PPPs (or any other organizations) or address the many factors that contribute to the success or failure of a partnership. The format does, however, allow one to think systematically about the definitions (and purposes) of transparency and accountability, the ways to measure high and low levels for both concepts, different institutional mechanisms that can change the levels of transparency or accountability, and, eventually, how these two dimensions influence the performance of a partnership. In short, this simplified model is intended to create conceptual clarity about the purposes of PPP governance and also lead to concrete options for action to promote ethical and effective governance of PPPs in global health. Let us, therefore, consider these two dimensions of governance in more detail.

TRANSPARENCY

Transparency fundamentally involves questions of contents and relationships: What information is available to whom? In addition, transparency involves questions about the quality of the information, and the mechanisms for making the information available.

Let's start with the relationship aspect of transparency. This addresses the question of *who* has access to information from the partnership. The receivers of information can include the core founding partners, nonfounding and noncore partners, stakeholders who are not partners (such as beneficiaries), government agencies (including contracting agencies and regulatory agencies), relevant actors in the public health field, donor agencies, academics, and the general

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public. Depending on national law, partnerships can be required to make certain information available to specific government agencies and to the general public. For example, in the United States, partnerships that register as nonprofit and tax-exempt charitable organizations (as a 501(c)(3) organization) are required to file a financial report (Form 990) with the Internal Revenue Service each year, thereby providing information to the U.S. government. In addition, these organizations are required to make the annual Form 990 available for inspection to the general public during business hours (and many place the forms on their website for free download). National law and government policy (including memoranda of understanding with a PPP) can thus specify which information is to be made available to whom.

Most informational relationships are decided at the discretion of the partnership (or at the direction of a partner in a written agreement to initiate the collaboration).[e] For instance, detailed information about salaries of executives and managers at a partnership may be available to the core partners on the board of directors but may not be available to the broader public or the beneficiaries of a PPP. Similarly, contracts with suppliers may be reviewed by the core partners but not by noncore partners. Indeed, the funders of partnerships can exert high degrees of influence over what is made transparent to whom, sometimes restricting access to information and sometimes expanding it. This pattern illustrates that not all partners are equal.

Next let's consider kinds of information. One way to think about kinds of information for a PPP is around inputs, processes, outputs, and outcomes. This typology is proposed by Reynaers and Grimmelikhuijsen (2015) in their article on transparency in PPPs,[20] although I have slightly altered the definitions (to fit with standard terms used in evaluation and management literature). *Inputs* could include the contributions from each partner, such as finances and sources of funding, materials purchased and received by the organization, people who work at the PPP (human resources), as well as any intellectual property and information used by the partnership. *Processes* could include ways of making decisions (including plans and budgets) and related documentation such as agreements signed by the partnership, policy memos and analyses, minutes from internal meetings, expenditures by the PPP (financial reporting), and operational and strategic decisions for the PPP. *Outputs* could include who receives products managed by the PPP, and data sets that measure performance of the organization (in terms of relevant metrics or targets, or related to the partnership's mission), such as numbers of beneficiaries, services delivered, or medications received, as well as lessons learned that others can apply. *Outcomes* would specify the ultimate performance objectives in terms of improved health status, or client satisfaction, or financial risk protection.[21] In their analysis of four partnerships in the Netherlands, Reynaers and Grimmelikhuijsen found that there was limited attention to inputs and processes, and that most of the attention focused on outputs, but that the output targets were not always clearly specified (and thereby created problems).[20]

The quality and scope of information is also often decided by the partnership. For instance, monitoring information on outputs produced by the PPP is often published in an annual report and made available to the general public. But these documents rarely contain any negative information and usually do not compare performance to targets or expectations. The full data set is not usually publicly available, or the data may be aggregated in ways that mask key results that could be viewed negatively, such as distributional issues (across regions or across income groups). Another possibility is that raw data are provided, but in ways that are either not easily understood by people who are not technical analysts or cannot be readily analyzed. The presentation of data thus can shape whether the information is intelligible to different audiences.

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The final consideration is mechanisms for assuring transparency. Four general types of mechanisms to promote access to information (and transparency) exist:[18] (1) access through *public dissemination*, where information is provided by the organization in publications or on websites, or made available in public reading rooms; (2) access by *request*, either as required by law (or lawsuit) or by discretionary decision of the organization; (3) access through *meetings*, including public hearings or advisory meetings or closed meetings; and (4) access through *informal means*, such as whistleblowers or leaks when confidential documents are provided to individuals, government agencies, other groups, or the press, generally in order to focus attention on mismanagement, corruption, or other purposes.

Other mechanisms for access to information also exist. For example, the funders of an organization (or the founding partners of a PPP) can require the reporting of certain information to the funders and the founders and of other information to the public as a condition of receiving financial support. Members of the board of directors may have exceptional access to internal information through regular meetings; these members can include the core partners, noncore partners, and others, depending on how broadly board representation is decided by the partnership. Finally, peer-reviewed publications and evaluations can result in public access to information, including full and original data sets for analysis.

It is worth noting several reasons why we care about transparency for PPPs. First, transparency contributes to learning. Transparency allows others the opportunity to avoid making the same mistakes and advances knowledge about how to improve the role of PPPs in global health. Through access to information about inputs, processes, outputs, and outcomes, others can learn about what works, how efficient different approaches are, the comparative strengths and weaknesses of different strategies and structures, and many other aspects of partnership performance. Access to information is a necessary but not sufficient condition for learning.

Second, transparency contributes to democracy. Because PPPs are intended to fulfill public interests, one can argue that the public has a right to know (in a democratic society) about what these organizations are doing and how they are operating. Laws on the right to know, however, usually apply to government agencies and public records. When PPPs take on public-sector functions, the contracts can include confidentiality clauses that limit access to information within the partnership organization.[22] These restrictions can limit public information and public deliberation about the specific PPP and its activities.

Third, access to information can contribute to accountability, as discussed below in more detail. But transparency (and access to information) does not necessarily result in action to hold a partnership accountable. An organization can provide partial or altered information, to shape perceptions of what it is doing, or it can provide an overwhelming amount of information in ways that obstruct accountability. In addition, action does not always follow access to information.

Fourth, transparency can shape organizational performance. If a partnership is required to report on certain metrics (such as number of patients treated), then the PPP could tend to seek to produce to that metric. There may be financial incentives and reputational benefits to report (and to act) in ways that show positive trends in information disclosed.

Finally, transparency can contribute to public perceptions of a partnership. Decisions about transparency shape the positive and negative information and images that exist in the public sphere about a partnership. PPPs may decide not to disclose information that could be viewed as harmful or negative, as part of their public relations strategies, or they may use positive information to boost the partnership's public image and reputation. In addition, PPPs

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may use their transparency policies to highlight the organization's adherence to ethical standards for partnerships.

In conclusion, PPPs shape the transparency they provide by deciding how to use different access-to-information mechanisms to channel certain kinds and quality of information to different audiences. Partnerships tend to have large latitude in deciding which information is provided to whom, the quality of that information, and how it is provided, depending on the nation where the partnership is registered and the legal requirements for such organizations in that country (which sets the minimal rules for transparency). The legal requirements will also vary, however, depending on whether the PPP is registered as a formal organization, the kind of organization, and the national laws related to that organizational form.[f] It should also be noted, however, that transparency for a PPP has costs (in terms of preparing and releasing information to different actors and audience) and also can have risks (since releasing information can result in consequences that may negatively affect the partnership). The complexity of transparency in practice (as described above) also complicates the challenges of measuring the degree of transparency for a particular organization. It may therefore be more appropriate to think about transparency with regard to a particular actor, rather than trying to create an aggregate measure across diverse audiences.

ACCOUNTABILITY

Accountability, as with transparency, is a contested concept with multiple definitions. I find the definition provided by Edward Rubin to be useful, as it captures many common elements of the concept:[23]

> [t]he ability of one actor to demand an explanation or justification of another actor for its actions and to punish the second actor on the basis of its performance or of its explanation.

These two elements are often called "answerability" and "sanctions." Accountability (in democratic societies) is typically considered for elected officials (both legislators and the chief executive), and that form of accountability is exercised (in the traditional view) through elections. Many problems exist with the notion of elections as a mechanism for assuring accountability;[23] and these problems are well known. As Rubin wrote in 2005, elections as accountability depends on the idea that

> an elected official must answer to his constituents for his actions. A realistic, contemporary consideration of elections suggests that this relationship to accountability, although not entirely absent, is a relatively minor aspect of the electoral process.

(One need only glance at the current state of public affairs in Washington, DC, to understand the limitations of elections as accountability mechanisms.)

Rubin also argues that accountability can only be exercised in a hierarchical relationship between superior and subordinate (which I do not agree with, especially for partnerships), and according to concrete standards (which I do agree with).[23] Rubin concludes by saying that his goal is not to solve the problem of administrative accountability but "simply to indicate that holding someone accountable is a complex, technical task."[23] This process of "holding

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accountable" is further complicated in PPPs by the challenges of trying to hold a partner accountable—a problem that may not have been anticipated when the partnership began. In addition, holding someone or a partner accountable is more than a technical task, since it involves questions of values (e.g., which targets are selected for assessing performance) and power (e.g., how actors are pressured to comply). In short, accountability involves ethics and politics as well as technical challenges. For example, accountability may be exercised through specific sanctions for nonperformance related to an agreed-upon metric, but it may also occur through public criticism and conflict that damage a PPP's reputation and thereby negatively affect the partnership's ability to operate.

What does this mean for PPPs in global health? Let's consider accountability for PPPs, first according to relationships and then according to metrics.

As with transparency, accountability needs to be addressed through bilateral relationships: *Who is holding the PPP accountable?* PPPs have a variety of stakeholders who could seek to hold the organization and its officers accountable. Perhaps most directly involved are the founding or core partners, which typically provide funding to initiate the PPP and have agreements and contractual obligations to uphold. These core partners are often represented on the partnership's board of directors or its executive committee, where key strategic decisions are made and supervised. Other nonfounding partners (who may or may not be on the board) also have strong interest in asserting accountability for a PPP, including the intended beneficiaries, related civil society organizations, and relevant governmental or international agencies. National regulatory bodies in the countries where the PPP operates also have a relationship with the PPP that can be expressed through accountability. National legislative and executive authorities may have an accountability relationship with a PPP, depending on the field of action for the PPP and the national political context. Whether a PPP is registered as an independent entity (and the kind of organization) in a particular political jurisdiction will have important implications (including legal obligations) for who holds the partnership accountable (and for what and how), as noted above for transparency.

Ambiguous roles and responsibilities in a partnership complicate the process of holding a PPP accountable. Kamya et al. contrast the partnership model of relationships with the contractual model. They state that[24]

> Unlike contractual relationships where roles and responsibilities are demarcated and enforceable and where goals are often set by one party and communicated vertically to another, partnerships are defined by flexible and dynamic allocation of roles and responsibilities and mutual decision making and goal setting.

In their paper, Kamya et al. evaluate the GAVI partnership for human papillomavirus (HPV) applications in Uganda and find that the lack of clear guidelines about roles, responsibilities, and terms of references probably reduced efficiency in operations. They conclude, "[t]he existence of many capable partners does not ensure clear expectations and management of activities and processes."[24] In short, in this case, it was not clear who was accountable to whom, and this ambiguity created confusion.

The next question is: *Accountable for what?* Here it is useful to refer back to the four categories of information discussed above for transparency: *inputs* (resources that go into a program or organization), *processes* (activities undertaken by the program or organization, including how decisions and plans are made), *outputs* (what is produced by the activities), and

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outcomes (the ultimate performance goals or benefits produced by the program or organization). These categories relate to the concepts typically used in logic models for evaluation.[25] As part of assuring accountability, a partnership could have specific metrics or procedures specified as performance targets for these four categories. Different stakeholders could have different interests and capacities for different kinds of targets, and they may seek to hold the partnership accountable for different kinds of performance metrics. Outsiders, for example, may be keenly concerned with processes used in partnerships, since it can allow them to participate and have voice in decision making, and thereby influence decisions and performance on results. Insiders may focus on staff performance metrics for deciding on both sanctions and incentives, and thereby influence partnership production of both outputs and outcomes. Insiders, for example, could use "management by objectives" and "key performance indicators" to hold executives or groups or projects responsible for specific targets, with sanctions and rewards depending on performance.

Holding a partnership accountable for final outcomes (such as changes in health status, client satisfaction, or financial risk protection)[21] often involves complex questions of assessing causation. To what extent can partnership actions be causally associated with a specific outcome, and how can you know?[26] A rigorous study to evaluate how a partnership's actions affect outcomes often entails high costs and can still have high uncertainty, due to multiple factors that affect outcomes (beyond the specific intervention) and that are not under the partnership's control. An evaluation of 120 pharmaceutical industry-led access-to-medicine initiatives (all listed on the IFPMA Health Partnerships Directory) found, despite frequent claims of positive impacts, only 47 evaluation studies, and all except three were of low or very low quality.[26] Uncertainty in causal attribution requires careful study design and interpretation of analytical results. Whether to hold a partnership accountable for specific outcomes, and if so, which ones, therefore, represent complex questions.

The third aspect for accountability is: *How? What mechanisms can be used* to implement PPP accountability for different stakeholders? Many accountability mechanisms exist that can be (and are) applied to partnerships. Boards of directors (representing different perspectives) review performance assessments of partnership executives and decide on both incentives (such as financial bonuses) and sanctions (such as firing and demotions). Core partners may decide to increase their financial commitments to a PPP, reduce their funding, or even exit a partnership, based on changes in key performance indicators. National regulatory authorities may require partnerships to submit annual financial reports to allow the PPP to continue operations within a country. Civil society organizations may use both procedural and substantive measures to assess PPP performance and then using various strategies (public information campaigns, lobbying politicians, public interest lawsuits) compel the partnership to change its activities or reward the PPP. Open meetings or hearings, attended by key stakeholders, may provide a mechanism for assessing procedural or substantive metrics and allowing public review and criticism, thereby advancing accountability through impacts on public reputation for the PPP. But such public meetings can also be designed to avoid serious questions and consequences, thereby avoiding accountability. In some cases, a partnership may sign contracts with key stakeholders (core partners or beneficiaries) as a way of setting specific performance metrics and specifying consequences if those metrics are not achieved within certain time periods. The judiciary can also serve as an important force for holding partnerships accountable when other mechanisms are not effective.

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In conclusion, holding a PPP and partners accountable seeks to assure that a partnership is achieving its public interest objectives, and if not, what can be done to improve that performance.[g] Analysis of accountability therefore must be connected to practical action.

IMPLICATIONS FOR ANALYSIS AND ACTION

The above discussions of transparency and accountability, while seemingly abstract and theoretical, have practical implications for both analysis and action. To illustrate some of these implications, I have combined the concepts of transparency and accountability into a "governance matrix for PPPs" (see Table A-2). This descriptive tool allows one to analyze the characteristics and levels of transparency and accountability for a particular organization, and it can also be used as a planning tool to design transparency and accountability relationships for a new PPP. Table A-2 applies the governance matrix to a hypothetical partnership, to illustrate how the matrix can be used to describe and assess transparency and accountability for a specific PPP. (Note: this hypothetical example is not intended to be either an ideal or a typical partnership, but rather to illustrate how the matrix might be used.)

TABLE A-2 Governance Matrix for PPPs: Assessing Transparency and Accountability for a Hypothetical PPP

	Relationship: Party B	**Contents**	**Mechanisms**	**Level (High/Low)**
	Information to?	*Information on?*	*How informed?*	
Transparency: Party A (PPP)	General public	Limited number of outputs	Annual report available on PPP webpage	Low
	Beneficiaries	Information on a few outputs	Written report and public meeting	Low
	Board of directors	Detailed reports on key inputs, processes, outputs	Board meetings, financial and operating reports	High
	Accountable to?	*Accountable for?*	*How accountable?*	
Accountability: Party A (PPP)	General public	Limited number of metrics	PPP webpage, public hearings	Low
	Beneficiaries	A few metrics on outputs	Ombudsman and complaints, using public pressure and reputation	Low
	Core partners	Detailed metrics on inputs, processes, outputs	Annual reviews of key staff, with firing or bonus, and of key partners	High

NOTE: Contents for Transparency includes inputs, processes, and outputs; Contents for Accountability includes inputs, processes, and outputs; for Mechanisms for Transparency and Accountability, see discussion above.

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One important caveat needs to be noted before we explore this matrix. Our intuition tells us that improved governance should lead to improved performance, by helping partnerships learn, by correcting nonproductive practices, and by removing or punishing individuals or partners that do not contribute to social goals and PPP objectives. But few systematic studies have been conducted to assess the connections between either transparency or accountability and the performance of partnerships, making it difficult to draw firm causal conclusions. According to one systematic review, case studies for some partnerships suggest various kinds of positive impacts, "at least in certain settings."[27] We need to know more, however, if recommendations are to be based on expected consequences.

First, for transparency, the analyst selects a relationship between the PPP and some party B (such as the general public, beneficiaries, or board of directors). The contents of transparency are then described according to the kind and quality of information made available in the transparency relationships (key outputs, a few outputs, or detailed information on inputs, processes, and outputs), and the mechanisms for making this information available are then entered (annual reports on a website, simple written reports physically distributed, or distribution of detailed operational and financial reports at a closed board meeting). These descriptions then allow a judgment about the level of transparency provided for each relationship (high or low).

The analyst then conducts a similar assessment for accountability. The analyst selects a relationship between the PPP and some party B (such as the general public, beneficiaries, or core partners). The contents of accountability are then described according to (1) the kind of standards used in the accountability relationships (few or many procedural or substantive standards), and (2) the mechanisms for assuring that the performance standards are met by the organization (accountability through public information on a webpage, accountability through reports provided to beneficiaries, or accountability through performance reviews of key PPP staff, followed by sanctions or rewards depending on performance). These descriptions then allow a judgment about the level of accountability provided for each relationship (high or low).

This governance matrix leaves many questions unanswered. The metrics by which each dimension is measured need to be defined. There are operational questions about how to collect the information for the matrix, on both transparency and accountability, and judgment questions about how to assess levels as high or low. Some of these questions can be addressed through repeated practice and use of the tool by actual partnerships. Also, the levels of transparency and accountability may change over time, as the partnership evolves. This reflects the need to monitor the implementation process, to assess gaps between expected performance in transparency and accountability, and actual performance. Finally, the matrix may be applicable to other kinds of PPPs (those outside of global health) and to other organizations (beyond partnerships, such as public agencies, academic institutions, and private entities).

This approach to transparency and accountability can also be used for normative evaluation (that is, setting specific performance targets), but that raises process implications. What is the desirable level of transparency and accountability for a PPP, and for which audiences, within a particular country? Who should set those levels, and how? In short, who sets the normative rules for PPPs? We could, for example, consider a set of "minimal" standards of governance of PPPs, or even provide a scale of standards from bronze- to silver- to gold-level governance (as one reviewer suggested). This question returns us to broader normative issues about the governance of PPPs, to assure that these organizations are meeting the social goals and public interests that they are intended to pursue.

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Four broad options emerge to address these normative questions: by nation, by industry, by international organization, or by nongovernmental organizations.

One possible approach is to assign this responsibility to each nation. National regulatory agencies and national law could address (as currently happens for charitable organizations, for example) the governance requirements of PPPs, specifying the levels and mechanisms of transparency and accountability required. These laws could include tax reporting requirements and activity reporting requirements, to assure that a partnership continues its status as a charitable organization. This approach, however, could introduce legalistic restrictions to partnerships, and thereby diminish their flexibility and innovative capacity to address problems not easily handled by governments (one of the proposed key advantages of PPPs).

A second approach would be for each industry to develop its own standards (through an approach of self-regulation) for transparency and accountability of PPPs. The International Federation of Pharmaceutical Manufacturers Associations (IFPMA), for example, has a website with a directory of more than 250 "health partnerships."[28] The IFPMA could set industry metrics and expectations for these partnerships, and ask each organization to complete its own governance matrix. The metrics then might be different for different industries, for instance, for pharmaceutical companies, food companies, petroleum companies, and others. This approach raises problems of the limited effectiveness of self-regulation.

A third approach would be for an international or multilateral agency to propose good practice standards for governance of PPPs. This would cut across different types of PPPs and could be integrated into the Sustainable Development Goals. It could include the development of a symbol of "good partnership practices," provided by an independent organization, like the symbol for environmentally caught seafood[29] or the Good Housekeeping Seal of Approval[30] or an ISO 9000.[31] These globally accepted standards of good partnership practice could then provide the basis for audits, which would assure that the mechanisms of transparency and accountability function as intended.

A fourth approach would be for PPPs to develop their own code of good partnership practices. This code could include specific metrics and processes for both transparency and accountability, and could define specific audiences as important relationships for partnerships. An association of PPPs could then define membership based on compliance with the code and on audits to demonstrate acceptable performance by a specific organization.

CONCLUSION

In conclusion, this proposal for a simplified model offers a number of suggestions about how to think about the governance of PPPs, with a focus on transparency and accountability. I present the proposal in the spirit of seeking to move the discussion forward, clarify some of the key concepts, and indicate ways to apply the ideas in practice. I hope that the proposal will help improve thinking and action about the governance of PPPs in global health.

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NOTES

a. The "five characteristics of high-performing PPPs," according to the report, are (1) adopt overall strategy and role, (2) leverage the power of the private sector, (3) nurture partnerships with government, (4) invest in knowledge, and (5) plan for sustainability. For further information on what these characteristics mean and how they were derived from the analysis of a single case study, see ref. 10.
b. This article on global health partnerships identifies seven "unhealthy habits," although the authors do not explain the methods they used to reach these conclusions. They state: "We argue that GHPs [Global Health Partnerships] skew national priorities of recipient countries by imposing those of donor partners; deprive specific stakeholders a voice in decision-making; demonstrate inadequate use of critical governance procedures; fail to compare the costs and benefits of public vs. private approaches; fail to be sufficiently resourced to implement activities and pay for alliance costs; waste resources through inadequate use of country systems and poor harmonisation; and do not adequately manage human resources for partnering approaches." See ref. 11 for additional details.
c. While I did not conduct a systematic analysis of the titles retrieved, the literature scan was very helpful in identifying some key publications related to PPP governance, and I have used them in writing this paper and included them as references.
d. I decided not to include "participation" as a separate dimension of PPP governance because it seemed to me to be a key component of both transparency and accountability (through the relational nature of both concepts), because it seemed to be a mechanism to achieve transparency and accountability more than a separate dimension of governance, and because a three-dimensional matrix is too hard to visualize, keep in mind, and use in practice.
e. Private health care organizations (such as hospitals) that engage in mergers and acquisitions, on the other hand, can be required by state law in the United States to submit detailed financial reports to state agencies (for example, on price and quality) in order to evaluate likely impacts on consumers. They can also be required to provide annual financial statements (on revenues, profit/losses, and debt) on a regular basis. In some cases, however, private hospital chains have refused to provide these detailed reports and as a result have been subjected to fines for noncompliance and threats of noncertification. See: Priyanka Dayal McCluskey, "Steward Health Care Fails to Submit Financial Data as it Expands," *Boston Globe*, 2 September 2017, p. 8.
f. The decision of whether to register a partnership as an independent entity (or locate within an existing entity) has important implications for both governance and operations. For example,

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if a PPP seeks to receive tax-deductible donations in kind or in cash in the United States, it frequently registers as a 501(c)(3) nonprofit organization that is exempt from federal taxes under the U.S. tax code (one of 29 types of tax exempt organizations under 501(c)). This 501(c)(3) status as a private charity or public foundation also results in certain reporting requirements and limitations on political activities, with fines for noncompliance, and thereby shapes both transparency and accountability.

g. It is worth noting that some PPPs (for instance, for service delivery within national health systems) have been criticized for conflicts of interest and not serving public health goals or public welfare. See: Sujatha Rao, "A Strange Hybrid," *The Indian Express*, 11 August 2017, http://indianexpress.com/article/opinion/columns/niti-aayog-a-strange-hybrid-public-hospitals-government-4791233

REFERENCES

1. Taylor, Rachel. "Invitation to Speak at National Academies Workshop on Global Health PPP Governance," Email to author, 12 July 2017.
2. Reich, Michael R., ed., Assessment of TDR's Contributions to Product Development for Tropical Diseases: Three Cases. Geneva: UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, 1997.
3. Reich, Michael R., ed., An Assessment of U.S. Pharmaceutical Donations: Players, Processes, and Products. Boston: Harvard School of Public Health, 1999.
4. Frost, Laura, Michael R. Reich, and Tomoko Fujisaki. "A Partnership for Ivermectin: Social Worlds and Boundary Objects," in Michael R. Reich, ed., Public-Private Partnerships for Public Health. Cambridge, MA: Harvard University Press, 2002, pp. 87-113.
5. Ramiah, Ilavenil, and Michael R. Reich. "Public-Private Partnerships and Antiretroviral Drugs for HIV/AIDS: Lessons from Botswana." Health Affairs 24(2): 545-551, 2005.
6. Reich, Michael R., ed., Public-Private Partnerships for Public Health. Cambridge, MA: Harvard University Press, 2002.
7. Institute on Governance. "Defining Governance." http://iog.ca/defining-governance
8. Reich, Michael R. "Public-Private Partnerships for Public Health." In: Michael R. Reich, ed., Public-Private Partnerships for Public Health, Cambridge, MA: Harvard University Press, 2002, pp. 1-18.
9. National Academies of Sciences, Engineering, and Medicine. "Partnership Governance in Global Health, Annotated Bibliography of Selected Resources." Prepared as an initial reference document for the Workshop on Exploring Partnership Governance in Global Health Planning Committee. Washington, DC: NASEM, 2017.
10. FSG. Adapting Through Crisis: Lessons from ACHAP's Contributions to the Fight Against HIV/AIDS in Botswana. Boston, MA: FSG, 2014.
11. Buse, Ken, and Andrew M. Harmer. "Seven Habits of Highly Effective Global Public-Private Health Partnerships: Practice and Potential." Social Science & Medicine 64: 259-71, 2007.
12. Buckup, Sebastian. "Global Public-Private Partnerships Against Neglected Diseases: Building Governance Structures for Effective Outcomes." Health Economics, Policy and Law 3(Pt 1): 31-50, 2008.
13. Bezanson, Keith A., and Paul Isenman. Governance of New Global Partnerships: Challenges, Weaknesses, Lessons. CGD Policy Paper 014. Washington, DC: Center for Global Development, 2012.
14. Bears, Daniel. Literature Scan—Commissioned Paper for Exploring Partnership Governance in Global Health. Washington, DC: NAS Research Center, 11 August 2017.
15. Pyone, Thidar, Helen Smith, and Nynke van den Broek. "Frameworks to Assess Health Systems Governance: A Systematic Review." Health Policy and Planning 32: 710-22, 2017.

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16. Fox, Jonathan. “The Uncertain Relationship Between Transparency and Accountability.” Development in Practice 17(4-5): 663-71, 2007.
17. Scott C. Figuring Out Accountability: Selected Uses of Official Statistics by Civil Society to Improve Public Sector Performance. Q Squared Working Paper No. 37. Toronto: Centre for International Studies of the University of Toronto; 2007. Accessed 19 Aug 2017 at: https://www.trentu.ca/ids/sites/trentu.ca.ids/files/documents/Q2_WP37_Scott.pdf(accessed April 16, 2018).
18. Vian, Taryn, Jillian C. Kohler, Gilles Forte, and Deidre Dimancesco. “Promoting Transparency, Accountability, and Access Through a Multi-Stakeholder Initiative: Lessons from the Medicines Transparency Alliance.” Journal of Pharmaceutical Policy and Practice 10(18): 1-11, 2017.
19. CHESTRAD International. Institutionalize, Resource and Measure: Meaningful Civil Society Engagement in Global and National Health Policy, Financing, Measurement and Accountability. United Kingdom: CHESTRAD International, June 2015.
20. Reynaers, Anne-Marie, and Stephan Grimmelikhuijsen. “Transparency in Public-Private Partnerships: Not So Bad After All?" Public Administration 93(3): 609-626, 2015.
21. Roberts, Marc J., William C. Hsiao, Peter Berman, and Michael R. Reich. Getting Health Reform Right: A Guide to Improve Performance and Equity. New York: Oxford University Press, 2004.
22. Sands, Valerie. “The Right to Know and Obligation to Provide: Public Private Partnerships, Public Knowledge, Public Accountability, Public Disenfranchisement and Prison Cases.” UNSW Law Journal 29(3): 334-341, 2006.
23. Rubin, Edward. “The Myth of Accountability and the Anti-Administrative Impulse.” Michigan Law Review 103: 2073, 2005.
24. Kamya, Carol, Jessica Shearer, Gilbert Asiimwe, Emily Carnahan, Nicole Salisbury, Peter Waiswa, Jennifer Brinkerhoff, and Dai Hozumi. “Evaluating Global Health Partnerships: A Case Study of a Gavi HPV Vaccine Application Process in Uganda.” International Journal of Health Policy and Management 6(6): 327-338, 2017.
25. McLaughlin, John A., and Gretchen B. Jordan. “Logic Models: A Tool for Telling Your Program’s Performance Story.” Evaluation and Program Planning 22: 65-72, 1999.
26. Rockers, Peter C., Veronika J. Wirtz, Chukwuemeka A. Umeh, Preethi M. Swamy, and Richard O. Laing. “Industry-Led Access-to-Medicines Initiatives in Low- and Middle-Income Countries: Strategies and Evidence.” Health Affairs 36(4): 706-713, 2017.
27. Gaventa, John, and Rosemary McGee. “The Impact of Transparency and Accountability Initiatives. Synthesis Report.” Development Policy Review 31(S1): S3-S28, 2013.
28. IFPMA. “Health Partnership Directory.” Web page. http://partnerships.ifpma.org/partnerships/by-letter/all (accessed April 16, 2018).
29. Marine Stewardship Council. “The Blue MSC Label: Sustainable, Traceable, Wild Seafood.” https://www.msc.org/about-us/blue-msc-ecolabel-traceable-sustainable-seafood.
30. Good Housekeeping. “About the Good Housekeeping Seal.” http://www.goodhousekeeping.com/product-reviews/seal (accessed April 16, 2018).
31. International Organization for Standardization. “ISO 9000 – Quality Management.” https://www.iso.org/iso-9001-quality-management.html (acceseed April 16, 2018).

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Appendix B

I. World Café Reports on Internal Governance of Individual Partners and Impacts on Approaches to Public–Private Partnerships

During the middle of the workshop, the participants engaged in a World Café discussion at their tables during which they answered two questions:

- Based on your experiences, what have been the main barriers your organization has experienced when engaging in public–private partnerships (PPPs)?
- How have you or your organization overcome or managed these barriers to engagement?

In this short session, Jo Ivey Boufford and Kevin Etter summarized examples of some responses from individuals from the six participating groups. None of these examples should be construed as reflecting consensus by any of the small working groups. Regarding the first question (see Table B-1), Etter said there were a few themes that the session highlighted, including alignment and understanding among the partners, measurement, and trust, but overall the groups identified a rich and diverse set of challenges.

TABLE B-1 Responses to World Café Question 1: What Are the Main Barriers Your Organization Has Experienced When Engaging in PPPs?

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Failure to document vision, mission, intent	Alignment of expectations; definition and measure of success; leadership differences; adaptability	Identifying the champions: skill sets and expertise; retention of relationships	Lack of metrics/agreed performance	Alignment: defined purpose of PPP	Assumptions; private-sector mistrust; speaking the same language; power dynamics
People: champions and host lost; capacity	Risk: political, financial, reputation, legal	Lacking the right indicators to measure success of the partnership	Lack of management capabilities	Measure and evaluate comparative value-added of PPP	Lack of trust: difference in ideology
Understand ing the business and players	Local ownership: exit strategy and sustainability	Alignment of interests: evolution and redefinition	Lack of mutual understanding in motivations, assumptions, purpose, and language	Transaction costs	Strategy seen as luxury versus necessity

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NOTE: This table shows examples of responses from individual participants, and should not be construed as reflecting group consensus. PPP = public–private partnership.
SOURCE: As presented by Jo Ivey Boufford and Kevin Etter on October 26, 2017.

Boufford then summarized the answers to the second question on how to address these challenges (see Table B-2). The solutions included investing time at the start of the partnership to institutionalize the partnership and get buy-in from leadership. Being flexible to adapt to change, being transparent and honest, deploying appropriate metrics, and establishing mechanisms to resolving disagreements and barriers to understanding were other solutions.

TABLE B-2 Responses to World Café Question 2: How Have You or Your Organization Overcome or Managed These Barriers to Engagement?

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Invest time up front on common purpose	Document everything	Institutionalize partnership with buy-in from leadership and staff	Use metrics to manage	Plan with candor	Invest time up front to discuss goals, roles, and responsibilities
Realize disagreement will happen; document pattern for resolving disagreement	Establish or build in mechanisms for change in advance	Cultural liaison to guide partnership and align interests and expectations	Define relevant qualification for leaders (and be willing to act if change is needed)	Articulate key performance indicators to be evaluated	Understand motivations of each partner and be honest about limitations
Define the end game	Involve local ownership from beginning; be transparent about sustainability goals/road map	Be open to rethinking roles; leave room for innovation from the beginning	Reminder of agreed purpose; declare prejudices; understand common interests; apply metrics to guide decision making	Passion, initiative, efficiency	Experience success and be honest in failure

NOTE: This table shows examples of responses from individual participants and should not be construed as reflecting group consensus.
SOURCE: As presented by Jo Ivey Boufford and Kevin Etter on October 26, 2017.

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Appendix C

Speaker and Moderator Biographical Sketches

Jo Ivey Boufford, M.D., is co-chair of the Forum on Public–Private Partnerships for Global Health and Safety, and immediate past President of the New York Academy of Medicine. She is a Clinical Professor of Global Public Health at the College of Global Public Health at New York University, where she is also Professor of Public Service, Health Policy, and Management at the Robert F. Wagner Graduate School of Public Service and Clinical Professor of Pediatrics at New York University School of Medicine. She served as Dean of the Robert F. Wagner Graduate School of Public Service at New York University from June 1997 to November 2002. Prior to that, she served as Principal Deputy Assistant Secretary for Health in the U.S. Department of Health and Human Services (HHS) from November 1993 to January 1997, and as Acting Assistant Secretary from January 1997 to May 1997. While at HHS, she was the U.S. representative on the Executive Board of the World Health Organization (WHO) from 1994 to 1997. She served in a variety of senior positions and as President of the New York City Health and Hospitals Corporation (HHC), the largest municipal system in the United States, from December 1985 until October 1989. Dr. Boufford was awarded a Robert Wood Johnson Health Policy Fellowship at the National Academy of Medicine (formerly known as the Institute of Medicine) in Washington, DC, for 1979–1980. She currently serves on the boards of the United Hospital Fund and the Health Effects Institute. She was elected to membership in the National Academy of Medicine in 1992 and served on its Board on Global Health and Board on African Science Academy Development. She served two 4-year terms as the Foreign Secretary of the National Academy of Medicine between 2010 and 2014 and was elected to membership for the National Academy of Public Administration in 2015. She received Honorary Doctorate of Science degrees from the State University of New York, Brooklyn (1992), New York Medical College (2007), Pace University (2011) and Toledo University (2012). She has been a Fellow of the New York Academy of Medicine since 1988 and a Trustee since 2004. Dr. Boufford attended Wellesley College for 2 years and received her B.A. (Psychology) magna cum laude from the University of Michigan, and her M.D., with distinction, from the University of Michigan Medical School. She is board certified in pediatrics.

Douglas M. Brooks, M.S.W., a social worker, began his career in HIV/AIDS with his work for the Provincetown AIDS Support Group. He went on to become the Senior Vice President for Community, Health, and Public Policy at the Justice Resource Institute (JRI), a regional health and human service agency based in Massachusetts. He also previously served as Executive Director of the Sidney Borum Jr. Health Center. He also served as Chair of the Board of Trustees of AIDS United in Washington, DC. In 2010, Mr. Brooks was appointed to the Presidential Advisory Council on HIV/AIDS (PACHA) and subsequently named that body's liaison to the CDC/HRSA Advisory Committee. In 2014, he was appointed to be Director of the White House Office of National AIDS Policy. In 2015, Mr. Brooks spearheaded an update to the National HIV/AIDS Strategy, which is a 5-year plan that guides priorities and principles for our nation in our response to HIV. Mr. Brooks is an openly gay man living with HIV. During his time as director of ONAP, he focused on turning attention to populations of people most affected by the epidemic—such as gay and bisexual men, especially those of color, black women, transgender men and women, and people living in the southern United States. He supported the widespread scale up of PrEP, and included this in the updated strategy as a key way to reduce new infections in the United States. In May 2016, Mr. Brooks started in the newly created role of Senior Director for Community Engagement at Gilead Sciences.

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Anthony Brown, J.D., M.B.A., is Senior Legal Counsel with Gavi, the Vaccine Alliance. With Gavi since 2005, Mr. Brown has been instrumental in a number of corporate initiatives, including the setup and continued operation of two major multistakeholder financing schemes, the International Finance Facility for Immunisation and the Advance Market Commitment for Pneumococcal Vaccine to provide long-term guaranteed funding to Gavi and incentivize manufactures to develop a pneumococcal vaccine for Gavi countries respectively. He has advised on and negotiated multiple private partnership engagements, such as Gavi's 2016 Advance Purchase Commitment for an Ebola vaccine. He also co-led Gavi's 2008 Governance transition from three separate entities into a Swiss international organization. Besides his corporate and financing expertise, Mr. Brown advises on issues across Gavi's spectrum, including governance, country programs, regulatory, insurance and personnel-related matters. From 2015 to 2016, on a secondment, Mr. Brown was Acting General Counsel/Senior Legal Officer with the CGIAR System Organization, a global agricultural research partnership, where he served on the governance transition team as the organization underwent a major restructuring. Afterwards, he led the development of the organization's new partnership financing agreements. Prior to Gavi, Mr. Brown worked in Washington, D.C., with the law firm of Williams & Connolly. Prior to graduate school, Mr. Brown worked in the New York office of the international consulting firm Booz Allen & Hamilton. Mr. Brown is a graduate of Columbia College and earned his J.D. from the University of Pennsylvania Law School and his M.B.A. from the Wharton School.

Steve Davis, **J.D., M.A.,** president and CEO of PATH, combines extensive experience as a technology business leader, global health advocate, and social innovator to accelerate great ideas and bring lifesaving solutions to scale. Prior to joining PATH in 2012, he served as director of Social Innovation at McKinsey & Company, CEO of internet pioneer and global digital media firm Corbis, and interim director of the Infectious Disease Research Institute. He also practiced law at the international law firm K&L Gates. Earlier, he worked extensively on refugee programs and policies, as well as Chinese politics and law. Mr. Davis is a lecturer on social innovation at the Stanford Graduate School of Business. He currently is a member of the Council on Foreign Relations, serves on the board of InterAction, Challenge Seattle, and sits on several advisory groups, including as a trustee of the World Economic Forum's Global Health Challenge, on the stakeholder advisory panel for the global insurance and asset management firm AXA, and on the advisory board for Medtronics Labs. Mr. Davis earned his B.A. from Princeton University, his M.A. in Chinese studies from the University of Washington, and his law degree from Columbia University. He also studied at Beijing University.

Mark Dybul, M.D., is a professor in the Department of Medicine at Georgetown University Medical Center and the Faculty Director of the Center for Global Health and Quality. Dr. Dybul has worked on HIV and public health for more than 25 years as a clinician, scientist, teacher, and administrator, most recently as the Executive Director of the Global Fund to Fight AIDS, Tuberculosis and Malaria. After graduating from Georgetown Medical School in Washington D.C., Dr. Dybul joined the National Institute of Allergy and Infectious Diseases, as a research fellow under director Dr. Anthony Fauci, where he conducted basic and clinical studies on HIV virology, immunology, and treatment optimization, including the first randomized, controlled trial with combination antiretroviral therapy in Africa. Dr. Dybul was one of the founding architects in the formation of the U.S. President's Emergency Plan for AIDS Relief, better known as PEPFAR. After serving as Chief Medical Officer and Assistant, Deputy, and Acting Director, he was appointed as its leader in 2006, becoming the U.S. Global AIDS Coordinator, with the rank of Ambassador at the level of an Assistant Secretary of State. He served until early 2009. Dr. Dybul has written extensively in scientific and policy literature, and has received several Honorary Degrees and awards, including a Doctor of Science, Honoris Causa, from Georgetown University.

Kevin Etter, built on work over 3 decades with UPS (United Parcel Service), is an internationally recognized thought leader in the field of logistics and supply chain service innovation. A few of his

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accomplishments to date include large aircraft fleet acquisition and integration projects; development of new services built through focusing on strategic mergers and acquisition activities; new service ideas and innovation for the pharmaceutical, medical device, and health products supply chain and security; and new ways of thinking about corporate social responsibility. Mr. Etter is a strong voice and advocate in the world of community service and corporate philanthropy, active both at home, in Europe, and at UPS. A recent partnership for the UPS Foundation had him seconded (executive on loan) to Gavi, the Vaccine Alliance, in Geneva, Switzerland. There, Mr. Etter played a key role in advising, consulting, and developing solutions supporting Gavi's Supply Chain Strategy. Mr. Etter pioneered innovative models for public–private partnerships with Gavi, UN organizations, and other international NGOs. Mr. Etter has recently presented a TED Talk entitled "I am the Donation" that features his work with Gavi and highlights the opportunity that our business communities have in moving beyond check book philanthropy to impact real change in our world today.

Clarion Johnson, M.D., co-chair of the Forum on Public–Private Partnerships for Global Health and Safety, served as Global Medical Director of ExxonMobil Corporation until his retirement in 2013. Currently, Dr. Johnson is a consultant to ExxonMobil, the immediate past Chair of The Joint Commission's International and Resource Boards, and a member of the Yale School of Public Health Leadership Council. He serves on several boards including the Bon Secours Hospital System, the Advisory Board of the Yale School of Public Health, and the Board of the Milbank Memorial Fund. Dr. Johnson previously served on the U.S. National Academies' Board on Global Health. Dr. Johnson also has a HHS Secretary appointment to the National Institute of Occupational Safety and Health Advisory Board and was a member of Virginia Governor's Task Force on Health reform and co-chair of the Insurance Reform Task Force. He is the past chair of Virginia Health Care Foundation and of the Board of City Lights Charter School in Washington, D.C. He served as advisor and lecturer in the Harvard Medical School's department of continuing education "Global Clinic Course" 2005–2008. In 2013 he received the President's Award from the Oil and International Petroleum Industry Environment Conservation Association (IPIECA) and Oil and Gas Producers (OGP) for contributions to health, and in 2012 he was the recipient of the Society of Petroleum Engineers (SPE) Award for Health, Safety, Security, Environment, and Social Responsibility. In 2011, he received a medal from the French Army's Institute De Recherche Biomedical for Project Tetrapole: a public–private partnership in malaria research. Dr. Johnson is a graduate of Sarah Lawrence College and member of its Board of Trustees and the Yale School of Medicine. While on active duty in the U.S. Army, he also trained as a microwave researcher at Walter Reed Army Institute of Research. He is board certified in Internal Medicine, Cardiology, and Occupational Medicine.

Lauren A. Marks, J.D., is the Director of Private-Sector Engagement in the Office of the U.S. Global AIDS Coordinator and Health Diplomacy (S/GAC), which leads implementation of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). Ms. Marks leads the Private-Sector Engagement Team to support the development, implementation, and evaluation of policies, interventions, and strategies for public–private partnerships (PPPs) by working closely with country teams, implementation partners, private-sector organizations, foundations, and multilateral institutions. Ms. Marks comes to S/GAC from the private sector—Ms. Marks managed the HIV/AIDS portfolio for Johnson & Johnson's Corporate Contributions group. Prior to joining Johnson & Johnson, Ms. Marks served as the Health Program/Public–Private Partnership Advisor at USAID/South Africa, where she built several successful PPPs between the U.S. government, the private sector, and nongovernmental organizations. Ms. Marks also worked at USAID/Washington in the Bureau for Global Health, where she provided technical support to USAID missions in several African and Asian countries. Prior to USAID, Ms. Marks was a corporate attorney at Nixon Peabody LLP in New York. She has a law degree from Georgetown University and a B.A. from Duke University.

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Sonal Mehta, M.S.W., I.M.P.M., grew to the level of Chief Executive of Alliance India in October 2016, after serving in capacity of Director of Programmes and Policy in the organizations for 9 years. With 3 decades of experience in sexual health and development, Ms. Mehta guides Alliance India's mission of community action for ending AIDS with programmatic experience and management smartness. Before joining Alliance India, Ms. Mehta was Challenge Fund Manager in the DFID programme that led to many path-breaking interventions in India, including bringing oral substitution therapy for people who inject drugs. Prior to that she worked with organizations in India including NACO, Gujarat SACS, CHETNA, and SEWA, as well as with the Pacific Institute of Women's Health in Los Angeles, USA. Ms. Mehta has an M.S.W. from the Faculty of Social Work, Vadodara, Gujarat. In a stride to continue learning, she completed her International Masters in Practicing Management (I.M.P.M.) from McGill and is pursuing a Masters in Science in International Management from Lancaster, UK.

Kenneth Miller, J.D., is Associate General Counsel at the Bill & Melinda Gates Foundation where he provides legal advice to the foundation's Global Health Division to help structure and negotiate agreements for innovative charitable investments, including grants, contracts, and program-related investments to develop and deliver vaccines, drugs, and diagnostics to people most in need. Before joining the foundation in 2015, Mr. Miller was a partner in the technology transactions group at Perkins Coie LLP, an international law firm based in Seattle, where he represented leading-edge technology companies in complex IP and commercial transactions.

John T. Monahan, J.D., is a Senior Advisor for Global Initiatives to Georgetown University's President John J. DeGioia and a Senior Fellow at Georgetown's McCourt School of Public Policy. In his current position, he advances university-wide initiatives in global health and related areas; chairs a senior-level committee examining the future of Georgetown's masters programs in international development; co-chairs the Lancet-Georgetown Commission on Global Health and Law; and has been teaching global health courses in Georgetown's foreign service, law, and nursing schools. Over the course of his distinguished career, Mr. Monahan has played multiple leadership roles in government, diplomacy, politics, philanthropy, and academia at the global, national, state, and local levels. He has focused on managing complex health, social service, and development issues and programs affecting low-income and vulnerable populations in the United States and abroad. From 2010 to 2014, Mr. Monahan served as Special Advisor for Global Health Partnerships at the U.S. Department of State. Under the leadership of Secretaries Clinton and Kerry, he was the chief architect of the Obama administration's successful strategy for reforming the operations and replenishing the finances of the Global Fund to Fight AIDS, Tuberculosis and Malaria, an innovative public–private partnership based in Switzerland. He served as the U.S. government's representative on the Global Fund's board; a member of the board's Comprehensive Reform Working Group; and Vice-Chair of the board's Finance and Operational Performance Committee. In 2009–2010, he was Director of the Office of Global Health Affairs at the Department of Health and Human Services and served as a primary liaison to the World Health Organization's leadership during the H1N1 influenza pandemic. He also served as Counselor to the Secretary of HHS and represented the Department on the White House-led interagency task force implementing the stimulus legislation in 2009. Mr. Monahan also has extensive experience with domestic public policy issues. From 2000 to 2007, he served as Senior Fellow at the Annie E. Casey Foundation, a philanthropy dedicated to low-income children in the United States. He advised the Foundation's senior leadership on federal policy issues; managed its relationship with Living Cities, a public–private partnership devoted to U.S. community development; and supported its use and advocacy of loan guarantees and innovative program-related investment strategies. During the Clinton administration, Mr. Monahan served as Director of Intergovernmental Affairs at HHS, where he represented the department in negotiations with governors and state officials regarding scores of Medicaid and welfare demonstration waivers; and as Principal Deputy Assistant Secretary for Children and Families in which he was responsible for assisting in implementation of federal welfare reform. In his varied career, he has also served as the founding Executive Director of Georgetown's O'Neill Institute for National and Global

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Health Law; Legal Counsel to U.S. Senator David Pryor; Law Clerk to U.S. District Court Judge John Grady; and is a veteran of numerous political races, including the Mondale and Clinton presidential campaigns. A member of the Council on Foreign Relations, he serves on the Advisory Committee of the Fogarty International Center at the National Institutes of Health and on the boards of the Lever Fund and the U.S. Committee for Refugees and Immigrants. Mr. Monahan holds bachelors and law degrees cum laude from Georgetown University.

C. D. Mote, Jr., Ph.D., M.S., is president of the National Academy of Engineering (NAE) and Regents Professor on leave from the University of Maryland. He was president of the University of Maryland for 12 years and was on the University of California, Berkeley, faculty for 31 years where he held an endowed chair in mechanical systems, chaired the Mechanical Engineering Department, and served as vice chancellor. As president of the NAE, he is committed to ensuring highly competitive talent in the U.S. engineering workforce, facilitating public understanding of engineering, demonstrating how engineering creates a better quality of life, and engaging the academy in global engineering issues in support of national interests. A highlight of global engineering engagement is the promotion of the NAE's 14 Grand Challenges for Engineering from 2008 whose solutions are goals to achieve the vision "Continuation of life on the planet, making our world more sustainable, safe, healthy and joyful." Dr. Mote is internationally recognized for his research on the dynamics of gyroscopic systems and the biomechanics of snow skiing. He has produced more than 300 publications and is a fellow of the American Academy of Arts and Sciences, American Academy of Mechanics, American Association for the Advancement of Science, and Acoustical Society of America, and an honorary fellow of the American Society of Mechanical Engineers (ASME). He is a Foreign Member of the Chinese Academy of Engineering and an Honorary Academician of the Academia Sinica. He is the 2005 recipient of the NAE Founders Award and the 2011 recipient of the ASME Medal in recognition of his comprehensive body of work on the dynamics of moving flexible structures and his leadership in academia.

Nina Nathani, J.D., is a founding partner of Matalon & Nathani, LLP. She has devoted nearly 20 years of her career to providing legal advice and counsel to nonprofit organizations of all sizes who work across different sectors and with support from a variety of U.S. and foreign donors, both public and private. Her expertise extends to traditional nonprofit governance, operations, and compliance matters, including establishment of nonprofit corporations, applications for tax-exempt status, corporate governance and ethics, grants and contracts, fundraising (including charitable solicitations), gift acceptance policies, procurement of goods and services, intellectual property, commercial leases and other agreements, lobbying, and employment and consultancy agreements. She also has significant expertise in advising global NGOs on matters particular to their overseas operations, including establishing branch offices, working with local NGOs, and monitoring and evaluation of subrecipients and subcontractors, as well as the formation, governance, and management of collaborative arrangements among NGOs, commercial companies, and governmental and multilateral institutions, with a focus on public–private partnerships. Her early legal career included several years working as an associate at Akin Gump Strauss Hauer & Feld LLP and Steptoe & Johnson LLP and as an Attorney Advisor in the USAID Office of General Counsel.

Cate O'Kane knows that partnerships can make change happen, be that in Europe, Asia, Africa, or her current base in the United States. With an innate curiosity about people and culture, she has successfully led multidisciplinary and multinational teams and developed an understanding of the finer nuances of partnership. As founder of partnership consultancy &co, Ms. O'Kane now develops strategic partnerships that ensure success for all parties involved, be that a multinational company, a government agency, or a non-profit implementer. Previously, Ms. O'Kane was Director of Corporate Partnerships & Philanthropy at PSI in Washington, D.C., where she led the development of philanthropic, social responsibility, and shared value partnerships, integrating the worlds of purpose and profit to deliver win-win opportunities. During her tenure at PSI, corporate partnerships quadrupled in number, and revenue from partnerships grew 600%. She emphasized the value of partnerships to provide not only financial investment at a

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country level but also as a means of knowledge sharing and individual capacity development through fellowships and joint thought leadership. Prior to her time at PSI's headquarters, Ms. O'Kane was the Technical Services Director at PSI/Botswana where she led the platform's marketing, communications, and research programs across a multitude of HIV/AIDS interventions. In building partnerships across sectors from defense to health to communications, she produced the first Botswana edutainment TV series Morwalela, featuring the lives of Batswana living with HIV, and developed a camouflage condom in partnership with the Botswana Defense Force. She spent her time before PSI working in Europe and Asia for 16 years in advertising and communications roles. Her last role in industry was as Director of J Walter Thompson's North East Asia team, based in Shanghai and working to expand market share for companies in this dynamic region.
She is a member of the Devex Strategic Advisory Council working across sectors to encourage stronger partnership practices and was a founding member of the INGO collective within FSG's Shared Value Initiative. She has spoken on the development, role and management of partnerships for impact at USAID, FSG, DEVEX, SOCAP, UN Compact, and PYXERAGlobal events.

Muhammad Ali Pate, M.D., M.B.A., is CEO of Big Win Philanthropy. Dr. Pate was Minister of State for Health of the Federal Republic of Nigeria from July 2011 to July 2013. He led the successful Presidential Task Force on Polio Eradication in Nigeria and developed the results-based initiative Save One Million Lives. From 2013 to 2015, Dr. Pate was visiting Professor at Duke University's Global Health Institute. Previously, Dr. Pate served as the Chief Executive of Nigeria's Primary Health Care Development Agency and worked for several years at the World Bank Group in Washington, D.C. He is a founding co-chair of the board of the Private-Sector Health Alliance in Nigeria and serves on Merck's Advisory Board for Merck for Mothers, Harvard's Defeating Malaria Initiative, the FHI 360 Advisory Board, and the World Economic Forum Global Agenda Council on Demographic Dynamics. He received the Geneva Health Forum Award in 2014 and the Harvard Health Leadership Award in 2012. Dr. Pate is certified by the American Board of Internal Medicine in the specialty of Internal Medicine with a subspecialty in infectious diseases. He also holds an M.B.A. in Health Sector Management Concentration.

Regina Rabinovich, M.D., M.P.H., is the ExxonMobil Malaria Scholar in Residence at Harvard University, and International Scholar at ISGLOBAL at the University of Barcelona. She has over 25 years of experience in global health across research, public health, and philanthropic sectors, with focus on strategy, global health product development, and the introduction and scale up of tools and strategies resulting in impact on endemic populations. From 2003 to 2012, Dr. Rabinovich served as Director of the Infectious Diseases division at the Bill & Melinda Gates Foundation, overseeing the development and implementation of strategies for the prevention, treatment, and control of infectious diseases of particular relevance to malaria, pneumonia, diarrhea, and neglected infectious diseases. Dr. Rabinovich has served as Chief of the Clinical and Regulatory Affairs Branch at the U.S. National Institute of Allergy and Infectious Diseases (NIAID), focusing on the development and evaluation of vaccines through a network of U.S. clinical research units. She participated in the Children's Vaccine Initiative, a global effort to prevent infectious diseases in children in the developing world. In 1999, Dr. Rabinovich became director of the PATH Malaria Vaccine Initiative, a project funded by the Bill & Melinda Gates Foundation to advance efforts to develop promising malaria vaccine candidates. She serves on the boards of AERAS, a nonprofit biotech company focused on development of vaccines for tuberculosis; the Sabin Vaccine Institute; and the Catholic Medical Mission Board. She is the President-Elect of the American Society of Tropical Medicine and Hygiene. Dr. Rabinovich holds a medical degree from Southern Illinois University and a Masters of Public Health degree from the University of North Carolina.

Michael R. Reich, Ph.D., is the Taro Takemi Research Professor of International Health Policy at the Harvard T.H. Chan School of Public Health. He received his Ph.D. in political science from Yale University in 1981 and has been a member of the Harvard faculty since 1983. Dr. Reich has long-standing research interests in the political economy of pharmaceutical policy, access to medicines, and public–

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private partnerships, and has published extensively on these topics. Several publications are particularly relevant to this Workshop. In 2002, he edited a book called *Public–Private Partnerships for Public Health* (Harvard University Press). He coauthored the landmark textbook on health systems, *Getting Health Reform Right: A Guide to Improving Performance and Equity* (Oxford University Press, 2004, with M.J. Roberts, W.C. Hsiao, and P. Berman). In 2008, Dr. Reich published a book with Laura J. Frost, *Access: How do Good Health Technologies Get to Poor People in Poor Countries?* (Harvard University Press, 2008). Many of his publications are available on his Harvard faculty website. He was a member of the Lancet Commission on Essential Medicines Policies, which published its report in fall 2016. He is also a founding Editor-in-Chief of the new journal *Health Systems & Reform*, now in its fourth year.

Peter Rockers, Sc.D., is an Assistant Professor in the Department of Global Health at the Boston University School of Public Health, where he is also the Director of the Monitoring and Evaluation certificate program. His research primarily focuses on evaluating interventions and policies that aim to strengthen health systems in developing countries. He is Co-Principle Investigator for a project developing a framework for evaluating pharmaceutical industry-led access to medicines programs. He is also Co-Investigator for a cluster-randomized trial in Kenya evaluating the impact of Novartis Access on the availability and price of NCD medicines. Dr. Rockers received a Doctor of Science degree from the Harvard School of Public Health.

Danielle Rollmann, M.P.A., leads Access Priorities within Pfizer's Global Policy team. She drives significant cross- functional initiatives to enhance patient access to medicines, including supporting Pfizer's engagement in Access Accelerated, a multicompany initiative to address the full spectrum of access barriers to medicines for noncommunicable diseases (NCDs) in lower-income countries, and policy support for innovative financing and reimbursement approaches. Ms. Rollmann was previously a partner in the Global Health Practice of Booz & Company, a strategic management consulting firm. She served clients in the pharmaceutical, diagnostics, consumer health, and other life sciences industries for 17 years, as an advisor on commercial innovation, growth and marketing strategy, and business transformation.

BT Slingsby, M.D., Ph.D., M.P.H., is the founding CEO and Executive Director of the Global Health Innovative Technology Fund (GHIT Fund). The GHIT Fund is a public–private partnership in Japan between the government of Japan (Ministry of Foreign Affairs and Ministry of Health, Labour and Welfare), 16 life science companies (Astellas, Chugai, Daiichi Sankyo, Eisai, Fujifilm, Shionogi, Takeda, Sysmex, Otsuka, GSK, Johnson & Johnson, Kyowa Hakko Kirin, Merck, Mitsubishi Tanabe, Nipro, and Sumitomo Dainippon), the Bill & Melinda Gates Foundation, Wellcome Trust, and United Nations Development Programme. Launched in April 2013 with a commitment of over US$100 million, GHIT has grown to manage over US$350 million with a portfolio of over 50 investments in the research and development of novel Japanese innovations for global health. The combination of Japan's government and its pharmaceutical industry—the second largest in the world—brings a powerful engine of knowledge and innovation to the development of medications for the developing world. Prior to the GHIT Fund, he was global head for access and strategy for the developing world at Eisai Co. & Ltd. Dr. Slingsby is adjunct professor at Kyoto University Graduate School of Medicine and the University of Tokyo Graduate School of Medicine and has published over 50 peer-reviewed articles in English and Japanese in journals including *Journal of General Internal Medicine*, *Journal of Public Health*, and the *Lancet*. He graduated from Brown University, earned his Masters and Doctorate from Kyoto University and the University of Tokyo, and received his Medical Doctorate from the George Washington University.

Jeffrey L. Sturchio, Ph.D., is President and CEO at Rabin Martin, a global health strategy consulting firm, and former President and CEO of the Global Health Council. Before joining the Council in 2009, Dr. Sturchio was vice president of Corporate Responsibility at Merck & Co. Inc., president of the Merck Company Foundation, and chairman of the U. S. Corporate Council on Africa (CCA), whose 160 member

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companies represent some 85 percent of total U.S. private-sector investment in Africa. While at Merck & Co., Inc., for more than a decade he was a leader of the company's global HIV/AIDS policy and was centrally involved in the UN/Industry Accelerating Access Initiative established in 2000 to help improve HIV/AIDS care and treatment in the developing world. He was a member of the board of the African Comprehensive HIV/AIDS Partnerships in Botswana (2005–2009) and a member of the private-sector delegation to the board of the Global Fund to Fight AIDS, TB and Malaria (2002–2008). He is chairman of the Corporate Council on Africa, chairman of the BroadReach Institute for Training and Education, and a member of the boards of ACHAP, the Science History Institute, and Friends of the Global Fight Against AIDS, TB and Malaria. Dr. Sturchio is also currently a visiting scholar at the Institute for Applied Economics, Global Health and the Study of Business Enterprise at The Johns Hopkins University; Senior Associate at the Center for Strategic and International Studies; a principal of the Modernizing Foreign Assistance Network; Fellow of the American Association for the Advancement of Science; a member of the Council on Foreign Relations and the Arthur W. Page Society; and an advisor to amfAR, Intrahealth International, and the Partnership for Quality Medical Donations. He received an A.B. in history from Princeton University and a Ph.D. in the history and sociology of science from the University of Pennsylvania. His publications include *Noncommunicable Diseases in the Developing World: Addressing Global Gaps in Policy and Research* (edited with L. Galambos, Johns Hopkins University Press, 2013).

Valerie Wenderoth, J.D., is an attorney-advisor within the Department of State's Office of the Legal Adviser responsible for the entire area of financial and appropriations law (other than foreign assistance), as well as other highly specialized areas, such as financial management and reporting, fiscal irregularities and contingencies, public–private partnerships, and eGovernment. Prior to joining the Department of State in November 2007, Ms. Wenderoth held various positions within the Office of the General Counsel for the Department of the Navy, including Deputy Assistant General Counsel for Research, Development, and Acquisition and Deputy Assistant General Counsel for Financial Management and Comptroller. Ms. Wenderoth began her law career as an assistant counsel at the Naval Sea Systems Command, focusing on ship building and repair claims and litigation. Ms. Wenderoth is a graduate of the University of Colorado, Boulder, where she earned a B.A. in History and German. She earned her J.D. from the University of Denver, College of Law.

Veronika J. Wirtz, MSc, PhD is an Associate Professor in the Department of Global Health at the Boston University School of Public Health, where she is also Director of the World Health Organization Collaborating Center in Pharmaceutical Policy. Her research interests include the role of the private sector to promote equitable access and efficient use of medicines in low and middle income countries, medicines price analysis, generic medicines policies and access to medicines for non-communicable diseases. Between 2014 and 2016 she was the Co-Chair of The Lancet Commission on Essential Medicine Policies which published its report Essential Medicines for Universal Health Coverage in Fall 2016.
She has worked as a technical advisor for various international organizations, among them the World Health Organization, the Pan American Health Organization, the Global Fund to fight AIDS, Tuberculosis and Malaria, the Bill and Melinda Gates Foundation and Alliance for Health Systems and Policy Research. She is a Visiting Professor of the National Institute of Public Health (INSP), Mexico where she was a faculty member between 2005 and 2012. She received her training as a pharmacist from Albert-Ludwigs-University in Freiburg, Germany and her Master in Clinical Pharmacy and PhD from the University of London, UK.

Tadataka (Tachi) Yamada, M.D., is a Venture Partner with Frazier Healthcare Partners. Prior to joining Frazier he was Executive Vice-President, Chief Medical & Scientific Officer, and a **b**oard member of Takeda Pharmaceuticals. Dr. Yamada has served as President of the Bill & Melinda Gates Foundation Global Health Program. In this position, he oversaw grants totaling more than $9 billion in programs directed at applying technologies to address major health challenges of the developing world including

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TB, HIV, malaria and other infectious diseases, malnutrition and maternal and child health. He was formerly Chairman, Research and Development and a Member of the Board of Directors of GlaxoSmithKline and before that he was Chair of the Department of Internal Medicine and Physician-in-Chief at the University of Michigan Medical Center. Dr. Yamada holds a bachelor's degree in history from Stanford University and obtained his M.D. from New York University School of Medicine. In recognition of his contributions to medicine and science he has been elected to membership in the National Academy of Medicine (United States), the Academy of Medical Sciences (UK), and the National Academy of Medicine (Mexico), and he has received an honorary appointment as Knight Commander of the Most Excellent Order of the British Empire (KBE). He is a Past-President of the Association of American Physicians and of the American Gastroenterological Association and he has served as a member of the President's Council of Advisors on Science and Technology and the Advisory Committee to the Director of the National Institutes of Health. He is the Past Vice-Chair of the Council of the National Academy of Medicine and Chairman the Board of Directors of the Clinton Health Access Initiative.

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Appendix D

Workshop Agenda

Forum on Public–Private Partnerships for Global Health and Safety
Exploring Partnership Governance in Global Health: A Workshop
October 26, 2017
The National Academies of Sciences, Engineering, and Medicine
500 Fifth Street NW, Washington, DC 20001

AGENDA

The Forum on Public–Private Partnerships for Global Health and Safety (PPP Forum) fosters a collaborative community of multisectoral leaders from business, government, foundations, humanitarian and professional organizations, academia, and civil society to leverage the strengths of multiple sectors and disciplines to yield benefits for global health and safety. The PPP Forum is premised on the understanding that partnerships among these stakeholders can facilitate dialogue and knowledge exchange; utilize technological and process efficiencies; promote innovation; and synergistically advance humanitarian, international development, and global health interests. The U.S. National Academies of Sciences, Engineering, and Medicine provides a neutral evidence-based platform through which the PPP Forum is convened.

This public workshop on partnership governance in global health has been planned by an ad hoc expert committee. The intended audience is the PPP Forum members and the organizations they represent, other public and private entities that have participated in or are considering collaboration across sectors to further global health and safety, and academics and researchers across multiple disciplines who are focused on understanding the value proposition and impact of various models of public–private partnerships to improve global health.

Workshop Objectives:

- Examine what role governance assumes in public–private partnerships for global health and how governance impacts the effectiveness of these partnerships in improving health outcomes.
- Consider the range of stakeholders and sectors engaged in global health partnerships and how specific organizational attributes impact a partnership's governance and decision-making processes.
- Explore best practices, common challenges, and lessons learned in the varying approaches to partnership governance.
- Illuminate the key issues in the governance of public–private partnerships for global health with the goal of increasing their effectiveness in improving health outcomes.

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Workshop Context:

Definitions of governance are varied and depend on factors such as the relevant actors, level of analysis, and existing political and social contexts. Broadly, governance is conceived of as the "art of steering societies and organizations" (IOG). Within the context of public–private partnerships (PPPs), governance refers to the structures, processes, and practices for decision making and for ultimately accomplishing the goal of the partnership. Governance defines the power structure of a PPP by regulating who makes decisions and how and when the decisions are made, as well as how other stakeholders are represented in the process. Effective governance mechanisms can be a tool for providing direction and monitoring performance, promoting accountability and transparency, enhancing legitimacy and ownership, and managing both real and perceived conflicts of interest.

The governance of a partnership impacts its efficiency and effectiveness in meeting its stated goal: strong governance can improve the performance of PPPs while weak governance can undermine it. In global health, PPPs have played a critical role in addressing global health needs; however, they require careful steering to avoid potential pitfalls (Reich, 2002). An examination of PPPs in global health has revealed some common shortcomings in their governance, including weakness in or absence of strategic direction, accountability mechanisms, monitoring and evaluation systems, and risk management; lack of clarity in roles and responsibilities; confusion between the roles of management versus governance; and inadequate attention to resource mobilization and to the human resources required to deliver programs and achieve objectives (Bezanson and Isenman, 2012).

While the importance of governance in global health partnerships has been identified, there is, in general, a lack of agreement on best practices for their governance structures, policies, and practice (Stenson, 2010). This is partly because of the significant variation across global health partnerships in size, including the number of partners engaged, resources allocated, geographic focus, and scope of the goals; the focus area, ranging from infectious diseases to pandemic preparedness and to noncommunicable diseases and injury prevention; the level of formality; and the intended outcomes. Over the last several decades, with the increased number of interested stakeholders, resources invested, and initiatives launched within the global health field, effective governance of global health PPPs is critical.

These PPPs are formal collaborative arrangements through which public and private parties share risks, responsibilities, and decision-making processes with the goal of collectively addressing a shared health objective. While it is assumed that both government and a private-sector actor will be formally engaged in the partnership, it is worth noting the range of stakeholders engaged in global health partnerships, such as national governments, bilateral development cooperation agencies, United Nations agencies, multilateral and regional development banks, hybrid global health initiatives, philanthropic organizations, civil society organizations and nongovernmental organizations, private businesses, and academic institutions.

Given the broad range of determinants that affect and are affected by health, there are many subcategories within these stakeholder groups that are engaged in global health partnerships, for example, within national governments, ministries of health, finance, telecommunications, and transportation. These numerous stakeholders bring varying strengths and resources to global health partnerships, but they also carry their own organizational cultures, regulations, and expectations. Managing PPPs among these stakeholders is complex and requires intentional and thoughtful governance.

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This workshop will explore the governance of partnerships that are defined by the following parameters: (1) a clearly defined, shared goal that centers on meeting the health needs of disadvantaged populations; (2) the inclusion of at least three partners with a government entity and business represented among them; (3) development of a formal joint agreement among the partners with a defined set of rules; (4) contributions of resources from all partners (resources can include financing, technical expertise, innovation, personnel, relationships, and research); and (5) expected value for all partners.

8:00am **Registration**

8:30am **Welcome**
DAN MOTE
President
National Academy of Engineering

8:35am **Introduction to the Workshop from the Planning Committee Co-Chairs**
CLARION JOHNSON
Private Consultant
ExxonMobil

REGINA RABINOVICH
ExxonMobil Malaria Scholar in Residence
Harvard T.H. Chan School of Public Health

I. Global Health and Governance of Public-Private Partnerships in the Current Context

This opening session will provide an overview of the current trends and challenges in the governance of global health public-private partnerships (PPPs). The session will begin with a review of the existing literature on the governance structures, processes, and practices of global health PPPs. The roles of transparency and accountability will be explored in the governance of global health PPPs, with a focus on organizational design and decision-making. Governance issues for discussion will include power dynamics and equity, inclusion and participation in decision-making, and the management of real and perceived conflicts of interest.

Session Moderator: REGINA RABINOVICH

8:50am **The Core Roles of Transparency and Accountability in the Governance of Global Health PPPs**
MICHAEL R. REICH
Taro Takemi Research Professor of International Health Policy
Harvard T.H. Chan School of Public Health

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Exploring Partnership Governance in Global Health: Proceedings of a Workshop

9:15am **Addressing Major Challenges in the Governance of Global Health PPPs: Panel Discussion**

STEVE DAVIS
President and CEO
PATH

MARK DYBUL
Professor of Medicine and Faculty Director
Georgetown University Center for Global Health and Quality

MUHAMMAD PATE
CEO
Big Win Philanthropy

TACHI YAMADA
Venture Partner
Frazier Healthcare Partners

10:15am **BREAK**

II. Legal Considerations for PPP Governance in Global Health

Through a problem-solving exercise, this session will surface legal considerations within different sectors when developing global health PPPs. The discussion will aim to address questions including—What governance structures, processes, and practices are advisable from a legal perspective given a myriad of considerations such as leadership, conflicts of interest, data ownership, publicity, and flexibility in decision making? How does or should PPP governance emulate private-sector governance? How does it differ? What are the legal considerations when operating across countries and international systems? In terms of acknowledging and valuing resources from all partners, questions include—How are resources contributed from each partner acknowledged within the governance document? How is the value of in-kind resources defined? Panelists will discuss these questions and elaborate on the legal and regulatory constraints they have encountered and problem-solved for when structuring PPPs.

Session Moderator: LAUREN MARKS*
Director, Private-Sector Engagement for PEPFAR
U.S. Department of State

10:30am **Panel Discussion**

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DOUGLAS BROOKS
Senior Director for Community Engagement
Gilead Sciences, Inc.

ANTHONY BROWN
Senior Legal Counsel
Gavi, the Vaccine Alliance

KENNETH MILLER
Associate General Counsel
The Bill & Melinda Gates Foundation

NINA NATHANI
Partner
Matalon & Nathani, LLP

VALERIE WENDEROTH
Attorney-Advisor
U.S. Department of State

12:00pm LUNCH

III. Internal Governance of Individual Partners and Impacts on Approaches to Public–Private Partnerships

The internal governance structures, processes, and practices of individual partners impact how they approach and engage in PPPs. Greater clarity and understanding of the practical, legal, and regulatory constraints of individual organizations, which may impact the partnership and how it is governed, can promote transparency and manage expectations. Through defined strategies, priorities, and procedures for partnership engagement that reflect their internal governance considerations, individual organizations can articulate their expectations, needs, and limitations prior to engagement and throughout the partnership operations. Developing a partnership strategy not only provides a signal to other stakeholders and potential partners but also requires organizations to internally review and assess their own priorities, expectations, and resources as they develop their capacity to engage in PPPs. In this interactive session, participants will collectively discuss the issue and related questions posed by the facilitators. The session will be conducted in two rounds followed by a harvest with the larger group to reflect on the themes and deeper questions that arose during small-group discussions.

Session Facilitator: JO IVEY BOUFFORD*
Immediate Past President
New York Academy of Medicine

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KEVIN ETTER*
Director
UPS Loaned Executive Program

1:00pm World Café/Small Table Interactive Discussions

IV. Lessons Learned from Development, Iterative Improvement, and Reform of Public–Private Partnerships and Their Governance

In this session panelists will first illuminate their decision making when developing and establishing a PPP and its governance structure, processes, and practices. Panelists will share lessons learned from experiences in determining governance needs and mechanisms based on the partnership goal; engaging partners and other stakeholders in decision making for the design of the PPP and its governance; developing the governance mechanism; and defining metrics for evaluating the effectiveness of the PPP and its governance performance.

Subsequently panelists will delve into the creation of iterative processes for the continuous improvement of PPP governance as well as approaching PPP reform. Using the experiences of their respective partnerships, panelists will share lessons learned in decision making when adjusting to evolving priorities of the PPP to partners and in the broader global health environment, and related impacts of issues such as expectations, language, and internal decision-making processes of each partner.

Session Moderator: CLARION JOHNSON*

2:00pm Panel Presentations and Discussion

Access Accelerated
DANIELLE ROLLMANN
Access Priorities, Global Policy
Pfizer Inc.

The DREAMS Partnership
LAUREN MARKS*
Director, Private-Sector Engagement for PEPFAR
U.S. Department of State

Global Health Innovative Technology Fund
BT SLINGSBY*
CEO and Executive Director
Global Health Innovative Technology Fund

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ACHAP Partnership in Botswana
JEFF STURCHIO
Board Member, ACHAP
President and CEO, Rabin Martin

Avahan Program in India
SONAL MEHTA
Chief Executive
Alliance India

3:30pm BREAK

V. Evaluating and Reporting on Public–Private Partnerships in Global Health

When conducted effectively, evaluating and reporting on the progress of PPPs on their stated goals and outcomes promotes transparency and accountability, and can guide decision making within the partnership. Standardizing reporting and making it publicly accessible could contribute to decision making in global health more broadly. This session will present an initiative to develop a framework to standardize measurement and reporting across private-sector initiatives to improve access to NCD treatment and care. The presentation will focus on the decision-making process for the framework's design and how it is being applied. Following the presentation, participants will engage in a discussion on the potential of such frameworks for decision making in the development and operations of partnerships in global health.

Session Moderator: JOHN MONAHAN*
Senior Advisor for Global Health
Georgetown University

3:45pm Evaluation of Access Accelerated
VERONIKA WIRTZ
Associate Professor, Global Health
Boston University

PETER ROCKERS
Assistant Professor, Global Health
Boston University

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VI. Identifying Key Issues in the Governance of Public–Private Partnerships in Global Health

The objectives of this session are to identify the key issues in the governance of global health partnerships, and apply what has been learned to decisionmaking in the establishment of a new partnership. During the session, governance issues raised in the earlier sessions will be reviewed, participants will be guided through a role-playing exercise to apply lessons learned from the workshop, and key messages from the workshop will be identified.

Session Facilitator: CATE O'KANE*
Independent Consultant

4:15pm Report Back from World Café
JO BOUFFORD
KEVIN ETTER

4:25pm Facilitated Small-Group Activity

5:55pm Closing Remarks

REGINA RABINOVICH

CLARION JOHNSON

6:15pm Adjourn to Informal Reception

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Appendix E

References

Bezanson, K. A., and P. Isenman. 2012. *Governance of new global partnerships: Challenges, weaknessess, lessons.* Washington, DC: Center for Global Development.

Distlerath, Linda M., and Guy Macdonald. 2004. The African comprehensive HIV/AIDS partnerships-a new role for multinational corporations in global health policy. *Yale Journal of Health Policy, Law, and Ethics.* 4:147.

Ebrahim, A., J. Battilana, and J. Mair. 2014. The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior* 34:81–100.

Hilts, P. 2005. *Changing minds: Botswana beats back AIDS, In Rx for Survival: Why We Must Rise to the Global Health Challenge*. New York: Penguin Press. pp. 130–164.

IOG (Institute on Governance). 2017. *Defining Governance*.

Kokku, S. B., B. Mahapatra, S. Tucker, N. Saggurti, and P. Prabhakar. 2014. Effect of public-private partnership in treatment of sexually transmitted infections among female sex workers in Andhra Pradesh, India. *Indian Journal of Medical Research* 139(2):285–293.

I. Ramiah, and M. R. Reich. 2005.Public-private partnerships and antiretroviral drugs for HIV/AIDS: lessons from Botswana. *Health Affairs.* 24 (2): 545–551.

I. Ramiah, and M. R. Reich. 2006. Building effective public–private partnerships: Experiences and lessons from the African Comprehensive HIV/AIDS Partnerships (ACHAP). *Social Science & Medicine* 63(2): 397–408.

Reich, M. R. 2002. Public-private partnerships for public health. In *Public-private partnerships for public health*, edited by M. R. Reich. Cambridge, MA: Harvard University Press.

Rubin, E. 2005. The myth of accountability and the anti-administrative impulse. *Michigan Law Review* 103(8):2073–2136.

Stenson, B. 2010. *Strengths and weaknesses in the governance of selected global health initiatives.* Washington, DC: Global Partnership for Education.

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