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Policy change and micro-politics in global health aid: HIV in South Africa

Matthew M Kavanagh[1],* and Vuyiseka Dubula-Majola[2]

[1]O'Neill Institute for National and Global Health Law, Georgetown University, 600 New Jersey Avenue NW, Washington, DC 20001, USA and [2]Africa Centre for HIV/AIDS Management, Stellenbosch University, Stellenbosch, South Africa

*Corresponding author. O'Neill Institute for National and Global Health Law, Georgetown University, 600 New Jersey Avenue NW, Washington, DC 20001, USA. E-mail: matthew.kavanagh@georgetown.edu

Abstract

Efforts to improve the effectiveness of global health aid rarely take full account of the micro-politics of policy change and implementation. South Africa's HIV/AIDS epidemic is a case in point, where the US President's Emergency Plan for AIDS Relief (PEPFAR) has provided essential support to the national AIDS response. With changing political context, PEPFAR has shifted focus several times—most recently reversing the policy of 'transition' out of direct aid to a policy of re-investing in front-line services in priority districts to improve aid effectiveness. However, this policy shift has not led to the expected impact on health services. This paper reports the findings of a study on the implementation of the recent policy through interviews at randomly selected sites in high HIV-burden districts of South Africa that capture the experiences of public-sector health leaders. We find little evidence to support the explanation that the new aid policy displaced government staff and resources. Instead, our findings suggest that legacies of the previous policy remained as local aid managers did not shift funding and practice at sufficient scale to drive the planned service delivery expansion. Human resource support, the main PEPFAR contribution to service delivery at front-line facilities, was not adequate or distributed based on the size of the HIV programme, leaving notable gaps in outreach, defaulter tracing, and community service delivery. Instead, services that better fit the previous policy paradigm, like training and data-sharing, are common at site-level but provide diminishing returns. Together, our findings suggest opportunities for PEPFAR South Africa to revisit its model and increase service delivery intensity, in particular through community-based services. More broadly, this case illustrates the need for greater attention to the multiple actors with discretion in the policy system of health aid and the mechanisms through which political priority is translated into programming as policy shifts are made.

Keywords: HIV/AIDS, South Africa, aid, global health, policy implementation, human resources for health, PEPFAR

Introduction

Financing for the HIV/AIDS response in South Africa has been characterized by a series of dramatic policy pivots driven by shifting politics. With the world's highest burden of HIV and a middle-income economy with a fluctuating growth trajectory, the functioning of international aid for HIV in South Africa illuminates key challenges in policy change and implementation that are not often acknowledged in

international debates about global health aid effectiveness and the achievement of national and international health goals.

It is now credible to talk about ending the public health crisis of HIV through scaling up antiretroviral treatment (ART) for both health and prevention benefits alongside 'combination prevention' to halt HIV transmission (Fauci and Marston, 2015). In the face of a global infectious pandemic, whether this potential will be realized depends heavily on how quickly this scale-up takes place (Sidibé

Key Messages
- Translating political priority on aid effectiveness, achievement of disease response goals or the proper role of international assistance for middle-income countries faces policy implementation challenges.
- In South Africa, the limited impact of policy changes in the US President's Emergency Plan for AIDS Relief stems from insufficient implementation through shifting allocations to front-line facilities rather than from a failure of the model of funding direct services and human resources.

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et al., 2016). The South African National Strategic Plan has thus adopted UN-backed goals of achieving '90–90–90' targets by 2020—90% of people living with HIV will know their status, 90% of those will receive antiretroviral therapy, and 90% of those will achieve viral suppression (United Nations, 2016; SANAC, 2017). Despite significant increased investment and political commitment, however, scale-up and quality of South African HIV services is not yet on track to achieve these goals.

The US President's Emergency Plan for AIDS Relief (PEPFAR) has been a key part of financing the South African AIDS response for the last 15 years. While the South African government now finances the majority of its AIDS response, PEPFAR remains the largest external funding source for this largest AIDS response in the world (PEPFAR, 2017a). PEPFAR policy has shifted several times in that period—from initial focus on building treatment programmes to a major 'transition' out of funding front-line services. PEPFAR most recently reversed that transition with a policy shift toward font-line services in selected priority districts to improve effectiveness and impact.

In this article, we explore how this most recent policy change has translated at the front-lines of the HIV/AIDS response in the country. We draw on policy change and implementation literature to explore this shift. Studies of policy implementation have long shown how interpretation, coordination, values clashes and bureaucratic autonomy all challenge simplistic translation of policy changes into practice (Pressman and Wildavsky, 1984; Walt, 1994; Barrett, 2004). Studies highlight the ways in which policy is made and implemented through sub-systems that function based on belief structures, with multiple actors and layers of authority (Sabatier and Jenkins-Smith, 1993). Workers at the 'bottom' are themselves policy-makers with significant discretion in operational decisions (Lipsky, 2010). Government agencies and organizations are far from monolithic and back-stage 'micro-politics' can reshape what might appear to be clear policy direction (Burns, 1961). Local officials and managers play a critical role in aligning resources and organizational environments with policy goals to influence the discourses and incentives that can foster, or hinder, implementation at the front lines (Gilson *et al.*, 2014). In this case, local aid officials include both 'local' US administrators within US aid agencies and officers with implementing NGOs holding long-standing contracts. Each year the Office of the Global AIDS Coordinator in the US State Department sets policy through the country operational plan (COP) and other mechanisms. However, the actual contracts and work plans that dictate how PEPFAR funds will be spent in practice are set by agency officials assigned to a given country from the US Agency for International Development (USAID), Centers for Disease Control and Prevention and other agencies. NGO administrators then translate policies into action as they decide exactly how to programme the funds they receive. These officials are not directly accountable to PEPFAR headquarters and have significant discretion in interpreting PEPFAR's central policy directives.

Models of the policy process also emphasize how high-profile policy decisions of the past influence implementation of subsequent policies. Especially when the new policy reflects a significant shift, policy legacies may hinder implementation if the process is not carefully organized to account for the ideas and incentives of those on the front lines (Sabatier and Jenkins-Smith, 1993; Pierson, 2004; Béland and Ridde, 2016). PEPFAR's previous decision to 'transition' out of direct services is a good example of such a prior decision which set new ideas and incentives not likely to be easily discarded.

Given these expectations, this paper addresses several questions. First, it examines the degree to which the most recent PEPFAR policy shift to emphasize financing 'direct services', such as salaries of health workers and supplies at clinics has been implemented. Literature and anecdotal evidence give reason to expect that legacies of the previous transition policy would undercut implementation of the new policy. Second, it explores whether the shift to direct service investments is needed, fills a clear gap and is prioritized by the public-sector facility managers who run much of the AIDS response. Since PEPFAR funds flow primarily to NGOs working to augment public-sector services, key decisions about how funds are used lie with in-country US government officials and NGOs. They could be failing to implement policy change or, alternatively, could be quickly attempting to implement the new policies but facing resistance from facility-level managers or finding that new policies prove duplicative or unnecessary.

Overall our analysis finds that the high-level policy shifts announced by PEPFAR in South Africa have not translated at the front lines. Implementation of direct service interventions have been limited and slow to roll out. This, we argue, explains why programme goals have not been met in recent years, rather than the alternative explanation that facility-level investment in priorities like health worker salaries are not working. Evidence gathered from interviews with public-sector facility managers suggests that this is not for lack of need or priority within the broader AIDS response. PEPFAR has an opportunity for greater impact going forward through focusing on implementation of the stated policy and by more closely defining its investment priorities while engaging more deeply with public-sector health leaders. In the context of global policy debates over how to make foreign aid more effective (Beracochea, 2016) and about whether and how foreign aid for health should be deployed to middle-income countries (Markham *et al.*, 2015; Resch and Hecht, 2018), this paper highlights the need to focus on how policy imperatives translate politically into front-line delivery to realize impact.

Politics and PEPFAR policy in South Africa

PEPFAR has played a critical role in supporting the AIDS response in South Africa. Hailed as one of the world's most effective foreign aid programmes, it is credited with saving millions of lives in the country (Walensky and Kuritzkes, 2010). In 2004, PEPFAR began funding prevention and treatment programmes at a time of

ambivalence about HIV treatment under Mbeki's administration. In the early years, a significant portion of PEPFAR funding was focused on building new HIV treatment programmes—supporting efforts in public-sector facilities, NGO-run clinics, and within general practitioner networks. From 184 initial facilities in 2005, PEPFAR expanded its programmes into thousands of sites (Larson *et al.*, 2012). Support included funding direct patient-serving staff, drugs, commodities and equipment as well as training, mentoring and information management. By 2010, South Africa had a new minister of health committed to closing the book on the era of HIV denialism and a rising government HIV budget. Importantly, the country was also seen by the USA as a rising power—a BRICS (Brazil, Russia, India, China, South Africa) member with a growing economy that no longer justified such significant PEPFAR investments—a stance increasingly taken by global health donors with respect to powerful middle-income countries.

In a major policy shift, the US announced a 'transition' out of supporting front-line HIV treatment in the country and conducted a high-profile political process that culminated in Secretary of State Hilary Clinton signing a new partnership framework that set out an end to funding for 'direct services' (SAG & USG, 2010). PEPFAR funding was to decline by 48% to $250 million by 2017 and focus away from site-level direct services and toward supporting the health system. This process, which sparked controversy, included ending support for health worker salaries and moving a significant number of people on treatment from non-governmental sites to public-sector facilities (Kavanagh, 2014).

Within a few years, however, it became evident that, even with dramatically increased government commitment and funding, South Africa's burden of HIV and health systems challenges made reaching HIV goals nearly impossible through domestic financing alone. PEPFAR made a second major change—this one far less high profile—suspending the planned funding drawdown in the 2016 COP (PEPFAR, 2016; U.S. Mission South Africa, 2016). Direction from Washington shifted away from transition and towards re-investing in direct patient care where it could augment public-sector health services to speed achievement of 90–90–90 treatment goals (PEPFAR, 2017a). PEPFAR also named South Africa a priority for the DREAMS programme and injected $66 million in new funding for prevention programmes for adolescent girls and young women. In 2018, PEPFAR announced a new 'surge' in funding that will add several hundred million dollars on top of the current base funding of $483 million—the details of which are being negotiated at the time of this writing. In 2017 PEPFAR provided approximately one-quarter of all HIV funding in South Africa, sufficient funding to secure the policy shift to direct service and a figure that will increase to roughly 30% by 2019 (PEPFAR, 2017a).[1]

This new official policy was to shift funding into 'direct services' focused on 27 (out of 52) high HIV-burden districts. Four districts were prioritized as 'scale-up saturation' where significant PEPFAR investments were meant to achieve the 90–90–90 treatment goals by the end of fiscal year 2017. Those four districts—eThekwini, uMgungundlovu, Ekurhuleni and City of Johannesburg Metropolitan—experience some of the highest burdens of HIV in the country. While significant strides have been made, these districts fell significantly short of the goals—achieving only between 71 and 76% of their FY2017 goals for people currently receiving treatment (see Figure 1). Notably, only eThekwini achieved the testing targets for identifying people living with HIV, but programme quality was a significant problem. In these districts, PEPFAR reports 361 391 people were newly identified in 2017, but only 258 598 people were newly added to treatment; up to 30% of those already on treatment were 'lost to follow-up' (PEPFAR, 2018).
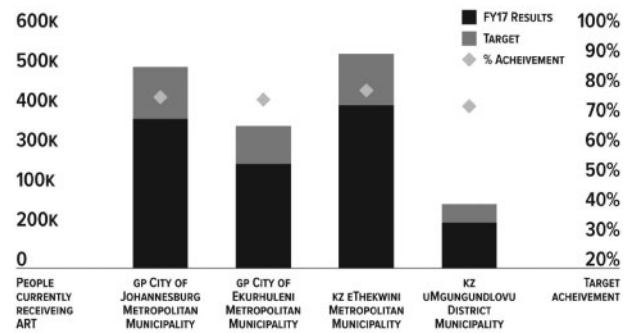

Figure 1. Saturation districts missed targets. FY17 treatment result vs target

These overall trends suggest there is more that is needed from PEPFAR programming to fill the key gaps toward reaching saturation and beyond.

How has this global health aid policy shift—meant to improve aid effectiveness through focusing geographically and re-engaging in direct service delivery—been implemented at the front lines? Why have the shifts set by PEPFAR leadership not resulted in achievement of the stated goals? We focus in on these four districts to understand more deeply how the PEPFAR policy that reversed transition is being translated into interventions to improve HIV treatment coverage in the highest-burden districts. As PEPFAR looks to expand its impact by both shifting its strategies and increasing its investment through 'surge' funding in the coming years, a variety of choices present themselves about how funding can be invested to achieve the strategic objectives of the programme.

Methods and facilities sample

We visited a randomly selected sample of PEPFAR-supported health facilities in the four 'saturation' districts between November 2017 and January 2018 and conducted semi-structured interviews to understand how policy is realized at the clinic level (Mosley, 2013). These districts account for 40% of all those supported on treatment through direct services by PEPFAR in 2017 (in all 52 districts).[2] Fifty-three facilities appear in the final random sample. From the 437 sites supported by PEPFAR, we excluded those sites in the bottom quartile of each district in the number of people on treatment, which we assume would be low on the list of priorities for increased direct service investment. The clinics sampled had a mean of 3335 people on ART. We also excluded mobile sites and those inside correctional facilities. Managers at all but five selected sites agreed to participate in interviews, with one excluded because no administrator had been at the facility longer than 6 months. We conducted interviews with lead staff at the remaining 53 sites—most often including the facility manager (usually a nurse) and/or nurse administering the HIV programme—and, wherever possible, we cross-checked answers with other staff and public records. All interviews were anonymous with the names of facility managers not linked to notes and recordings. Facility names are masked by codes below. Interviews were recorded, transcribed, and coded with checks for inter-coder reliability.

PEPFAR funding flows largely to a set of NGO 'implementing partners' that work in public-sector clinics based on contracts with one of several US government agencies. To ensure our sample was representative, the facilities visited included those contracted through both the Centers for Disease Control and Prevention and

the Agency for International Development and served by several lead implementing partners, including Right to Care, Anova, Wits RHI, MatCH, Health Systems Trust and Kheth'Impilo. We did not find significant, systematic differences between observations at clinics served by different implementing partners.

The results below are based on these interviews. Our data therefore represent not what implementing partners say they are doing, but instead what public-sector nurses responsible for managing the throughput of the clinic report they have observed and experienced. These are, of course, imperfect data subject to limitations of recall and bias, much as any qualitative data of this nature. We found that these managers were highly reliable narrators when it came to the size and tasks of the staff at the clinic, and the information they provided about the ART programme was verified against outside reports whenever it was possible. An important benefit of this approach is that the subjective input of facility managers about the major barriers to increasing the quality and effectiveness of the ART programme adds an important, and often missing, perspective to conversations about how to improve the efficacy and impact of health aid.

Results and discussion

PEPFAR's primary investment in 'direct service' at supported facilities since 2015 has been in human resources for health (HRH): staff paid through NGOs placed at facilities, rotating or roving teams visiting facilities to provide direct services, and training and mentoring of the existing government staff. PEPFAR in recent years has not procured significant antiretrovirals or equipment for front-line clinics (PEPFAR, 2017a). As such, we focussed data collection on HRH as the best indicator of the implementation of the policy change away from transition and into front-line services. Investments in HRH, however, run counter to the 'transition' paradigm of just a few years ago when local aid officials laid off many direct service workers and were encouraged to think of the role of PEPFAR-funded NGOs as mentors and technical experts not direct providers. Officials working for the US government and implementing NGOs in South Africa have significant discretion in how they translate the new high-level directives to re-invest in direct services into staffing and models service provision. Looking at HRH deployment therefore give us empirical insight about the degree to which aid officials are still acting under the previous paradigm rather than implementing path-departing change. Meanwhile, the views of front-line public-sector nurses managing the facilities largely align with PEPFAR's official policy shift toward direct services—yet the continued gaps they experience underscore the limited implementation of that policy by aid officials as well as insights about how incentives could be better aligned.

Characteristics of sample of public-sector facilities
The facilities we visited had large numbers of people on treatment: 85% had at least 1500 people on treatment, and 17% had more than 5000 (Figure 2).

The need for increases in human resources in South Africa to support rapid expansion of the AIDS response is well documented, with these public-sector clinics providing a wide range of services as well as initiating and maintaining people on ART (Van Damme *et al.*, 2008; Mayosi and Benatar, 2014). The sampled clinics are serving very large numbers of patients and have significant staff complements. Figures 3 and 4 show the portion of clinics in our sample with different numbers of government-employed clinicians
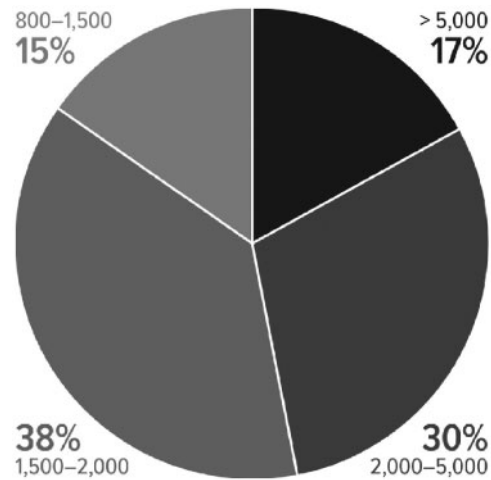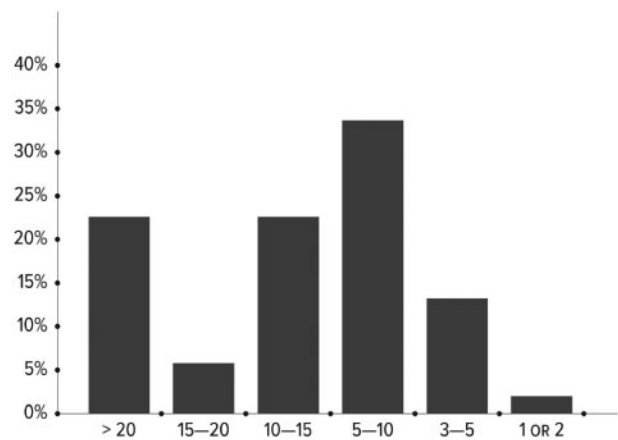

Figure 2. People on HIV treatment at visited clinics

Figure 3. Government's Nurses and doctors working (at least partly) on HIV per facility
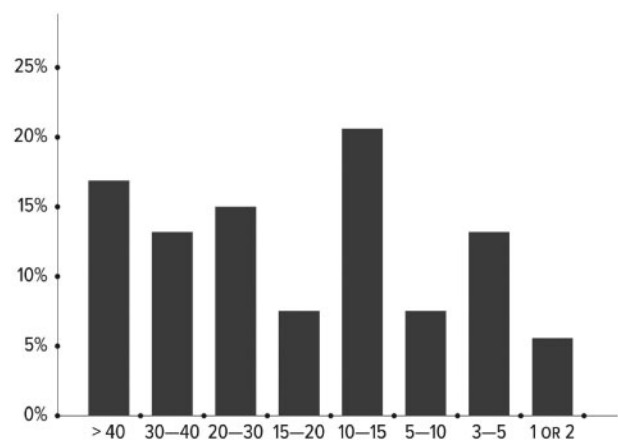

Figure 4. Government's lay staff working on HIV per facility

and lay staff, respectively. Over half of clinics have at least 10 clinicians, and almost half have 20 or more lay staff who are paid directly by government, most of whom have some level of engagement in
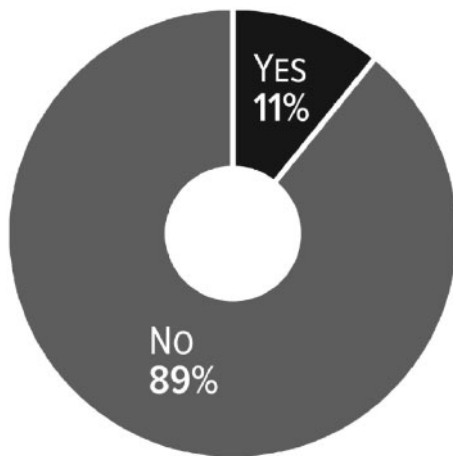
Figure 5. Facilities with government HR focussed on default tracing

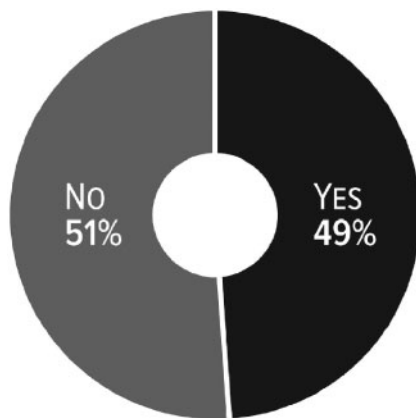**Figure 7.** Facilities with at least one direct service staff supported by PEPFAR

Figure 6. Facilities with government HR focussed on adherence counselling

the ART programme. While we do not have access to overall patient loads to reflect overall staffing ratios, these raw HRH levels are worth noting, because the additional impact of PEPFAR-supported staff is related to what is already in place as well as the gap in staffing needed to scale high-quality HIV services.

Of particular note, despite having significant government staffing complements, only half of clinics have any staff focussed primarily on HIV adherence counselling and support; 89% report having no government staff focussed on outreach or tracing those lost to follow-up from the ART programme (Figures 5 and 6).

PEPFAR support for HRH at front-line facility level

Most facilities in our sample report that there are some staff paid for by PEPFAR through local implementing partners who are based at the facility on a full-time or near full-time basis. Our sample was home to a total of 305 such staff, which is notable because our sampled clinics serve 20% of the PEPFAR-supported ART patients in these four districts (Figure 7).

In terms of clinical staff, facilities have a relatively small PEPFAR-supported complement of staff. A significant number of sites in these districts report they have no clinical staff based regularly at the facility. The modal configuration among those that do have clinical staff is a single nurse—30% of all clinics—with another
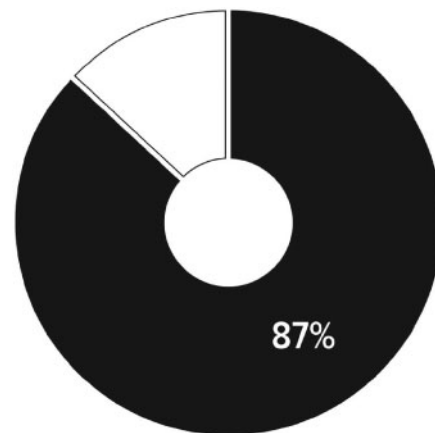
19% that have a second nurse, and a similar portion with a regular doctor funded by PEPFAR. A handful of clinics report more than two nurses, and a few facilities have regular pharmacy staff paid by PEPFAR (Figure 8).

About half of clinics have each of several PEPFAR-supported lay cadre of community health workers including HIV testing counsellors, data capturers and adherence or linkage counsellors, most often one person. Very few of the PEPFAR-supported staff are devoted to tracing patients who are lost to follow-up or providing community outreach or services. Our understanding of the PEPFAR strategy based on COP16 and COP17 is that direct service delivery staff are focussed at public-sector facilities and integrated into service delivery. We asked, on this basis, about staff based at these clinics who focus primarily on this task—but this means we may not have captured staff who are primarily based in communities reporting to NGOs who may be engaged in outreach and default tracing. We also note that some of the lay staff primarily tasked with other roles do spend some time reaching out to those who are lost to follow-up—though upon closer questioning, it was evident that this is usually only a small part of the day-to-day work of those reported as adherence counsellors, nurses and others (Figure 9).

Overall, public-sector managers report that these facility-based HRH additions are playing an important role in the service delivery structures of the clinics.

> *Patients' waiting time has been reduced because of the professional nurse that has been allocated for HIV and ART initiation* (GP-JNB-04).

> *With the addition of data capturers in our facility, we have improved in the way we collect and analyse statistics, and as a result, our service delivery to the patients has also improved* (KZN-uM-03).

Figure 10 represents how PEPFAR-supported HRH are distributed compared with the number of people on ART at each clinic. As reflects the frequencies shown in Table 1, most of the observations have relatively few nurses and overall HRH, clustering towards the chart bottom. Our observations cluster in the lower left where there are fewer people on ART (though all of the visited clinics have significant ART rolls) and few HRH. The upper right quadrant, meanwhile, is largely empty, reflecting the apparent lack of a systematic increase in the number of HRH or nurses as the size of the treatment rolls in a clinic increases.
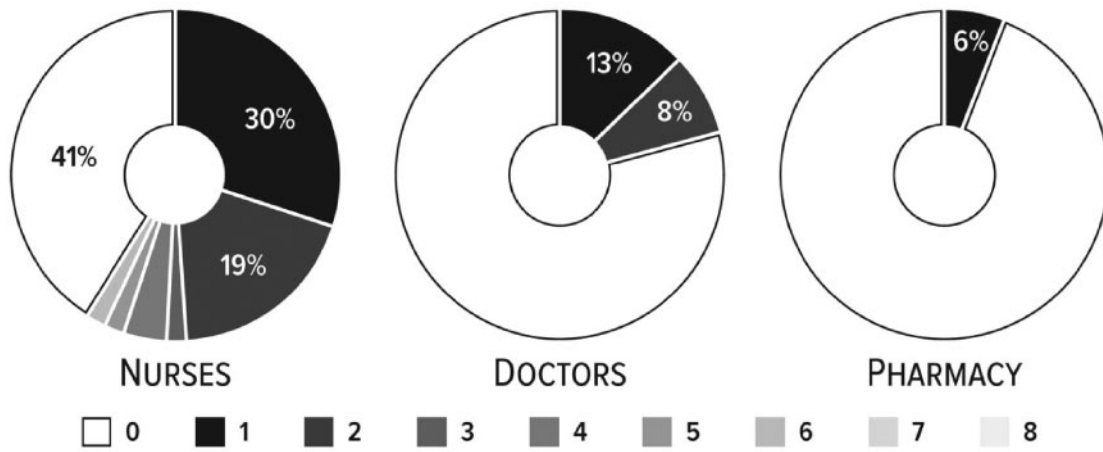
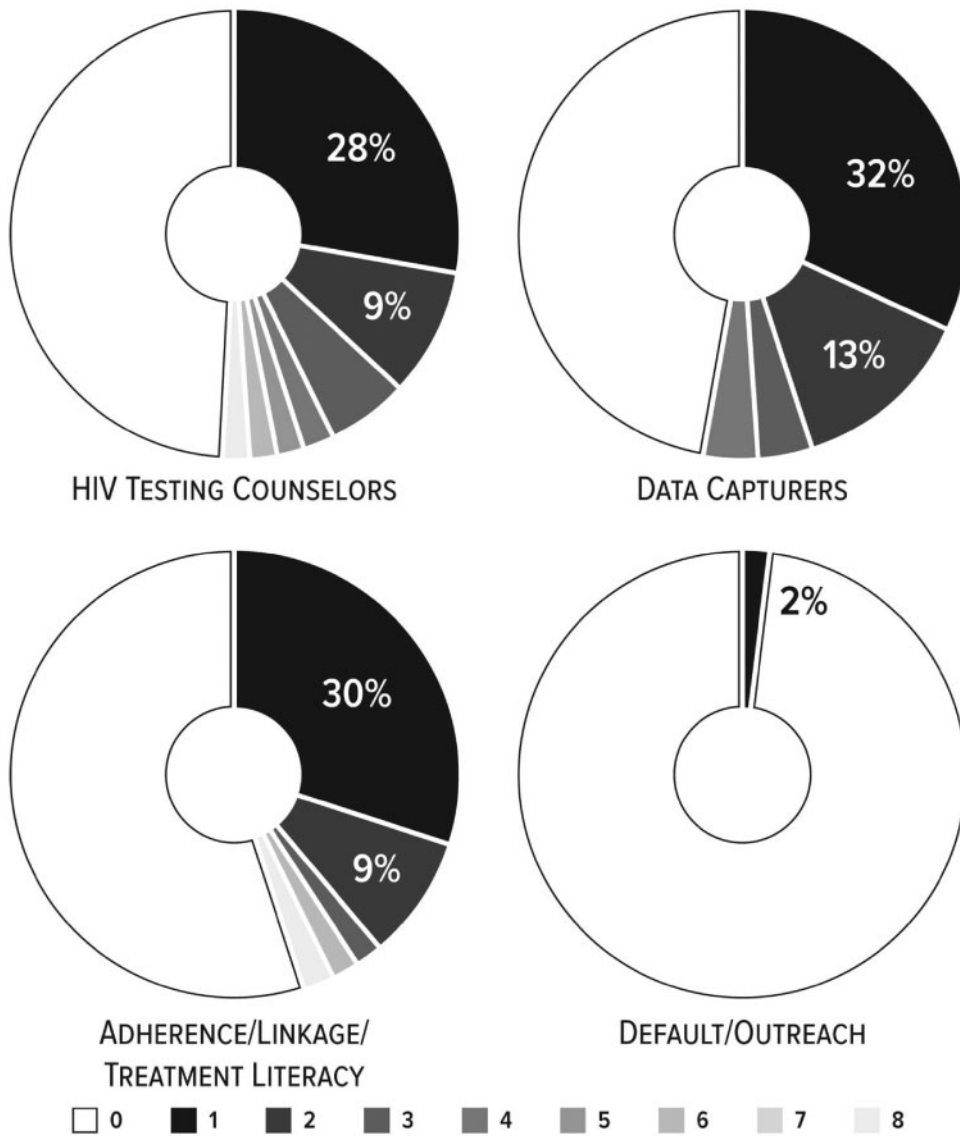**Figure 8.** PEPFAR-supported clinical staff. Number of clinical HR by cadre and percent of clinics
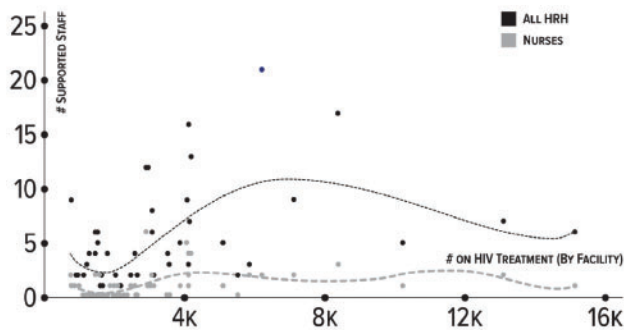

Figure 9. PEPFAR-supported lay staff

Figure 10. Distribution of PEPFAR-supported HRH

Table 1 Ratios of PEPFAR-supported HRH

People on HIV treatment per staff person (all)	
Range	92–2767
Average no. on ART per staff	999
People on HIV treatment per nurse	
Range	415–15 034
Average no. on ART per nurse	2895

At visited facilities, the ratio of people on ART per staff person (including all cadre) varied significantly between clinics, with an average of 999 people on ART per staff person. The patient-to-nurse ratio was similarly large, with an average of 2895 people on ART per nurse. We did not have access to 'total' patient numbers per clinic, but we note that the ratio of people on ART to total 'government' staff was 127:1. These ratios are not directly comparable, because government staff are almost all doing more than ART, but it may help understand the limited impact of adding only small numbers of staff to a clinic.

Overall, many clinic leaders interviewed identified both the benefits of PEPFAR-supported HRH and the continuing gaps in HRH needs.

> *I would not say a lot has changed, because our clinic is very big. The NGOs are just doing initiation of some patients, and all the follow-ups are done by the clinic nurses, as well as the whole TB/HIV co-infection part, though ART initiation has improved* (GP-JNB-16).

One possible explanation for why additional PEPFAR HRH has not had a larger impact is that government staff are shifting out of HIV services as PEPFAR-supported staff are added to the clinic—moving a nurse out of ART initiation to focus on childhood vaccination, for example. The result would then be no net increase in HRH working on HIV. In seeking to address this, we began with an open-ended question about what had changed about the work of staff at the clinics since the addition of PEPFAR-supported staff and followed up with a specific question about whether staff had shifted to other areas, and if so, to what areas. Overall, we found little evidence of a significant shifting of government staff out of working on HIV as PEPFAR-supported staff were added. In most clinics, no such shifting was supported. As one respondent explained:

> *No, it will never happen that government staff stop doing ART. We have so many thousands, if we just left HIV to them they would bleed through their nose and ears…* (GP-JNB-15).
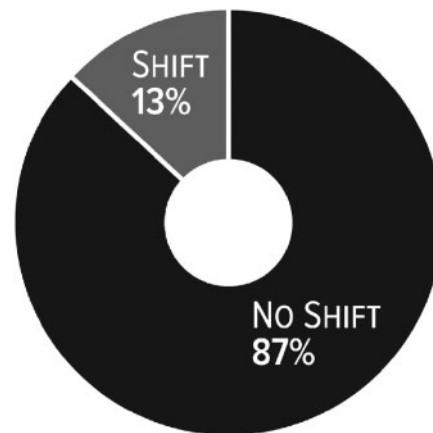

Figure 11. Clinics where government staff have/have not shifted from HIV to other pressing issues

Instead, at most facilities, staff shifted their work *within* HIV in ways meant to increase programme quality.

> *Before the arrival of NGO staff, we could not do HCT [HIV counseling and testing] and initiation at the same time, on the same day. They have made our work much easier, as we no longer experience long queue, and waiting time for patients has been cut down dramatically. But no, there is no way to stop doing HIV, we are still very short-staffed* (KZN-eTH-09).

In a few clinics (13% of our sample), however, there was some report of government staff shifting away from HIV care.

> *The professional nurse who was doing HIV is now concentrating on general follow-ups. She also assists in immunization when the clinic is too busy* (GP-JNB-07).

We also note that we do not have data to understand whether such shifts are occurring at a higher government level—shifts of staff into or out of clinics based on district or provincial decisions. As such, there is need to ensure that policy is clear and clearly communicated to leaders in this area. At clinic level, however, there does not seem to be widespread displacement (Figure 11).

PEPFAR HRH support through visiting teams
PEPFAR-funded NGOs also regularly come to the facilities as visitors to provide support. Nearly half of facilities receive such visits several times a week. These visits include both direct-service visitors—such as 'roving teams' of clinicians to boost service provision for difficult cases or at peak times—and visits for mentoring, technical assistance, and training. In our data and the experience of facility managers, these visits are not distinct. The same NGOs often provide both direct service and technical visits. When functioning well this interaction seems beneficial because it ties technical assistance closely to the life of the clinic.

Clinic officials, when asked to subjectively rank the value of various types of NGO visiting support, identified providing care and seeing patients as the most valuable intervention, in their opinion. This was followed by the collection of data to review performance with them—something many officials valued highly. These two more structured interventions were far more often identified among the most valuable compared with training, mentoring, providing advice, and similar activities (Figure 12).

PEPFAR-supported NGOs regularly share data with most facilities, which, as noted, is among the services most valued by facility leaders.

> *Every Wednesday, we sit and look and discuss statistics and look at gaps and how to improve service* (KZN-UM-02).

This usually happens on a weekly or monthly basis, though a smaller number of clinics do not report such regular data sharing.

Worryingly, however, fewer than half could identify specific ways that these data have resulted in a change in how they provide HIV services or run the clinic to improve performance. This, of course, does not mean that no changes were made—and indeed, management studies have long shown that simply identifying problems and showing staff how they are performing can improve performance. These data do, however, suggest a thinner relationship between data and mentoring than might be hoped (Figures 13 and 14).

Clinic officials overall praised the trainings conducted by PEPFAR partners. In particular, the most valuable trainings identified by facility managers in the past 12 months were in nurse-initiated/managed ART (NIMART) and in the Tier.net data system, along with several mentions of centralized chronic medicines dispensing and distribution (CCMDD).

> *We used to ask a nurse from the other clinics to come and initiate our patients on ART. [NGO] funded the NIMART training for our professional nurses. This NIMART training allows us as nurses to diagnose, make assessment, take bloods and offer treatment. Our numbers moved from 200 to 1000 clients taking treatment a month. It is a great achievement* (KZN-uM-09).

> *The training on the Tier.net, which helped us to understand what data needs to be captured and why. There is no guesswork anymore, and no running around when the district office is asking for certain numbers* (KZN-eTH-12).

While it is beyond the scope of this report to evaluate broader pre- and in-service training regimes, it is notable that these two subjects came out by far most often, reflecting a surprising unmet need. It is not clear how much is due to staff turnover or whether these facilities have not previously received such training, but centralizing and regularizing it might well increase efficacy and efficiency. These topics are also largely one-off trainings that should not require significant repeated and ongoing training (Figure 15).

Again, worryingly, 58% could not identify any specific practice, ways of providing care, protocols, or innovations introduced at the facility because of the trainings.
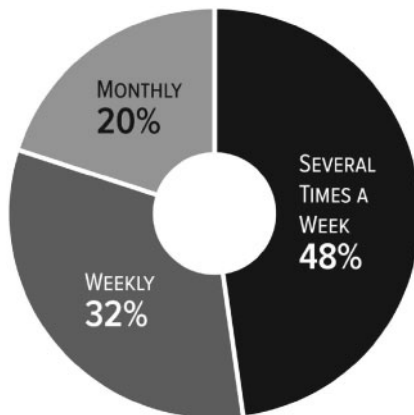

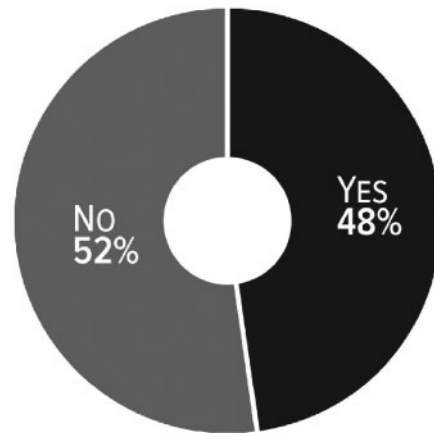**Figure 12**. How often NGOs visited. Most frequent visit by percent of clinics

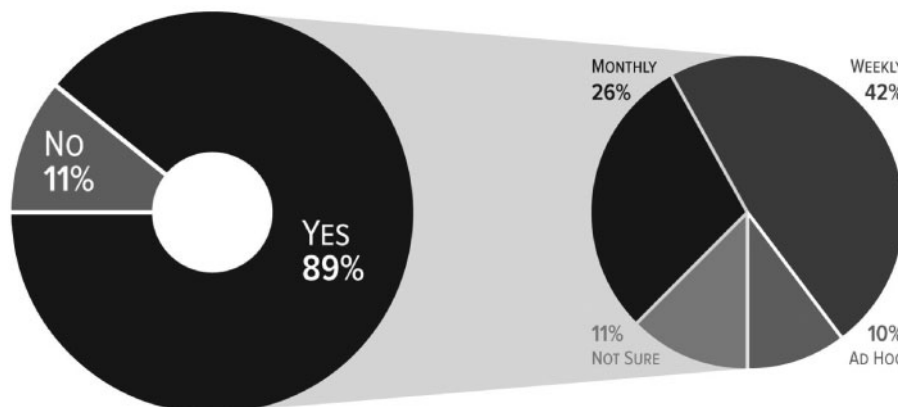**Figure 14**. Can identify example of how data have changed practice at the facility

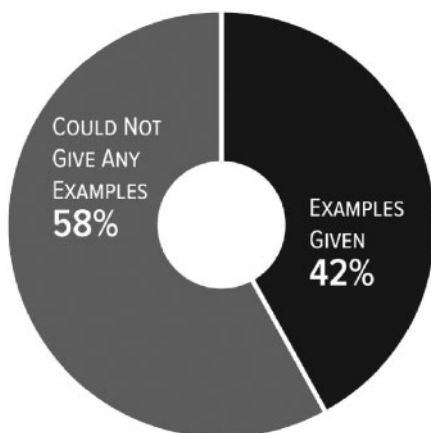**Figure 13**. Do NGOs regularly share data with clinic managers?

Figure 15. Can give example of changes, innovations, shifts in practice because of training in the last 12 months
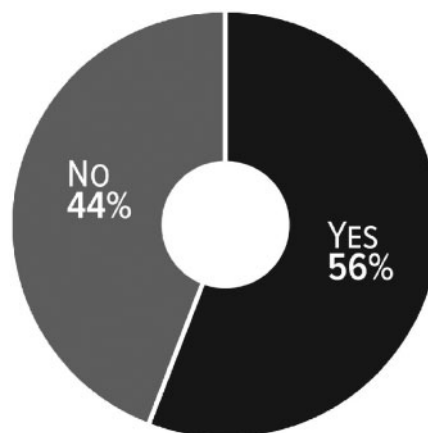

Figure 16. Are PEPFAR-supported NGOs addressing the biggest challenges identified by facility managers?

Front-line health leaders' priorities

We asked facility managers to identify the biggest barriers or challenges holding back increasing the number of people identified, initiated and retained in care. The biggest three identified were the following:

Staff shortages resulting in lack of capacity to trace lost patients and build effective retention programmes, especially for mobile populations:

We are dealing with a mobile community. They migrate from one place to the other after case finding and become lost to follow-up and come back when they are seriously sick, and sometimes they give us wrong addresses and wrong names, and we have nobody to follow up (GP-JNB-07).

If we can trace more, we will need more nurses—otherwise the waiting period will increase, or else other nurses from chronic will have to do initiation and the general chronic will suffer. We will require more nurse initiators. But as of now, we do not have someone to trace, so we have a problem before that one (KZN-uM-02).

Both physical space and lab infrastructure remained a significant problem:

Infrastructure is the biggest problem. We cannot accommodate as many people as we would love to. Even [NGO] has a problem, because we cannot give them enough working space. They just manage to get a corner somewhere and do their work (KZN-uM-10).

The lab results, the turn-around time, sometimes the errors, the queries on the results. So often the patients have no results to report and then they stop coming back. They say, 'I'll come next time' but don't (GP-EK-08).

The nurses still lack working spaces (rooms) and this impacts negatively to the privacy of the patients, so more park homes are needed here (KZN-eTH-07).

Particularly notable was the sense among respondents that clinics were not particularly well suited to supporting patient retention in many cases, and that some barriers might best be addressed by community-based service delivery.

Patients do not want to wait for long at the clinic each and every time. They have to go to work, and sometimes the attitude of the nurses is not right for the patients and that makes them just stop coming in, which you can understand (GP-JNB-16).
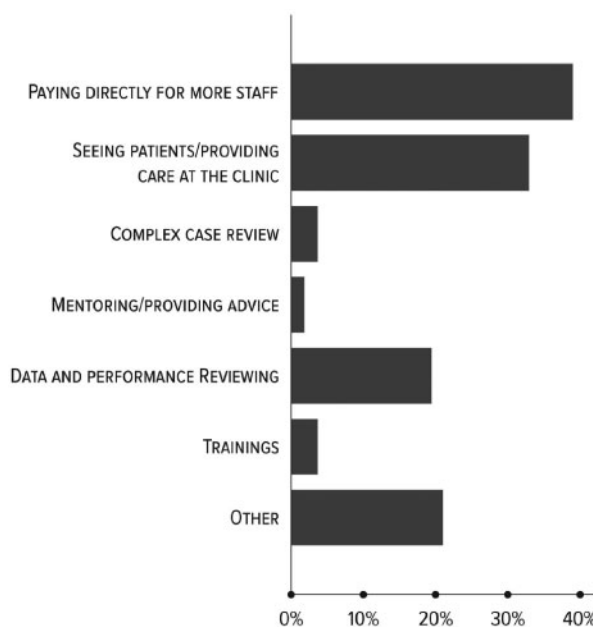

Figure 17. What would you rather NGOs focus on?

We do not work on weekends, and so we miss the working population. We need to rethink this, maybe make better use of these ideas going outside into community or workplaces for the chronics (KZN-uM-10).

Many facility leaders mentioned the benefits of the CCMDD models but noted the gap between CCMDD and facility-based efforts to support adherence and retention.

The overall sense from facility leaders is that PEPFAR-funded NGOs could be more focussed on addressing these challenges with additional capacity. Only 56% said they believed the work of these NGOs was focussed on these barriers.

When asked how they would reprogramme existing funds or spend any increase in available funding, facility managers say they would prioritize increasing the number of paid staff regularly based at their facility and funding the direct-service work at the clinic above all else. While data and performance review received some support for increase, only a handful of clinic leaders said they need more training or mentoring as a priority (Figures 16 and 17).
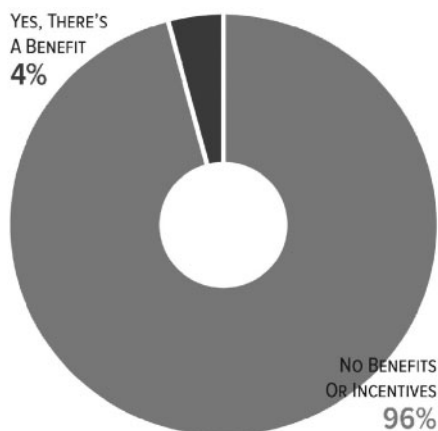
Figure 18. Is there any incentive (beyond personal sense of duty) for manager or clinic staff to add more people to treatment faster?

Limited incentives for scale-up and retention in the public sector

Finally, we asked clinic managers about the incentive structure within the public sector. While PEPFAR implementing partners have targets they are required to hit and are incentivized to speed up testing and enrolment and increase retention rates, we were curious about whether the public-sector staff managing these facilities had similar incentives. We therefore asked if there was any benefit to scale up faster or improve retention rates—or any consequence if they did not. Overall, respondents repeatedly expressed that they understood the benefits to the community of reaching HIV treatment saturation and felt a professional obligation to move as quickly as possible. As one put it:

> The benefit will be that the clinic won't be crowded with terminally ill people, the nurses will be able to concentrate on other chronics and follow-ups. That is the hope at least that keeps us going (GP-JNB-13).

However, they also expressed a recognition that doing so would come with significantly increased workload and very few benefits to themselves, the clinic, or their staff. 'We get more work is what it means', noted one respondent, 'and I don't think my nurses want more work, they are very unhappy with me right now' (GP-JNB-15).

This suggests a significant area of work for PEPFAR and Government of South Africa—to seek to align incentive structures such that the NGOs and public-sector workers have clear and similar incentives to focus on scale-up (Figure 18).

Conclusion

External financing to fight HIV in South Africa has been a remarkable success among international aid programmes—scaling up HIV treatment and prevention programmes from a time before the government embraced a science-based response. In recent years, efforts by PEPFAR to adapt to a changing political and economic context have led to substantial policy shifts aimed at improving aid effectiveness and addressing with the proper role of aid in middle-income countries—issues that have occupied significant policy attention globally. PEPFAR had previously decided to transition out of aid for direct HIV services in South Africa, including pulling back from investments in human resources. The recent decision to halt this

transition and re-invest in funding for direct front-line HIV services in high-priority districts faced policy legacies that undermined implementation.

We conducted visits to a random sample of aid-supported public health facilities with large numbers of people on HIV treatment in high-priority districts. Data gathered from health facility managers and clinicians suggest an important role for PEPFAR-supported initiatives. However, they also reveal the degree to which local aid officials—in this case local PEPFAR and NGO officials—have not yet shifted financing to implement the policy change through expanding human resources and other front-line investments. This stands in contrast to concerns expressed that implementing the new policy resulted in duplication or resistance from public-sector workers. PEPFAR's primary investment at this level is in a small cadre of health workers based at or visiting each clinic. With high ratios and low per-clinic numbers, these are not sufficient to provide the additional service intensity needed. Insufficient progress against the stated goals to reach 90–90–90 in these focus districts is likely due in part to an insufficient 'dose' of additional direct service support to achieve the desired 'response'. We also found that the distribution of PEPFAR-supported HRH is not well aligned with the patient load of a facility.

Mentoring and training, on the other hand, aligns far better with the ideas and incentives of the previous transition paradigm of 'transition' out of front-line services into a support and technical assistance role. While front-line facility leaders value training and mentoring, they are valued less than other inputs and we show evidence they are not resulting in significant changes in practice. South Africa has a mature AIDS response, in which many of these training and mentoring activities have been ongoing for years, so a level of diminishing returns could be expected. Moving some funding out of these areas and into new priorities is warranted, but doing so requires departing from the previous policy paradigm.

We note that PEPFAR has taken on board some of these insights and is planning a 2019 'surge' of front-line investments.[3] As PEPFAR considers re-prioritizing, public-sector facility managers have insights about what is needed. They spotlight increased direct-service staff—especially for outreach, treatment literacy, and lost-to-follow-up tracing, which our data suggest is a gap in both government- and PEPFAR-funded capacities. Meanwhile, interviewees identified significant limitations in facility-based models, which mirrors the growing consensus that building community-based alternatives is necessary (Duncombe *et al.*, 2015). In the words of one uMgungundlovu facility leader, 'We need to rethink this'. Achieving ambitious goals will require differentiated service delivery, community-based drug pick-up and adherence support, and disruptive models that are better at reaching young people, men, key populations and others. Models including those piloted in South Africa by MSF and from the SEARCH study could be taken to scale to address this need (Bemelmans *et al.*, 2014; Perriat *et al.*, 2018).

On a broader level, this case study reveals the need for a focus on the micro-politics of implementation in global health aid policy. The legacies of the previous policy of transition away from aid have not been easily shed. This is predictable in light of policy implementation research that suggests a shift like this, which directly contradicts the ideas, incentives, and underlying beliefs behind the prior policy, will face resistance. Multiple actors including locally-based aid officials and NGOs receiving funding have significant discretion that was not fully considered. While PEPFAR South Africa's struggles to achieve its goals suggested a problem, the limited degree of policy implementation was not immediately apparent to senior leaders in PEPFAR, which suggests a need to set clearer benchmarks and

indicators of implementation when aid policy shifts like these are undertaken. Front-line public-sector managers, meanwhile, may be untapped allies in implementation—with motivations and knowledge distinct from that of the aid agency and NGO officials most often involved in PEPFAR processes. This is likely especially true in the broader universe of middle-income countries where a significant, well-capacitated bureaucracy has a large role to play in fostering or hindering policy change. As current debates on achieving disease-fighting targets and making foreign assistance more effective are translated into specific policy change efforts, identifying ways to bring front-line health leaders into the process could help drive more rapid and comprehensive implementation.

Notes

1. Currency fluctuations make exact figures difficult, but PEPFAR COP-level spending (excluding additional HQ top-ups) represents between 22 and 27% of total HIV expenditures in 2017.
2. PEPFAR differentiates between those served through direct service delivery versus technical assistance (PEPFAR, 2017b).
3. A version of this analysis was presented at the PEPFAR Regional Planning Meetings in Johannesburg in February 2018.

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