

Global Health Initiatives Network - GHIN

Understanding the effects of global health initiatives on health systems strengthening

POLICY BRIEF



Understanding the interaction – synergy, but also friction – between Global Health Initiatives (GHIs) and health systems is an important step towards meeting global health development goals [1]. It is likely that GHIs have both positive and negative effects on health systems [2], but data are required to flesh out and nuance this hypothesis. Two questions stand out: which elements of a health system benefit most from the scale up of funds generated by GHIs, and where are tensions felt most?

The data presented in this Policy Brief are derived from 8 country studies (China, Georgia, Kyrgyzstan, Malawi, Peru, Uganda, Ukraine and Zambia) conducted by researchers through the Global Health Initiatives Network (GHIN) (Table 1). Since 2007, GHIN has been coordinating research on the effects of scale up of funds from three GHIs – the Global Fund, the World Bank’s MAP, and PEPFAR – on the health system response to HIV/AIDS services at national and sub-national levels (Box 7, p8).

1. HEALTH SERVICE DELIVERY

Delivering a health service is the principal function of a health system (reference). Successful delivery rests on five ‘building blocks’, each of which GHIs may support: governance, financing, health workforce, health information, and supply management [3]. This Policy Brief begins with data on treatment, prevention and care, quality of services and non-focal services. It then synthesises the effects of scale up of GHI financing on each of the five building blocks.

Table 1: GHI presence in eight countries

Country	Global Fund	World Bank	PEPFAR
China ^a			
Georgia			
Kyrgyzstan			
Malawi			
Peru			
Uganda			
Ukraine ^b			
Zambia ^c			

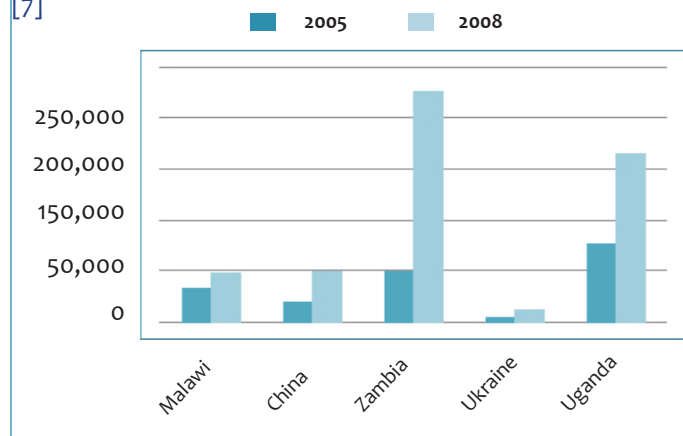
a) The Bank has provided substantial financial support to China though not through its MAP; b) World Bank funding to Ukraine was suspended briefly in 2006; c) Zambia World Bank grant ended in 2008

Scaling up ART treatment

Data from GHIN researchers show dramatic scale up in delivery of antiretroviral treatment (ART) (Figure 1). In Malawi, where in 2009 the Global Fund contributed more than 70% of funding for the country’s HIV/AIDS response, provision of ART was being delivered at three to seven times the coverage levels observed in a baseline survey conducted in 2006/07 [4]. In Ukraine, Global Fund programmes have also led to a substantial increase in the number of PLWHA receiving ART. In 2003 only 53 people received ART but by 2008 the number had increased to 900 – 600 of whom received

treatment financed by the Global Fund [5]. In Ukraine, researchers found that one of the Global Fund’s biggest contributions was its support for Prevention of Mother to Child Transmission (PMTCT) through ART. Levels of HIV transmission from mother to child were reported to have reduced from 28% in 2001 to 7% in 2006. In some regions, transmission from mother to child was reported in MOH data to be as low as 4%. In three districts of Zambia, the numbers of clients receiving ART increased consistently from 2004 to 2007, and in 2008 data showed that 89% of surveyed facilities in Lusaka, 80% in Kabwe and 39% in Mumbwa were providing ART [6].

Figure 1: Increase in total number of individuals reached by Global Fund on ART in five GHIN focus countries, 2005-2008 [7]



Scaling up prevention and care services

Scale up of prevention and care services has been equally impressive. In Kyrgyzstan and Ukraine, the Global Fund is the principal funder of preventive services (80% of total funding in Ukraine; in Kyrgyzstan 70% of Global Fund monies are earmarked for prevention). Activities supported by the Global Fund in these two countries include: preparation and distribution of informational material to vulnerable groups, outreach activities, condom distribution, and syringe exchange.

In Kyrgyzstan, more injecting drug users (IDUs) are taking advantage of facility services (up from 2844 in 2004 to 11,468 in 2007). In Ukraine, coverage of preventive services has increased across a range of vulnerable groups. However, the problem of reaching targeted groups remains large (Table 2) and despite scale up, interview data drew attention to poor quality condoms, insufficient support for primary preventive interventions, and insufficient focus on younger groups (Box 1).

Box 1: Interview with a Ukrainian healthworker

“[Within the Global Fund programme] primary prevention could have been more active; the programme of decreasing the demand for drugs should have been more widespread. There is no work going on at schools.”

In each of the three African countries studied, GHIs were also the largest funders of preventive services (60% of total funding in Uganda, for example, with PEPFAR alone providing 53%). In both Malawi and Zambia, rapid scale-up of HIV/AIDS prevention and care services was reported. In Malawi, there was a 4-5 times increase in HIV Testing and Counselling (HTC) clients in rural health centers – from less than 100 clients on average in 2005 to 480 clients on average in 2008 [8]. In Zambia, PMTCT and voluntary HIV counselling and testing (VCT) services were scaled up in the three districts studied from 2004 to 2007. All 39 facilities sampled across the three districts provided VCT, and 89% of sampled facilities in Lusaka provided PMTCT, as did 100% in Kabwe and Mumbwa [9].

Table 2: Increase in coverage of preventive services by the International HIV/AIDS Alliance to vulnerable groups in Ukraine

	End of 2004	End of 2005	Beginning of 2008
Injecting Drug Users	44,000	75,000	140,555 (35% of est. total IDUs in Ukraine)
Commercial sex workers	4,700	9,000	21,330 (19% of est. total)
MSWM	466	2,000	10,361 (6% of est. total)
Prisoners	3,600	10,000	45,158 (34% of est. total)

Rural v urban distribution of services

A common finding across all of the country studies is a disparity in provision of services between rural and urban areas. In Kyrgyzstan, 2006 data showed that outside the principal cities of Bishkek and Osh, the supply of doctors was below the average (20 per 10,000 population) and in some rural areas as low as 7-9 per 10,000 population. In Zambia, data showed a much higher percentage of facilities in urban areas scaling up ART treatment (89% of surveyed facilities in Lusaka, 80% in Kabwe) than rural areas (39% in Mumbwa district) [10]. In Malawi, data showed HTC (in full) services

remained largely urban-biased with 53% of the 23,884 HTC clients reported in 2008 being from urban facilities, compared to 29% from the district hospitals and 18% from the rural health facilities [11].

2. HEALTH WORKFORCE

Scaling up public sector health worker numbers

GHIN data from African countries supports the conclusion that scale up of GHI funds has not resulted in a significant increase in the health workforce (Figs 3-4). Total numbers of staff are increasing in urban areas: in Malawi there was a 10% increase in clinical staff and a three to six-fold increase in health surveillance assistants; and in Zambia there was a decrease in clinical staff (doctors, clinical officers and nurses) between 2005 and 2007 from 610 to 584, despite the large scale-up in HIV services. There are few incentives given to retain what is often described as a demoralised workforce, resulting in a rapid turnover of staff (Box 2), and strict guidelines forbid recruitment of new public-sector health workers with GHI financing.

Figure 2 here: Total number of urban health workers in Zambia, Jan 2004-08 (16 facilities)

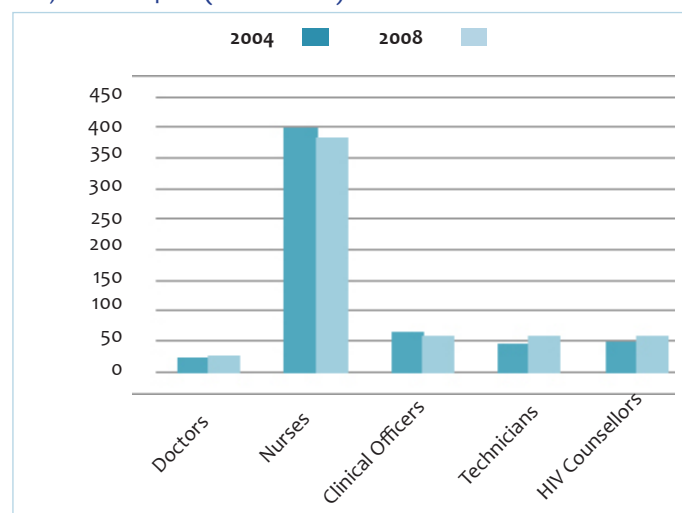


Figure 3 here: Total number of rural health workers in Zambia Jan 2004-08 (11 facilities)

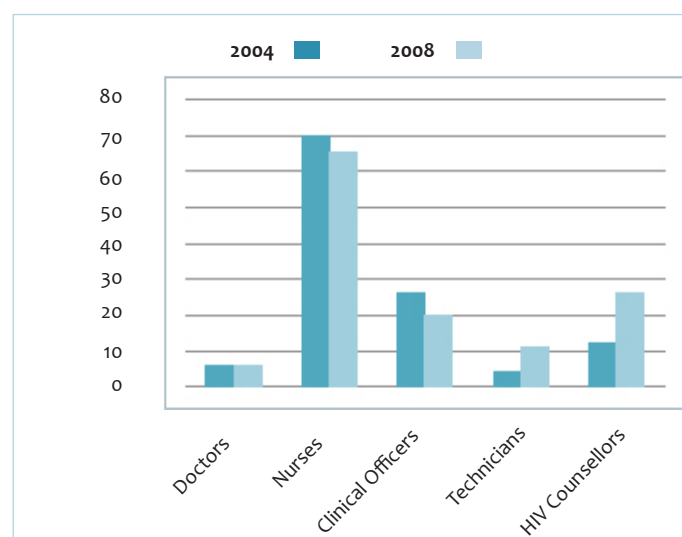


Table 2: Increases in the number of health personnel working for government organisations and NGOs providing HIV/AIDS services in urban areas of Ukraine.

Organisation	2004	2007	Total increase
Kyiv city hospital AIDS centre	60	150	90
Odessa AIDS centre	12	37	25
Kyiv office of the All-Ukrainian network of PLWHA	12	50	38
Odessa NGO 'Faith, Hope, Love'	27	90	63

In eastern European countries, there has been significant scale up of health personnel, due primarily to the increase in support to NGOs from GHIs such as the Global Fund (Tables 2 & 3). As observed in African countries, increases in health workers were less pronounced in rural areas in both Kyrgyzstan and Ukraine: in rural areas of Kyrgyzstan, for example, there were significantly fewer health workers – just 81 in outlying Oblasts compared to a total of 456 personnel in the capital Bishkek.

Box 2: Summary of effects of GHIs on Human Resources for HIV/AIDS services in Malawi, Uganda and Zambia [12]

- Scale up of GHI funding has not translated into significant increases in the health workforce. Rural areas - where HIV/AIDS services are most neglected - received proportionately fewer staff than urban areas, and increases in staff for non-clinical HIV/AIDS services were not replicated for clinical services.
- In all three countries the national health workforce has not grown proportionately to the increasing number of clients seeking care and treatment for HIV/AIDS. As a result, workloads have increased across all health cadres.
- Training takes time and it is still too early to determine accurately the effects of scale up, although increased capacity is reported in most countries. Monitoring of training is weak, however, and time set aside for training has stretched an already overburdened workforce, leading to high levels of absenteeism from work.
- Relatively low salaries for government health workers made it difficult for employers to retain staff who were attracted by the higher wages offered by GHI-supported NGOs.

Scale up in number of NGO health workers

Interview data revealed the dependent and, at times, precarious relationship between NGOs and GHIs. Breaks in funding were reported as a major obstacle to sustained service provision (Box 3). Nevertheless, GHI financial support for NGOs - particularly PEPFAR - has fuelled a rapid increase in the number of NGO health workers. Furthermore, data from Zambia and Uganda showed a high turnover of health staff from the public sector to NGOs that offered better conditions of service.

Table 3: Increases in the number of health personnel working for government organisations and NGOs providing HIV/AIDS services in 14 facilities in Kyrgyzstan

	2005	2006	2007	% increase 2005-2007
NGO (n - 8)	68	83	128	88
Gov Org (n - 6)	316	356	393	24
Total (n - 14)	384	439	521	36

In Kyrgyzstan, grants from the Global Fund led to substantial increases in the number of NGOs delivering prevention and care services, and the number of NGO health workers increased proportionately (Table 3). In Ukraine, substantial funding from GHIs has been disseminated among NGOs. Data from GHIN research showed that in Kyiv, Odessa and Lviv, between 60% and 85% of funding for NGOs was from the Global Fund. Financial support and capacity building from the Global Fund resulted in a stronger Civil Society in both countries (Box 4)

Box 3: Interview with Ugandan former employee/ nurse of disbanded HIV care NGO

“The manager would one day tell us that the funds have been approved and after a week she would tell us to pray again because the money was blocked” -

GHI training and capacity building

In all countries, GHIs have contributed substantially towards capacity building among HIV/AIDS services through training in HIV/AIDS issues and organizational development. 2008 data from GHIN research in Malawi showed that 71% of health service providers surveyed had gained more skills and knowledge from working in HIV clinics through the training provided by GHIs [13]. In Uganda, HIV donors funded training for HIV services, with PEPFAR contributing most (57.6%) to training in those organisations surveyed [14]. In Zambia, whilst GHIs did not fund training of new health workers, they did support training for existing staff. In a questionnaire survey completed by 234 doctors, nurses, clinical officers, and pharmacy staff, 72% said they had received training in HIV/AIDS services in the past year [15].

Box 4: Interview with Ukrainian NGO health worker

“Civil society has got new development that manifested in technical and professional development of HIV-service organizations in the last five years. They are now a powerful force.”

In other regions, a similarly positive note was reported from GHIN country studies: data from Kyrgyzstan showed 85% of surveyed respondents in 2008 indicating they had received training, and 62% felt that Global Fund-supported workshops had a positive impact on their skills [16]; in Ukraine, training had expanded con-

siderably and was mostly funded by the Global Fund, although it was primarily short-term – typically 1-3 days. Data from Georgia suggested that training funded by the Global Fund had softened prejudicial attitudes of health workers towards People living with HIV/AIDS (PLWHA). The number of service providers who considered the provision of services to HIV/AIDS patients safe increased by approximately 22% between baseline (2006) and end-line (2007) surveys [17].

3. INFORMATION SYSTEMS

GHIs can strengthen countries' health information systems by aligning with existing country Monitoring and Evaluation (M&E) processes or by supporting capacity and provide funding to finance development of new M&E processes where none existed previously. GHI support for M&E systems in countries varied within regions, although in each of the three Eastern European countries surveyed by GHIN researchers, national M&E systems either did not exist or were in the very early stages of development.

Box 5: Interview with Ukrainian health worker

“The achievement of the Global Fund is the creation of a system of monitoring and evaluation of both epidemiological situation and program measures. I think that the international organizations contributed a lot to the quite successful reporting of Ukraine in fulfillment of UNGASS [targets]”

In Georgia, M&E was identified as the weakest element in Global Fund project implementation. Although both the Principal Recipient (PR) of Global Fund funding (Georgia Health and Social Projects Implementation Centre) and Georgia's Local Fund Agent (KPMG) were required to report to the Country Coordinating Mechanism (CCM), GHIN researchers found that the CCM had not received any feedback from the LFA. M&E in Georgia was also limited to money disbursement and resource mobilisation, and no method had been established to measure quality of services [18]. A weak M&E system existed in Kyrgyzstan based on parallel data recording systems and derived from donors' requirements. In terms of funding, M&E was very low in the list of expenditure items (Table 4). The World Bank's Central Asian AIDS Project, which was working to improve coordination of development aid in the Region, was reported in Kyrgyzstan as having adapted its Management Information System, although improvements had yet to materialise. In Ukraine, the Global Fund was reported as having an important role in establishing a M&E system, although the process of reporting results was only “quite successful” (Box 5)

In Peru, the MOH lacked a comprehensive M&E system that could provide feedback on Global Fund activities [20]. Large volumes of information were channelled to the National HIV/STI Sanitary Strategy where existing

Table 4: Distribution of the Global Fund HIV/AIDS grant in Kyrgyzstan, 2007 [19]

Expenditure items	Soms (millions)	%
Goods/items/drugs	70.7	47.9
Expenditures of SR, consultants and others	48.9	33.2
Training of staff/planning	9.2	6.2
Infrastructure/equipment	6.1	4.1
Publications	5.5	3.7
Monitoring and Evaluation	4.8	3.3
Administrative expenditures	2.4	1.6
Total	147.6	100

infrastructure was insufficient to organize and use it for decision-making. Informants thought that information was unclear and focused on processes important to the relationship between the PR, Sub-recipient (SR) and the Global Fund.

In African countries, quality and development of health monitoring and information systems (HMIS) were similarly varied: researchers reported that Malawi lacked an adequate M&E system; in Uganda GHI-funded training was provided for M&E but there were relatively few sessions (just 11 funded by PEPFAR, MAP and Global Fund out of a total of 255 HIV/AIDS sub-projects) [21]. Whilst GHIs in Zambia have moved towards ensuring their funded projects use the National AIDS Reporting Forms (NARF) and the HMIS, the Global Fund and PEPFAR still demand additional indicators and reports. This has resulted in additional burdens on health facility staff. The Zambia study found many problems with facility level data including incomplete and inaccurate records.

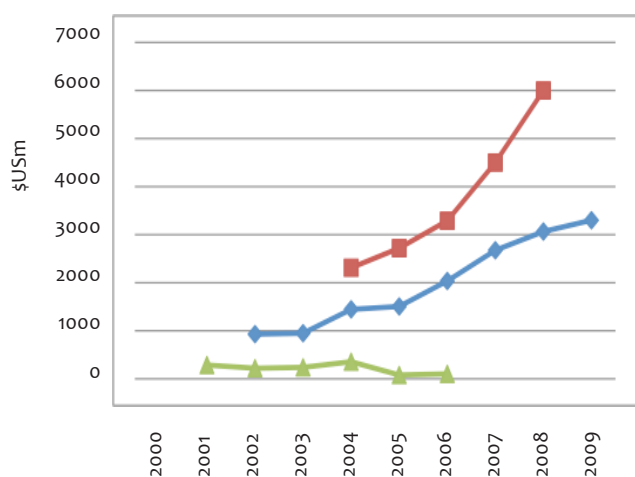
4. MEDICAL PRODUCTS, VACCINES AND TECHNOLOGIES

GHI financial support has contributed significantly to this 4th pillar of the health system. In Georgia, Global Fund financial support helped to supply necessary diagnostic tests and drugs, which resulted in ART being available to all who required treatment. Malawi experienced remarkable improvements in drug management and in the processes of requisition and replenishment of stocks, which resulted in a reduction of drug stock-outs by 35- 60% between 2006 and 2008. Drug availability for HIV/AIDS was reported to have increased in facilities sampled in Zambia. In 2006, no sampled facilities experienced stock-outs of first line antiretroviral (ARV) drugs. 2007 findings showed that two facilities in Lusaka and Mumbwa ran out of first line ARVs, and another two facilities in Lusaka ran out of second line ARVs. Stock-outs for non-HIV drugs were more frequent than for non-HIV drugs.

5. FINANCING

GHIs have generated massive scale-up of additional funding for HIV/AIDS (Table 5; Fig 6). However, sustainability of financing from GHIs was a major concern for many interviewees across the countries studied. In Georgia, the government had not increased its funding for focal diseases, whose recurrent costs had increased, and so were dependent on Global Fund grants. In both Kyrgyzstan and Ukraine, NGOs were a major provider of prevention services. Their dependence on Global Fund financial support also raised concerns with interviewees, as did breaks in funding - which were identified in Kyrgyzstan as the principal reason for a decline in attendance by clients at STI clinics in Bishkek between 2007-2008.

Fig 4: GHI funding for HIV/AIDS [25]



Data on financial flows were very difficult to obtain in many of the countries studied. Nevertheless, researchers from Zambia concluded that the large level of funding from GHIs had undoubtedly been crucial. Data confirmed that none of the GHIs had invested money in hiring additional public sector staff, which had resulted in higher workloads and extra strain on health workers.

6. LEADERSHIP AND GOVERNANCE

Much of the reporting on governance in the GHIN studies provide data to assess the extent that GHI programmes are coordinated and aligned with health systems or exaggerate problems of weak health systems.

The Global Fund Country Coordinating Mechanism (CCM)

In Zambia, the National AIDS Council (NAC) was the main coordinating body and the CCM operated parallel to it. In Georgia, the CCM was credited with improving multi-sectoral coordination, although success was primarily attributed to the leadership qualities of its Chair. In Peru, conflicts of interest arose because NGOs were both members of the CCM and recipients of GF grants, resulting in loss of trust within the NGO community.

Coordination

In Kyrgyzstan, relations between government and NGO HIV/AIDS services improved after the Global Fund and CAAP programmes were introduced: client referrals were better coordinated, and some organisations signed Memoranda of Understanding to formalise co-operative arrangements. In Zambia, MAP provided capacity support to the NAC. While PEPFAR participated in coordination structures at the national level, many of its NGO recipients did not collaborate with government structures or other NGOs at the district level.

Alignment and country ownership

Qualitative data from GHIN research confirmed that in some cases GHIs, notably PEPFAR, continued to set priorities outside national and subnational coordination structures – often regarding their participation in such structures as a formality. This undermined country ownership and made coordinating multiple aid programmes difficult for countries. Kyrgyz and Ukrainian data suggest that GHIs did not fully engage in coordination structures for strategic reasons: they were able to maintain institutional visibility and attribute impacts to the activities they had financed. In Zambia, GHI support was mixed. PEPFAR funded organisations did not engage with other coordination structures, but the World Bank worked hard to ensure coordination and the the Global Fund was fully supportive.

Box 6: Scaling up Civil Society participation in GHIs

GHIN data suggest that all three GHIs have created opportunities for CSO involvement in HIV/AIDS programmes through funding their activities, or insisting on their inclusion in coordination mechanisms such as the Global Fund's CCM.

- In Peru, communities of PLWHA became active in Global Fund projects, although development researchers found little evidence of genuine inclusivity in the Global Fund's decision-making processes [26].
- In Zambia, CSOs began to play a significant role in district coordination structures, and the World Bank, through the Zambia National Response to HIV/AIDS Project (ZANARA), supported community responses to HIV/AIDS by financing community based organisations, which also participated in District AIDS Task Forces and Community AIDS Task Forces [27].
- In Georgia, NGOs were invited to elect their representatives annually on a rotation basis, and two permanent seats were established for NGOs.
- In Kyrgyzstan, a Steering Group (SG) of AIDS services NGOs was established in 2008 with support from GHIs and other donors. The SG helps coordinate capacity building and technical assistance support from donors. The Kyrgyz research team concluded: "the SG is recognised as a significant achievement, and is evidence of a new stage of NGO development – moving from competition and fragmentation to consolidation and cooperation".

Table 5: GHI and domestic financing of HIV/AIDS services

	PEPFAR ^a	Global Fund ^b	World Bank MAP ^c	Domestic expenditure ^d
China	Not a focus country	Rounds 3-6: Total = \$369.1m	Not supported by MAP but Bank contributed \$60m to China Health Project 9 (1999-2008)	\$124,115,808 (11%) (2007)
Georgia	Not a focus country	Rounds 2,6,9: Total = \$54.1m	Not supported by MAP	\$571,365 (11%) (2006)
Kyrgyzstan	Not a focus country	Rounds 2,7: Total = \$28.9m	\$26m (2005-2010) - CAAP	\$695,009 (9%) (2006)
Malawi	\$88.9m (2004-08)	Rounds 1,5,7: Total = \$375.3m	\$35m (2003-12); \$30m (2009-2012)	\$18,264,048 (32%) (2005)
Peru	Not a focus country	Rounds 2,5,6: Total = \$67.2m	Not supported by MAP	\$12,452,754 (44%) (2007)
Uganda	\$929.3m (2004-08)	Rounds 1,3,7: Total = \$165.6m	\$47.5m (2000-05)	\$12,313,604 (6%) (2005)
Ukraine	Not a focus country	Rounds 1,6: Total = \$230.7m	\$60m (2003-09)	\$28,146,178 (51%) (2006)
Zambia	\$845.9m (2004-08)	Rounds 1,4,8: Total = \$456m	\$42m (2002-08)	\$29,082,976 (15%) (2006)

a) PEPFAR Country Profiles data; b) Global Fund Grant Commitments and Disbursements – total approved funding [22]; c) World Bank Projects and Operations data [23]; d) UNAIDS country progress reports (% total expenditure for HIV/AIDS including IDA) [24].

7. CONCLUSIONS

- Despite massive scale up of funding, access to and delivery of services was stark between urban and rural areas.
- Both governments and GHIs need to address issues of inequity between urban and rural services.
- Scale up of funds has increased workload but no corresponding increase in workforce
- Effects on non-HIV services are unclear, and governments need to keep monitoring non-focal services to ensure needs are met .
- There are signs that transparency and coordination is improving in some countries though not all.

8. RECOMMENDATIONS

For Global Health Initiatives

- A serious shortage of public-sector clinical staff was evident across the eight countries. GHIs should introduce incentives by relaxing conditions that prevent funds being spent on additional public sector staff and wage bill ceilings
- GHIs should provide long-term investment in training and help governments establish monitoring systems that evaluate training processes
- GHIs should share information on location and levels of disbursements and expenditure of funds on HSS with relevant stakeholders
- Breaks in funding to sub-recipients of GHI funds were identified as one of the most serious impediments to successful service delivery. Improving disbursement mechanisms to projects may be one way to mitigate the negative effects of such breaks

For Governments and Donors

- Routine health information systems need to be strengthened
- Invest in capacity building of facility and sub-national staff to undertake analysis, supervision and quality of health facility records.
- Encourage and contribute to the sharing of information with and within district level coordination mechanisms,
- Support processes to strengthen information flows between district levels, provincial and national levels.
- Facilitate coordination between NGO and public sector organisations
- Monitor staff migration, particularly across facilities and from government to non-government sectors to better determine trends

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Box 7: ABOUT GHIN RESEARCH

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The research is part of the Global HIV/AIDS Initiatives Network (GHIN), a network of researchers in 22 countries that has been exploring the effects of three global HIV/AIDS initiatives on country health systems: the Global Fund, PEPFAR and the World Bank. RCSI and LSHTM coordinate the network, which is funded by Irish Aid, Danida and DFID.

This Policy brief was written by Andrew Harmer (LSHTM), with support from GHIN colleagues Neil Spicer and Gill Walt (LSHTM), and Aisling Walsh, Ruairí Brugha and Regien Biesma (RCSI).

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