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LEVERAGING THE HIV RESPONSE FOR STRONGER HEALTH SYSTEMS AND PANDEMIC PREPAREDNESS

Early lessons from COVID-19 responses in six countries

KEY POINTS

- Progress towards Universal Health Coverage requires strengthened health systems; COVID-19 has underscored this priority.
- Key informant interviews in six countries explored the role of HIV programs and providers in early national COVID-19 programming and health systems more generally.
- National HIV programs made substantial contributions to early COVID-19 control, including through community systems, laboratory, testing, health care worker mobilization, and surveillance capacity. HIV programs often demonstrated adaptability, innovation and community focus.
- Community engagement in research, planning, service delivery, advocacy and monitoring have been essential to the success of the HIV response.
- The HIV response offers a critical pathway towards robust, resilient, rights-based and people-centered health systems. It provides opportunities for pursuing ambitious disease-specific targets while advancing progress on broader health goals.
- Policy makers should be much more intentional about leveraging HIV investments for stronger health systems and pandemic preparedness in ways that also advance the HIV response.

Background

The need to strengthen health systems and ensure they work for people in all their diversity has never been more pressing. Through the Sustainable Development Goals, the global community has pledged to ensure Universal Health Coverage (UHC) and to end the epidemics of AIDS, tuberculosis, malaria, neglected tropical diseases and preventable deaths among children under five. Achieving these goals will require health systems that deliver good-quality, accessible, and affordable services, tailored to a range of needs.

Health systems are inherently local and vary considerably within and between countries, based on country context, disease burden, location and politics. Health systems must have the capacity to effectively address the rising tide of non-communicable diseases, which together account for the bulk of mortality globally.[1] At the same time, the COVID-19 pandemic and the continuing HIV, TB and malaria epidemics underscore the need for health system resilience to address existing and new disease threats. Indeed, in the era of ongoing and emerging pandemics, we have seen how COVID-19 has imposed unprecedented stressors on public health infrastructure in countries of all income classifications and emphasized the need for pandemic preparedness and response (PPR) founded on strong and flexible health systems.

During the first 15 years of the 21st century, spending on HIV programs in low- and middle-income countries drove a major overall increase in official development assistance for health.[2] These investments have yielded a robust, multi-faceted infrastructure — for research, clinical

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care, health information systems, community systems and multi-sectoral collaborations to address social and structural determinants of health.

As explored in this issue brief, the HIV response is unique in important ways that go beyond levels of financial investment. Within the health systems of many low- and middle-income countries (LMICs), HIV programs are in the vanguard with respect to accessibility, affordability, service quality, collection and use of strategic information, innovation and community engagement.

One path toward health systems that work for people in the 21st century is to build on the unique approach to HIV services found in many settings. As COVID-19 has posed a stark and ongoing challenge, assessing the role that the HIV response has played in national COVID-19 efforts provides an important test case for the broader benefits of this response.

Key informant interviews in six countries

To obtain insights into how the HIV response might be serving as a pathway to stronger health systems in the context of COVID-19, we conducted 34 key informant interviews in six countries (Kenya, Rwanda, Sierra Leone, South Africa, Thailand, Vietnam) in February and March 2021. As the case studies that accompany this report reveal, these countries represent a range of experiences with both HIV and COVID-19, varying levels of national income, and important differences in health systems.

Interviews were conducted with representatives of national governments, the Global Fund, PEPFAR and UNAIDS staff, and at least two members of civil society in each country. Prior to these interviews, we reviewed information to inform the development of a standardized interview guide. This information included national HIV epidemiology, programming and financing, COVID-19 epidemiology and responses, key global health and development indicators, and national initiatives to expand health coverage.

With a specific focus on their respective country, informants were asked to identify:

- Whether (and if so, how) the HIV response has contributed to the national response to COVID-19, including testing and screening efforts
- Whether (and if so, how) the HIV response has contributed to strengthening the broader health care system, including facilitating access to non-HIV-related primary care services
- Opportunities and risks related to leveraging HIV investments to respond to COVID-19 and strengthen health care systems.

On average, interviews lasted one hour. Most were of individual key informants, and others included multiple participants. Answers to questions were recorded in writing by one of the two study authors doing interviews.

These interviewers then reviewed their notes together to identify key themes and differences across countries and reached joint consensus on major themes. Interviewers prepared country case studies that summarize the informants' input. These case studies have been included as appendices at the end of this brief.

This research has several limitations. While the authors have reviewed literature on public health services in each country studied, the qualitative data from key informant interviews may present a biased or incomplete picture and are not necessarily representative of broader experiences across countries. Because we sought to identify informants already heavily involved in the HIV response, there may be bias towards finding validation of the broad benefits of HIV. Where perspectives from interviews were inconsistent with other informants or with the literature we did not include them. Findings reported here represent the consensus among informants, which may limit the quality and level of overall data presented. These findings do not capture the wealth and diversity of impacts the HIV platform has had on health, and its applicability to other country settings may be limited.

This brief summarizes key outcomes of our interviews. Given the varying contexts in the six countries and the diverse perspectives of informants, the interviews resulted in a range of findings and viewpoints. However, several key themes were evident across the 34 interviews.

Evidence suggests that the HIV response has played important roles in national COVID-19 efforts, both in terms of preserving access to HIV services and in helping countries rapidly pivot to address this latest pandemic.

National COVID-19 responses: the contribution of the HIV response

COVID-19 has significantly disrupted HIV services in many countries, though at the time of these interviews its impact had been somewhat less serious than originally feared.[3, 4] The negative impact of COVID-19 appears to have been more severe and long-lasting among HIV prevention programs compared to treatment programs.[5, 6]

Evidence suggests that the HIV response has played important roles in national COVID-19 efforts, both in terms of preserving access to HIV services and in helping countries rapidly pivot to address this latest pandemic.[7, 8, 9] Our interviews confirmed this early finding, identifying substantial contributions of national HIV platforms and infrastructure to COVID-19 responses in five countries, and to a more limited degree in Thailand, where COVID-19 cases had been kept in check prior to April 2021, when infections began to surge.[10] These contributions included, most commonly: community service systems, HIV laboratory facilities and personnel, diagnostic testing machines and personnel, health care worker mobilization, and surveillance capacity. One key informant from South Africa advised that, "*South Africa would have been significantly worse off in responding to COVID had we not had investments made across health systems as a result of the HIV response.*"

An especially striking contribution of the HIV response cited by informants was the critical role of community members...in helping countries broaden the reach of COVID-19 testing, treatment and education.

HIV laboratory capacity and personnel were often cited as having played a critical role in national COVID-19 responses. For example, in Kenya and Rwanda, laboratories that had been focused on HIV provided a vital source of PCR diagnostic machines that were used to diagnose COVID-19 and monitor national trends. Laboratory personnel focused on HIV operated these diagnostic platforms and interpreted results for the COVID-19 response. Thousands of health care workers have been hired and trained to provide HIV services in LMICs[11], and in many settings these workers rapidly pivoted to provide COVID-19 treatment and care. COVID-19 responses have also benefited the public health surveillance capacity that has been built through HIV programs.

An especially striking contribution of the HIV response cited by informants was the critical role of community members — including affected communities, networks of people living with HIV, key population groups and other civil society organizations — in helping countries broaden the reach of COVID-19 testing, treatment and education. For example, in Kenya, HIV community organizations educated communities about the pandemic, distributed personal protective equipment, and established hand-washing stations.

It is important to note that at the time of the interviews, countries were at very early stages of COVID-19 responses, focused mostly on screening, testing, and vaccine acquisition. As global vaccine supply constraints are expected to ease over time, we anticipate there will be numerous examples of how the HIV response helps support COVID-19 vaccine roll-out. As the US and other governments and stakeholders explore strategies to building robust, sustainable PPR capacity, our interviews suggest that a critical step is to maintain and fully leverage programs created in response to HIV. In particular, HIV programs have demonstrated the kind of adaptability, innovation and community focus that are essential when health and other emergencies arise.

Broader health systems: lessons from the HIV response

Over the years, there have been lively debates regarding the impact of "vertical" responses on broader health systems. In truth, this distinction is often more theoretical than real. Even as they have used disease-specific metrics to measure success, HIV programs have always relied on broader health systems, such as pre-natal services already in place for prevention of vertical transmission; TB services to identify co-infection in HIV-positive patients; sexual and reproductive health services; task shifting in antiretroviral treatment provision; and optimizing point of entry for health care access at primary care clinics.

At the same time, the HIV response has invested major resources through the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and the US President's Emergency Plan for AIDS Relief (PEPFAR) toward strengthening health systems, supplemented with local government investments.

Numerous prior studies and analyses have found that HIV investments have contributed to more durable health systems in LMIC contexts[12,13,14] — including through bolstering national health procurement and supply chains, improving health information systems, hiring and training health workers and supporting community responses.[15] A recent analysis of Global Fund budgets in 10 countries similarly highlighted the organization's contributions to health security, further highlighting the synergies between vertical programming and broader health system strengthening.[16] However, while investments into HIV programs have been directly linked to marked declines in all-cause adult mortality[17, 18], studies of the benefits of the HIV response on broader health systems have been mixed.[19, 20, 21, 22, 23] Some research has suggested that HIV and other vertical programs may divert resources from fundamental efforts to support basic health systems. However, most of these earlier studies are now dated and may not fully take account of the longer-term effects of ongoing HIV investments. These analyses also were conducted prior to the existential test that COVID-19 has posed to health systems in LMICs.

"The important thing is the mindset…People who work in HIV learn to establish partnerships, the importance of multisectoral work, of the community response, and of monitoring."

Our interviews afforded an opportunity to revisit and update the evidence base regarding the effects of HIV investments on broader health systems. A common theme was that the principles and overall approach to HIV services are distinctive and can shape broader health planning, delivery and governance relevant to UHC goals. For example, in South Africa, informants said the HIV response has altered popular aspirations and expectations for health services generally, emphasizing the right to health (as enshrined in the country's constitution), accountability for results, and community engagement. A representative of a multilateral organization working in Rwanda said, "*The important thing is the mindset…People who work in HIV learn to establish partnerships, the importance of multisectoral work, of the community response, and of monitoring.*" A community member in Vietnam noted that it is no accident HIV-oriented community organizations are playing an important role in broader health: "*the HIV organizations do this because they are the most organized, best trained, most empowered and most capacitated.*"

Other frequently noted contributions of the HIV response to health systems include information systems and strategic use of data; laboratory infrastructure; and health care worker training and support. In Kenya and South Africa, the availability of HIV services has brought millions of people into the health system, enabling them to access other, non-HIV-specific health services they might need. In Sierra Leone, PEPFAR partnered with the public health system to recruit and train cadres of midwives, a priority in that country.

Several informants observed that the dictates of donors to focus on specific diseases may sometimes undermine efforts to leverage HIV services. In Rwanda, a representative with a multilateral organization noted how donor priorities are balanced with general health system investment: "*What the [outside donor] expects from you are the outcomes, the data, meeting targets. We can use the funding horizontally as long as we are meeting those requirements.*"

Informants cited the urgent need to combat stigma and discrimination against people living with HIV and key populations, which increase vulnerability and deter people from using the services they need.

The opportunity for greater integration

The HIV response has, in many ways, contrasted markedly with traditional health system practice. As the UNAIDS-Lancet Commission on Defeating AIDS — Advancing Global Health found, key characteristics of the HIV response that distinguish it from many other health programs include, "the sustained leadership of civil society and people living with HIV, the multistakeholder nature of the response, the extraordinary degree of political leadership for the fight against HIV, the centrality of human rights, gender equity, and social justice to the response, and a commitment to global and local-level accountability and transparency."[24,25] Comments from key informants were consistent with this assessment, citing as key elements of the HIV response a central role for community engagement and community-based service provision; tailored services for key population groups; flexibility in applying lessons learned and adapting to new circumstances; attention to social rights and equity; target setting and monitoring; human rights-based services; attention to service quality; and the aspiration to achieve universal access to services.

While HIV has had a profound impact on the health discourse and in transforming perceptions of what can be achieved for people's health and well-being, informants said that broader health systems continued to lag in adopting key elements of the HIV response. South African informants, for example, said the country's health system could benefit by mainstreaming the HIV responses' emphasis on targets and accountability, data-based monitoring and decision-making, and civil society advocacy. One informant from a multilateral organization noted that while HIV services had adapted during COVID-19 to scale up multi-month dispensing and other service innovations, these approaches had not been implemented for many other areas of health services.

HIV remains a major and unique pandemic

In addition to the benefits of HIV investments to broader health systems, there is an independent reason to continue invest in HIV programs: HIV remains a serious health problem. In 2020 alone, 1.5 million people newly acquired HIV worldwide and 680,000 died of AIDS-related illnesses.[26] From the beginning of the HIV pandemic, members of socially and legally marginalized communities have been disproportionately affected by HIV, and this relative burden on the marginalized is increasing.

Although new HIV infections and AIDS-related deaths globally continue to decline, momentum in the response has slowed. The world achieved none of the so-called Fast-Track targets for 2020 that were designed to put the world on track to end AIDS as a public health threat by 2030.[27] The rate of decline in new HIV infections globally has slowed over the last decade, and new infections are on the rise in Eastern Europe and Central

Asia and in the Middle East and North Africa (while no progress has been made in reducing new infections in Latin America since 2010).[28] Getting the HIV response on track requires a major global re-investment, but financing for the HIV response has flattened in recent years, potentially jeopardizing gains made to date and risking a rebound in the epidemic.[29]

In addition to re-investing in HIV, informants cited the urgent need to combat stigma and discrimination against people living with HIV and key populations, which increase vulnerability and deter people from using the services they need. Informants emphasized the importance of tailoring and targeting services for key populations and investing in community systems that can reach these populations effectively.

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HIV as a pathway to PPR and UHC — core principles, community engagement and risks

While acknowledging the continuing impact of the COVID-19 pandemic and shifting global response, our key informant interviews provide compelling evidence of the resilience of the HIV response and its important contributions to national COVID-19 responses and to supporting health systems more generally. Although there is no single roadmap from HIV services to stronger health systems, key informants indicated that the ethos, service platforms and infrastructure of the HIV response have the potential to serve as building blocks for progress toward PPR and UHC. The findings are consistent with more recent information released by PEPFAR about the program's impact on global COVID-19 responses.[30]

The ways in which HIV investments will inform and bolster health systems will inevitably differ in distinct settings, and have likely changed as countries begin to implement COVID-19 vaccine delivery. Despite these variations, three cross-cutting themes emerged from experiences with HIV investments.

First, the attributes associated with the response to HIV have been influential in broader health systems and will be critical in realizing Sustainable Development Goal 3: ensuring healthy lives and promoting well-being at all ages. Our interviews and document review provided numerous country examples of how the HIV response has advanced principles such as community engagement (including service delivery), human rights, universal access, participatory decision making, strategic use of data and a focus on measuring results. These principles were not invented by the HIV movement, but in catalyzing civil society, researchers, donors, providers and policy makers to work towards common objectives, the HIV response has put these principles into action and has fundamentally changed ambitions and expectations in global health service delivery and governance.

As we have seen in both the HIV and COVID-19 pandemics, social vulnerability and inequalities have profound effects on community health

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and on how epidemics evolve and affect different populations. The equity and rights focus of the HIV response is essential as countries respond to COVID-19, build toward UHC and strengthen their PPR capabilities.

Second, the central role of community members as advocates, providers and meaningful participants in public health decision-making is fundamental in the HIV response and provides a model for broader health systems strengthening initiatives. As our interviews demonstrated, communities in diverse settings swiftly adapted their work to provide COVID-19 services, displaying a unique ability to reach the most vulnerable populations, fight stigma, monitor services and push for health care access and quality.

Social marginalization is present across country contexts and is a factor in virtually all health care provision and outcomes. The ability of communities to reach marginalized people and galvanize progress in addressing structural issues of inequality will be essential in building equitable and sustainable health systems and stronger PPR. Today's global inequities in the delivery of COVID-19 vaccines and therapeutics are reminiscent of limited access to HIV treatment earlier in that epidemic, and they underscore the need to learn from the successes of the HIV response in order to achieve genuine global mobilization on health equity, including tackling pricing and access structures.

Third, while the HIV platform brings major assets to health systems and pandemic responses, integration of HIV services presents real risks in certain settings that will need to be directly addressed. The informants shared concerns that full integration could lead to reduced focus on the needs of marginalized populations, HIV stigma reduction, supporting community systems, and tracking progress toward global HIV treatment and prevention targets. As stigma and discrimination against people living with HIV and members of marginalized groups will outlive efforts to achieve more integrated health systems, stand-alone systems and tailored services for key populations will remain essential in many settings. A reinvigoration of national and global HIV responses is an urgent priority, especially as HIV investments have flattened and progress in reducing new HIV infections and AIDS-related deaths has slowed.

RECOMMENDATIONS FOR ACTION

Debates regarding the relative strengths of vertical and horizontal programming obscure the many opportunities to pursue ambitious disease-specific goals while laying a foundation for improved pandemic response and stronger health systems. Each country is walking its own path toward stronger health systems, and the HIV response — its principles, personnel, communities and systems — is aiding countries on this journey in different ways.

The HIV response should be counted as a key contributor to progress towards UHC and pandemic preparedness. Resources for HIV must consequently not only be preserved, but further increased — both to reach the destination of ending the AIDS epidemic as a public health threat and to further contribute to stronger, more resilient health systems. Sustainability will require both donor and implementing country investments in HIV and health systems.

Communities must be meaningfully engaged at every level. Unless communities, advocates, providers, donors and policy makers insist on the non-negotiable principles that have guided the HIV response, these principles are at high risk of being compromised.

There are several priorities for policy makers engaged in advancing global health security and strengthening health systems towards UHC:

- **Policy makers should recognize the rich and multifaceted contributions of the HIV platform to the COVID-19 response and to stronger health systems.** Implementing country policy makers and donors should monitor ongoing interaction with HIV systems and COVID-19 vaccine roll out.
- **Efforts to advance stronger PPR and UHC should build on synergies with the HIV response.** Both primary care services and pandemic preparedness will be enhanced by incorporating the HIV response's emphasis on community engagement, equity, adaptability and innovation.
- **Implementing countries and donors should increase investments in HIV as a key driver in making progress on HIV and advancing rights-based, community-engaged systems as part of a broader surge in health system investments.**
- **National policy makers and donors should be much more intentional about identifying opportunities to leverage HIV investments for stronger health systems and PPR in ways that also advance the HIV response, using additional financing, incentives, new flexibilities and regularly updated policy guidance to promote such leveraging.**

HIV offers a potentially critical pathway towards robust, resilient and people-centered systems. The global response to HIV in many ways presents a model for health services that seek to achieve universal access, holistically address individual needs, engage communities, and demonstrate concrete results. With the related goals of greater PPR capability, and the ultimate objective of UHC, the HIV response should serve as a model and a foundation for equitable and effective systems for health in all regions of the world.

HIV offers a potentially critical pathway towards robust, resilient and people-centered systems. The global response to HIV in many ways presents a model for health services that seek to achieve universal access, holistically address individual needs, engage communities, and demonstrate concrete results.

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Case study: KENYA

When COVID-19 emerged, Kenya immediately called on the infrastructure and leadership of the HIV response, one of the few sectors of Kenya's health system with substantial experience in responding to a health emergency. Laboratories built through HIV investments provided essential PCR testing for COVID-19, and surveillance systems supported by HIV funding played a key role in COVID-19 surveillance. The thousands of health workers hired as a result of donor funding for HIV have provided COVID-19 diagnostic and treatment services. Community systems built through HIV funding have educated communities about the pandemic, distributed personal protective equipment, and established hand-washing stations. Scale-up of multi-month dispensing and an emphasis on community service delivery have helped minimize the depth and duration of COVID-19-related disruption of HIV services.

Informants agreed that HIV investments have had broad benefits for health services more generally. HIV funding has helped mitigate health worker shortages, improved the clinic experience and attracted more than one million people to seek health services. Although there are encouraging examples of HIV services integration, such as with TB or maternal and child health services, HIV has yet to be fully integrated across health service delivery generally. Quality assurance mechanisms in HIV programs have been applied to TB and malaria services and are increasingly being taken on board across the health system. HIV investments have strengthened the health information system used for monitoring diverse health services, although strategic information for health more broadly lags considerably behind the HIV response.

The HIV response, with its emphasis on universal access and its minimization of out-of-pocket costs, provides a model for how UHC might work in Kenya. Domestic funding for health is persistently inadequate, HIV service delivery in Kenya remains largely siloed away from the broader health system, and informants said community health workers and community-led systems are insufficiently prioritized in the broader health system.

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Case study: **RWANDA**

Several services financed through HIV programming where harnessed for the COVID-19 response, including logistics, supply chain systems, viral load testing machines and lab infrastructure. HIV health care providers offered information on COVID-19, and contract tracing methods used for HIV were adapted and applied to address the new pandemic. The network of people living with HIV was very active, providing COVID-19 awareness services in communities and helping with distribution of food and supplies.

The genocide devastated health and other systems in Rwanda. "We were unique," a community provider said, "because there was nothing after the genocide, so we had the opportunity to rebuild with a comprehensive approach." Today, clinical staff are trained to deal with multiple diseases, including HIV, and laboratory infrastructure created for HIV is used more broadly. Surveillance systems and data management is one area where HIV investments have benefitted the broader health system, including maternal and child health and TB services. Many community organizations have a focus on HIV but also provide other health and social services.

Several informants noted that the HIV response has had a notable impact on the overall approach to health care. "The important thing is the mindset," one informant said. "People who work in HIV learn to establish partnerships, the importance of multisectoral work, of the community response, and of monitoring." Another said the HIV response brought, "a culture of inclusion," that has impacted the work of community organizations. Donors have sometimes been supportive of the country's holistic approach, though there is a desire for more flexibility. One person noted that, "What the [external funder] expects from you is the outcomes, the data, meeting targets. We can use the funding horizontally as long as we are meeting those requirements."

HIV-related stigma and discrimination remain major challenges and protection of confidentiality will be essential as HIV services are further integrated. There is some concern that key population groups might not be adequately served in a fully integrated system and some informants worry that complete pooling of health resources could lead to reduced focus on achieving HIV-related goals.

Case study:
SIERRA LEONE

The HIV platform assisted with the country's COVID-19 response in several ways. PEPFAR set up tents and hand washing stations, and staff took temperature readings outside 15 health clinics, benefiting all attending. The program also procured a dozen oxygen machines used at public health facilities. The national HIV laboratory was initially used for processing COVID-19 tests. People living with HIV and key population groups supported through HIV funding utilized their capacity to reach people living in slums and other less accessible areas with COVID-19 education. HIV test counselors provided COVID-19 testing. HIV anti-stigma approaches were used to address COVID-19 related stigma.

Following the devastating Ebola outbreak, PEPFAR provided training and support to help rebuild the health care workforce. The program partnered with the public health system to recruit and train a new cadre of midwives. HIV staff initially focused on PMTCT were re-trained to provide broader maternal and child health services. The HIV program also supports the central public health laboratory, including the staff and sample transportation system. The approach to HIV services — actively seeking people who need services and helping them stay in care — has influenced other areas of health care.

Community led monitoring, supported in part through HIV funds, sends members of civil society to clinics to check for medicine stock outs and review service quality. This monitoring system is now being expanded to include TB and malaria services, as well as identifying human rights issues. Several informants noted that the rights-based focus of HIV services continues to have a broader impact in the country's public health services. The HIV platform has a comparatively strong data system and is now being used to collect data on TB, malaria and other conditions. Further work to build off HIV services and harmonize work in data collection, monitoring and supervision across health services were identified as key opportunities.

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Case study:
SOUTH AFRICA

To respond to COVID-19, South Africa has leveraged the scientific and programmatic leadership of the national HIV response. HIV investments in laboratory-based innovation, human resources for health, clinical service sites, community health workers, commodity forecasting and disease surveillance helped strengthen and accelerate the national response to COVID-19. Due to the combination of scaled-up multi-month antiretroviral dispensing and the active engagement of community health workers, South Africa was able to minimize the disruption of HIV treatment services, although a reduction in the number of HIV tests conducted in 2020 led to a decline in the number of individuals initiated on antiretroviral therapy.

HIV investments in laboratory-based innovation, human resources for health, clinical service sites, community health workers, commodity forecasting and disease surveillance were leveraged to strengthen and accelerate the national response to COVID-19.

HIV services have brought millions of South Africans into the health system, enabling expanded access to health services beyond HIV. The HIV response has altered popular aspirations and expectations for health services generally, emphasizing the human right to health, accountability for results, and community engagement and leadership in health decision-making.

Informants said the degree to which holistic, integrated services are available in South Africa is limited. Some, albeit partial, progress has been made in integrated HIV and TB services, but otherwise many opportunities for health screening and intervention are missed due to inadequate integration. Factors that contribute to insufficient integration include the fact that health workers are overburdened as well as the dictates of some donors, which prioritize disease-specific outcomes over broader health indicators.

South Africa is in the process of designing a national health insurance scheme, with stakeholders from the HIV response working to ensure that the national benefits package includes comprehensive coverage of HIV-related services. However, some informants suggested that South Africa should focus first on transforming the quality, accessibility and efficiency of its health services. The conditional grants that have largely funded HIV services are expected to be folded into the country's UHC program, creating some uncertainty regarding future accountability for HIV results. Informants urged concerted efforts to mainstream key aspects of the HIV response across the health system more generally, including an emphasis on targets and accountability, data-based monitoring and decision-making, community service delivery, civil society advocacy, and attention to stigma, discrimination and broader structural issues.

Case study: **THAILAND**

Given the comparatively modest impact of COVID-19 in Thailand at the time of the interviews, informants acknowledged that the country's HIV programs had made more limited contributions to the broader COVID-19 response. Sex worker-led projects supported by HIV program funding provided health, social and economic support to sex workers whose livelihoods were disrupted by early lockdowns. Multi-month dispensing of antiretroviral medicines, proactive efforts by key population-led organizations, and careful monitoring of antiretroviral drug supplies helped minimize HIV treatment service disruptions during that time.

As a result of integration of antiretroviral therapy in Thailand's UHC scheme, people living with HIV are able to obtain diverse health services at the same health centers they visit for HIV treatment. However, informants said that HIV clinical staff focus primarily or exclusively on HIV services rather than on holistic care coordination. While some HIV clinicians in Thailand have stepped into more of a care management role by treating common co-morbidities, this practice is reportedly not widespread, especially outside the capital city of Bangkok. Multi-disease screening — for example, by offering anal pap smears, hormone monitoring for transgender people, and viral hepatitis screening alongside HIV testing — has aided in the recruitment of key populations for HIV testing services, and some key population-led services offer PrEP as part of a broader service package.

Informants said that the health system could benefit by mainstreaming key lessons learned by the HIV response. These include prioritizing community engagement in both service delivery and health decision-making, proactive action to ensure that services are tailored for the most vulnerable, and exhibiting a spirit of innovation, such as extending multi-month dispensing for stable patients with non-communicable diseases.

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Case study: VIETNAM

Several elements of the HIV response supported the country's COVID-19 effort. The government encouraged health workers normally focused on HIV prevention and treatment to participate. The main HIV referral laboratories and personnel supported COVID-19 testing. The Global Fund provided testing machines and donor government personnel helped provide COVID-19 screening. HIV-oriented community organizations actively participated in the COVID-19 control effort, in part because HIV services are among the most developed community systems in the country.

HIV is steadily becoming more integrated with other health services in Vietnam, and in the last several years ARV provision has been added to the Vietnamese social insurance program. Investments into HIV programs have been critical to establishing management information systems and strategic use of data, and expanded community engagement in the broader health system. Some community programs that started out focusing on HIV services now also provide services related to TB, malaria, social protection, and human and legal rights. The country has established private clinics owned and run by members of key population groups that provide tailored services. These are now regarded as a model for broader care.

The approach to providing HIV services has had a fundamental impact on the character of local health systems. People providing HIV care are trained in a rights-based approach that is client centered, contributing to a more "user friendly" orientation in other areas of health. HIV services offer a, "very good entry point to address and overcome social barriers in health." A community member observed it is no accident that HIV-oriented community organizations play a broader role: "the HIV organizations do this because they are the most organized, best trained, most empowered and most capacitated — they have core funds…we built a system."

Stigma and discrimination remain critical barriers to HIV and health care access, and some informants were concerned about attention to these issues as HIV is further integrated. If they consider reducing external support, informants said donors should make sure the lessons of the HIV response are adopted more broadly, including establishing systems to track service quality, attention to key populations, and investment in community systems. One informant said that flexibility in use of external donor funds and support consistent with national strategies is crucial.

Endnotes

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