November 2019

ROADMAP FOR TRANSITION TO SELF-RELIANCE OF LAO PDR'S NATIONAL HIV RESPONSE

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HP+ HEALTH POLICY PLUS

NOVEMBER 2019

Suggested citation: Health Policy Plus and the Center for HIV/AIDS and STI. 2019. *Roadmap for Transition to Self-Reliance of Lao PDR's National HIV Response*. Washington, DC: Palladium, Health Policy Plus; Lao PDR: Center for HIV/AIDS and STI, Lao PDR Ministry of Health.

ISBN: 1-59560-228-3

Health Policy Plus (HP+) is a five-year cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-15-00051, beginning August 28, 2015. The project's HIV activities are supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). HP+ is implemented by Palladium, in collaboration with Avenir Health, Futures Group Global Outreach, Plan International USA, Population Reference Bureau, RTI International, ThinkWell, and the White Ribbon Alliance for Safe Motherhood.

Contents

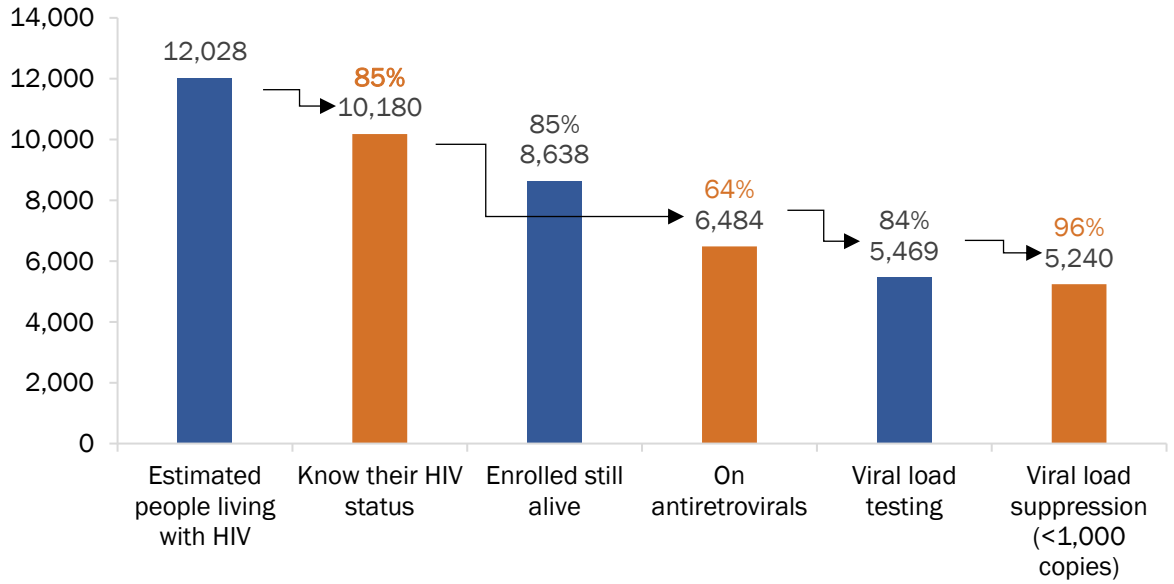
Acronyms

AIDS	acquired immune deficiency syndrome
ART	antiretroviral therapy
ARV	antiretroviral
CHAS	Center for HIV/AIDS and STI
CSO	civil society organization
DHIS2	District Health Information System 2
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	human immunodeficiency virus
IT	information technology
Lao PDR	Lao People's Democratic Republic
MOH	Ministry of Health
NSAP	National HIV and AIDS Strategy and Action Plan
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
STI	sexually transmitted infection
TB	tuberculosis
USAID	United States Agency for International Development
WHO	World Health Organization

1. Introduction and Roadmap Development Approach

The Lao People's Democratic Republic (Lao PDR) has been engaged in organized efforts to respond to HIV/AIDS since 1988, when it established the National Committee for the Control of AIDS. Over the last three decades, the Government of Lao PDR has worked in close partnership with the international community to mobilize technical and financial resources needed for those efforts. Civil society organizations (CSOs) have played a vital role in partnership with the government, particularly to reach and serve key populations at risk of HIV infection. Lao PDR is now classified as a low-HIV-prevalence country, with an adult (ages 15–49) prevalence of 0.3 percent (UNAIDS, 2018). HIV incidence has declined over the last decade, and the country is progressing toward its 95-95-95 clinical cascade targets (95 percent of people living with HIV know their status, 95 percent who know their status are receiving treatment, and 95 percent of those on treatment have a suppressed viral load) (Figure 1). Program performance has improved for each of the three main cascade targets: 85 percent of the total estimated number of people living with HIV in the country know their status; 64 percent of diagnosed people living with HIV who are alive and have been linked to care are currently on antiretroviral therapy (ART); and 96 percent of people living with HIV currently on ART and who have been tested for viral load are virally suppressed. However, an examination of comprehensive achievement across all three targets shows that just 44 percent of all estimated people living with HIV in Lao PDR have achieved viral suppression. It is clear that important work remains to be done.

Figure 1. HIV Cascade of Lao PDR, Performance as of June 30, 2018



Source: recreated from CHAS

The 2017 Sustainability Index Dashboard report noted that "the Lao PDR government has demonstrated strong leadership in crafting a national HIV/AIDS strategy and coordinating the response" (PEPFAR, 2017). That strong leadership, led by the Lao PDR Ministry of Health's (MOH) Center for HIV/AIDS and STI (CHAS), was instrumental in developing two five-year national HIV and AIDS strategy and action plans (Lao PDR, CHAS, 2016). Those plans sought to strengthen multisectoral collaboration to put in place and sustain an efficient

and effective national HIV/AIDS response. Key accomplishments include improved access to HIV prevention, treatment, care, and support for key populations (including men who have sex with men and female sex workers) among people living with HIV. The national response also includes activities to strongly address stigma and discrimination and promote equity in access to information and services. HIV prevention and testing services are now available at voluntary counseling and testing sites in all districts across the country. Eleven ART centers in eight provinces provide HIV/AIDS treatment, care, and support services to people living with HIV, and planning is underway to expand geographic availability of these ART services through a point-of-care strategy.

It is in this program development context—the country having graduated to lower-middle-income status with a low national HIV prevalence—that discussions about transition to self-reliance for the national HIV/AIDS response have been grounded. According to national program leaders, those discussions picked up in earnest in mid-2018. With strong support from a broad cross-section of HIV/AIDS community stakeholders in the country, CHAS commissioned a process to assess the readiness of the national program to transition to self-reliance and, based on findings from a transition readiness assessment (Sine et al., 2019), lay out a roadmap to guide that process. This report examines 10 priority challenges the country must overcome during its journey to self-reliance. The report also provides a set of mitigating actions for each challenge and consequent implementation steps that will help the country transition smoothly toward its ambitious goals while protecting the significant gains it has made as a result of past investments—particularly in addressing HIV among key populations, ensuring continuity of services to people living with HIV, and continuously reducing onward transmission of HIV.

Box 1. Transition Roadmap Development Process

- Secondary document review
- Transition readiness assessment
  - Stakeholder consultation meetings (January and April 2019)
  - Comparative analysis of data from PEPFAR's 2015 and 2017 Sustainability Index Dashboard
  - National validation meeting on transition readiness findings (August 2019)
- National program costing analysis for 2019–2030
- In-depth key informant interviews on transition challenges and solutions
- National validation meeting on roadmap content (August 2019)

These challenges, mitigating actions, and implementation steps were developed during a rigorous process, outlined in Box 1. This process included extensive consultation and dialogue with a broad range of national and international partners and stakeholders, including leadership and program units at the MOH CHAS, leadership at the Country Coordinating Mechanism, CSOs actively involved in the national HIV/AIDS response, and international donor partners and their implementing agencies.

The period of performance for the current five-year National HIV and AIDS Strategy and Action Plan (NSAP) will come to an end in 2020, and the country will soon embark on a process to develop its third NSAP, covering the period of 2021–2025. This new strategy must consider three critically important dimensions.

- First, subsequent to developing the current NSAP, the country has committed to an accelerated timeline for achieving the triple 95 clinical cascade targets; the new end year has been moved from 2030 to 2025. Given the current performance of the national program against these ambitious targets, achieving this goal will require equally ambitious strategizing and operational planning to overcome key challenges and accelerate program progress.
- Second, the program will need to incorporate the new reality of transition. Although international partners will continue to support the national program in the short term, based on trends in funding sources, the transition is already underway for the HIV/AIDS domain and other health sector domains, including childhood immunizations; maternal, neonatal, and child health; tuberculosis (TB); and malaria. In fact, the Government of Lao PDR has begun mobilizing domestic resources to finance the national HIV/AIDS response, and that resource commitment is expected to grow annually. This financial transition to self-reliance will be supported by the robust economic growth forecasted for the years ahead; it is predicted that the country will achieve middle-income country status by 2024. More advanced transition processes in the health sector, such as for the immunization program, should be viewed as learning opportunities for the HIV/AIDS program.
- Third, the new NSAP will need to consider and synchronize with new and evolving aspects in the health sector landscape, including the fast-paced rollout of national health insurance and implementation of the national health sector reform strategy (Lao PDR MOH, 2017; Lao MOH et al., 2013).[1]

The contents of this roadmap, having been developed jointly with national and international stakeholders, and thoroughly vetted and validated, are intended to be used as key inputs into development of the NSAP 2021–2025. Section 2 of this roadmap report provides an overview of each priority challenge, derived from the process described in Box 1. For each challenge, a description is provided on why it is important and the potential consequences for national program performance if it is not addressed. Section 3 comprises a matrix providing mitigating actions and specific implementation steps for each challenge. Section 4 provides summary conclusions and recommendations for use of this roadmap.

[1] The current Health Sector Reform Strategy and Framework 2013–2025 will soon be updated with a phase III health sector reform strategy document covering the period of 2021–2025.

2. Overview of Transition Challenges and Mitigating Actions

Ten priority challenges emerged from the process outlined in Box 1. They are organized into four thematic groups: governance and leadership, strategic information, health services and systems, and financing. For each challenge, there is a description of its significance for the national HIV/AIDS response regarding the country's ability to successfully transition to self-reliance. This section also provides mitigating actions that were identified as remedial approaches to overcoming each challenge. As the agency tasked with stewardship of the national program, CHAS is responsible for ensuring that the analytical work and other mitigating actions defined in this roadmap are implemented. CHAS often engages with donors and other partners to finance and conduct analytical work; the proposed mitigating actions should be seen in that light.

Detailed implementation steps for each mitigating action are provided in Section 3. Section 4 provides an overview of opportunities for using the information in this transition roadmap in connection with other policy and planning development arenas to further the country's transition goals.

Priority Governance and Leadership Challenges

Challenge 1

The national AIDS response in Lao PDR must continue benefiting from new global clinical guidance, policies, technology, and protocols that can improve routine care and service targets to support continued improvement in quality of and access to HIV/AIDS services to help meet 95-95-95 clinical cascade targets. More regular monitoring and enforcement are also needed.

The existing strong regulatory framework for Lao PDR's HIV/AIDS domain, including service standards and guidelines, needs to be regularly updated to keep pace with changing testing and treatment technology, as well as evolving international best practices. HIV prevention, testing, treatment, and care evolve quickly; having an up-to-date framework is crucial to the national HIV/AIDS program's ability to achieve its 95-95-95 cascade targets. Service delivery networks need to be kept updated as new developments occur to ensure optimal patient treatment, care, and support.

Monitoring and enforcing adherence to testing and treatment policies, standards, and guidelines are vital to ensure continuous improvement of service quality, increased productivity, and reduced inefficiency. Enforcing the implementation of standard protocols with respect to patient access is also important—for instance, by ensuring adherence to the policy of free antiretroviral (ARV) treatment in all parts of the country. Attention to developing and updating guidelines has been greater than emphasis on enforcement. Monitoring, oversight, and enforcement policies, guidelines, and protocols all need strengthening. Application of these mechanisms to ensure adherence at points of service will have significant impacts on (1) patient care, and thus treatment continuation, reduction in patient drop-out rates, and the proportion of cases lost to follow-up—all affecting performance against the second 95 target; and (2) treatment efficacy—affecting viral load suppression, the third 95 target, particularly regarding policies meant to remove barriers to

timely access to ART and the financial burden of treatment adherence on patients and their families.

Currently, these regulatory processes for HIV/AIDS services in Lao PDR are supported heavily by external assistance, both financially and technically. The program needs to create mechanisms and identify human and financial resources to maintain connectivity between the national program and the international HIV/AIDS scientific community. To transition to self-reliance, it also needs to continue institutionalizing and independently implementing these policy regulatory functions, from continuous updating to dissemination, monitoring, and enforcement.

Challenge 1	Mitigating Actions
The national AIDS response in Lao PDR must continue benefiting from new global clinical guidance, policies, technology, and protocols that can improve routine care and service targets to support continued improvement in quality of and access to HIV/AIDS services and help meet 95-95-95 clinical cascade targets. More regular monitoring and enforcement are also needed.	a. Develop and institutionalize a plan to close technical and institutional gaps in capacity for policy and regulatory monitoring and updating. b. Prepare a strategy and operational plan to ensure timely and accurate communication of policy revisions to service delivery sites, providers, and provincial and district health authorities, and provide training as appropriate. c. Prepare a plan to institutionalize structures and systems for monitoring and enforcement of HIV/AIDS policies, regulations, and service standards and guidelines.

Challenge 2

The country lacks an evidence base developed from economic analyses to leverage financing for HIV/AIDS programs and services from donors, government budgets, universal health coverage strategies (including national health insurance), and other domestic resource mobilization efforts.

Public budgets are by nature constrained by a government's revenue base; it is no different in Lao PDR. Actual government revenues often fall short of projections, compromising the ability of national treasuries to meet budget commitments to line ministries. Public financial management and program implementation challenges result from several institutional and capacity limitations, which further reduces actual spending compared to approved budgets. Shortfalls in spending from released funds commonly lead to perceptions of program inefficiencies and absorptive capacity, resulting in challenges with the ability of program units to defend budgets for the following year that are proposed to ministries of finance and legislatures. In the case of Lao PDR's national HIV/AIDS program, the challenge is even greater. To reach its ambitious accelerated national goals for control and elimination of HIV/AIDS, a significant expansion of program capacity and reach will be required, thus demanding a strong case for progressively increased resource allocation for HIV/AIDS programs and services. Although external support for the national HIV/AIDS response is not at risk in the short term, as the pace of external partner financial commitment phase-down advances, the need for increased domestic resources will be compounded.

Given that the program is largely driven through public service delivery channels, the success of public sector resource mobilization is critical. The evidence generated from economic analyses is an important tool that helps internal and external advocates make a successful case for program funding during budget development processes. In the absence of convincing evidence on the economic returns and impacts from higher domestic investment,

advocates will not be armed with the inputs necessary to drive a successful domestic resource mobilization effort. Weak mobilization of domestic resources will compromise the national program's ability to reach its 95-95-95 cascade goals.

Along with government budgets for CHAS-led programs and services, eventual inclusion of HIV/AIDS services in the national health insurance benefits package will be an important means through which to mobilize and mainstream resources for the necessary expansion of HIV/AIDS services in the country. At present, no economic analyses of HIV/AIDS spending have been completed—evidence is not yet available on the amount of increased domestic spending that will be required through either public budgets or national health insurance. HIV treatment costing has not been conducted or communicated to the National Health Insurance Bureau, which is currently considering a national benefits package. The bureau is thus insufficiently informed about the affordability of adding HIV/AIDS services to its benefits package or about treatment and care trends that are likely to reduce costs, thus making those services more affordable in the benefits package. Neither does the bureau have information about the long-term savings of including HIV/AIDS services in the benefits package earlier rather than later. The current perception that HIV/AIDS is too expensive for national health insurance to cover thus remains unchallenged.

Challenge 2	Mitigating Actions
The country lacks an evidence base developed from economic analyses to leverage financing for HIV/AIDS programs and services from donors, government budgets, universal health coverage strategies (including national health insurance), and other domestic resource mobilization efforts.	a. Produce an investment case for HIV/AIDS for public budgets and national health insurance. b. Produce an analysis that links HIV/AIDS programming targets with Lao PDR's universal health coverage strategies and goals.

Challenge 3

High dependency on external donors to fund CSO-led HIV services, programs, policy dialogue, and advocacy leaves the critical role of civil society in Lao PDR's national HIV response at risk.

For more than two decades, civil society has played an important role in providing prevention and care to key populations, particularly for men who have sex with men and female sex workers, and communities of people living with HIV. These interventions are vital to the country's ability to meet all three of the 95-95-95 targets. CSOs' value and importance lie in their long history working with vulnerable and hard-to-reach populations. In the context of HIV/AIDS, they are uniquely able to reach and educate the more marginalized communities of men who have sex with men and female sex workers (contributing to the first 95 target pertaining to identification of people living with HIV), and encourage treatment adherence among people living with HIV (contributing to the second and third 95 targets), thus reducing further HIV transmission. CSOs also contribute to the strength of the national HIV/AIDS response by serving as agents for bringing the voices of key populations and HIV-affected communities into the policy dialogue and planning realm.

Historically, CSOs engaged in HIV/AIDS work have been funded entirely by donors, and prospects for setting up a social contracting mechanism between the government and CSOs are slim in the short and medium term. Additionally, there are few domestic options for alternative domestic financing, and access to alternative international financing is limited by CSOs' business development capability and connectivity with these networks. Reductions in external partner support will have a direct impact on CSOs' sustainability and ability to

continue serving key populations with HIV/AIDS services. CSOs' strong and vital partnership with key components of the Government of Lao PDR's HIV/AIDS program is in jeopardy, potentially portending a significant interruption in the steady progress being made toward the national HIV/AIDS program's 95-95-95 cascade targets.

Joint consultations with CSOs, government, and international partner stakeholders in Lao PDR is needed regarding several key areas where support to CSOs would have constructive impact on sustainability. Formal assessments of organizational and technical capacities and gaps of individual CSOs would help to develop specific, tailored development plans for each. Assessments would also help identify strategies to increase cross-collaboration among CSOs and capitalize on their individual strengths. In addition, strengthening linkages between CSOs and the provincial and district health authorities with which they work would have a mutually beneficial effect. For local health authorities, linkages are a means by which they can learn how best to tailor services to the specific needs of key populations and other people affected by HIV. For CSOs, local health authorities represent an additional base of support for sustaining their role in the national HIV/AIDS response, and possibly for devising appropriate, expanded roles in areas such as treatment adherence and continuation. There is support in the Lao PDR HIV/AIDS community for learning more from neighboring countries with respect to how their governments engage with CSOs in the HIV/AIDS sphere and considering how some of those approaches might be adopted or adapted for the context in Lao PDR.

Challenge 3	Mitigating Actions
High dependency on external donors to fund CSO-led HIV services, programs, policy dialogue, and advocacy leaves the critical role of civil society in Lao PDR's national HIV response at risk.	a. Under the auspices of CHAS, and as part of the process of producing the next five-year NSAP on HIV/AIDS/STI control and prevention (2021–2025), reaffirm the roles and contributions of CSOs in complementing and supporting the government's role in the national HIV/AIDS response. Articulate service delivery roles; key population groups and geographic coverage; expected quality standards; and a plan to resource these roles and contributions, both financially and otherwise. b. Consistent with roles articulated for CSOs in the new NSAP (see part a, above), conduct a current and prospective organizational and technical capacity assessment of CSOs and develop a plan to close identified gaps. Align the current national policy framework for CSOs as needed to operationalize these roles, including a performance monitoring and evaluation framework. c. Build institutional capacity in financial management and business development to diversify funding sources for CSOs' service delivery, policy dialogue, and advocacy roles as expressed in the national vision.

Priority Strategic Information Challenges

Challenge 4

Limited national capacity to produce timely and quality epidemiological, clinical cascade, and other HIV/AIDS program monitoring and evaluation data limits CHAS's ability to monitor progress toward the 95-95-95 clinical cascade goals and serve planning needs.

The challenge of improving the quality and quantity of routine and periodic strategic information for the HIV/AIDS program is highlighted in the current NSAP. However, the

human and financial resources that are needed have not been fully mobilized; four years into the NSAP's implementation period, much remains to be done. A national standard for HIV/AIDS data collection, including policy, structure, protocol, and procedures, remains to be produced. All of these elements are necessary to improve HIV/AIDS program planning, monitoring, and evaluation.

Definitions of HIV/AIDS terms (such as "key populations" and "high risk"); protocols for data collection, coding, and recording; and data collection methods and tools all need to clarified and standardized. These steps are necessary to improve the quality of data collected, reported, and shared. Additionally, multiple streams and systems for data collection and reporting exist, each serving a different stakeholder base and generally following major funding streams or program monitoring platforms (e.g., the Integrated HIV Bio-behavioral Surveillance and the Asian Epidemic Model). These streams need to be better aligned in a more unified system.

Population size estimates for key populations need updating. Better and more up-to-date information is needed on behaviors that put people at risk of HIV infection and program effectiveness for key areas, such as outreach, prevention, care, and treatment. Much of the information on new and expanding areas of HIV risk is more anecdotal than evidence based; improved information is needed to confirm and characterize these areas of concern. These risk groups consist of people who inject drugs, mobile populations (i.e., people migrating into Lao PDR, those returning home from external migration, internal migrants to large-scale infrastructure projects and urban areas for employment, and truck drivers), and new concentrations of female sex workers who follow migrants to large-scale infrastructure development locations, among others.

Although national-level information on the HIV/AIDS treatment cascade is up to date and comprehensive, it is not currently available at the provincial or treatment facility levels, or for key populations. This lack impedes the ability to identify higher- and lower-performing program components and optimally allocate program resources for maximum impact on program improvement. Additionally, better use can be made of other data sources to augment those produced for HIV/AIDS information systems, including, for example, data from the National Blood Bank.

Challenge 4	Mitigating Actions
Limited national capacity to produce timely and quality epidemiological, clinical cascade, and other HIV/AIDS program monitoring and evaluation data limits CHAS's ability to monitor progress toward the 95-95-95 clinical cascade goals and serve planning needs.	a. Integrate and align routine information systems used by government and nongovernment organizations involved in national HIV/AIDS program implementation into a standardized, uniform system based on the national District Health Information System 2 (DHIS2) platform. b. In the 2021–2025 NSAP, include content guidelines and clear schedules for regular implementation of HIV/AIDS surveys (e.g., behavioral and epidemiological surveillance). c. Implement clinical cascade monitoring at all HIV service delivery sites.

Challenge 5

Strengthened analytic capacity is needed to translate routine and periodic program data into evidence to drive the program improvement, planning, and expansion that is necessary to achieve the country's 95-95-95 cascade targets.

Establishing a culture of data demand and use is important for improving data collection and quality (see challenge 4). The human resource base for data analysis and use in Lao PDR is currently insufficient to meet HIV/AIDS program needs. Triangulation and analysis of data to inform decision making and planning, including development of national HIV/AIDS strategies and action plans, has relied on external technical and financial support. At the HIV/AIDS program level, emphasis on data quality assessment, validation, and improvement has been limited. Use of data beyond the fulfilment of program and funder-driven requirements has also been limited. Sharing and discussing analyzed strategic information is not a norm; forums are not routinely held for discussing strategic information within CHAS, among provinces, or in multistakeholder settings.

The MOH Department for Planning and International Cooperation is the unit responsible for maintaining and operating the DHIS2. It has the capacity to support the HIV/AIDS program to design data collection systems, but its capacity is limited with respect to supporting data analysis and use. As the HIV/AIDS program progresses toward its 95-95-95 cascade goals, data use needs will become increasingly more complex. Although program data are collected, analyzed, and disseminated transparently on a regular basis, the quality of data analytics needs improvement; international experience has shown that increased demand for data analysis among planners and policymakers is critical to creating the capacity and practice of using data analytically.

Challenge 5	Mitigating Actions
Strengthened analytic capacity is needed to translate routine and periodic program data into evidence to drive the program improvement, planning, and expansion that is necessary to achieve the country's 95-95-95 cascade targets.	a. Bolster national capacity to use routine and periodic survey data to produce evidence for national and subnational program planners and partners. b. Promote and strengthen a culture of data use to improve policy decision making and program planning. Align CHAS strategic information initiatives with national health sector data use promotion efforts.

Priority Health Services and Systems Challenges

Challenge 6

HIV education, prevention, and testing programs will need to be targeted to networks and population groups associated with key populations to more efficiently and effectively reach those most at risk and bring new people living with HIV into the clinical cascade.

Based on the most recent epidemiological data, there are an estimated 12,028 people living with HIV in Lao PDR. Although prevalence among the general adult population remains low (at about 0.3 percent), prevalence among key populations is considerably higher (2.52 percent, 1 percent, and 17.4 percent among men who have sex with men, female sex workers, and people who inject drugs, respectively). In addition, a considerable number of people living with HIV exist among population groups not defined as key populations, many of whom can likely be found among networks associated with one or more of the key population groups defined in Lao PDR (UNAIDS, 2019).

Precisely defining this population is difficult for two reasons. First, for various sociological reasons, it is often difficult to distinguish between the behavior that resulted in an HIV infection and categorizing the person as belonging or not belonging to one of the defined key

population groups. For instance, in Lao PDR, the mean duration of women working as "service women" (female sex workers) is 17 months (UNAIDS, 2019). After doing this work, many female sex workers return to their home communities and assume other occupations and lifestyles. Similarly, some men who currently or in the past have had sex with other men maintain heterosexual family relationships and do not identify as men who have sex with men or divulge this behavior. Second, data on HIV among non-key population groups are poor.

CHAS has defined mobile populations overall as a group in which non-key population HIV infections are likely to be concentrated. Strategies that are effective in identifying clearly defined key population members at higher risk for infection and reaching them with prevention and HIV testing services will not be effective in identifying non-key population higher-risk persons. New and improved strategies are needed to reach individuals in these higher-risk groups with best practices recommended by the World Health Organization (WHO) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). These practices encourage testing, identifying those who are HIV positive, and initiating them on ART.

HIV/AIDS services in Lao PDR are not currently integrated into the mainstream healthcare system. Systematic HIV education, prevention, and testing is largely a vertical program focused on higher-risk key populations. Access to these services among others adjacent to communities with key populations is mostly limited to exposure to posters in healthcare facilities and other mass media messages. Condoms are widely available but distributed in the mainstream health system mostly through family planning service delivery channels. HIV testing for people not in a key population group generally occurs in the context of a physician's request after a patient presents with symptoms suggestive of HIV infection and other diagnoses are ruled out. Thus, such cases are often diagnosed in a later stage of HIV infection, with attendant consequences on treatment success, prevention of onward infection, and HIV-related mortality.

Existing guidelines, tools, materials, and strategies for education, prevention, and promotion of testing should be reviewed to determine which ones can be tailored for use in reaching communities adjacent to key populations and what new materials need to be developed based on WHO and PEPFAR best practices emerging from international experience. Multisectoral (including community) engagement and involvement can be strengthened to provide HIV education, prevention, and testing to mobile population groups and other communities adjacent to key populations. Steps should also be taken to capacitate and involve provincial and district levels of the public health system to play an increasingly active role in taking responsibility for achieving national 95-95-95 cascade goals, particularly with respect to reaching out to these communities.

Reaching the first 95 clinical cascade target, therefore, requires success in identifying people living with HIV in these adjacent, non-key population groups, early identification of HIV infection among them, and initiation of ART—all steps of considerable importance in achieving the clinical cascade targets.

Challenge 6	Mitigating Actions
HIV education, prevention, and testing programs will need to be targeted to networks and population groups associated with key populations to more efficiently and effectively reach those most at risk and bring new people living with HIV into the clinical cascade.	a. Strengthen the national strategy and implementation framework for addressing the needs of communities adjacent to key populations for HIV/AIDS education, prevention, and testing services. b. Adapt guidelines, tools, materials, and strategies for education, prevention, and promotion of testing, tailored for use in reaching communities adjacent to key populations. c. Strengthen multisectoral (including community) engagement and involvement in providing HIV education, prevention, and testing. d. Take steps to capacitate and involve provincial and district levels of the public health system to play an increasingly active role in taking responsibility for achieving national 95-95-95 cascade goals.

Challenge 7

The current centralized configuration of treatment services (including laboratory) is not sufficient to meet expected geographic expansion of and volume increases in patient demand as the national program moves toward achieving the second and third 95 clinical cascade targets.

ART services have been successfully scaled up to 11 sites throughout the country—three in the Vientiane capital region and one each in eight of Lao PDR's other 17 provinces. ART and other treatment services (including blood collection for laboratory tests and resupply of ARVs) are available exclusively at these sites. For people living with HIV who live at a distance from one of these sites, geographic access is a major impediment to treatment adherence and continuation. Given travel and transportation costs, and loss of wages because of the commitment required to reach one of these treatment sites, this limitation also creates a financial burden.

The national program's point of care strategy, now in the process of being developed, is intended to address this issue. The strategy calls for expansion of sites to include provincial hospitals in provinces where there is currently no ART center. Although this expansion will decidedly improve access to care and treatment services, people living with HIV who live at a distance from their provincial capital city will still face access challenges; the national program will need to consider additional strategies if it is to achieve its second and third clinical cascade targets.

One strategy to address access barriers includes migrating data on people living with HIV from the HIV Cascade Cohort Monitoring System into a new DHIS2 HIV patient tracker system, currently under development. Once operational, it will facilitate electronic patient referrals, allowing staff at all 11 ART centers to access information on any person living with HIV in the country. This information will allow people living with HIV on ART to seek care and ARV resupply from any ART center when they travel temporarily or migrate from one location to another.

Dialogue is ongoing regarding other mechanisms that would permit stable ART patients to receive ARV resupplies at additional locations (e.g., possibly district hospitals, health centers, and community settings), reducing the need for time-consuming and expensive travel. Facility-based expansion of geographic access to treatment and treatment continuation services will require additional financial and human resources investments. To increase affordability and efficient allocation of limited program resources, these and other

strategies must be continuously evaluated, considered, and operationalized to ensure continued advancement toward the 95-95-95 cascade targets.

Challenge 7	Mitigating Actions
The current centralized configuration of treatment services (including laboratory) is not sufficient to meet expected geographic expansion of and volume increases in patient demand as the national program moves toward achieving the second and third 95 clinical cascade targets.	a. Revise national HIV/AIDS treatment policy to streamline, align, and maximize the existing public health system's structure to support and link patients to care and minimize patients' geographic and financial access burden through network expansion. b. Work with the National Center for Laboratory and Epidemiology to establish a coordination mechanism for establishing and supporting new HIV/AIDS analysis capacity for additional laboratories in the public system. c. Promote HIV/AIDS patient treatment adherence by creating a system to allow patients to continue their treatment at any health facility within the network through the DHIS2 patient tracker system.

Challenge 8

Human resources are insufficient to meet clinical, managerial, and administrative needs as the program expands to reach the 95-95-95 clinical cascade goals.

A shortage of skilled, experienced, and motivated human resources for health is a broader health system issue in Lao PDR. There is no HIV/AIDS content in the pre-service medical doctor or nursing curricula. Consequently, foundational technical knowledge or even awareness of HIV/AIDS is low among health professional graduates. Curricula for mainstream in-service clinician training programs also lack HIV/AIDS content. HIV/AIDS clinical training is entirely based on vertical, in-service training for health staff designated to provide clinical services at the 11 national ART centers and staff at HIV counseling and testing sites. This places a high financial, technical, and human resource burden on CHAS as it operationalizes its clinical point of care expansion strategy. Moreover, given the high turnover rate among health staff (due to transfers to other positions and health facilities, and attrition from retirements and departures from public service), CHAS must continually identify and train clinician replacements. Attracting clinicians to take on new responsibilities for HIV/AIDS services is also a challenge, given stigmatized attitudes still prevalent among health professionals regarding HIV/AIDS.

As more clinicians receive in-service training to serve the planned expansion in HIV/AIDS service delivery sites, it will be important that CHAS have the information and systems to track the assignment locations of those it has trained. The MOH is currently putting in place a new human resources information system; CHAS program staff will be included in that database. However, at this stage, individual records in the human resources information system do not include fields for noting in-service training, so CHAS will need to separately track HIV/AIDS-trained clinicians.

On the public health professional side, local government HIV/AIDS program support was formerly the responsibility of dedicated HIV/AIDS focal persons. A recent reorganization and realignment of the MOH's human resource pool assigned responsibility for that support to communicable disease units in province health departments and district health offices, thus eliminating the dedicated positions. This change warrants evaluation to determine its impact on quality management and oversight of HIV/AIDS services. Current shortages of

other allied health professionals with knowledge, experience, and interest in HIV/AIDS, such as those in information technology, communication, epidemiology, and laboratory technology, also must be addressed. In addition, in the context of a 10-year transition timeframe, succession planning for the HIV/AIDS program must receive increased attention.

Challenge 8	Mitigating Actions
Human resources are insufficient to meet clinical, managerial, and administrative needs as the program expands to reach the 95-95-95 clinical cascade goals.	a. Review and develop an integrated master plan at central and subnational levels to meet HIV/AIDS program human resource needs consistent with expected program expansion. b. Integrate HIV/AIDS modules into all health workers' clinical pre-service training programs—that is, those involving physicians, nurses, and midwives. c. Create strategies and plans to improve retention of HIV/AIDS-competent health workers to reduce recruiting and retraining needs.

Challenge 9

CHAS and the MOH do not yet completely own key supply chain management functions (i.e., forecasting, procurement, distribution, and commodity management information systems) for meeting HIV/AIDS program targets. Processes currently underway to transfer capacity and ownership of these functions to appropriate CHAS and MOH units need to be maintained and sped up.

The public sector's medical products supply chain system is overseen by the Medical Products Supply Centre under the MOH's Food and Drug Department. It is considered to be technically competent and structurally sound. The Food and Drug Department's Quality Control Division is responsible for maintaining the quality of commodities in the system, including inspection of pharmaceutical storage conditions. The Medical Products Supply Centre aggregates commodity needs across programs and provides them to the MOH Procurement Committee, which is responsible for managing procurement. At present, these agencies have a limited role in supporting the procurement and management of HIV/AIDS commodities. Also, they do not yet have the technical knowledge, skills, and resources to add responsibility for HIV/AIDS commodities to their existing responsibilities, even as the government has begun to allocate funds for commodity procurement (i.e., resources to procure ARVs were allocated in program year 2019).

Procurement of ARVs is a new function for the MOH Procurement Committee, working for the first time with MOH budget funds. Since 2009, the Global Fund to Fight AIDS, Tuberculosis, and Malaria's Program Management Unit has been tasked with transferring procurement skills, tools, information, and capacity to the Procurement Committee. The transfer process has been characterized as challenging. With the recent reorganization of the MOH Procurement Committee, some of this ground will need to be covered again, and stakeholders in Lao PDR estimate complete transition to the Procurement Committee will require another three to five years to complete. Although the Global Fund currently is supporting the Procurement Committee, assessment of the procurement experience will yield important lessons for the future transfer of its responsibility in this area, as the proportion of total national ARV requirement to be procured directly by MOH is expected to rise each year by at least five percentage points. The pros and cons of regional procurement and procurement agent mechanisms need to be assessed to identify trade-offs in price, product, and delivery timeliness. Also, a clearer performance management timeline associated with this transfer of responsibility is needed.

For ARV forecasting, CHAS is supported by the Clinton Health Access Initiative; the process of transferring forecasting skills and tools to CHAS is ongoing. As the country increasingly purchases these commodities using domestic resources, mechanisms will need to be put in place to ensure the rational and timely distribution of HIV-related commodities.

Several other issues pose potential supply chain challenges. Most HIV/AIDS commodities consumed through HIV/AIDS services are not yet included on the MOH List of Essential Medicines; a process needs to be engaged to include them. Most HIV/AIDS commodities will need to be procured from international sources because there are no import agents in Lao PDR for them. Many international suppliers require advance payment before delivery, and the process for arranging such payments from government budgets may be cumbersome, with potential implications for timely delivery of shipments. New regulations have been put in place requiring pre-registration for importers. It is estimated that this process may take six to nine months, again risking delayed delivery of products compared to program needs.

The MOH has established a Logistic and Supply Chain Technical Working Group that meets regularly to review supply chain system needs. Although this mechanism creates the basis for continued improvement of the supply chain system and ensures the smooth transfer of skills and tools from external partners to Lao PDR counterparts, this technical working group's functioning relies on substantial Global Fund technical support, particularly from its Program Management Unit, as well as financial support. Steps need to be taken to foster self-reliance for this important group.

Challenge 9	Mitigating Actions
CHAS and the MOH do not yet completely own key supply chain management functions (i.e., forecasting, procurement, distribution, and commodity management information systems) for meeting HIV/AIDS program targets. Processes currently underway to transfer capacity and ownership of these functions to appropriate CHAS and MOH units need to be maintained and sped up.	a. Complete the process of transferring HIV/AIDS commodity forecasting methodology, technology, and tools to CHAS and the MOH Procurement Committee. Institutionalize capacity, responsibility, and accountability for annual forecasting. b. Produce and regularly update the compendium of technical specifications for all HIV/AIDS commodities for preparing procurement tenders and guiding bid evaluations and selections conducted by the MOH Procurement Committee. c. Identify and produce a plan to manage challenges inherent in the process of international procurement and capacitate CHAS and the MOH Procurement Committee to manage that plan. d. Participate in working groups considering options for adopting a national electronic tracking system for MOH commodities. Advocate for inclusion of all HIV/AIDS commodities in that system and plan the transfer from the donor-supported M-Supply system.

Priority Financing Challenge

Challenge 10

The financing environment for the Lao PDR HIV/AIDS program needs to be integrated and harmonized to reach 95-95-95 clinical cascade targets.

Financing for the Lao PDR national HIV/AIDS response derives from several government agency budgets and international donor partners, and from private sources (mostly out-of-pocket payments by individuals and households, including for condoms for prevention). In any country, donor technical and financial commitments can vary across time; in Lao PDR,

government spending will continue to increase and broaden as the transition to self-reliance proceeds. The varying nature of these sources and flows of funds complicates the ability to plan and can result in financing disjoints, duplications, overlaps, and gaps, potentially reducing program efficiency and impact. Government agencies devote considerable time and effort to coordinating with external partners and aligning their spending with national HIV/AIDS program priorities. This effort is challenging in an environment in which each partner brings to the table an activity plan partially defined by its own organizational objectives, goals, and mandates. The HIV/AIDS financing situation in Lao PDR is not unique in this regard, but fragmentation and duplication weaken the case for increased domestic and continued international financing.

Development of a rationalized, comprehensive, multiyear financing plan that clearly defines technical, geographic, and financing niches for each financing contributor and implementing agency (including, for instance, CSOs) can help improve the harmonization and complementarity of financial inputs, and promote greater allocative efficiency in the use of available resources. Development of this plan will be important during Lao PDR's transition to self-reliance, when shifts in funding sources are expected and shortfalls from full funding requirements are almost certain to occur at times.

The importance of a strong and comprehensive financing framework increases even more in the context of strategic program considerations for a fast-track two- to five-year scale-up of activities to identify, diagnose, and link people living with HIV to ART and virally suppress HIV in Lao PDR. Surge funding will be required to facilitate this scale-up with the expectation that intense, short-term efforts to interrupt transmission of HIV and reduce the future HIV burden nationally will thereby reduce future financing requirements. In turn, a strong framework may facilitate easier integration of treatment and care costs into mainstream health financing, such as budgets for chronic and infectious diseases and the national health insurance benefits package.

A medium-term expenditure framework is a tool designed to improve coordination and instill a greater degree of predictability into the financing landscape for programs. Creation of such a framework for HIV/AIDS would provide a better basis for the government to identify funding gaps, with sufficient lead time to mobilize public budget and other domestic resources to fill those gaps. It would also help to ensure that donors' financing is well coordinated, both among themselves and with the Government of Lao PDR, so their funds can be used for maximum impact. In addition, it will provide a basis for tracking progress with financing the national response.

To pave the way for developing a medium-term expenditure framework for HIV/AIDS, completion of several technical analyses is recommended. An HIV/AIDS health accounts analysis should be produced that identifies all sources, users, and uses of funds for HIV/AIDS purposes, including government, donor, private sector, and household and individual resources. A fiscal space analysis should be conducted to identify sources of funds potentially available over a 5- to 10-year time horizon. A fiscal space analysis includes both public (multisectoral), donor, private, and CSO components. It is recommended that a resource mobilization plan for HIV/AIDS is produced as an operational guide to capture funds projected to be available by the fiscal space analysis.

Challenge 10	Mitigating Actions
The financing environment for the Lao PDR HIV/AIDS program needs to be integrated and harmonized to reach 95-95-95 clinical cascade targets.	a. Within the context of the NSAP, jointly develop a comprehensive, multiyear HIV/AIDS expenditure framework with all partners, including international partners, CSOs, and the private sector. Produce an implementation mechanism that ensures harmonization and complementarity, avoids duplication, and tracks progress. b. Incorporate annual HIV funding reviews into routine health sector financial reporting.

3. The Transition Roadmap: Challenges, Mitigating Actions, and Implementation Steps

This section provides additional details for addressing each priority challenge described in the previous section. For each challenge's mitigating actions, implementation steps, and appropriate lead and support agencies are suggested. Challenges are organized according to four dimensions: governance and leadership, strategic information, health services and systems, and financing. These challenges, mitigating actions, and implementation steps should be considered during annual program work planning, development of the new NSAP 2021–2015, and planning for donor financial and technical assistance investments between 2019 and 2030.

Governance and Leadership

Challenge 1: The national AIDS response in Lao PDR must continue benefiting from new global clinical guidance, policies, technology, and protocols that can improve routine care and service targets to support continued improvement in quality of and access to HIV/AIDS services and help meet 95-95-95 clinical cascade targets. More regular monitoring and enforcement are also needed.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Develop and institutionalize a plan to close technical and institutional gaps in capacity for policy and regulatory monitoring and updating.	• Lead: CHAS • Supporting: external partners • Timing: short and medium term	1. Determine technical standards that define self-reliance capacity in policy and regulatory monitoring and revision. Develop capacity assessment instrument; prepare terms of reference; engage experts to conduct an assessment. 2. Assess current in-country HIV/AIDS technical expertise and institutional structures and protocols for policy monitoring and revision; identify gaps. 3. Develop and implement a plan, including domestic and external support and resources needed, to close gaps.
b. Prepare a strategy and operational plan to ensure timely and accurate communication of policy revisions to service delivery sites, providers, and provincial and district health authorities, and provide training as appropriate.	• Lead: CHAS • Supporting: external partners • Timing: short and medium term	1. Assess current structures and modalities, including effectiveness, for communicating new and revised policies, regulations, and service standards and guidelines; identify gaps and shortcomings. 2. Develop a plan to close gaps, including developing improved communication and training modalities. 3. Delineate and mobilize domestic and external support as required.
c. Prepare a plan to institutionalize structures and systems for monitoring and enforcement of HIV/AIDS policies, regulations, and service standards and guidelines.	• Lead: CHAS • Supporting: external partners • Timing: short and medium term	1. Assess current monitoring and enforcement structures and systems. 2. Identify gaps needing to be filled to reach self-reliance. 3. Prepare a plan and seek external support to close gaps. 4. Monitor to ensure routine implementation.

Challenge 2: The country lacks an evidence base developed from economic analyses to leverage financing for HIV/AIDS programs and services from donors, government budgets, universal health coverage strategies (including national health insurance), and other domestic resource mobilization efforts.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Produce an investment case for HIV/AIDS for public budgets and national health insurance.	• Lead: CHAS • Supporting: Department of Planning and Cooperation; National Health Insurance Bureau; Department of Finance; external partners • Timing: short term	1. Annually update national cost analysis of HIV/AIDS programs and services. 2. Conduct efficiency analyses of current HIV/AIDS program spending, identify opportunities for improvement, put in place mechanisms to capture these efficiency opportunities, and prepare analyses that demonstrate progressively improving program efficiency. 3. Produce analyses of patient cost impacts on households of people living with HIV. 4. Using outputs from steps 1–3, and other data and information, prepare an investment case report. In the report, include an assessment of: (1) increased public budget allocations, (2) national health insurance, and, (3) other alternative health financing mechanisms that may be available, drawing on the resource mobilization plan (see challenge 10, mitigating action a, implementation step 3). 5. Disseminate results of all analyses (steps 1–4); train internal (MOH) and external advocates on use of results. 6. Prepare an advocacy strategy using analytic results. 7. Use results to advocate for increased domestic resource allocation to national HIV/AIDS programs and services.
b. Produce an analysis that links HIV/AIDS programming targets with Lao PDR's universal health coverage strategies and goals.	• Lead: CHAS • Supporting: external partners • Timing: short and medium term	1. Conduct an actuarial analysis of HIV/AIDS services, estimate the impact of these costs on health insurance premiums when spread across the entire beneficiary base enrolled in national health insurance, and estimate long-run cost savings of adding the benefit sooner versus later. 2. Continue dialogue with the National Health Insurance Bureau and National Social Security Fund to assess the potential for gradual integration of HIV/AIDS services into national health insurance benefits packages and develop a timeline. 3. Link results to advocacy for increased domestic resource allocation to national HIV/AIDS programs and services (see mitigating action a, implementation step 7, above).

Challenge 3: High dependency on external donors to fund CSO-led HIV services, programs, policy dialogue, and advocacy leaves the critical role of civil society in Lao PDR's national HIV response at risk.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Under the auspices of CHAS, and as part of the process of producing the next five-year NSAP on HIV/AIDS/STI control and prevention (2021–2025), reaffirm the roles and contributions of CSOs in complementing and supporting the government's role in the national HIV/AIDS response. Articulate service delivery roles; key population groups and geographic coverage; expected quality standards; and a plan to resource these roles and contributions, both financially and otherwise.	• Lead: CHAS • Supporting: CSOs; other national and external partners • Timing: short term, aligning with existing planning cycle (2021–2025)	1. In alignment with the process for developing the 2021–2025 NSAP, facilitate dialogue to reaffirm and achieve consensus on the role of CSOs as partners in achieving the national vision and mission of a sustainable national HIV/AIDS program, and mechanisms to operationalize their contributions. 2. Develop and objectively assess options for implementing HIV/AIDS services. Identify where it is most strategic, in terms of human and financial resources, for CSOs to be responsible for program areas, including potentially new areas. 3. Develop a detailed implementation plan that supports the immediate and longer-term vision for CSO roles and contributions. Prepare a plan to technically support those roles and to finance them with domestic funds (see also challenge 10 on financial sustainability).
b. Consistent with roles articulated for CSOs in the new NSAP (see part a, above), conduct a current and prospective organizational and technical capacity assessment of CSOs and develop a plan to close identified gaps. Align the current national policy framework for CSOs as needed to operationalize these roles, including a performance monitoring and evaluation framework	• Lead: external partners, with CSOs • Supporting: CHAS • Timing: short and medium term	1. Coordinate multistakeholder meetings to develop and describe quality standards and a monitoring and evaluation framework to guide CSO activities; seek endorsement from the MOH for that plan. 2. Design, plan, and conduct an organizational and technical assessment of CSOs' capabilities, based on defined standards, and mobilize resources to carry out the assessment. 3. Organize and conduct exercises to learn from neighboring countries how their governments engage with CSOs in the HIV/AIDS sphere and consider how some of those approaches might be adopted or adapted for the Lao PDR context. 4. Integrate findings and results into the newly developed vision, policy, and plans for CSO sustainability. 5. Develop a national capacity development plan to raise and maintain CSO organizational and technical competency. Include mechanisms for CSOs to drive their own capacity development through mutual support and cross-development structures.

Mitigating Actions	Lead and Support Agency	Implementation Steps
c. Build institutional capacity in financial management and business development to diversify funding sources for CSOs' service delivery, policy dialogue, and advocacy roles as expressed in the national vision.	• Lead: external partners and CSOs • Supporting: CHAS • Timing: short and medium term	1. Identify existing resource mobilization/business development capacities and gaps among CSOs. 2. Prioritize identified gaps and identify technical inputs to support gap-closing capacity building. 3. Assist civil society entities to develop resource mobilization strategies. 4. Include medium-term coaching as part of capacity building, setting an explicit "graduation" plan and timeline. 5. Create mechanisms for cross-CSO learning and support on business development skills.

Strategic Information

Challenge 4: Limited national capacity to produce timely and quality epidemiological, clinical cascade, and other HIV/AIDS program monitoring and evaluation data limits CHAS's ability to monitor progress toward the 95-95-95 clinical cascade goals and serve planning needs.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Integrate and align routine information systems used by government and nongovernment organizations involved in national HIV/AIDS program implementation into a standardized, uniform system based on the national District Health Information System 2 (DHIS2) platform.	• Lead: CHAS • Supporting: Department of Planning and Cooperation; Maternal, Neonatal, and Child Health Program; TB Program; Department of Healthcare and Rehabilitation • Timing: short term	1. Comprehensively assess existing routine information systems of all national HIV/AIDS program implementing partners in the context of national program information needs. 2. Identify needs for the alignment of each, including the current HIV Cascade Cohort Monitoring System, for interoperability with the national DHIS2 platform. 3. Revise elements, tools, and procedures of each partner's system to align with national program needs and the DHIS2 platform. Conduct national training on the aligned HIV/AIDS information system; support and monitor implementation and execute a continuous improvement plan. 4. Perform routine data quality assessment, including data validation, cross-checking, and triangulation; institutionalize and routinize a data quality assessment system. 5. Map current HIV/AIDS human resource capacity in information management (quantity and competency) at the central and subnational levels against current and future program needs; build out the CHAS strategic information human resource base (see also challenge 8, human resources).
b. In the 2021–2025 NSAP, include content guidelines and clear schedules for regular implementation of HIV/AIDS surveys (e.g., behavioral and epidemiological surveillance).	• Lead: CHAS • Supporting: Department of Planning and Cooperation; Maternal, Neonatal, and Child Health Program; TB Program; Department of Healthcare and Rehabilitation • Timing: short term	1. Identify priority surveys and other periodic data collection needs. 2. Define minimum content guidelines and periodicity of data needs for each. 3. Determine technical and financial resource needs for each. 4. Include strategic information as a dedicated section of the 2021–2025 NSAP.

Mitigating Actions	Lead and Support Agency	Implementation Steps
c. Implement clinical cascade monitoring at all HIV service delivery sites.	• Lead: CHAS • Supporting: Department of Planning and Cooperation; Maternal, Neonatal, and Child Health Program; TB Program; Department of Healthcare and Rehabilitation • Timing: short term	1. Map all HIV service delivery sites, assess the quality and completeness of clinical cascade monitoring at each site, and identify sites where no cascade monitoring is occurring. 2. Provide necessary training to initiate or raise the quality and completeness of monitoring and reporting at appropriate sites. 3. Regularly monitor improvements and performance at each site; provide ongoing support as needed.

Challenge 5: Strengthened analytic capacity is needed to translate routine and periodic program data into evidence to drive the program improvement, planning, and expansion that is necessary to achieve the country's 95-95-95 cascade targets.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Bolster national capacity to use routine and periodic survey data to produce evidence for national and subnational program planners and partners.	• Lead: CHAS • Supporting: technical assistance from external partners • Timing: short and medium term	1. Assess the data analysis capacity of national and subnational government organizations and CSOs; evaluate the extent to which evidence is used in program and service quality improvement decisions. 2. Identify gaps and prepare strategies to close technical and institutional gaps and build skills to instill a culture of data demand and use, including a plan and timeline for transferring external partner support for these functions to domestic entities. 3. Support implementing strategies to embed analytic skills within the CHAS Monitoring and Evaluation Unit (and other government institutions) through hands-on external partner support; transition that support to domestic entities over the course of the transition period.
b. Promote and strengthen a culture of data use to improve policy decision making and program planning. Align CHAS strategic information initiatives with national health sector data use promotion efforts.	• Lead: CHAS • Supporting: TB Program; Department of Planning and Cooperation; Malaria Program • Timing: short and medium term	1. Identify forums and initiatives within the MOH and beyond to promote and strengthen the culture of data demand and use in the health sector. 2. Assign CHAS staff to participate regularly in these forums. 3. Organize monthly or quarterly activities within CHAS with provincial health departments, district health offices, provincial committees for the control of AIDS, and district committees for the control of AIDS to promote increased demand for and use of data and analyses at all program levels. 4. Design and implement strategies, such as identifying community data champions, mentoring, and others, to promote data demand and use. 5. Use data from routine information systems to create dashboards to inform those responsible for HIV/AIDS planning, service delivery monitoring, health facility management, and supportive supervision of health workers.

Health Services and Systems

Challenge 6: HIV education, prevention, and testing programs will need to be targeted to networks and population groups associated with key populations to more efficiently and effectively reach those most at risk and bring new people living with HIV into the clinical cascade.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Strengthen the national strategy and implementation framework for addressing the needs of communities adjacent to key populations for HIV/AIDS education, prevention, and testing services.	• Lead: CHAS • Supporting: National Committee for the Control of AIDS • Timing: short term	1. In the context of developing the new NSAP for 2021–2025, assess and revise the national strategy and plan to provide HIV education, prevention, and testing to communities adjacent to key populations through multisectoral collaboration. 2. Determine the financial, structural, material, and human resource requirements to operationalize the strengthened plan. 3. Reactivate a focal person and unit within CHAS to be accountable for implementation and reporting on progress.
b. Adapt guidelines, tools, materials, and strategies for education, prevention, and promotion of testing, tailored for use in reaching communities adjacent to key populations	• Lead: CHAS • Supporting: TB Program; Maternal, Neonatal, and Child Health Program • Timing: medium term	1. Evaluate existing guidelines, tools, materials, and strategies with respect to appropriateness for use with the general population and other populations of interest. Adapt existing mechanisms, including the use of mass and social media, or create new mechanisms to reach higher-risk populations in communities adjacent to key populations. 2. Identify technical and financial resources to implement strategies. 3. Monitor implementation, effectiveness, and impact; further adapt strategies, materials, and mechanisms based on experience.
c. Strengthen multisectoral (including community) engagement and involvement in providing HIV education, prevention, and testing.	• Lead: CHAS • Supporting: National Committee for the Control of AIDS • Timing: short term	1. Review the human resource base and coordination mechanisms of the National Committee for the Control of AIDS; identify needs to strengthen its coordination function for HIV prevention, education, and testing. 2. Under the auspices of the National Committee for the Control of AIDS, convene a multisectoral forum to develop a multisectoral strategy and a plan for community education and prevention. Replicate this function at key provincial and district committees for the control of AIDS.

Mitigating Actions	Lead and Support Agency	Implementation Steps
d. Take steps to capacitate and involve provincial and district levels of the public health system to play an increasingly active role in taking responsibility for achieving national 95-95-95 cascade goals.		1. Within the recently revised structures for provincial health departments and district health offices, identify positions in infectious disease units responsible for planning and oversight of HIV/AIDS programs and services. 2. Build the capacity of the units and personnel identified in step 1 to assume responsibility for the full range of HIV/AIDS interventions, including outreach and prevention for key populations and higher-risk communities adjacent to key populations. Produce standard operating procedures to guide long-term sustainability for operationalizing these responsibilities and building new capacity during personnel transitions. 3. Recognizing that CSO engagement in service delivery to key populations in any given geographic location likely will be time limited, working with CHAS, expand the role of CSOs in local program implementation to include building the capacity of provincial health departments and district health offices regarding key population needs and effective service delivery approaches.

Challenge 7: The current centralized configuration of treatment services (including laboratory) is not sufficient to meet expected geographic expansion of and volume increases in patient demand as the national program moves toward achieving the second and third 95 clinical cascade targets.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Revise national HIV/AIDS treatment policy to streamline, align, and maximize the existing public health system's structure to support and link patients to care and minimize patients' geographic and financial access burden through network expansion.	• Lead: CHAS • Supporting: Department of Healthcare and Rehabilitation; Maternal, Neonatal, and Child Health Program; TB Program; Department of Communicable Disease Control • Timing: short and medium term	1. Assess distribution of current and expected future geographic need for services based on current and expected testing and treatment HIV/AIDS caseloads. 2. Produce a plan for geographic expansion of health facilities capable of providing HIV/AIDS services based on the geographic needs assessment. 3. Prepare an appropriate expansion strategy, including human resources for health training and support needs (clinical, managerial, and administrative), infrastructure needs, capacity needs, information and reporting system needs, and financing needs. Consider alternative expansion strategies based on different scenarios for resource availability. 4. Review the MOH's "Five Goods, One Satisfaction" quality management and quality improvement framework and recommend additional content specific to the needs of HIV/AIDS services, such as to address stigma and discrimination, especially among staff in the expanded service delivery network. 5. Mainstream responsibility for HIV/AIDS quality management and improvement into the MOH Health Care Department as integral to its overall responsibility to implement the "Five Goods, One Satisfaction" framework. 6. Mobilize technical and financial resources to implement the expansion strategy. 7. Monitor progress and adjust the plan accordingly, taking into account the evolving resource availability environment.
b. Work with the National Center for Laboratory and Epidemiology to establish a coordination mechanism for establishing and supporting new HIV/AIDS analysis capacity for additional laboratories in the public system.	• Lead: CHAS • Supporting: National Center for Laboratory and Epidemiology; provincial health departments; hospital directors • Timing: medium term	1. Identify one to two strategic locations where new laboratory services will have the most impact on improved access to clinical services and determine equipment and supply requirements for the new laboratories, as well as laboratory technician training requirements. Establish a start-up plan. 2. Within the context of the evolving national and local lab oversight and coordination structures, produce a plan for CHAS technical support to HIV/AIDS functions. 3. Mobilize resources for equipment acquisition and technician training.

Mitigating Actions	Lead and Support Agency	Implementation Steps
c. Promote HIV/AIDS patient treatment adherence by creating a system to allow patients to continue their treatment at any health facility within the network through the DHIS2 patient tracker system.	• Lead: CHAS • Supporting: Department of Planning and Cooperation; Department of Healthcare and Rehabilitation; TB Program; Maternal, Neonatal, and Child Health Program • Timing: short term	1. Continue to develop the HIV patient tracker in the DHIS2 and ensure functionality of patient choice is built in from the beginning. 2. Field test functionality as part of the overall HIV patient tracker testing. Revise and finalize the tool for expansion. 3. Define an implementation plan, including resource requirements, and mobilize those resources (domestic and external). 4. Assess the impact and effectiveness of the new system; monitor implementation and collect feedback for continuous improvement.

Challenge 8: Human resources are insufficient to meet clinical, managerial, and administrative needs as the program expands to reach the 95-95-95 clinical cascade goals.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Review and develop an integrated master plan at central and subnational levels to meet HIV/AIDS program human resource needs consistent with expected program expansion.	• Lead: CHAS • Supporting: MOH Department of Health Care and Rehabilitation; MOH Department of Health Personnel and Education; CSOs; external donor partners • Timing: short to long term	1. Assess current and future HIV/AIDS program human resource needs (public, private, and civil society workers; community workers and volunteers; clinicians; laboratory technicians; management and administrative staff; monitoring and evaluation, epidemiology, and other specialists; etc.); map and compare with existing HIV/AIDS human resources and competencies. 2. Produce a long-term plan for the use of HIV/AIDS human resources for health, aligning resources for implementation of that plan with the National Health Personnel Development Strategy (2009–2020) and the emerging human resources information system. 3. Prepare and cost a training and competency development and maintenance plan.
b. Integrate HIV/AIDS modules into all health workers' clinical pre-service training programs—that is, those involving physicians, nurses, and midwives.	• Lead: CHAS • Supporting: MOH Department of Health Personnel and Education; health training institutions • Timing: short to medium term	1. Define HIV/AIDS competencies for each health worker cadre and develop appropriate modules for HIV/AIDS education for incorporation into pre-service training curricula. 2. Map all relevant pre-service clinical training programs and advocate for inclusion of HIV/AIDS modules in curricula. 3. Train pre-service institution educators to be able to teach the HIV/AIDS modules. 4. Monitor quality of pre-service training and competency of trained students against competency standards and adjust accordingly.
c. Create strategies and plans to improve retention of HIV/AIDS-competent health workers to reduce recruiting and retraining needs	• Lead: CHAS • Supporting: MOH Department of Personnel and Education; CSOs; external donor partners • Timing: short to long term	1. Evaluate turnover among HIV/AIDS health workers, including system costs and consequences. 2. Develop and keep updated a database of clinicians trained in HIV/AIDS services and their current assignment locations. Advocate to include fields for in-service training information in the MOH human resources information system. 3. Define a package of retention incentives, including career progression opportunities for those engaged in HIV/AIDS service delivery, and vet the plan with relevant MOH departments. Come to an agreement on allowable strategies. 4. Participate in ongoing policy dialogue about human resources for health in planning forums and working groups within the MOH.

Challenge 9: CHAS and the MOH do not yet completely own key supply chain management functions (i.e., forecasting, procurement, distribution, and commodity management information systems) for meeting HIV/AIDS program targets. Processes currently underway to transfer capacity and ownership of these functions to appropriate CHAS and MOH units need to be maintained and sped up.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Complete the process of transferring HIV/AIDS commodity forecasting methodology, technology, and tools to CHAS and the MOH Procurement Committee. Institutionalize capacity, responsibility, and accountability for annual forecasting.	• Lead: CHAS • Supporting: Global Fund Program Management Unit; Department of Food and Drug/Medical Products Supply Centre; Clinton Health Access Initiative • Timing: short term	1. Continue joint commodity forecasting with CHAS and the Clinton Health Access Initiative, gradually reducing external support of the annual process. 2. Complete installation of commodity forecasting software for the CHAS Administrative Unit; develop standard operating procedures for conducting annual forecasting. 3. Work with the Global Fund to produce a clear phase-out plan for donated HIV/AIDS commodities and phase-in plan for national assumption of responsibility for all commodities. 4. Consistent with the phase-out/in plan (step 3) and with the medium-term expenditure framework for the full national HIV/AIDS program (see challenge 10), prepare multiyear commodity and budget requirement estimates for prevention, testing, and treatment commodities. 5. Build sustainable CHAS capacity to lead annual HIV/AIDS forecasting by establishing a forecasting support team. Include representation from the MOH Department of Food and Drug/Medical Products Supply Centre and conduct cross-unit training. 6. Embed forecasting training capacity for new team members within CHAS.
b. Produce and regularly update the compendium of technical specifications for all HIV/AIDS commodities for preparing procurement tenders and guiding bid evaluations and selections conducted by the MOH Procurement Committee.	• Lead: CHAS • Supporting: Global Fund Program Management Unit; Department of Food and Drug/Medical Products Supply Centre • Timing: short term	1. Produce a comprehensive list of commodities currently used in the national HIV/AIDS/STI program; include commodities expected to be newly introduced within the next two years. 2. Complete a market analysis of potential domestic and international suppliers for program commodities listed in step 1. 3. Obtain technical specifications for commodities currently donated to the country program and other products identified in step 2. For each product, review, revise, and adapt those technical specifications as appropriate. 4. Put in place a process for annual review and updating; assign institutional responsibility within CHAS for this function.

Mitigating Actions	Lead and Support Agency	Implementation Steps
c. Identify and produce a plan to manage challenges inherent in the process of international procurement and capacitate CHAS and the MOH Procurement Committee to manage that plan.	• Lead: CHAS; MOH Logistic and Supply Chain Technical Working Group • Supporting: Global Fund Program Management Unit; Clinton Health Access Initiative • Timing: short and medium term	1. Produce a detailed map of the procurement process for MOH-procured commodities, including forecasting and technical specification inputs, tendering and bid evaluation and selection, and vendor payment and delivery. Identify opportunities to streamline the process. 2. Investigate short- and long-term options for pooled procurement, such as regional pooling with other countries and partnerships with international procurement agents like the Global Fund, to ensure national access to an uninterrupted supply of quality products at the most competitive prices. 3. Provide capacity development to the MOH Procurement Committee regarding HIV/AIDS commodity needs and international procurement sourcing. Produce standard operating procedures for CHAS, the Medical Products Supply Centre, and Global Fund Program Management Unit roles and responsibilities in the transition plan for procurement processes. 4. Advocate with relevant government agencies to identify mechanisms to overcome international procurement challenges (e.g., pre-payment approval for international suppliers).
d. Participate in working groups considering options for adopting a national electronic tracking system for MOH commodities. Advocate for inclusion of all HIV/AIDS commodities in that system and plan the transfer from the donor-supported M-Supply system.	• Lead: CHAS; MOH Logistic and Supply Chain Technical Working Group • Supporting: Department of Food and Drug/Medical Products Supply Centre • Timing: medium term	1. Continue working with the MOH Department of Food and Drug to establish a process for adopting and putting in place an electronic logistics management information system for health sector commodities. 2. Work to ensure all HIV/AIDS commodities are included in that system. 3. Once adopted and installed at health facilities, train logistics management information system managers and health facility managers on using the system for HIV/AIDS commodity tracking and routine reporting.

Financing

Challenge 10: The financing environment for the Lao PDR HIV/AIDS program needs to be integrated and harmonized to reach 95-95-95 clinical cascade targets.

Mitigating Actions	Lead and Support Agency	Implementation Steps
a. Within the context of the NSAP, jointly develop a comprehensive, multiyear HIV/AIDS expenditure framework with all partners, including international partners, CSOs, and the private sector. Produce an implementation mechanism that ensures harmonization and complementarity, avoids duplication, and tracks progress.	• Lead: CHAS • Supporting: CSOs; related Government of Lao PDR and MOH programs; external partners • Timing: short term	1. Complete an HIV/AIDS health accounts analysis (sources, users, and uses of funds). 2. Conduct a fiscal space analysis (include both public [multisectoral], private, and CSO components) to identify potential future sources of funds over 5- and 10-year time horizons. 3. Produce a formal resource mobilization plan to guide efforts to capture projected future fiscal space for financing each segment and institutional partner of the national program. 4. Using the costed NSAP, fiscal space analysis, and resource mobilization plan outputs, produce an HIV/AIDS medium-term expenditure framework that delineates a rationalized plan for sources, users, and uses of funds. 5. Conduct consensus-building dialogue to secure broad commitment to adhering to the HIV/AIDS medium-term expenditure framework. 6. Implement the resource mobilization plan to mobilize funds.
b. Incorporate annual HIV funding reviews into routine health sector financial reporting.	• Lead: CHAS • Supporting: CSOs; related Government of Lao PDR and MOH programs; external partners • Timing: short and medium term	1. Build a tool within the MOH program-level monitoring and evaluation system to track progress of the HIV/AIDS medium-term expenditure framework. 2. Generate tools for each partner included in the medium-term expenditure framework for them to track progress toward targets and goals for HIV/AIDS. 3. Establish regular feedback mechanisms (e.g., quarterly and annual) to report financial progress to all partners included in the medium-term expenditure framework for HIV/AIDS.

4. Summary and Next Steps

In the three decades since Lao PDR formally established mechanisms in response to the public health threat posed by HIV, it has built a strong program. The fact that it remains a low-prevalence country is a testament to that program's effectiveness to date. These achievements must be maintained and further progress achieved to succeed in the national commitment to reach the 95-95-95 clinical cascade targets by 2025—the timeline to which the country has committed—and reach the ultimate goal of eliminating HIV/AIDS as a public health burden. This transition roadmap provides details of the mitigating actions and implementation steps of a set of 10 priority challenges that must be overcome if the program is to reach full national self-reliance—a goal set to be achieved by 2030.

As the national program nears the end point for implementation of its second NSAP in 2020, there are several opportunities for using the transition roadmap.[2] First and most immediately, the roadmap will be useful in the context of the country's first joint HIV/AIDS-TB program review, planned for October 2019. The national TB program is facing similar transition challenges, and many of the strategies and approaches suggested in this report are likely to be relevant to those challenges. Moreover, there are likely to be synergies between the two programs in strategies to promote transition readiness. Where those overlaps and synergies exist, it would be wise to develop a set of mutually reinforcing action steps to which both programs can contribute. For instance, both programs will require increased public budget support from the Government of Lao PDR to replace donor resources as they phase down. Both programs will also likely find a common cause in promoting eventual inclusion of their respective clinical services into the national health insurance benefits package as it evolves. Both programs will also benefit from economic analyses and investment cases to serve as an evidence base for public budget and national health insurance advocacy.

Second, the country will soon launch a major initiative to develop its third five-year NSAP, covering the period from 2021 to 2025. This period is precisely the one during which the country has committed to reaching the 95-95-95 clinical cascade goals. It is also the period during which transition away from donor reliance will need to gain momentum. CHAS will lead national dialogue for developing this new NSAP and, with a greater purpose in mind, it intends to include a longer-term vision for the program that will cover a further five-year period to 2030, which encompasses the period covered by this transition report and the recent transition national cost analysis. The challenges, strategies, and implementation steps included in this report should be further elaborated in that new NSAP. Additionally, annual implementation plans should operationalize contents of the 2021–2025 NSAP; those responsible for producing operational plans will find the "implementation steps" in this roadmap useful.

Planning for the Global Fund's 2021–23 funding round for Lao PDR's HIV/AIDS program is another opportunity to make use of this document. This new round of support will require the national program to demonstrate its plans and commitment to accelerate transition planning and domestic resource allocation. The Government of Lao PDR, working together with the Global Fund, will find value in the approaches articulated here toward meeting those planning requirements.

[2] Additional details on transition readiness of Lao PDR's national HIV/AIDS response can be found in a companion report, *Transition Readiness Assessment for the Lao PDR National HIV Response* (Sine et al., 2019).

Finally, this document lays out some of the opportunities for linking HIV/AIDS program transition actions to ongoing health sector development and reforms, including reforms related to human resource planning and development, information systems, and health financing. The country will soon embark on processes to develop two new important health sector policy documents that will guide strategic priorities and resource allocation for the next five years—years also critically important for the HIV/AIDS program's transition and sustainability. As mentioned above, the current National Health Sector Development Plan expires in 2020; it will be replaced with a new five-year plan covering 2021 to 2025. Development of a Phase III National Health Sector Reform Strategy, also covering the 2021–2025 period, will soon be launched. CHAS and other partners and stakeholders can and should use the contents of this transition roadmap as inputs for development of these national health sector policy documents to ensure that the needs of the national HIV/AIDS program are reflected and incorporated.

References

Lao PDR Center for HIV/AIDS and STI (CHAS). 2016. *National HIV Monitoring and Evaluation Strategy and Action Plan, 2016–2020*.

Lao PDR Ministry of Health (MOH). 2017. *National Health Insurance Strategy 2017–2020*.

Lao PDR Ministry of Health (MOH), Japan International Cooperation Agency, and World Health Organization. 2013. *Health Sector Reform Strategy and Framework 2013–2025*.

Sine, J., L. Morris, K. Chiang, and R. Kaufman. 2019. *Transition Readiness Assessment for the Lao PDR National HIV Response*. Washington, DC: Palladium, Health Policy Plus.

UNAIDS. 2018. "Country Factsheets." Lao People's Democratic Republic. Available at: https://www.unaids.org/en/regionscountries/countries/laopeoplesdemocraticrepublic.

UNAIDS. 2019. *Country Report, Gap Assessment and Ways Forward: The HIV Epidemic in Laos PDR and Field Assessment*.

U.S. President's Emergency Plan for AIDS Relief (PEPFAR). *2015 Sustainability Index and Dashboard Summary: Lao People's Democratic Republic.*

U.S. President's Emergency Plan for AIDS Relief (PEPFAR). *2017 Sustainability Index and Dashboard Summary: Lao People's Democratic Republic.*

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