Indonesia HIV and Human Resources for Health (HRH) Assessment:

Optimizing health workforce availability, quality, and performance to scale and sustain access to client-centered HIV care

Contents

ABBREVIATIONS

ARV	Antiretrovirals	MOH	Ministry of Health
ART	Antiretroviral Therapy	MMD	Multi-Month Dispensing
CFO	Client Flow Observations	ODK	Open Data Kit
CSO	Civil Society Organizations	PEPFAR	(United States) President's Emergency Plan for AIDS Relief
DHO	District Health Office	PHO	Provincial Health Office
DSD	Differentiated Service Delivery	PLHIV	People Living with HIV
FTE	Full Time Equivalent	PMTCT	Prevention of Mother-to-Child Transmission
HCW	Health Care Worker	RTA	Rapid Task Analysis
HIV	Human Immunodeficiency Virus	RR	Recording and Reporting
HOT4ART	HRH Optimization Tool for ART	SOP	Standard Operating Procedure
HRH	Human Resources for Health	SUFA	Strategic Use of Anti-Retrovirals
HRH2030	Human Resources for Health in 2030 Program	USAID	United States Agency for International Development
LTFU	Loss to Follow-Up	WHO	World Health Organization

ACKNOWLEDGEMENTS

DISCLAIMER

Executive Summary

Data-driven human resources for health (HRH) decision-making can help more effectively train, manage, and support Indonesia's HIV health workforce to achieve targets. The USAID- and PEPFAR-supported Human Resources for Health in 2030 program (HRH2030) has been supporting progress towards Indonesia's 95-95-95 targets by conducting policy and site-level assessments to identify HRH barriers to HIV service delivery; building the capacity of stakeholders to use HIV-HRH data for decision-making; supporting stakeholders to be able to replicate and act upon HIV-HRH assessment results; and analyzing results to identify common themes and make recommendations to achieve national targets.

HRH2030 implemented several adaptable, ready-to-use tools to assess the HIV health workforce in Indonesia: The HRH Optimization Tool for ART Service Delivery (HOT4ART), to address staffing gaps and inefficiencies; Rapid Task Analysis (RTA), to analyze health worker confidence and knowledge to perform tasks; and Client Flow Observations (CFO), to analyze the efficiency of care from the client's perspective.

Based on site-level and policy-level assessments in Jakarta and Papua, HRH2030 presents the following recommendations to optimize the health workforce for ART service delivery. Recommendations are intended to identify areas where the health workforce can be supported to scale up test and treat, implement national guidance to accelerate ART service delivery, increase the number of PLHIV on ART, and reduce loss to follow-up. While each of the recommendations alone could support HIV service delivery, combining these recommendations and using data to track progress would be most effective to achieve the 95-95-95 targets.

Recommendation 1: Institutionalize multi-month dispensing to improve efficiency of limited health workforce and provide client-centered care. Three (3)-month dispensing reduces client time and opportunity costs and requires fewer health workers to provide services for the same number of clients.

Recommendation 2: Support task-sharing to alleviate workforce inefficiencies. When resources are not available to hire additional health workers, task-sharing could balance health worker workload and ensure that health care workers are performing at their best to provide client-centered care.

Recommendation 3: Support more diverse health worker types to master adherence counseling to reduce loss to follow-up. Several health worker types reported limited confidence to provide adherence counseling; improving this could support treatment retention.

Recommendation 4: Explore other differentiated service delivery models to optimize facility organization. Options like appointment spacing provide better care for clients and alleviate client load.

Recommendation 5: Explore how community-based workers could support client retention. Community-based workers could fill critical gaps in adherence counseling and alleviate burden on high-skilled workers.

Recommendation 6: Build the capacity of facility, district, and province-level stakeholders to utilize HRH data for planning and to improve the quality of HIV care. In the face of varied and unique challenges, supporting decentralized stakeholders to obtain, analyze, and use HIV-HRH data can improve the quality of HIV care.

Recent HIV policies in Indonesia are strategic to scale up ART service delivery, but more needs to be done to ensure that the growing number of PLHIV are sustained on an ART regimen for life. By scaling up differentiated service delivery, considering the possibility of engaging community health workers, and supporting data use across the health system, Indonesia can continue to optimize the health workforce to provide ART services. Optimization would alleviate the burden on health care workers, provide higher quality care that addresses the needs and expectations of clients, and contribute to achievement of the 95-95-95 goals.

Background

Indonesia's Ministry of Health has rolled out strategic policies to advance HIV/ AIDS epidemic control. Data-driven HRH decision-making can help more effectively train, manage, and support Indonesia's HIV health workforce to achieve targets.

In June 2019, the Government of Indonesia estimated that only 54% of an estimated 640,443 people living with HIV (PLHIV) were aware of their status, and 18% were receiving antiretrovirals (ARV). Recent policies, including the 2014 Strategic Use of Anti-Retrovirals (SUFA) policy, the 2018 Test and Treat policy, and July 2019 guidance on accelerating antiretroviral therapy (ART) seek to connect more PLHIV to client-centered services, increase ART adherence, reduce loss to follow up (LTFU), and achieve viral load suppression for higher numbers of PLHIV. These goals align with national priorities to improve health outcomes and scale up Universal Health Coverage.

To implement these policies effectively will require an adequate quantity, quality, and skill mix of health care workers (HCW). Further, HIV and HRH challenges differ across the country (see column at right): an urban, high-volume site that serves key populations in Jakarta may face very different HIV-HRH challenges than a remote site in Papua, where workforce shortages affect service availability in a low-level generalized epidemic. Ensuring that strategies are contextually sensitive will be important to efficient scale-up as the Indonesia HIV response is primarily (57%) financed by domestic resources. Given this context, Indonesia can advance on the journey to self-reliance if evidence is used to more effectively diversify and sustain the Indonesia health workforce. It is important to build the HIV-HRH evidence base and equip stakeholders with practical tools and actionable recommendations to make informed HRH decisions at all levels of HIV service delivery. Dynamic evidence-based HRH planning can support HIV policy implementation and help achieve the 95-95-95 targets.

Indonesia faces a diverse HIV epidemic, with HIV and HRH challenges that vary across the 17,000-island archipelago. HRH2030 focused on two geographic areas with unique HIV challenges:

The Special Capital Region of Jakarta
- Sprawling urban city of 10 million people
- 109,676 PLHIV (18% of total country estimate)
- Focus on key populations: 25.8% HIV prevalence among men who have sex with men
- 34.8 doctors per 100,000 population (vs. a national average of 10.7 doctors per 100,000)

The Province of Papua
- 60% of the Papua and West Papua population live in rural areas
- 47,856 PLHIV (7% of total country estimate)
- 2.3% prevalence rate; one of two provinces with a low-level generalized epidemic
- Facilities are often short staffed or experiencing high absenteeism; 16.55 doctors per 100,000 population, but a 2017 study found that 45% of the 372 Papua health centers did not have a doctor
Epidemiology statistics provided by LINKAGES

Objectives

The USAID- and PEPFAR-supported HRH2030 program supported effective HIV policy implementation and progress towards the 95-95-95 targets by…

Conducting policy and site-level assessments to identify site-level HRH barriers to HIV service delivery and policy implementation in Papua and Jakarta

Building capacity of stakeholders to use HIV-HRH data for decision-making

Supporting stakeholders to have adequate information and skills to replicate and act upon HIV-HRH assessment results

Analyzing results across methodologies to identify common themes and recommendations to achieve national ART targets.

This report synthesizes the high-level findings, common themes, opportunities, and recommendations for HIV-HRH planning and policies to improve HIV outcomes. It draws from findings from the unique service delivery contexts of Papua and Jakarta, including assessment results, observations from stakeholder consultations and workshops, and reflections on findings from the HIV-HRH policy and site-level assessment conducted in 2018.

Methods and Tools

HRH2030 and Jakarta-based data firm SOLIDARITAS supported sites in Jakarta and Papua to implement adaptable, practical tools to optimize ART service delivery and make dynamic HIV-HRH decisions.

These tools can be adopted and utilized by stakeholders to respond to HIV workforce gaps and prepare for innovative changes to HIV service delivery. For more details on assessment results and resources like data collection questionnaires and guidance, please see the list of tools and resources at the end of this document.

Key Questions:	What are the staffing gaps and/or imbalances that impact ART service delivery? How do we address them through optimizing task allocation or differentiated service delivery (DSD)?	Are health workers confident in performing their tasks? What competencies need improvement so that health workers can provide high-quality services?	What is a client's experience when they come to this facility? Where do they go, and how long does it take? Do they experience obstacles in receiving care?
Tool:	**HRH Optimization Tool for ART (HOT4ART)**	**Rapid Task Analysis (RTA)**	**Client Flow Observations (CFO)**
What does the tool do?	This Excel-based modeling tool quantifies health worker shortages or inefficiencies at the site or above-site level. It enables managers or program planners to address shortages and estimate the effects of differentiated service delivery models and/or task-sharing approaches on health worker skill mix to optimize ART.	Administering the RTA to each health worker type within the HIV core team allows quick identification of core tasks or types of health worker that may need support to address competency gaps. Includes self-assessment questions related to knowledge, confidence to perform tasks, and training.	Trained teams observe and document the workflow of the facility from a client's point of view. Results provide information on the length of an ART refill visit, the proportion of time spent in waiting rooms, and the duration of each step in their visit to the facility so that client experience can be improved.
Where did we use it?	1 private clinic in Jakarta and 3 *Puskesmas* (sub-district community health centers) in Papua	10 facilities in Jakarta: 8 *Puskesmas*, 1 *Puskesmas Kelurahan* (sub-sub-district health center), and 1 private clinic	10 facilities in Jakarta: 8 *Puskesmas*, 1 *Puskesmas Kelurahan*, and 1 private clinic
How did we use it?	Data were collected and analyzed in Microsoft Excel in partnership with facilities, District Health Offices (DHOs), and Provincial Health Offices (PHOs) in 2019. Data collection and review took approximately 1 day in each facility.	In 2018, the RTA was completed by 68 HCWs in the 10 facilities using an Android-based application, Open Data Kit (ODK). In 2019, two "champion facilities" were successfully supported to implement the tool on their own among 17 HCWs.	In 2018, community counselors (*kaders*) conducted 18 CFOs in the 10 facilities using ODK. In 2019, two "champion facilities" were successfully supported to implement the tool on their own and conducted 27 observations in 5 days.
What else could this tool be useful for?	▪ **MOH:** Estimate the effects of rolling out multi-month dispensing (MMD) and other DSD models on the health workforce ▪ **PHO and DHO:** Determine the quantity of health workers necessary to implement different models of care ▪ **Facility:** Plan site-level task-sharing and model approaches and advocate for additional staff or strategic DSD models based on quantitative evidence	▪ **MOH:** Analyze results to inform task sharing and task allocation recommendations ▪ **PHO and DHO:** Equip management staff to ensure the readiness of their teams ▪ **Facility:** Target areas in need of training or supportive supervision and incorporate findings in annual planning and budgeting	▪ **MOH:** Use results to measure impact of national DSD guidance on facility efficiency ▪ **PHO and DHO:** Analyze district or province level trends in client flow ▪ **Facility:** Identify facility-specific obstacles to efficient client flow and use data to set and monitor client flow targets (e.g., proportion of time spent in waiting rooms). Could easily incorporate a quick client satisfaction survey.

To promote stakeholder understanding, contribute to the journey to self-reliance, and promote the sustainability of HIV-HRH assessment tools, HRH2030 and SOLIDARITAS consulted with key stakeholders (including health workers, DHOs, and PHOs) in Jakarta and Papua to tailor tools to the Indonesia context before implementation. Results of all tools were discussed and interpreted directly with stakeholders during workshops and focus group discussions.

*Additional data collection was originally intended in Papua, including implementation of all three tools in 6 Puskesmas in highland areas of Papua. Unfortunately, due to unrest in highland areas during activity implementation that hindered travel of the data firm and availability of Puskesmas to participate, activities were revised to focus on HOT4ART as a key area of interest among stakeholders.

Results and Recommendations

HRH2030 presents the following recommendations regarding MMD, DSD, community-based workers, and data for decision-making to optimize HRH for HIV services, support HIV policy implementation, and achieve the 95-95-95 targets.

These recommendations are based on the cumulative evidence and results from the HRH2030 assessment activities: the 2018 HIV-HRH policy and site-level assessment and 2019 activities to build the capacity of facilities to assess and address HIV workforce challenges. For more detailed information on a specific tool or method, please see the "Results Spotlight" sections that provide information on the inputs, outputs, and summary findings from each of the three key tools utilized during the HIV-HRH assessments. Recommendations are intended to identify areas where the health workforce can be supported to scale up test and treat, implement national guidance to accelerate ART service delivery, increase the number of PLHIV on ART, and reduce LTFU.

Recommendation 1. Institutionalize MMD to improve efficiency of limited health workforce and provide client-centered care

The ART Acceleration Letter released by the Ministry of Health (MOH) Directorate General of Disease Prevention and Control in July 2019 established new Test and Treat policy guidance that includes the provision of antiretroviral drugs for more than one month to a maximum of three months to PLHIV currently in stable ARV therapy, as long as they meet certain criteria. This guidance to implement multi-month dispensing aligns with global guidance that less frequent medication pickups of 3 – 6 months are recommended for stable clients. Multi-month dispensing reduces clinic crowding, alleviates workload for health workers, shortens wait times, reduces time and transportation costs for clients, increases patient satisfaction and medication adherence, and enables providers to deliver a higher quality of care and spend more time per patient.

FIGURE 1. STAFF REQUIREMENTS FOR MMD

3 month dispensing reduces client time and opportunity costs and requires fewer health workers to provide services for the same number of clients.

HOT4ART results from Papua and Jakarta suggest that fully implementing the Ministry of Health's guidance for 3-month MMD could use existing facility staff more efficiently to provide ART services to more clients in a more acceptable way. In the two facilities that identified health workforce shortages using the tool, we found that implementing 3-month MMD required 20-40% fewer full time equivalents (FTEs) than providing standard care for all clients (see Figure 1), even before other forms of task-sharing or DSD models. In turn, MMD can enable facilities to better achieve ART treatment targets that they would not otherwise be able to reach without additional staff. As a result of these findings, both facilities are currently exploring how to scale up MMD among their stable clients. Extending the guidance to allow 6-month MMD would further align the national strategy with global best practices, achieve greater health worker efficiency gains, and promote client-centered care.

However, we also found anecdotal evidence in both Papua and Jakarta that there is still some reluctance and capacity gaps that hinder MMD implementation. For example, although some sites in Papua report implementing MMD, it is considered an exception to the rule and facilities have additional client criteria for MMD enrollment that do not reflect the MOH criteria. For another example, stakeholders reported that most facilities that implement MMD do it on a case-by-case basis for clients that live far away from the facility, and that clients nearby the facility are considered ineligible for MMD. Such additional criteria do not provide any health benefit and could hinder nation-wide scale-up of MMD; the use of MMD can help improve retention for all clients, not just those who must travel long distances to get their ART.

To ensure that MMD guidance is implemented to its full potential, the International AIDS Society recommends that health workers must be engaged from the beginning of implementation of DSD models (including MMD) so that they understand why the change is
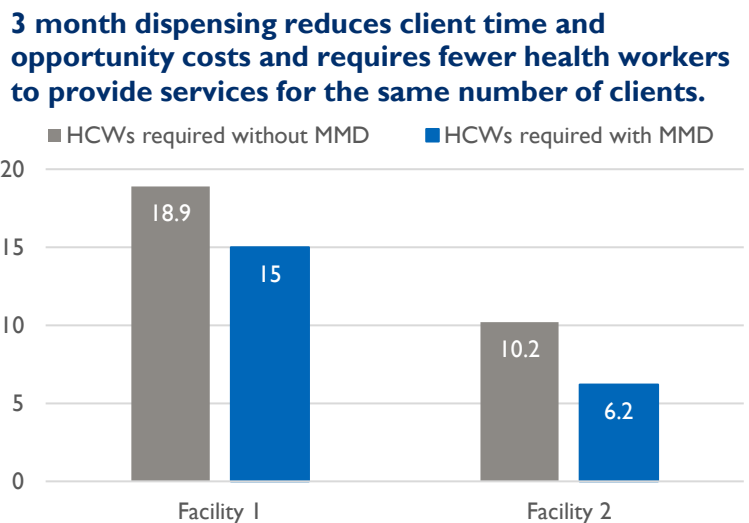
being made, understand the benefit for clients, and can implement national guidance consistently. In line with this guidance, it may be necessary to provide more skill building and support for health workers to implement MMD or for facility managers to lead DSD models in their facilities, including how MMD may change client flow, record keeping, or health worker tasks. MMD should also be reflected in in-service training curricula to reinforce national MMD guidance. Standards of care, guidance, and quality assurance systems should specifically include considerations for MMD to ensure that facilities have the knowledge and systems to scale up this model.

Recommendation 2. Support task-sharing to alleviate workforce inefficiencies

In situations where resources are not available to hire additional health workers (which we found was frequently the case at the local government level during the 2018 assessment), task-sharing could be an important method to balance HCW workload.

For example, during HOT4ART implementation, one of the health facilities that identified potential health workforce shortages was not able to solve those potential shortages through MMD alone. Specifically, the HOT4ART results for this facility identified a shortage of data recording and reporting (RR) staff and potential shortages of doctors, pharmacists, and lab technicians, but showed that the facility was not fully utilizing the available nurses and administrative staff. While MMD addressed the potential shortage of doctors, pharmacists, and lab technicians, it *did not* fully address the shortage of RR staff. Such a shortage could contribute to incomplete/inefficient record keeping (which could hinder MMD implementation), and could also mean that RR staff do not have time to implement measures like follow-up calls with clients that could be useful to promote treatment retention and avoid loss to follow up. Implementing additional task-sharing of the RR workload, especially with the under-utilized administrative staff, along with MMD was sufficient to address all potential health worker shortages. While this is a facility-specific example, other HRH2030 models have shown that rolling out MMD in combination with appointment-spacing, community-based DSD, and task-sharing could reduce HRH requirements by two thirds for greater treatment adherence and client retention.

Sharing physician tasks with nurses could be a particularly important strategy to optimize use of the existing health workforce. Current task-sharing guidelines allow for task-sharing from doctors to nurses only in situations where there is a shortage or absence of physicians. In line with this policy, the reports of task-sharing gathered during stakeholder consultations were limited to contexts like highland areas of Papua, where health workforce shortages and absenteeism have resulted in nurses taking on physician tasks when there is no physician present. However, several Jakarta facilities reported high stress and workload on physicians or that the limited number of doctors can be a client flow bottleneck that contributes to long wait times; task sharing with nurses could alleviate that pressure and provide a more streamlined experience for clients. The recent guidelines on MMD provide criteria for stable clients that could be useful for task-sharing, by identifying a subset of clients that could potentially be shared from doctors to nurses in order to alleviate doctor workload. A next step could be to clarify the scope of nurses in HIV standards of care so that they are able and legally protected to relieve some client burden from physicians.

RESULTS SPOTLIGHT: HOT4ART

Tool Inputs:

- Target number of ART clients
- Number of service providers
- Estimated time spent by staff on ART
- Types of DSD models available according to national guidelines

Tool Outputs:

- Human resource needs for current services
- Task-sharing options to decrease gaps and optimize personnel
- Calculation of service provider needs for different DSD models

Findings and Next Steps:

In **Jakarta**, HOT4ART was implemented in one high volume private clinic, where it found a shortage of recording and reporting (RR) staff, a potential shortage of doctors, pharmacists, and lab technicians, and inefficient utilization of nurses and admin staff. The facility determined that a combination of 3-month MMD with task-sharing of RR tasks solved these issues.

In **Jayapura in Papua**, the tool was implemented in two *Puskesmas* and found that there were enough health workers to meet client volume targets. If the client targets increase or any nurses retire (which are both anticipated next year), the facilities may experience shortages of nurses. The facilities considered task sharing to alleviate the burden on nurses, including sharing adherence counselling with other providers, and eliminating "extra" tasks currently performed by nurses. For example, facilities could encourage clients to pick up their own ARV from the pharmacy, and one facility will explore conducting its own viral load testing instead of nurses assisting clients to visit the hospital for viral load testing.

In **Jayawijaya in Papua**, the tool was implemented in one *Puskesmas* and found risks of shortages of pharmacists, nurses, and laboratory analysts. The facility explored two options that would help alleviate shortages: offering 3-month MMD to more qualifying clients, and implementing appointment spacing, where clinical assessment, adherence counselling, and health education are separated from the process of ARV refills, and clients can alternate full visits with streamlined ARV refill visits.

Task-sharing could also be implemented among and between other health worker types as well to ensure that clinical, high-skilled staff like doctors and nurses are used in an efficient way. In one Papua facility, we found that nurses were spending large segments of time performing tasks that were intended to alleviate stigma experienced by clients; for example, a nurse might spend the entire day going to the hospital and waiting in line in place of their client so that the client would not have to publicly stand in line for HIV services. Such tasks, if necessary, do not require technical skills and could be fulfilled by a lay worker, peer, or other non-clinical staff so that doctors and nurses can focus on non-adherent clients or other PLHIV in most need of clinical support.

Recommendation 3. **Support more diverse health worker types to master adherence counseling to reduce LTFU**

2019 Q3 data shows that 26% of clients who have ever been initiated on ART in Jakarta have been lost to follow-up or stopped treatment. Other health worker types could also be supported to take on a larger role in adherence counseling in order to promote retention. However, our assessment found that adherence counseling was typically assigned to just one type of health worker in each facility, which could be a missed opportunity to provide consistent and holistic adherence support.

1 out of **4**

people living with HIV initiated on ART in Jakarta have been lost to follow up or stopped treatment.
MOH SIHA, June 2019
Data provided by LINKAGES

Further, rapid task analysis results from 2018 demonstrate limited confidence to perform adherence counseling across different types of health worker (see Figure 2). Additional analysis conducted by "champion" facilities in 2019 found that midwives currently report feeling siloed from HIV services. Midwives reported that their HIV tasks include prevention of mother-to-child transmission (PMTCT) and providing referrals for pregnant women with positive test results to the HIV services team, but they generally did not recognize any other HIV tasks as part of their job (including ART counseling or education tasks). Further, community counselors/ *kaders* are not consistently recognized as part of the core HIV team by facility managers or HIV teams and are therefore infrequently supported or trained to perform tasks such as adherence counseling.

In addition, approximately 1 out of 5 doctors and 1 out of 3 nurses (23% and 34%, respectively) feel they need support or more practice to perform adherence counseling. In the context of high LTFU rates, these findings indicate a need for support across health worker types to ensure that health workers are prepared and confident to provide adherence counseling. Facilities noted that in addition to clarifying job descriptions (both in terms of in-facility management and in conversation with the Provincial Health Office), interprofessional mentorship and coaching to address capacity gaps should be identified through the RTA to incorporate in annual *Puskesmas* planning and budgeting for negotiation with the DHO and PHO. Greater flexibility of health worker types to implement adherence counseling would, in turn, allow more flexibility to implement task sharing to address high workloads, alleviate the burden on highly skilled HCWs, and promote ART retention.

FIGURE 2. CONFIDENCE OF HCWS TO PERFORM ADHERENCE COUNSELING ACCORDING TO RTA DATA

Several health care worker types report limited or no confidence to provide adherence counseling

Improving the confidence of additional health care workers to provide adherence counseling could support treatment retention.
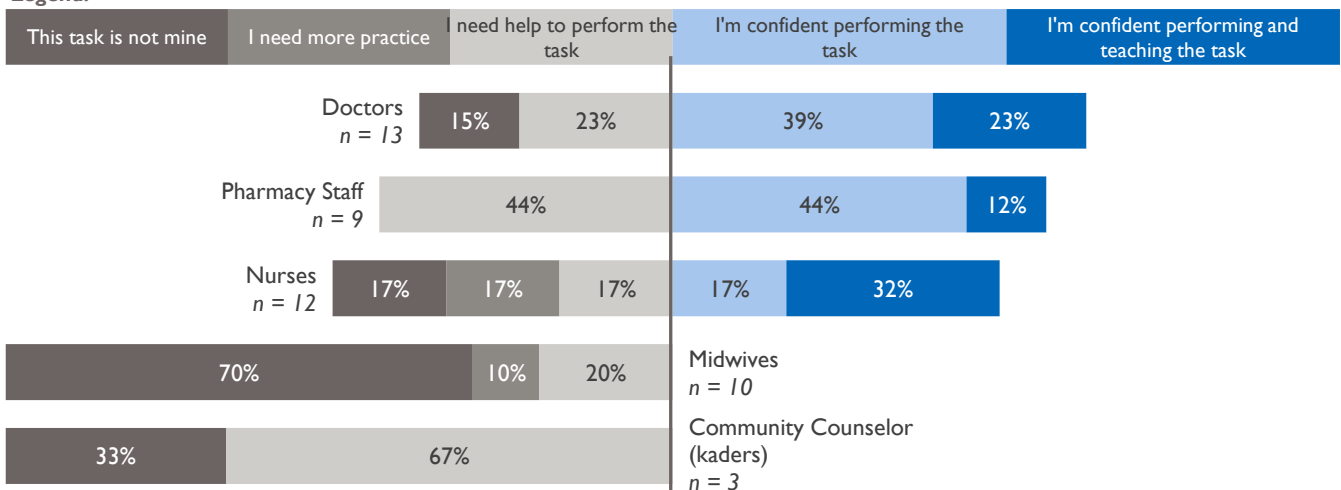
RESULTS SPOTLIGHT:
RAPID TASK ANALYSIS

Tool Inputs:

- Health providers' self-assessment of their training, knowledge, and confidence to perform ART tasks.

Tool Outputs:

- Information on which ART tasks, or types of service providers, may require training, supervision, or support.

Findings:

In 2018, rapid task analysis was conducted in 10 Jakarta facilities:

- Health workers reported having advanced or sufficient knowledge for 76.5% of their HIV service delivery tasks.
- Health workers expressed confidence in their ability to perform 69.6% of their tasks.
- However, providers frequently responded that they did not perform tasks that they were expected to, based on standard operating procedures (SOP). Providers responded "this task is not mine" to 32.5% of tasks, on average. When all tasks are included in the analysis, knowledge fell to 48.4% and confidence fell to 43.18%.

In 2019, rapid task analysis was conducted by two champion facilities who explored this in more detail:

- For example, recording and reporting officers are expected to communicate with clients related to lost to follow up, but do not recognize that task as their responsibility. Similarly, midwives felt that their only HIV tasks were providing PMTCT and referring clients.

Next steps:

- These findings show general confidence to perform tasks but indicate a potential misalignment of job descriptions with day-to-day work.
- Facility management can use this data to target mentoring and coaching and ensure that service providers understand their responsibilities.

Recommendation 4. **Explore other DSD models to optimize facility organization**

In addition to MMD and task-sharing, additional DSD models may be necessary to scale and sustain access to ART services and respond to contextually specific needs.

In Jakarta, pressure is building on health care workers in high client volume facilities to scale and sustain care for a growing number of clients on ART. High-skilled providers are feeling burdened by the number of patients, facility managers express reservations about the ability to meet growing targets, and lab staff report pressure to process a high amount of viral load and/or CD4 tests. The burden on health workers also impacts clients, who may need to wait for a long time to receive care; the client flow analysis in 2018 found that clients spent an average of 53% of their facility visits in waiting rooms. This may also limit the amount of time providers are able to spend with each patient, impacting the quality of care and affecting ART retention.

One option to alleviate the pressures on health care workers and provide a more streamlined option for clients is appointment spacing. In this model (according to the International AIDS Society): "ART refill visits have been separated from clinical consultations. When clients have an ART refill visit, they bypass any clinical staff or adherence support and proceed directly to receive their medication." For example, in the context of 3-month MMD, a client with undetectable viral load who meets the criteria for stable ARV treatment could come for their ART refill every 3 months, but only participate in a full consultation visit every 6 months. In high volume facilities with a large population of stable clients, appointment spacing provides an opportunity to streamline care for stable patients who desire a more efficient ART experience, while allowing providers to focus their consultation and adherence counseling efforts on non-stable clients who are most in need of additional support. Further, recent World Health Organization (WHO) and PEPFAR guidance recommends up to 6-month MMD, which could provide even more flexibility for long-term stable clients.

Recommendation 5. **Explore how community-based workers could support client retention**

In Papua, health workers express anxiety that many of their clients live nomadic lifestyles or live in remote areas, which they feel contributes to high loss to follow up. The geography of the highland areas makes it incredibly difficult for clients to travel regularly to health facilities. Further, language barriers prevent health workers from being able to communicate effectively with some clients from remote areas.

In this context, further analysis is needed to determine whether community-based workers could be a strategic, cost-effective investment to improve ART adherence. According to the WHO community health worker guidelines, there has been growing global attention on the potential of community-based workers to reduce inequities in access to essential health services; alleviate burden on high-skilled health workers through the adoption of a diverse, sustainable skills mix of health workers; provide an effective and cost-effective approach to delivering health services; and create employment opportunities and contribute to economic development. Experiences in Uganda and other sub-Saharan African countries demonstrate that community-based ART distribution systems, where lay providers or even client-peers distribute pre-packed ART at community points closer to clients' homes, is effective in terms of long-term retention and viral load suppression. Community-based workers could also fill critical gaps in adherence counseling.

WHO guidelines also recommend that community-based workers receive predictable financial and non-financial incentives and be embedded in health systems in order to reach their full potential. Community-based workers like *kaders* have historically been supported by civil society organizations or other non-governmental organizations and have therefore been dependent on external resources to maintain the community-based health workforce.
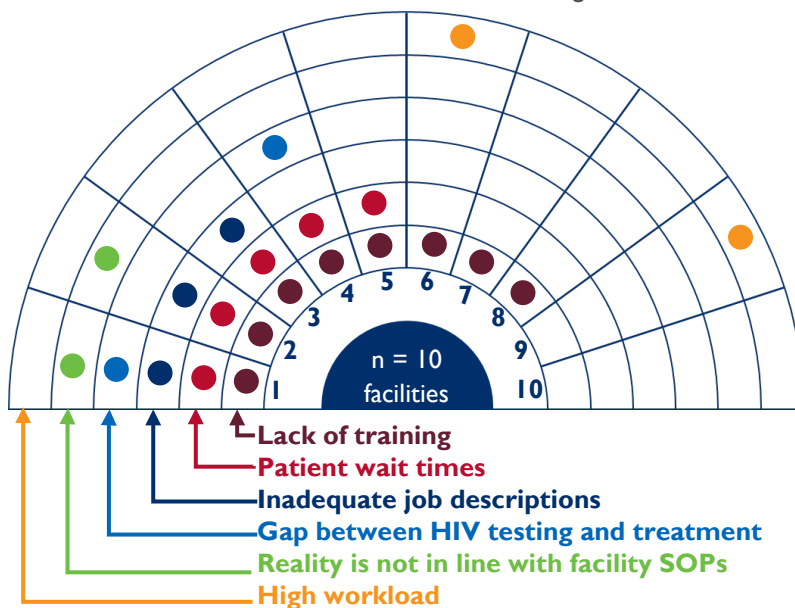
However, there are potential options to support community-based workers at a local level. Shifting appropriate tasks from higher-skilled positions to community-based workers, or offering longer MMD options while using peer groups or PLHIV lay workers to provide adherence counseling and social support, could boost productivity of high-skilled HCWs so that they can practice at the top of their license. The time and productivity savings could result in cost savings that could be utilized to support strategic investments in the community health workforce. With training on how to provide ART refills, adherence support, and follow-up, even PLHIV clients with no professional health background could be supported to provide community ART distribution. These community-based workers or lay workers could also provide health promotion and prevention activities and support client-centered care that meets clients where they are at with what they need. Tools like HOT4ART could be utilized to ensure that a skilled health worker has sufficient time available to support or supervise community health workers to ensure quality of care.

Recommendation 6. Build capacity of facility, district, and province-level stakeholders to utilize HRH data for planning and to improve the quality of HIV care

Utilizing results from the 2018 site-level assessment, workshops were conducted with each of the 10 Jakarta facilities to review the results. Facilities used data to identify HIV-HRH challenges, which were sorted into 6 themes as demonstrated in Figure 3.

FIGURE 3. MAPPING OF HIV-HRH ISSUES IDENTIFIED IN JAKARTA WORKSHOPS

In data dissemination workshops, the 10 facilities identified a range of different barriers to efficient HIV service delivery.

The range in number and type of barriers identified indicates a need for decentralized stakeholders to have skills to use data for HIV-HRH management.

Lack of training
Patient wait times
Inadequate job descriptions
Gap between HIV testing and treatment
Reality is not in line with facility SOPs
High workload

RESULTS SPOTLIGHT: CLIENT FLOW OBSERVATIONS

Tool Inputs:

- Observations of how clients who come to the facility for ART services move through the system

Tool Outputs:

- Information on wait times and potential bottlenecks in client flow
- Data on the duration of ART refill services from the client perspective

Findings:

In 2018, client flow observations were conducted in 10 Jakarta facilities:

- Across the facilities, the average time a client spent at the facility for an ART refill visit was 47 minutes, with a range from 15 to 92 minutes.
- On average, clients spent 53% of their visit in waiting rooms, especially the exam/consultation waiting room and the pharmacy waiting room.

In 2019, client flow observations were conducted by two champion facilities:

- Clients at these facilities spent approximately 30 minutes at the facility for an ART refill visit.
- Clients still spend about half of their visit in waiting rooms.
- The facilities also analyzed a client flow in the morning and afternoon. They found that even though there were more ART refill clients during morning service hours, there was no significant difference in the duration or waiting time in the morning vs. the afternoon.

Next steps:

- Three of the 10 facilities are testing separate registration or queuing systems to address waiting times.
- The "champion" facilities are using this data to form service standards that will be used as quality assurance measures
- The champions are also considering using the data on duration as a promotional message: for example, "Only 30 minutes, Live a Healthy Life with ARV."

The results demonstrated that the number and scope of challenges varied substantially from facility to facility. The most common challenge identified was lack of training and/or knowledge related to providing HIV services, which was identified by 8 of the 10 facilities. But beyond that relatively common factor, facility responses and the results of root cause analysis varied from facility to facility. In the face of varied and unique challenges, supporting decentralized stakeholders to obtain, analyze, and use HIV-HRH data for decision-making can enable facilities, districts, and provinces to make tailored, strategic decisions to improve the quality of HIV care.

HRH2030 envisions that stakeholders will have this capacity if they can utilize data to complete a process to optimize health worker performance and productivity, as outlined by the steps in Productivity and Performance Toolkit to Achieve the 95-95-95 Targets as displayed in Figure 4. For example:

Step 1: A facility manager routinely reviews her facility's routine service statistics to monitor the facility's performance along the HIV continuum of care. Through this process, she notices that the number of LTFU clients is rising. She also seeks feedback from existing clients, who note stigma and a desire for more support, as health workers have little time to provide counseling.

Step 2: The manager surveys her staff utilizing the rapid task analysis questionnaire to identify training and supervision needs in her facility. The results indicate lack of confidence to perform some HIV tasks, like adherence counseling.

Step 3: Using the RTA data, the facility manager leads her staff in a focus group discussion of the results, where together they identify that some staff have not been trained, others were trained but have since been rotated to another team in the facility, and some staff have been trained but need additional mentoring. Providers who recently completed pre-service training feel they need more practice and support to provide

FIGURE 4. OVERVIEW OF PROCESS FOR OPTIMIZING HEALTH WORKER PERFORMANCE AND PRODUCTIVITY

Step 1: Identify HIV Service Delivery Gaps

Step 2: Identify Possible Workforce Problems

Step 3: Understand Underlying Causes of Workforce Problems

Step 4: Develop Workforce Interventions

Step 5: Identify Strategies for Monitoring Interventions

high quality services. They also discuss the client feedback and note that the *kaders* could help provide more support to clients and alleviate stigma by conducting outreach with PLHIV groups in the community, communicating with LTFU clients, and providing adherence counseling.

Step 4: The facility updates their standard operating procedures to limit rotations of staff that have been recently trained in a specific service area, to retain staff in the roles for which they have received appropriate training. The HIV program coordinator and other highly skilled staff are planning a mentoring program for newly trained staff to ensure they are properly supported. The facility includes *kaders* in these mentorship approaches so that they are confident to support clients.

Step 5: The facility intends to implement rapid task analysis to gauge staff confidence at regular intervals, and *kaders* regularly gather the feedback of PLHIV clients. This will provide regular opportunities to re-target mentorship and supervision mechanisms, if necessary, while also providing a monitoring opportunity for the actions taken in Step 4.

In this example, the facility has the tools, capacity, and resources required to review its own data, implement practical HIV-HRH assessment tools, and utilize the results to identify facility-level adaptations that can be made to improve client-centered HIV service delivery. PHOs and DHOs could benefit from investment in the HRH planning skills of facility managers and HIV coordinators. Further, progress could be made at a national level by continuing to strengthen HRH data streams, including National Health Workforce Accounts and the Human Resources Information System, to ensure that HRH data is accurate and available to decision-makers.
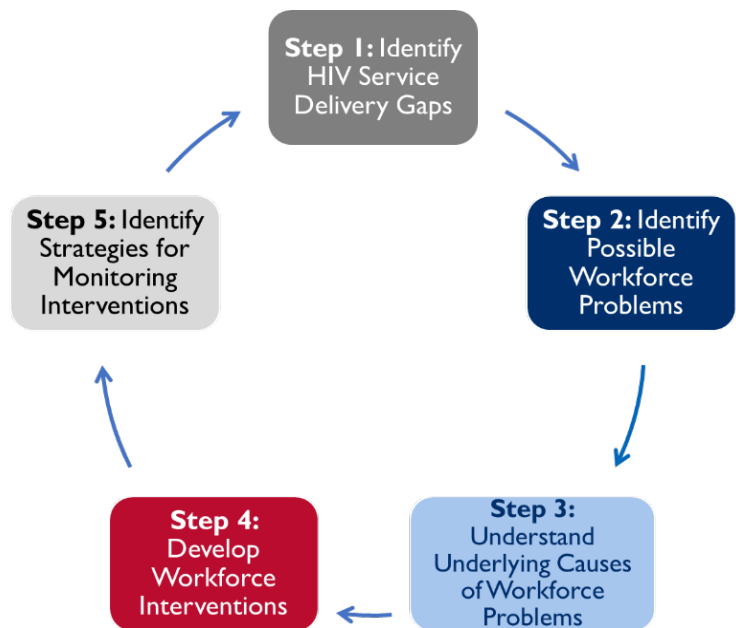
Putting Recommendations into Practice: What will it take to reach the national ART treatment targets in Jakarta?
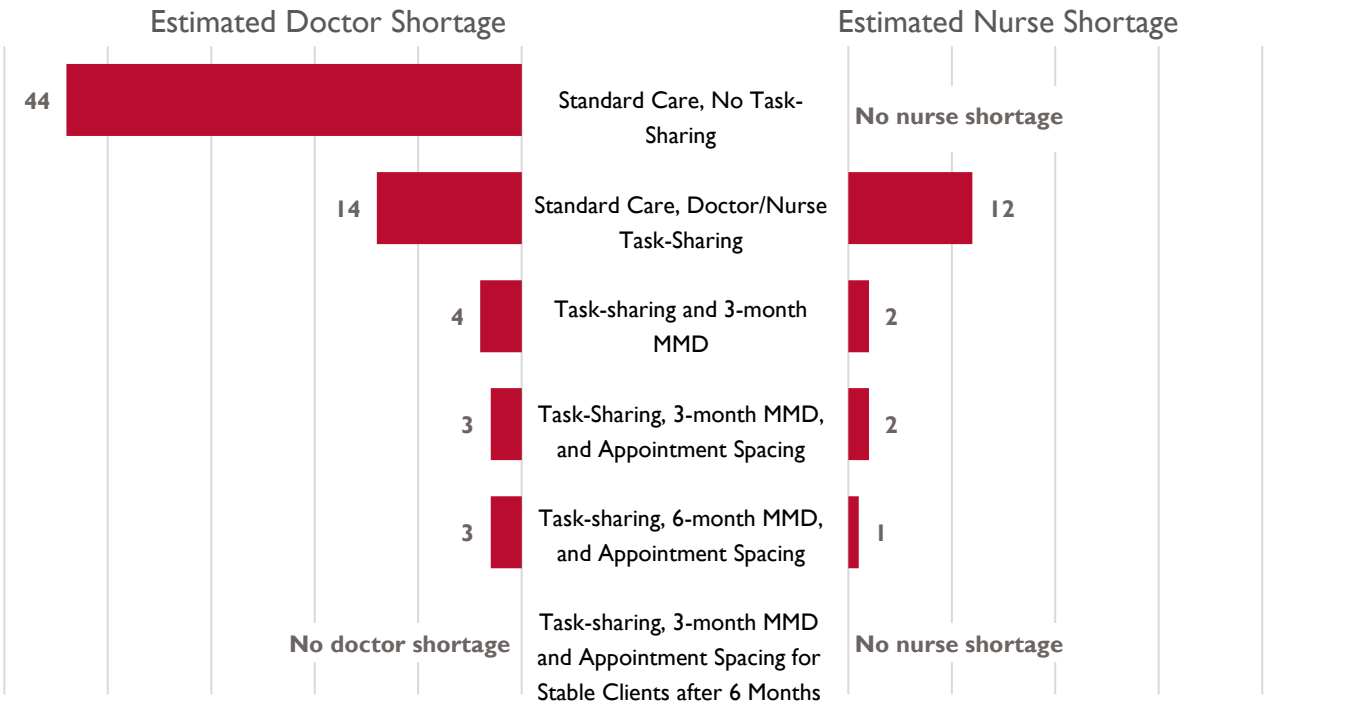
With these recommendations in mind, it is also important to consider the combination of decisions and strategies that will be necessary to reach the Ministry of Health's national ART targets. While the assessments conducted by HRH2030 are of relatively small sample size and are not representative of all facilities in Indonesia, it is possible to consider a case study based on the 10 Jakarta facilities involved in 2018 and 2019.

Previously in this document, HOT4ART was introduced as a tool that can quantify health worker shortages and inefficiencies at the site level. In addition, the tool has an above-site option where aggregated data for multiple facilities can be used to roughly quantify the impact of a variety of DSD models on staffing requirements. Using the data from the 10 Jakarta facilities, as well as some basic assumptions based on the MOH targets and other benchmarks, it is possible to develop an approximate estimate of the effect of DSD models on Jakarta's HIV service delivery.

The above-site HOT4ART exercise requires two key pieces of information: the number of health workers, and the number of targeted clients. Staffing figures from the 2018 assessment have been used to fill the provider section of the tool. ART cascade data from 2019 is available to determine *current* ART clients, but to reach the MOH strategic target of 40% of PLHIV on ART, Jakarta will need to approximately double the number of clients on ART. We have used the current estimated difference between the 10 facilities' current results and the ART treatment target to extrapolate information for the client section of the tool. (Full assumptions and calculations are included as notes in the HOT4ART Jakarta Case Study annex, as listed below in the resources and annexes section).

With these inputs, it is possible to estimate the general effects of various combinations of DSD models on staffing requirements for these 10 facilities. Figure 5 presents the results of modeling the estimated shortage of the two health worker types at greatest risk of shortage per the HOT4ART results: doctors and nurses. The figure explores several combinations of models, including standard care alone in the top row, and different combinations of task-sharing, MMD, and appointment spacing in the following rows.

FIGURE 5. MODELING OF ESTIMATED DOCTOR AND NURSE SHORTAGES TO REACH ART TARGET IN 10 JAKARTA FACILITIES

With standard care and current task allocation practices, there is a large shortage of doctors to reach the ART target. 3-month MMD substantially reduces shortages, but additional task-sharing and DSD models will likely be necessary to completely resolve shortages.

	Estimated Doctor Shortage		Estimated Nurse Shortage
Standard Care, No Task-Sharing	44		No nurse shortage
Standard Care, Doctor/Nurse Task-Sharing	14		12
Task-sharing and 3-month MMD	4		2
Task-Sharing, 3-month MMD, and Appointment Spacing	3		2
Task-sharing, 6-month MMD, and Appointment Spacing	3		1
Task-sharing, 3-month MMD and Appointment Spacing for Stable Clients after 6 Months	No doctor shortage		No nurse shortage

In summary, the current limitations on task sharing and the prevalence of standard care as the primary service delivery model would contribute to a large shortage of doctors to reach the ART target. To balance the extreme doctor shortage, task sharing could be implemented between doctors and nurses; specifically, facilities could use the criteria of stable clients used to determine MMD eligibility to share some stable clients with nurses for health education, consultation, and adherence counseling. From there, 3-month MMD is effective in addressing the majority of the remaining doctor and nurse shortages, but there is still an estimated total shortage of six health workers across the 10 facilities.

To address this remaining shortage will require either additional health workers of sufficient quality, or additional DSD approaches to further optimize ART service delivery of the existing health workforce. In this exercise, it was found that a large amount of time burden was due to the influx of new patients, who according to existing MMD guidance would need to remain on standard care for 12 months. If this requirement is modified to allow MMD after 6 months for stable clients (which is acceptable practice beneficial for client adherence according to PEPFAR and the International AIDS Society), and if MMD is combined with appointment spacing to alleviate the number of clients that require a full consultation visit, then the existing health workforce is estimated to be sufficient to achieve the ART target among these 10 facilities.

This example is by no means the _only_ answer to achieve the ART treatment targets. Additional areas of exploration could include engaging community health workers/_kaders_ to contribute to community ART distribution, investigating the potential of client-led distribution, or piloting group models as methods to alleviate the burden on high-skilled providers.

Further, the RTA and CFO tools can be utilized throughout this process of optimizing service delivery. The RTA can be used as a tool to actively manage and improve health worker competencies to implement new service delivery models. For example, if health workers are expected to take on new tasks to implement task-sharing or DSD models, the RTA can help to identify what in-service support or mentorship may be necessary for health workers to implement high quality care. For example, in this HOT4ART exercise, task sharing from doctors to nurses will be necessary to alleviate the burden on physicians, yet according to the 2018 Rapid Task Analysis, nurses responded that tasks in the doctor and nurse task list did not belong to them 53% of the time (on average). This indicates a need to incorporate service delivery tasks more strategically into nurses' job descriptions and pay close attention to their confidence and knowledge to perform those tasks.

The CFO tool can be used both as an adaptive management tool to regularly address client flow barriers, and also as a way to triangulate effects of DSD on health facility client flow; ideally, DSD models will reduce client flow barriers and wait times while increasing the time that providers have available to spend with clients in need of targeted support. In addition to paying attention to the time spent in waiting rooms, the data on _where_ clients face client flow obstacles can be important information to consider as well. For example, in our CFO results, clients were facing long wait times in both the consultation waiting room as well as the pharmacy waiting room. Task sharing between doctors and nurses may be able to reduce the consultation waiting time, as more providers will be available to provide examination and consultation services. In the pharmacy waiting room, MMD can streamline the client experience as fewer clients have to come to the pharmacy each month for their refill. Throughout this process, it will be important for facilities, districts, and provinces to have skills to pay close attention to the client experience, react to changes in HIV and HRH indicators, and use data to inform their decision-making.

Conclusion

Recent HIV policies in Indonesia are strategic to scale up ART service delivery, but more needs to be done to ensure that a growing number of PLHIV are sustained on an ART regimen for life. By scaling up differentiated service delivery, considering the possibility of engaging community health workers, and supporting data use at multiple levels of the health system, Indonesia can continue to optimize the health workforce to provide ART services. Optimization would alleviate the burden on health care workers, provide higher quality care that addresses the needs and expectations of clients, and contribute to achievement of the 95-95-95 goals in Indonesia.

Tools and Resources

HRH2030 has developed and compiled tools and resources to enable stakeholders at all levels of the health system to make evidence-based HRH decisions to optimize the health workforce and provide client-centered care to a greater number of ART clients. The following materials are available to provide further insight on the results presented here and as resources for stakeholders who are interested to learn and adopt the HIV-HRH assessment tools:

- HRH2030 Assessment Results (anonymized):
  - 2018 Results:
    - 2018 Indonesia HIV and HRH Assessment: Recommendations for Implementing and Scaling up the Test and Treat Policy (Report)
    - 2018 Policy Annexes
    - 2018 Site-Level Annexes
  - 2019 Results:
    - Results from "champion" facility RTA and CFO implementation (available in Bahasa Indonesia)
    - Results from the 4 facilities who implemented HOT4ART in this activity (available in Bahasa Indonesia)
- Data Collection and Utilization Resources:
  - Toolkit: Optimizing Health Worker Performance and Productivity to Achieve the 95-95-95 Targets
  - HRH Optimization Tool for ART Service Delivery
    - Online resource page
    - HRH2030 Brief Illustrating the Effect of MMD on HRH Requirements
    - Bahasa Indonesia/English Version of the tool
  - Rapid Task Analysis
    - Survey guide (available in Bahasa Indonesia)
    - Survey template for ODK collect (available in Bahasa Indonesia)
  - Client Flow Observations
    - Survey guide (available in Bahasa Indonesia)
    - Survey template for ODK collect (available in Bahasa Indonesia)
- Resources from other organizations:
  - WHO Guideline on health policy and system support to optimize community health worker programs
  - International AIDS Society Differentiated Care for HIV: A Decision Framework for Antiretroviral Therapy Delivery

A patient consults with a doctor in a Puskesmas in Jakarta, Indonesia. Credit: Andi Gultom.

Program Partners

- Chemonics International
- American International Health Alliance (AIHA)
- Amref Health Africa
- Open Development
- Palladium
- ThinkWell
- University Research Company (URC)

About HRH2030

HRH2030 strives to build the accessible, available, acceptable, and high-quality health workforce needed to improve health outcomes.

Global Program Objectives

1. **Improve performance and productivity of the health workforce.** Improve service delivery models, strengthen in-service training capacity and continuing professional development programs, and increase the capacity of managers to manage HRH resources more efficiently.

2. **Increase the number, skill mix, and competency of the health workforce.** Ensure that educational institutions meet students' needs and use curriculum relevant to students' future patients. This objective also addresses management capability of pre-service institutions.

3. **Strengthen HRH/HSS leadership and governance capacity.** Promote transparency in HRH decisions, strengthen the regulatory environment, improve management capacity, reduce gender disparities, and improve multi-sectoral collaboration for advancing the HRH agenda.

4. **Increase sustainability of investment in HRH.** Increase the utilization of HRH data for accurate decision-making with the aim of increasing investment in educating, training, and managing a fit-for-purpose and fit-for-practice health workforce.

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