Indonesia HIV and Human Resources for Health (HRH) Assessment:
Recommendations for implementing and scaling up the Test and Treat policy

HRH2030: Human Resources for Health in 2030
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## Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>ANC</td>
<td>Antenatal care</td>
</tr>
<tr>
<td>APBN/APBD</td>
<td><em>Anggaran Pendapatan dan Belanja Negara/Daerah</em> (National/Local State Budget)</td>
</tr>
<tr>
<td>ARV</td>
<td>Antiretrovirals</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral therapy</td>
</tr>
<tr>
<td>BLUD</td>
<td>Badan Layanan Umum Daerah</td>
</tr>
<tr>
<td>BOK</td>
<td>Puskesmas Operational Fund</td>
</tr>
<tr>
<td>BPJS</td>
<td>Universal Health Coverage</td>
</tr>
<tr>
<td>BPPSDMK</td>
<td><em>Badan Pengembangan dan Pamberdayaan Sumber Daya Manusia</em> Keshatan / Human Resources for Health Development and Empowerment Agency</td>
</tr>
<tr>
<td>CSO</td>
<td>Community Service Organization</td>
</tr>
<tr>
<td>CST</td>
<td>Care, Support and Treatment</td>
</tr>
<tr>
<td>CSW</td>
<td>Commercial sex workers</td>
</tr>
<tr>
<td>DHO</td>
<td>District Health Office</td>
</tr>
<tr>
<td>DSD</td>
<td>Differentiated Service Delivery</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus group discussion</td>
</tr>
<tr>
<td>HEIs</td>
<td>Higher education institutions</td>
</tr>
<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
</tr>
<tr>
<td>HRH</td>
<td>Human resources for health</td>
</tr>
<tr>
<td>KII</td>
<td>Key informant interview</td>
</tr>
<tr>
<td>KKI</td>
<td><em>Konsil Kedokteran Indonesia</em> / Indonesian Medical Council</td>
</tr>
<tr>
<td>KP</td>
<td>Key population</td>
</tr>
<tr>
<td>LAMPTKES</td>
<td><em>Lembaga Akreditasi Mandiri Pendidikan Tinggi Kesehatan Indonesia</em> (Independent Health Accreditation Institute for Indonesia)</td>
</tr>
<tr>
<td>LKB</td>
<td><em>Layanan Komprehensif Berkesinambungan</em> (Continuum of Prevention to Care Services)</td>
</tr>
<tr>
<td>MenPAN-RB</td>
<td>Ministry of Civil Apparatus Empowerment – Reformation of Bureaucracy</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MLHR</td>
<td>Ministry of Law and Human Rights</td>
</tr>
<tr>
<td>MMS</td>
<td>Multi-month scripting</td>
</tr>
<tr>
<td>MSM</td>
<td>Men who have sex with men</td>
</tr>
<tr>
<td>MORHE</td>
<td>Ministry of Research and Higher Education</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>MTKI</td>
<td>Majelis Tenaga Kesehatan Indonesia / Indonesian Health Workers Assembly</td>
</tr>
<tr>
<td>PEPFAR</td>
<td>(United States) President's Emergency Plan for AIDS Relief</td>
</tr>
<tr>
<td>PHO</td>
<td>Provincial Health Office</td>
</tr>
<tr>
<td>PKVHI</td>
<td>Persatuan Konselor HIV Indonesia (Indonesian Association of HIV Counselors)</td>
</tr>
<tr>
<td>PLHIV</td>
<td>People Living with HIV</td>
</tr>
<tr>
<td>PMK</td>
<td>Peraturan Menteri Kesehatan (The Ministers of Health Regulation)</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Prevention of Mother-to-Child Transmission</td>
</tr>
<tr>
<td>POLTEKES</td>
<td>Polytechnics</td>
</tr>
<tr>
<td>PKM</td>
<td>Puskesmas, or Pusat Kesehatan Masyarakat (community health center)</td>
</tr>
<tr>
<td>PP</td>
<td>Peraturan Pemerintah (Government Regulation)</td>
</tr>
<tr>
<td>PWID</td>
<td>People who inject drugs</td>
</tr>
<tr>
<td>PSE</td>
<td>Pre-service education</td>
</tr>
<tr>
<td>RTA</td>
<td>Rapid task analysis</td>
</tr>
<tr>
<td>SDKI</td>
<td>Survei Demografi Kesehatan Indonesia (Indonesia Health Demographic Survey)</td>
</tr>
<tr>
<td>SIHA</td>
<td>Sistem Informasi HIV/AIDS &amp; IMS / HIV/AIDS information systems</td>
</tr>
<tr>
<td>SIP</td>
<td>License to practice</td>
</tr>
<tr>
<td>SKDI</td>
<td>Standar Kompetensi Dokter Indonesia / Indonesian Doctors’ Standard Competence</td>
</tr>
<tr>
<td>SPM</td>
<td>Standar Pelayanan Medis / Minimum service standards</td>
</tr>
<tr>
<td>SRH</td>
<td>Sexual reproductive health services</td>
</tr>
<tr>
<td>STIs</td>
<td>Sexually transmitted infections</td>
</tr>
<tr>
<td>STIKES</td>
<td>School of health science</td>
</tr>
<tr>
<td>STR</td>
<td>Registration letter</td>
</tr>
<tr>
<td>SUFA</td>
<td>Strategic Use of Anti-Retrovirals</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>TOT</td>
<td>Training of Trainers</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>UU</td>
<td>Undang-undang (an act/law)</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counseling and Testing</td>
</tr>
<tr>
<td>VL</td>
<td>Viral load</td>
</tr>
</tbody>
</table>
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Executive Summary

Background & Context
Despite decades of concerted efforts towards HIV control and elimination, the progress towards testing and expanding access to antiretrovirals (ARVs) to all people living with HIV (PLHIV) in Indonesia is still below expectation. Of the estimated 652,349 PLHIV in Indonesia, only 232,323 (36%) have been diagnosed, and only 77,748 PLHIV (12%) are on antiretroviral therapy (ART) (Ministry of Health, 2016). At both the policy and service delivery levels of the health system, strategic efforts are needed to achieve the goal of “90-90-90”: 90% of all PLHIV knowing their status, 90% of these maintaining ART, and 90% of these achieving viral suppression. As part of the Sustainable Development Goals, in 2015 Indonesia signed on as a “Fast-Track” country, with a mandate to make rapid, efficient, and innovative investments to reach critical HIV prevention and treatment targets.

The Government of Indonesia’s Ministry of Health (MoH) has responded by issuing increasingly expansive HIV policies, including the most recent 2014 “Strategic Use of Anti-Retrovirals (SUFA)” to the Test and Treat Policy—which was released while this HIV-HRH assessment period was underway. It includes: 1) offering routine testing to all patients in generalized epidemic areas and those with any symptoms of HIV or risk factors (TB, STIs, hepatitis, pregnant women, key populations, prisoners, and partners of PLHIV); 2) ARV should be administered to all PLHIV; and 3) counseling should be provided to PLHIV who refuse testing and ART.

Methods
The USAID- and PEPFAR-supported HRH2030 Program conducted a two-prong assessment to understand the health workforce feasibility and barriers to scaling up HIV services (Figure i):

- At the policy level: to analyze relevant HRH policies, protocols, scopes of practice, and task shifting practices that have hindered or supported the health workforce who implement Indonesia’s SUFA policy and will be implementing Test and Treat policy in the future. The analysis consisted of a policy search and validation, inventory process, and text analysis, which was complemented by key informant interviews with relevant stakeholders to explore policy implementation successes and challenges.
- At the site level: to understand the specific health workforce challenges and client flow inefficiencies by implementing a suite of adapted tools in a sample of ten USAID- and PEPFAR-supported sites in the five districts in Jakarta, including eight Puskesmas Kecamatan, one Puskesmas Kelurahan, and one large private key population (KP)-friendly clinic.

Results
Overall, the HIV policies developed at the central level and reviewed in this assessment are sufficient to support implementation of Test and Treat, though implementation guidance is required to promote success. Where SUFA had implications for increased workload of laboratory technicians and others, due to many required routine examinations, Test and Treat should serve to streamline these workflows. Although HIV-related competencies are prescribed in the competency standards for physicians, there is no regulation that specifies to what extent it should be included in pre-service education curriculum, and as a result, the quality of HRH produced by higher education institutions varies. The standards of care documents do not adequately provide guidance in consideration of the diverse contexts in which they may be implemented, lacking specific guidance for where there is no doctor, and where the formal health system relies on the labor of non-clinical, community-based, contracted, or volunteer counselors.
While the HRH policies to describe planning and procurement processes are very detailed, the stakeholders responsible for health workforce development, planning, deployment, and support within the public sector are spread across multiple ministries and multiple levels of government and are not focused solely on HIV. While this policy implementation barrier is common around the world and is not limited to HIV services, the limited interpretation and implementation of many health workforce policies due to separate spheres of authority remains challenging.

Despite the autonomy of local governments in HRH planning and procurement, the financial capacity of local governments to hire health workers is often limited, creating HRH shortages and maldistribution across health facilities and geographic areas. Use and availability of accurate and timely HRH information systems are limited and inhibit long-term planning. The implementation of performance-based payment and quality control mechanisms, such as accreditation and Minimum Service Standards (Standar Pelayanan Medis, or SPM), may stimulate local government to improve the HRH situation.

The site-level assessment tools revealed a wealth of information about each site’s HRH situation that cannot easily be summarized, but includes specific health workforce competency gaps, issues of health worker engagement, inefficient processes and/or poor staff or task allocations. Overall, the ten sites reviewed in this assessment obtained a sufficient number and type of health workers. Relative to many HIV service delivery units in other LMICs with similar staffing levels, these sites are responding to a reasonable service volume workload. However, the self-reported knowledge and ability to perform tasks across the HIV services is inadequate.

As summarized in Table i on the following page, of all the health worker teams surveyed at eight Puskesmas Kecamatan (primary health care facilities) in Jakarta, all experience generally low service volume and have staffing that surpasses the “core team” minimum of five. On average, they reported having advanced or sufficient knowledge for about three-quarters (76.5%) of the HIV service delivery tasks assigned to them and expressed confidence in their ability to perform over two-thirds of these same tasks (69.6%).
Table i. Summary results from the site-level assessment

<table>
<thead>
<tr>
<th>PKM</th>
<th>HIV Services</th>
<th>Core team</th>
<th>Knowledge</th>
<th>Confidence to perform</th>
<th>% Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New positives</td>
<td>+ =</td>
<td>Advanced</td>
<td>Confident, capable to mentor CONFIDENT but need support Needs practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrolled in ART</td>
<td>-</td>
<td>Sufficient</td>
<td>CONFIDENT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Currently on ART</td>
<td></td>
<td>Basic</td>
<td></td>
<td></td>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
<td>6</td>
<td>82</td>
<td>+</td>
<td>0%</td>
</tr>
<tr>
<td>B</td>
<td>20</td>
<td>15</td>
<td>237</td>
<td>+</td>
<td>5%</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td>0</td>
<td>61</td>
<td>+</td>
<td>0%</td>
</tr>
<tr>
<td>D</td>
<td>10</td>
<td>6</td>
<td>111</td>
<td>+</td>
<td>0%</td>
</tr>
<tr>
<td>E</td>
<td>20</td>
<td>11</td>
<td>171</td>
<td>+</td>
<td>0%</td>
</tr>
<tr>
<td>F</td>
<td>10</td>
<td>9</td>
<td>265</td>
<td>+</td>
<td>4%</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>7</td>
<td>81</td>
<td>+</td>
<td>12%</td>
</tr>
<tr>
<td>H</td>
<td>13</td>
<td>12</td>
<td>241</td>
<td>+</td>
<td>34%</td>
</tr>
</tbody>
</table>

While the policy assessment outlined that the regulations to facilitate task shifting were sufficient, the site-level assessment demonstrated their incomplete implementation. In-service training and follow-up support may be the greatest inhibitor. Notably, among nurses at the eight surveyed Puskesmas Kecamatan, the tasks across the HIV continuum of services that they identified as under their purview generally corresponded with the ones for which they received training (Figure ii). Adherence counseling and ART initiation counseling were the areas that they performed with the greatest confidence and frequency. Some health workers are performing tasks for which they have had no training.

Figure ii. Example results: Nurses’ self-reported HIV knowledge, skills, and training by task (n=10)
Recommendations
The HIV-HRH assessment team provides the following recommendations for building, managing and optimizing the health workforce for HIV services, which are further detailed in the body of this report.

Specific to HIV service delivery:

Integrate HRH considerations in forthcoming HIV standards of care. We recommend that the MoH, PHO, DHO, and local stakeholders engage to review the forthcoming Test and Treat standards of care from an HRH perspective to consider the education, management, and support implications, particularly to define task shifting/sharing approaches and roll out as service volume increases, and as the policy is implemented in areas outside of Jakarta, where health teams experience shortages and turnover. Additional contextualization and detail of the tasks and competencies required for Test and Treat would help to promote successful implementation, including defining stable patients and clarifying nurse scope for HIV diagnosis to ensure their legal protections.

Invest in coordinated in-service training for specific HIV skills. Concerning policies on education, including HIV competencies and pre-service education, new HIV standards of care should be updated in “core team” PSE curricula, especially to ensure TB-HIV co-management skills. To implement Test and Treat, the HIV core teams will likely require more dedicated skills building and performance support, and managers should allocate more time to provide supportive supervision to staff as they learn and practice skills.

Generate more evidence on differentiated care options. In support of HRH optimization through task shifting, multi-month scripting (MMS), and/or other differentiated service delivery (DSD) models, stakeholders should determine what evidence is needed to promote effective advocacy among local and national authorities, including to consider the role of the community cadres in relation to cost-benefit, effectiveness, and sustainability of their financing, for example. Districts should undertake a routine review of workforce pressure data, especially for pharmacists, to identify priority sites.

Strengthen HRH functions at the district level, for the benefit of HIV and other health services. To improve HRH financing at the local level, it is critical to strengthen local governments’ capability to adapt national capitation regulations and manage funding for the Puskesmas. DHO and PKM budgets can be used strategically for targeted, practical skills building for priority HIV tasks such as: low-dose/high-frequency training, coaching, clinical mentoring, peer/champions, interprofessional support, supportive supervision, quality improvement, and/or other evidence-based learning approaches. Building capacity to routinely (i.e., annually) apply the site-level tools at PEPFAR-supported sites is recommended to collect, manage and effectively use resultant data through automated reports or dashboards. HRH2030 engagement in the National Health Workforce Accounts implementation may serve as an opportunity to convene national and decentralized HRH planners, local government authorities, the Human Resources for Health Development and Empowerment Agency (Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan, BPPSDMK), and others to better document HRH turnover and streamline HRH planning and priority staffing.
Support district and facility staff to understand and act upon site-level HIV-HRH assessment results. It is recommended that each site-level assessment report be disseminated and reviewed with the respective staff to reflect on possible local solutions to the problems identified, and to share data to advocate with relevant authorities. Interested DHOs or Puskesmas could consider adapting and applying these tools in other service areas, or across all services at the same site, to understand site-specific HRH enablers and barriers more broadly.

Build local capacity to routinize and scale up site-level HIV assessment. At sites sampled, the assessment should be repeated routinely to capture any HIV-HRH changes and improvements over time. In next steps, HRH2030 also recommends applying the site-level assessment tools to the Papuan context, where the HRH capacity and coverage, especially for higher skilled clinicians, differs from Jakarta.

In conclusion, the new Test and Treat policy has important skill and workload implications for the human resources for health (HRH) providing HIV services across Indonesia. Its successful implementation requires an available, qualified, competent health workforce to provide HIV services across the clinical cascade and to sustain the increasing number of PLHIV expected to maintain their ART regimen for life. The policy- and site-level assessment suggests the importance of addressing several implications for HRH management and must be addressed across the health labor market to control the HIV epidemic in Indonesia, notably to support the acquisition of new HIV competencies across diverse teams of health and non-health workers through locally contextualized and sustained professional development.
Background and Context

Despite decades of concerted efforts towards HIV/AIDS control and elimination, the progress towards testing and expanding access to antiretrovirals (ARVs) to all people living with HIV (PLHIV) in Indonesia is still below expectation. Of the estimated 652,349 PLHIV in Indonesia, only 232,323 (36%) have been diagnosed, and only 77,748 PLHIV (12%) are on antiretroviral therapy (ART) (Ministry of Health, 2016).

In 2014, the Indonesia Ministry of Health (MoH) began implementing the ‘Test and Treat’ approach through its “Strategic Use of Anti-Retrovirals (SUFA)” policy (MoH Decree No 21/2013). The policy recommended HIV testing of all persons with symptoms of AIDS, history of tuberculosis (TB) and sexually transmitted infections (STIs), newborns delivered from HIV positive mothers, malnourished children in generalized epidemic areas, and adult men requesting circumcision to prevent HIV. SUFA also recommended routine HIV testing for key populations (i.e., commercial sex workers [CSW], men who have sex with men [MSM], transgenders, people who inject drugs [PWID], and prisoners), partners of PLHIV, TB and hepatitis patients, and pregnant women in generalized and epidemic areas. In generalized epidemic areas, the policy recommended HIV testing for all people visiting health facilities, especially in health facilities providing certain types of services such as antenatal care (ANC) and sexual reproductive health (SRH) services.

SUFA also prescribed that ART be given to individuals with certain criteria, i.e., HIV patients with stage 3 or 4 of the disease, or CD4 counts less than or equal to 350cell/mm3, pregnant women with HIV, and PLHIV with TB. However, it has been observed by HIV program implementers that one of the main reasons for the high failure rates of ART initiation is the complicated, long process in accessing ART. Prior to ART initiation, SUFA requires that HIV-positive individuals undergo post-test counseling and a series of laboratory tests. Often, because not all health facilities are able to provide ART, HIV-positive individuals must go to different health facilities for testing and initiating ART.

In 2018, the MoH released a new policy for implementing Test and Treat across the country. The policy contains the following approaches: 1) routine testing for all patients in generalized epidemic areas (Papua and West Papua) and all patients with AIDS symptoms (including malnourished children), all TB patients, all pregnant women, all STI patients, all hepatitis patients, all key populations, prisoners and partners of PLHIV; 2) ARV is administered to all PLHIV regardless of clinical symptoms and CD4 count; and 3) counseling is provided to PLHIV who refuse tests and ART (MoH Letter HK.02.02/1/1564/2018). Implementation of the new policy calls for a qualified and competent health workforce in an adequate number to provide the HIV continuum of care, especially because an increased number of PLHIV will enter and remain on the ART regimen for life.

The USAID- and PEPFAR-supported Human Resources for Health in 2030 (HRH2030) program conducted an assessment:

- At the policy level: to analyze relevant HRH policies, protocols, scopes of practice, and task shifting practices that hinder or support the health workforce who are implementing Indonesia’s SUFA policy and will be implementing Test and Treat policy in the future. With the recent policy change, the analyses of HRH policies, protocols, scopes of practice, and task shifting of SUFA related practices will be treated as an entry point to make recommendations for the future implementation of Test and Treat.
At the site level: to understand the specific health workforce challenges and client flow inefficiencies in a sample of 10 USAID- and PEPFAR-supported sites in the five districts in Jakarta. The HRH2030 Program adapted a suite of its flagship tools and approaches to the Indonesian context to examine the site-specific health workforce challenges and HIV service delivery bottlenecks.

Findings from this analysis will help identify policy and advocacy opportunities, challenges, priority actions, and implications for HRH programming to strengthen the HIV continuum of care.

**Assessment Objectives and Research Questions**

The **policy assessment** aims to achieve two objectives:

1. To identify relevant HRH policies, protocols, scopes of practice, and task shifting practices that hinder or support the key cadres to implement and scale up the SUFA/Test and Treat program
2. To identify policy and advocacy opportunities, challenges, priority actions, and implications for HRH programming to strengthen the implementation of the SUFA/Test and Treat program

The **policy assessment** aims to answer five research questions for HIV policy implementation in Indonesia:

1. What are the major policy and regulatory barriers and opportunities in the HRH system for current implementation?
2. What are the policy implementation issues that influence the health workforce in delivering HIV services?
3. Learning from the implementation of SUFA, what HRH policy, regulatory, and legal adaptations will be needed for fully implementing the Test and Treat program in the future?
4. What policy or regulatory changes should be prioritized to achieve more effective implementation?
5. What aspects in the policies, protocols, scopes of practice hinder or support the implementation of task-shifting practices in Indonesia?

The **site-level assessment** aims to achieve two objectives:

1. Generate site-level/general recommendations for addressing HRH-related bottlenecks to HIV service delivery
2. Gather evidence to recommend policy and site level interventions to improve HIV service delivery
   - HRH optimization to achieve Fast-Track targets
   - Longer-term sustainability planning and HIV mainstreaming
   - Consideration of differentiated service delivery (DSD) models

**Methods**

HRH2030 considered the health labor market framework from Sousa et al (2013) to adapt an assessment approach for the HIV-HRH context in Indonesia to facilitate situational analysis and mapping of the national, provincial, and district-level policies across the health worker life cycle. At the site-level, HRH2030 adapted a series of tools to assess the availability, accessibility, competency of the health workforce to deliver quality HIV services (i.e., according to standards of care). The scope of each assessment approach is illustrated in Figure 1 on the following page.
Policy assessment methods

The study team applied the Policy Implementation Assessment Tool\textsuperscript{1} to analyze relevant HRH policies, protocols, scopes of practice, and task shifting practices that hinder or support the health workforce who are implementing Indonesia’s SUFA policy and will be implementing the Test and Treat policy. The assessment, conducted from April - August 2018, included policy analyses and key informant interviews (KII), using the following steps (Figure 2):

\textsuperscript{1}http://www.healthpolicyplus.com/archive/ns/pubs/hsi/1155_I_PIAT_Paper_Taking_the_Pulse_of_Policy_acc.pdf
Policy Analyses

• **Policy search.** The research team conducted a policy search of legal and policy documents such as acts, laws, government regulations, ministerial decrees, etc. The researchers conducted the search on Google and on the websites of relevant institutions, such as the Ministry of Law and Human Rights (MLHR), MoH, Ministry of Research, Technology, and Higher Education (MoRTHE), and the Ministry of Labor. After collecting the policies, the researchers verified their validity status on the website of MLHR. The researchers also searched for earlier or pre-existing policies referenced in the collected policies. During the interviews with stakeholders, the researchers also asked respondents for policies and regulations relevant to HRH and HIV/AIDS issues.

• **Development of policy inventory.** Two researchers reviewed the policy documents to examine the relevance of the policies to the study objectives and developed an inventory of the policies to document the following variables: level of the policy, issuing institution, date of issue, number, title, status, consideration and content (see Annex G). The content of the policies was reviewed and categorized into the following groups:
  - Primary: defined as policy that mainly addresses HIV and HRH issues
  - Technical/derivative: defined as policy that further describes the technical aspects of the respective primary policy in a more detailed manner.
  - Background: defined as policy that provides context and background for the primary policy

• **Text analysis.** The researchers conducted a text analysis of the primary policies to describe the relevant components and implications of the respective policy on HRH and HIV (see Annex H). Subsequently, the primary policies were further classified using the abovementioned HRH2030 approach framework.

• **Key Informant Interviews.** Using a semi-structured interview guide, the research team conducted 23 key informant interviews at the national level with representatives from 18 institutions involved in HRH and HIV prevention and treatment. The interviews examined stakeholders’ knowledge of and experience implementing HRH and HIV-related policies. Please refer to Annexes A through F for the list of interview guide types, key informant interview guides, informed consent, and key informants.

**Site-level assessment methods**

From June through August 2018, HRH2030 conducted a site-level HIV-HRH assessment in collaboration with SOLIDARITAS, LINKAGES, and other partners to inform decision-making to strengthen HIV service delivery for achievement of epidemic control. The assessment was conducted in 10 facilities across Jakarta’s five districts (Table 1), which represent a range of testing and treatment volumes and facility types. While there was focus on the sub-district (kecamatan) Puskesmas, the assessment also captured a sub-sub-district (kelurahan) Puskesmas, as well as Ruang Carlo, a large private sector, KP-friendly clinic that yields a high volume of HIV-positive tests.
Table 1. Selected Sites for the Indonesia HIV-HRH Site-level Assessment

<table>
<thead>
<tr>
<th>Site</th>
<th>District</th>
<th>Volume of all HIV tests conducted</th>
<th>Volume of HIV+ tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>PKM Kecamatan Cakung</td>
<td>East</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PKM Kecamatan Cengkareng</td>
<td>West</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PKM Kecamatan Gambir</td>
<td>Central</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PKM Kecamatan Kramat Jati</td>
<td>East</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PKM Kecamatan Penjaringan</td>
<td>North</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PKM Kecamatan Setiabudi</td>
<td>South</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PKM Kecamatan Taman Sari</td>
<td>West</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>PKM [Kecamatan Tanjung Priok]</td>
<td>North</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Klinik Ruang Carlo</td>
<td>Central</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>PKM Kelurahan Kramat (Kecamatan Senen)</td>
<td>Central</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

The site-level assessment included five data collection methods that were adapted and tested for the Indonesian health system context:

1. **HIV Service Delivery Data Review**

   To understand any existing service delivery bottlenecks for HIV services according to the **Toolkit on Optimizing Health Worker Performance and Productivity to Achieve 95-95-95 Targets**
   
   2, the FY18 Q3 HIV service delivery data were requested from USAID/Indonesia and PEPFAR in the format currently collected, so as to avoid duplication of efforts.

2. **Unit Manager Rapid Assessment Questionnaire**

   This tool, adapted from the **PEPFAR Rapid Site-level Health Workforce Assessment Tool**
   
   3, which provides information on health worker types, number, allocation, capacity, and potential HRH barriers. This information can be used to ensure adequate staffing, optimize efficient utilization of health workers across the HIV continuum, identify HRH barriers to quality HIV service delivery, and collect site-specific HRH data to inform program planning and transition. Based on the knowledge of the unit manager, the questionnaire was completed through a series of semi-structured interview questions. Adaptations for this tool included listing the health worker types included within the HIV service delivery units, assessing best methods for questionnaire administration, and the categorization of HIV service delivery areas, which were also used for the Rapid Task Analysis. To review the complete instrument, please see Annex J [English] and Annex K [Bahasa].

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2 www.hrh2030program.org/prodperftoolkit

3 https://www.hrh2030program.org/pepfar_tool/
3. Rapid Task Analysis

This tool is an adapted **HRH2030 task analysis approach**\(^4\) intended to rapidly identify health workers’ self-identified competencies in providing HIV/AIDS services, and can be used by health facility managers to align competencies with the needs and demands of the populations that they serve. This tool required the most significant adaptations. With inputs from the PHO and LINKAGES, the list of tasks by service area and health worker type (shown in Table 2 on the following page) was finalized. It should be recognized that for the purposes of this assessment, only the most significant tasks were included; the shaded boxes indicate that no tasks were assessed in this service area, but that does not necessarily mean that this health worker type does not have any responsibilities for this service area. In addition, some tasks may be categorized under a certain service area, though the task in fact overlaps across several service areas. To review the complete instrument, please see Annex L [English] and Annex M [Bahasa].

4. Client Flow Mapping

This tool involved observation of clients who came for HIV services and recorded the time spent for their routine ART refills. While the researchers would have preferred to track client flow across all HIV services, they determined that HIV testing results and counseling would be logistically challenging due to the outreach. This tool captured information on wait times and possible bottlenecks in client flow. To review the complete instrument, please see Annex N [English] and Annex O [Bahasa].

Observations and data collection for client flow mapping were collected in cooperation with LINKAGES and several partner civil society organizations (CSOs) community counselors. This was done because the community counselors collecting data were already accompanying the clients being observed on their visits to access ARV services. The CSOs involved included:

- Pesona Jakarta Foundation: Setiabudi and Ruang Carlo
- Charisma Foundation: Tanjung Priok and Gambir
- STIGMA Foundation: Cengkareng
- Inter Medika Foundation: Penjaringan and Cakung
- Kusuma Buwana Foundation: Taman Sari
- Bandung Wangi Foundation: Kramat Jati

---

<table>
<thead>
<tr>
<th>Service Area</th>
<th>01: Examination of HIV, STI and hepatitis</th>
<th>Medical doctors (MD) / Nurses (N)</th>
<th>Midwives (M)</th>
<th>Laboratory Technicians (LT)</th>
<th>Reporting and Recording Officers (RR)</th>
<th>Pharmacy Staff (P)</th>
<th>Community Counselors/Cadre (CSC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tasks</strong></td>
<td>- 01: Conduct medical checkup and provide diagnosis for all HIV patients/and PLHIV</td>
<td>- 01: Referral of pregnant mother</td>
<td>- 01: Conduct a complete HIV examination</td>
<td>- 01: Set up/fill out a referral form</td>
<td>- 02: Record keeping and the reporting of HIV-TB-IMS</td>
<td>- 01: Develop partnerships with patients and communities</td>
<td>- 02: Connecting patients with resources and peer support</td>
</tr>
<tr>
<td>Service Area</td>
<td>02: ART Enrollment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>- 02: Conduct adherence counseling including counseling for key populations</td>
<td>- 03: Conduct palliative counseling</td>
<td>- 02: For ART enrollment, provide education on ART in pregnant women.</td>
<td></td>
<td></td>
<td></td>
<td>- 03: Conduct adherence counseling, including counseling for key populations</td>
</tr>
<tr>
<td>Service Area</td>
<td>03: ART Initiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>- 04: Deliver ART initiation counseling</td>
<td>- 03: Conduct ART initiation counseling for pregnant women</td>
<td>- 02: Conduct pre-initiation supporting test</td>
<td></td>
<td></td>
<td></td>
<td>See 02 above</td>
</tr>
<tr>
<td>Service Area</td>
<td>04: Adherence Counseling</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>- 03: Provide adherence counseling/education</td>
</tr>
<tr>
<td>Service Area</td>
<td>05: Clinical Examination &amp; Consultation</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>- 05: Perform advanced clinical examination for ART patient</td>
<td>- 03: Keep activity logs of HIV lab examination</td>
<td>- 04: Conduct monitoring</td>
<td></td>
<td></td>
<td></td>
<td>- 01: Provide medicinal services for all HIV patients</td>
</tr>
<tr>
<td>Service Area</td>
<td>06: Recording and Reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td></td>
<td></td>
<td>- 05: Input data of lab check results to SIHA</td>
<td>- 03: Input data to SIHA and KOHORT</td>
<td>- 04: Write LBPHA</td>
<td>- 02: Keep register of medicine dispensing for all HIV-related drugs</td>
<td>- 04: Write LBPHA report</td>
</tr>
<tr>
<td>Service Area</td>
<td>07: Health Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>- 10: Provide related information through IEC</td>
<td>- 05: Provide related information positive prevention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- 06: Provide related information through IEC</td>
</tr>
<tr>
<td>Service Area</td>
<td>08: Integrated TB-HIV Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Service Area</td>
<td>09: Mobile Testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>- 08: Conduct mobile testing including Pre and Post-test counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- 04: Identify and get key populations to do HIV test</td>
</tr>
<tr>
<td>Service Area</td>
<td>10: PMTCT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>- 09: Managing ARV therapy for pregnant women</td>
<td>- 04: Carrying out PMTCT integrated in MCH, family planning and counseling teenagers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- 06: Provide related information through IEC</td>
</tr>
<tr>
<td>Service Area</td>
<td>11: Harm reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>- 06: Conduct counseling on addiction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- 05: Keep logs on HIV+ drug users; provide condoms</td>
</tr>
</tbody>
</table>

Table 2. Tasks assessed in the Rapid Task Analysis by Service Area and Health Worker Type
5. **Health Worker Focus Group Discussions**

These discussions, held with health workers currently providing HIV services at the assessment facilities, focused on HIV service flow, mapping the flow of clients through the facility as well as which health workers they would encounter at each service point, and identifying constraints and impediments to effective service delivery. After mapping the client flow and health worker challenges across the service points, health workers were prompted to discuss the underlying, or root causes, that may be contributing to the bottlenecks. The root causes were then categorized by HRH problem types according to the HRH2030 Toolkit on Optimizing Health Workforce Performance and Productivity to Achieve the 95-95-95 Targets:

- Health worker competency gaps
- Low engagement
- Poor allocation of staff or tasks
- Inefficient work processes
- Other health systems issues

To review the complete instrument, please see Annex P [English] and Annex Q [Bahasa]. Findings and more detailed notes from this method are included in the site-specific reports (Annex R 01-08).

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5 www.hrh2030program.org/prodperftoolkit
**Results and Discussion**

*Policy assessment results*

The study team identified 55 HRH and HIV-related policies, of which 22 were categorized as primary policies that mainly address HIV and HRH issues. The results section first provides an overview of the current HIV policies and programs in Indonesia. Finally, we provide a summary of the policies across the health worker lifecycle, including an overview of HRH legislation, and discuss the status of their implementation.

**Current HIV Policies and Programs in Indonesia**

The MoH Regulation no 21/2013 marked the beginning of comprehensive HIV control in Indonesia. The policy aimed to ensure that all people living with HIV have access to the HIV continuum of care, or *Layanan Komprehensif Berkesinambungan* (LKB), which includes promotion, prevention, diagnosis/testing, and care, support, and treatment (CST). This regulation was followed by The Minister of Health Regulation 87/2014, which aimed to ensure all PLHIV have access to ARV and was executed through a program called SUFA (Strategic Use of ARV).

The MoH combined the implementation of these two regulations into a program referred to as LKB-SUFA. The LKB-SUFA program regulates access to ARV for HIV-positive adults or pediatric patients with stage 3 or 4 of the disease or with CD4 =< 350 cell/mm3, pregnant women with HIV, newborn of HIV positive mothers, children or infants with HIV, HIV with TB, hepatitis B and C, HIV among key populations, HIV serodiscordant couples, and HIV patients in general population of generalized epidemic areas (see Figure 3).

![Figure 3. Evolution of HIV policies and programs since 2013](image)

In July 2018, the MoH released a new policy on the Management of PLHIV, which aims to achieve elimination of HIV by 2030 (MoH Letter HK.02.02/1/1564/2018). This policy presents several differences in the cascade of HIV testing to ART initiation. The following table shows the differences in the pathways of care between LKB-SUFA and Test and Treat (Table 3).
### Table 3. Continuum of Care in LKB SUFA and Test & Treat Services

<table>
<thead>
<tr>
<th>SERVICES</th>
<th>LKB SUFA</th>
<th>TEST &amp; TREAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>• Continuum of care services</td>
<td>• HIV testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ART initiation, as soon as possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ART retention</td>
</tr>
<tr>
<td>Pre-test Counseling</td>
<td>• Mandatory for all people undergoing HIV testing</td>
<td>• Provided for: (1) patients who refuse HIV test; (2) PLHIV patients who refuse to bring their partners to take HIV test</td>
</tr>
<tr>
<td></td>
<td>• Used as an entry point to Care, Support and Treatment (CST) team.</td>
<td></td>
</tr>
<tr>
<td>Indication of HIV test</td>
<td>• Two approaches: (1) Initiated by health providers (PITC); (2) Initiated by patients (Voluntary Counseling and Testing/VCT)</td>
<td>• Initiated by health providers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Health providers request (replace the old term &quot;offered&quot;) HIV test</td>
</tr>
<tr>
<td>Type of HIV testing services</td>
<td>• Counseling and testing can be done by static or mobile services. Mobile services are conducted in coordination with outreach services and peer educators. This model should be linked with the continuum of care (LKB). The mobile service is done by a team consisting of health workers, a counselor, a lab technician, and admin staff.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The result should be communicated by health workers who offered the HIV test. The health workers should refer patients to the HIV counselor for more counseling and for treatment.</td>
<td></td>
</tr>
<tr>
<td>Laboratory testing</td>
<td>• HIV testing should be done in laboratories of health facilities or at the referral laboratory. Rapid tests can be done outside the laboratory, at the community health center (Puskesmas) by trained paramedics or in mobile units such as mobile Puskesmas.</td>
<td></td>
</tr>
<tr>
<td>Post-test counseling</td>
<td>• All patients, regardless of HIV test results</td>
<td>• Provided to PLHIV patients who refuse to be referred to ART</td>
</tr>
<tr>
<td>Eligibility of ART</td>
<td>• ARV should be initiated in these conditions: (1) HIV-positive adults or pediatric patients with stage 3 or 4 of the disease or with CD4 (&lt; 350) cell/mm(^3); (2) Pregnant/breastfeeding women with HIV; (3) Newborns of HIV positive mothers; (4) Children or infants with HIV; (5) PLHIV with TB, hepatitis B and C; (6) HIV-positive members of key populations; (7) HIV patients within an HIV-discordant couple; (8) HIV patients in the general population of generalized epidemic areas.</td>
<td>• ARV is given immediately to anyone who is diagnosed HIV+</td>
</tr>
<tr>
<td></td>
<td>• ART can be started the same day patients are diagnosed HIV+, if no clinical contraindications such as TB symptoms, other OIs symptoms, or CD4&lt;100 in the case of Cryptococcus meningitis.</td>
<td></td>
</tr>
<tr>
<td>Retention</td>
<td>• Viral load monitoring every 6 months</td>
<td>• Viral load monitoring on the 6th and 12th month after ART is initiated; followed by annual VL test (every 12 months).</td>
</tr>
<tr>
<td></td>
<td>• CD4 test could be part of monitoring system (if VL test not available) and for cotrimoxazole provision, but not required for starting ART.</td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>ARV is initiated in type C hospitals and Puskesmas(^6) or other health facilities with ARV treatment capacity. In areas with generalized and concentrated epidemic, ARV treatment can be initiated in Puskesmas or other health facilities with ARV treatment capacity.</td>
<td></td>
</tr>
</tbody>
</table>

Source: MoH Regulation no 21/2013

Table 3 shows substantial differences between LKB SUFA and Test & Treat:

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\(^6\) Type C hospital is a hospital that can provide limited subspecialist medical services. There are four types of specialist services provided, namely internal medical services, surgical services, child health services, and obstetrics and gynecology services. This type C hospital is a hospital that was established in the district level as a level 2 health facility that accommodates referrals from level 1 health facilities (health centers / polyclinics or private doctors).
• Test & Treat emphasizes reaching target audiences by promoting HIV testing and ART initiation, while SUFA emphasizes promoting preventive behaviors. In Test and Treat, HIV tests will be mostly requested by health providers — rather than voluntarily requested by patients or offered by health providers, as in SUFA.

• In Test and Treat, the coverage of HIV tests will be expanded to include all at-risk and key populations and all people visiting health facilities in Papua and West Papua.

• In Test and Treat, pre- and post-test counseling are no longer mandatory and will only be offered for difficult cases, such as PLHIV who refused ART.

• In Test and Treat, ARV will be given immediately to anyone who is diagnosed as HIV+ regardless of CD4 count. Previously, ARV could only be given to those with CD4=350.

• If the patient is ready to start treatment, ART can be started on the same day that the patient is diagnosed as HIV+, if there are no clinical contraindications such as TB symptoms, other OIs symptoms, or CD4<100 in the presence of Cryptococcus meningitis infection.

• Viral load monitoring is still required to monitor viral load suppression and indicate the retention level of PLHIV patients. This should be done every 6 and 12 months once ART is started and followed by an annual viral load (VL) test (every 12 months). CD4 tests could be part of monitoring system (if VL test not available) and for cotrimoxazole provision but is not required for starting ART (The Minister of Health Regulation 87/2014).

The policy change in ART initiation brings moderate differences in the human resources needed to implement Test and Treat as explained below:

• First, as HIV tests should be increasingly initiated by health providers, especially in key populations, more health workers with skills to reach and promote HIV tests in these often-hidden populations will be required. In generalized epidemic areas especially, health workers should be actively promoting HIV testing and screening all patients visiting health facilities.

• Second, as pre-test counseling is not mandatory anymore for every patient, the need for VCT counselors might decrease.

• Third, as the access to HIV testing should be expanding to more targeted populations, especially in Papua and West Papua, more health facilities with HIV testing capacity will be required and will need trained physicians and laboratory technicians for diagnosis.

• Fourth, it is expected that with the removal of CD4 test results, more PLHIV will enter the treatment regimen. This implies that the workload on the existing CST team will increase, and there will be an increasing need for CST teams in many health facilities for ART administration and monitoring. Moreover, as the VL and clinical response should be monitored six and 12 months after a patient started treatment, the workload of maintaining and monitoring adherence to treatment will also increase.
Policies for Human Resources for Health and HIV in Indonesia

There is a range of stakeholders involved in HRH and HIV policy implementation in Indonesia. Figure 4 shows the multiple stakeholders involved in the education, planning, regulation, recruitment, and management of HRH in Indonesia.

Figure 4. HRH Stakeholders in Policy Implementation in Indonesia

The study team defined health workers as “those who have education background in health science and commit themselves to health care services” (Act on Health Workers, 2014). At present, there is wide variation in the types and number of HRH working in HIV service delivery in Indonesia. Human resources in HIV programs include field workers (peer educators, outreach workers, supervisors of field programs, field level program managers), service level personnel (counselors, specialists, physicians, laboratory technicians, nurses, administrators, nutritionists, midwives, and case managers) and personnel at the coordination level in provincial, districts, and municipalities (program managers, monitoring and evaluation/surveillance officers, finance and administration staff, etc) (The Minister of Health Regulation 74/2014 and 52/2017Ref). This assessment focused on physicians, nurses, and midwives as the frontline health workers in the formal health system who will manage HIV patients on a day-to-day basis.

Policies on Education

HIV Competencies

Existing Policies. According to the 2012 Indonesian Doctors’ Standard Competence (Standar Kompetensi Dokter Indonesia – SKDI7), physicians should have a competence of 4A level in HIV, being able to establish a diagnosis of HIV and perform case management independently and comprehensively. Midwives are required to have the competence to provide HIV education and to identify and refer pregnant women suspected of having or identified with HIV (Standard

7 The SKDI released by the Indonesian Medical Council (Konsil Kedokteran Indonesia - KKI) and this standard refers to the Law of Medical Practices 29/2004.
Competence of Midwives/Standar Kompetensi Bidan, 20078). The competency standards of nurses do not specify competence for HIV, however, they must be competent to provide health education and nursing care for patients, which certainly also include PLHIV (Standard Competence of Nurses/Standar Kompetensi Perawat, 20079).

**Implementation Issues.** Although HIV competencies are specified in the Standard Competence of Physician (Standar Kompetensi Dokter Indonesia – SKDI), there is no standardized curriculum or modules on HIV for undergraduate students (KII with MoH staff). Consequently, the quality and depth of medical curriculum for HIV vary highly between medical schools. For example, the HIV-related subjects in one university are included in the Infection and Immunity block, while in other university, the HIV-related subjects are offered as an elective program. In addition, not all medical students encounter HIV patients in their clinical year, and so clinical knowledge and skills among newly graduated physicians for managing HIV patients independently may be inconsistent. This is also the case for newly graduated midwives and nurses, as topics on prevention of mother to child transmission (PMTCT) are not always specified in the curriculum of midwifery schools (KII with professional organization staff).

**Pre-service education**

**Existing Policies.** Pre-service education for HRH in Indonesia is provided by higher education institutions (HEIs). The curriculum in the Faculty of Medicine, Nursing, and Midwives must be based on the national standards developed by the Ministry of Higher Education (MOHE) in coordination with the MoH, professional organizations, and associations of health education institutions (Act on Health Workers, 2014).

Currently, the medical education in Indonesia consists of 3.5 years of theory and two years of practice. Upon graduation, physicians should undergo a one-year internship before being allowed to perform clinical practice (Law of Medical Education no 20/2013). Nurses and midwives must have a minimum diploma (D3) of vocational education. Nurses who do not have a diploma are eligible to work only as nurse assistants (Act on Health Workers no 36/2014) and midwives who have less than a D-1 education must obtain a D-3 before 2021. Nurses and midwives are educated not only by universities but also by academy, polytechnics (POLTEKKES), institutes and school of health science (STIKES) (Act on Health Workers, 2014 and The Minister of Health Decree no 369/2007).

To ensure the quality of education, the Government implements an accreditation system for HEIs. The accreditation is based on numerous assessment criteria such as infrastructure and facilities, human resources, availability of structured curriculum, etc. Based on the assessment, HEIs can be categorized into several classes, with A-accreditation as the highest level. The accreditation process takes place regularly and is conducted by an independent body called LAMPTKES (Lembaga Akreditasi Mandiri Perguruan Tinggi Kesehatan).

**Implementation Issues.** The pre-service education for HRH in Indonesia is highly structured, and applicants must complete high school to continue to HEIs. However, most HEIs in health are private and, while applicants must pass a national exam to enter public schools, private medical schools have less strict entrance criteria and usually conduct their own entrance exams.

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8 The Standard Competence of Midwives refers to the Minister of Health Regulation 369/2007.
9 The Standard Competence of Nurse released by Persatuan Perawat Nasional Indonesia (PPNI/Indonesia Nurse Association)
In addition, few HEIs in health have A-accreditation status. As a result, the input of HEIs vary highly, which subsequently affects the HRH output entering the health workforce (KII with professional organization).

In-service training

Existing Policies. Health workers must renew their registration letters (STR) every five years. Participating in continuing education programs (i.e., seminars, training, courses) is an obligation for renewal. Physicians must collect 250 credits of continuing education to be able to renew their STR, while nurses need to collect 25 credits (Minister of Health Decree no 46/2013 on Health Worker Registration). For that reason, at the workplace, health workers are entitled to opportunities for participating in in-service training, including in HIV. These rights are also stated in the Indonesia Standard Competence of Physician and the Standard Competence of Nurses.

There are many types of HIV in-service capacity building activities conducted for health workers to increase their knowledge and skills in HIV management. These activities are mostly funded by the National Budget, Local Budget, and Global Fund. Depending on the source of budget and the target audience, these activities are conducted by MoH, PHO, district health offices (DHOs), professional organizations, NGOs, or the respective health facilities. Some of these trainings include the following, among many others (KII with MoH and PHO program staff):

- Training for Trainers (ToT) for CST Team, usually conducted by the Sub directorate of HIV/AIDS in coordination with the MoH’s Human Resources for Health Development and Empowerment Agency (Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan, BPPSDMK). Trainers produced by the ToT will subsequently train the CST team at provincial and district level.
- Training for CST Team (physicians, nurses, pharmacist, laboratory technician and data manager) at Puskesmas and hospitals, usually conducted by provincial or district health office.
- Training for midwives on Prevention of Mother-to-Child Transmission, usually conducted by the Sub directorate of Family Health in collaboration with HIV/AIDS, PHO, DHO, and professional organizations.
- Training for VCT counselors, usually conducted by Indonesian Association of HIV Counselor (PKVHI).
- Training on HIV diagnosis and treatment for physicians at Puskesmas and hospitals, usually conducted by PHO/DHO and professional organizations.
- Training on HIV program managers at Puskesmas, usually conducted by PHO/DHO.
- HIV workshop or refresher courses conducted by different organizations such as professional organizations, health facilities and NGOs.

Implementation Issues. The continuing education activities on HIV are highly dependent on budget allocations for the HIV/AIDS control programs. A recent review by Universitas Gadjah Mada found that most of the funding for HIV is contributed by foreign donors, such as Global Fund, including continuing education activities (Center for Health Policy and Management, 2016). Although several local governments have allocated funding from the local budget, the allocated budgets often only cover administrative costs. Therefore, it is possible that not all health workers responsible for HIV programs have access to quality continuing education programs.

Moreover, the effectiveness of capacity building activities is often impeded by high turnover of health workers. Trained health workers are frequently rotated to other positions in the same or
different health facilities. Although the MOH requires that health workers remain at their position for at least two years after a training, this rule is not enforceable, as the decision to keep or rotate health workers is made by the district government. Furthermore, because of the lack of human resources at Puskesmas level, one health worker may be responsible for more than one health program. As a result, those who are sent to trainings may not always be the health workers who will deal with the HIV control program in their daily work. Lastly, capacity building activities are not followed up with adequate supervision and mentoring.

**Policies on HRH Regulation & Planning**

**HRH Legislation**

HRH in Indonesia is regulated by state agencies or authorized officials through procedures stipulated in legal regulation. Legislation operates within a hierarchy, meaning that a lower level regulation must not contradict the higher ones. The hierarchy of laws is as follow: 1) The 1945 Constitution of the Republic of Indonesia; 2) The Decree of the People's Consultative Assembly; 3) Law/Government Regulation in Lieu of Law; 4) Government regulations; 5) Presidential decree; 6) Provincial Regulations; and 7) District/Municipalities Regulations.

In addition to these seven laws, legislation also covers the laws and regulations stipulated by the People's Consultative Assembly (MPR), House of Representatives (DPR), Regional Representative Council (DPD), Supreme Court (MA), Constitutional Court (MK), Audit Board of Indonesia (BPK), Judicial Commissions (KY), Bank Indonesia (BI), ministers, bodies, institutions or equivalent commissions established by law or the Government by the order of law, Provincial House of Representatives (DPRD Provinsi), Governor, Regency/Municipal House of Representatives (DPRD Kabupaten/Kota), Regent/Mayor, Village Head or equivalent. These regulations are recognized and have binding legal force as they are ordered by a higher Legal Regulation or an established authority.

Figure 5 on the following page provides an overview of the laws that are relevant to the management of HRH development and are discussed in more detail in the following sections. This overview is important, considering the issue of over regulated matters, disharmony, contradictions, and/or overlap between regulations that is almost always found and present in the hierarchy of Indonesian legislation.

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10 Article 7 paragraph (2) and the explanation of Law Number 12, Year 2011
11 Article 7 paragraph (1) of Law Number 12, Year 2011
12 Pasal 8 ayat (1) Undang-Undang Nomor 12, tahun 2011
13 Pasal 8 ayat (2) Undang-Undang Nomor 12, tahun 2011
In general, regulations that are relevant to human resource for health development management are as follows:

1. Law Number 23 Year 2014 on Regional Government;
2. Law Number 5 Year 2014 on State Civil Apparatus;
3. Law Number 36 Year 2014 on Health Personnel;
4. Law Number 17 Year 2007 regarding the National Long-Term Development Plan (RPJPN);
5. Law Number 29 Year 2004 on Medical Practice;
7. Government Regulation Number 18 Year 2016 on Local Apparatus;
8. Government Regulation Number 2 of 2018 on Minimum Service Standards;
9. Regulation of the Minister of Health Number 33 of 2015 on Guidelines for the Preparation of Health Human Resources Needs Planning;
10. Regulation of the Minister of Health Number 26 of 2017 on Guidelines on Procurement of Health Human Resources in Supporting the Healthy Indonesia Program;
11. Joint Regulation of the Minister of Health, Minister of Home Affairs, and Minister of State Apparatus Utilization and Bureaucratic Reform Number 61 Year 2014, Number 08 / SKB / MENPAN-RB / 10/2014, on the Planning and Distribution of Health Human Resources in Government Health Service Facilities.

**Licensing and Registration**

**Existing Policies.** Registration of health workers is managed by the respective council or assembly (i.e., physicians by KKI, nurses and midwives by the Indonesian Health Workers Assembly [Majelis Tenaga Kesehatan Indonesia – MTKI]). Since 2007, physicians must pass a national competence test to obtain the registration letter (STR) which is issued by the KKI and is valid for 5 years. To obtain a license for practice (SIP), physicians must have a valid STR. The SIP is issued by the local government based on the DHO recommendation in the district where
the physician is intending to perform medical practices. The SIP can be used to practice medicine at a maximum of three health facilities.

Similarly, nurses and midwives must pass a competence test conducted by the respective councils and obtain a registration letter and SIP to practice or to work at health facilities.

**Implementation Issues.** Data from the Indonesian Health Worker Assembly (Majelis Tenaga Kesehatan Indonesia/MTKI) shows that between 30-50% of health workers are not able to pass the competence tests. This might be due to the huge variation in the quality of HEIs for health. There is no explicit regulation that requires regular monitoring or supervision of HEIs for health, and therefore, the monitoring of the overall quality of HEIs is partly done through accreditation by an independent body (Lembaga Akreditasi Mandiri Pendidikan Tinggi Kesehatan Indonesia/ LAMPTKES). Although essentially accreditation has its own function to grade HEIs, in the case of Indonesia, it has another function — to monitor the quality of HEIs. According to Permenristek Dikti no. 32 tahun 2016, the accreditation should be conducted once every two years.

The registration process is often delayed because of the lack of human resources at the responsible organizations. An online registration system has been established to overcome this problem.

A lack of human resources is also often the barrier for the DHO in effectively issuing recommendations for SIP, although this situation has now improved. In the former DHO organizational structure, the SIP recommendation was managed by the Division of Health Services, but it is now managed by the Division of Health Resources. This new entity is however not present in all DHOs.

**Allocation, Budgeting and Recruitment**

**Existing policies.** Responsibility for overall HRH planning lies with the MoH at the BPPSDMK, and the planning of civil apparatus lies with the Ministry of Civil Apparatus Empowerment. The provincial and district government hold the authority and responsibility for planning and procurement of frontline HRH at their respective levels, both for civil servants and non-civil servants. The DHO deploys HRH to the health facilities (hospitals and Puskesmas) and the local government can also relocate HRH to other facilities or other areas on certain conditions, such as to distribute health workers evenly (PBM No. 61/2014) or supporting MOH programs (e.g., Indonesia Sehat, the Minister of Health Regulation No. 26/2017).

The MoH, through the BPPSDMK, can only provide recommendations on the number of health workers needed at the area and health facility level (The Minister of Regulation “Development and empowerment of HRH including planning, distribution, competencies and quality improvement of HRH” No. 64/2015, see KII Guide D). The Directorate General of Health Services sets the quality standards for health facilities, i.e., the minimum type and number of health workers for accreditation of health facilities. Without close coordination between these stakeholders involved in HRH policy implementation (Figure 4), accurate HRH planning and allocation cannot be achieved.

Depending on the level of recruitment and the employee status, health workers can be categorized as follows (Act on Health Workers, 2014):
Civil servant health workers. The recruitment process for civil servant health workers follows the regulation for civil servant recruitment. Each government agency, led by the head of the agency as Pejabat Pembina Kepegawaian, calculates the number and type of civil servants required, based on job and workload analysis. Based on this calculation, the Ministry of Civil Apparatus Empowerment – Reformation of Bureaucracy (MenPAN-RB) determines the number and type of required civil servants. The calculation of the number and type of civil servant positions is conducted for a period of five years and is specified per one year based on the priority needs. After this is agreed, each government agency conducts the recruitment processes (i.e., announcement, selection tests, and pre-civil servant training) until the recruited civil servants are inaugurated. Central and local governments are responsible for civil servant recruitment at their respective technical health facilities. Civil servant salaries are standardized (Government Regulation No. 18/2018) and budgeted from the National or Local State Budget (APBN/APBD) depending on their status (Act on Civil Apparatus, 2014). However, the salaries and incentives are varied among districts, depending upon Upah Minimum Regional (UMR/standard of minimum salaries at regional level) and funding availability at the district level.

Non-civil servant health workers. Non-civil servant health workers account for a large proportion of the health workforce in Indonesia (Law of Health Workers No. 36/2014) since the allocation of civil servant health worker is limited. There are various types and nomenclature of non-civil servant health workers:

- **Contract-based health workers.** These are health workers (including physicians, midwives and nurses) who work at government agencies on a contract basis, often for a prolonged period. There are various names for this position, including tenaga honorer, tenaga kontra, etc. Contract-based health workers are present in almost all levels of health facilities. These workers are typically recruited by the district/municipality government (MoH Regulation No. 1199/2004) or directly by the health facilities, which have autonomy to do so. For example, health facilities that have been certified as Badan Layanan Umum Daerah (BLUD) or the local public service unit are authorized to directly hire health workers. From 2005 to 2014 it was required that the local government promote contract-based health workers to become civil servant health workers (Government Regulation no 48/2005).

- **Non-permanent government workers (or Pegawai Tidak Tetap [PTT]).** Since 1992, the Government has been implementing the PTT program to meet the needs of the health workforce, especially physicians and midwives in remote/very remote areas. Physicians and midwives are recruited to work in these areas for a certain period, ranging from six months to two years. Physicians are usually assigned in Puskesmas or hospitals, while midwives are assigned to the village level. The most recent policy stipulates that PTT physicians and midwives can be allocated to remote/very remote health facilities located in under-privileged areas, border areas, island areas, or conflict areas (MoH Regulation No. 7/2013). The PTT programs are mostly funded by APBN and some by APBD, i.e., provision of facilities (such as housing and transportation) and incentives.

- **Contract-based government worker, or PPPK.** The Act on Civil Apparatus (2014) stipulates a new government worker status, i.e., PPPK, whose rights and obligations are similar to those of civil servants but with a temporary employment contract. This stipulation will come into effect in 2019.
- **Penugasa Khusus, or Special Assignment.** To achieve more equal distribution of health workers, especially physicians and specialists, the MoH also designs special assignment programs such as a post-internship assignment, residency training, post-specialist training, as well as Nusantara Sehat (NS) programs (Law of Medical Education No. 20/2013, MOH Regulation No. 16/2017). In these programs, newly graduated physicians or specialists are obliged to work in remote areas or areas which need physicians and specialists for a certain period. These programs are mostly funded by APBN and some by APBD. The NS program is a new initiative by the MoH to deploy health teams to needy areas for a period of two years. The team consists of four to five types of health workers, depending on the need of the area.

**Private health workers.** There is no specific regulation concerning private health workers, except the Act on Labor Force (2003). Private health workers include those who work as private individual practitioners or at private health facilities (i.e., general clinic, maternity clinic, hospital, etc.).

**Implementation Issues.** These existing regulations on HRH planning and distribution show a mix between centralized and decentralized authority on HRH procurement. While overall HRH planning is the responsibility of MoH, the actual HRH planning and procurement at the local level is the autonomy of local government (through PHO and DHO). As a result, the actual number and distribution of HRH in the health sector at the provincial and district level is often not known by MoH. PHO and DHO often only report the HRH situation to the local government head and not always to the MoH (KII with policy maker). Moreover, timely databases of health workers at the local level do not exist or are not maintained adequately because of the high turnover of health workers. The HRH planning at the local level is not often based on long term projections. Often, the MoH must perform assessments or surveys to obtain an accurate number of health workers for HRH planning.

In addition, the limited number of civil servants that can be hired by local government is still inadequate to meet the HRH needs. This is often addressed by recruiting non-civil servant health workers to close the HRH gap. However, the Government Regulation no. 48/2005 stipulates that non-civil servant health workers should have been promoted to civil servant health workers by 2014. This regulation was not fully implemented because of the limited financial capability of local governments to allocate civil servant salaries. Although relocation and redistribution across areas and health facilities is possible, in practice, it is not always easy because limited financial capacity of destination areas to attract and retain health workers.

In remote areas such as Papua and West Papua Province, the acute need for human resources has been compensated by health workers deployed through special assignment and PTT schemes (Joint Ministerial Regulations MOH, Minister of Home Affair and Minister of Civil Apparatus Empowerment, Permenkes No. 61/2014, Permendagri No. 68/2014 dan 08/SKB/MenPAN RB/10/2014). However, these assignment schemes are temporary. Health workers who are assigned in these areas are expected to be permanently hired by local governments, however, again this is constrained by the limited financial capability of local governments.

A specific implementation issue in HRH for HIV is the reliance on non-health workers such as NGO or CSO workers to perform outreach services, especially to key populations, as well as counseling. So far, there has been no regulation that addresses the non-health workers (KII with NGO).
Policies on HRH Management

Remuneration

Existing Policies. Health workers in the public health sector receive income from various sources depending on their status. These may include: local allowances, special incentives for health workers (service fees), capitation, operational funds (BOK), local travel/transportation allowance, transportation fees, meal allowances, and/or performance-based incentives.

Civil servant health workers are entitled to basic salaries, several types of fixed incentives, pensions, and health insurance. The basic salary of civil servants is dependent on their level and is the same across the country. There are several types of incentives. First are the incentives based on the level and type of the civil servant. Those who hold administrative or managerial positions are entitled to incentives referred to as structural incentives, while civil servants who provide services receive functional incentives. Salaries are budgeted from the State Budget for civil servants recruited by MoH and from the Local Budget for civil servants recruited by the local government. Non-civil servant health workers are also entitled to basic salaries and incentives (Law of Labor No. 13/2003) allocated from the Local Budget. The rate of basic salary is determined by the local government regulation. Meanwhile, health workers deployed by the MoH on special assignment will receive basic salaries and incentives.

Depending on the local government policy and the employment status, health workers may receive local allowances (i.e., housing, dependents, transportation) and performance-based incentives.

Physicians and other health workers who provide health care services are also entitled to medical service fees (MOH Regulation No. 21/2016). Before the Universal Health Coverage (BPJS) was introduced, the service fee was standardized by areas and health facilities. Based on the BPSSDM study (2015), the biggest of source of health personnel income is obtained from the service fees. For those who work at primary health care facilities such as Puskesmas, service fees are sourced from the capitation fund. These funds are obtained from monthly BPJS Health payments to health facilities. Based on MoH Regulation No 21/2016, the capitation fund is fully utilized for: (a) payment of health services (at least 60% of the capitation fund); and (b) supporting the operational costs of health services.

Health workers working at the secondary and tertiary care levels, such as hospitals, will also receive service fees from BPJS. Different from primary health care facilities, hospitals will receive reimbursement from BPJS for the total amount of medical care they provide.

Health workers providing services for HIV do not receive additional incentives. Funding for HIV is usually allocated to PHO/DHO and is mainly utilized for disease control activities, such as training from PHO/DHO to health workers at Puskesmas and hospitals. Puskesmas are now also entitled to operational funds or BOK that can be used for financing operational activities. For example, health workers who provide outreach services or undertake disease control program activities outside the health facilities (such as delivering health education on HIV/AIDS to the community) are entitled to transportation fees allocated from Puskesmas operational funds.

Implementation Issues. The inadequate compensation of health workers compared to the workload has been a long issue in the Indonesian health sector. Not only that the amount is regarded as too small, but the payment is often delayed. In remote areas, salary payments are
often delayed or not even paid, especially for non-civil servant health workers. After the BPJS was introduced, reimbursement of medical service fees became severely delayed, especially at the hospitals.

At Puskesmas level, the workload of Puskesmas staff significantly increased after the introduction of BPJS. Moreover, health workers are not only responsible for providing medical services but also managing several health programs from administrative to operational issues, which add to their workload significantly. For the latter, operational incentives for performing activities outside the health facilities are available from the Puskesmas Operational Funds (BOK) or from the DHO.

Health workers working at provincial and district levels, especially in remote areas are entitled to additional incentives and facilities, yet the amount varies greatly, depending on the financial capabilities of the local government and their capability to adapt the national regulation to the local level and manage the funding for the Puskesmas.

The availability of financial incentives for health workers in undertaking HIV activities depends very much on whether PHO/DHO and Puskesmas allocate funding for HIV in their budget plans. So far, the financing of HIV relies heavily on foreign donors. In 2010, only 30% of all districts allocated funding for HIV. In 2007, the Minister of Home Affairs issued a regulation that aimed to increase the proportion of local funding and reduce dependency on international aid. However, it was considered by the local governments to have weak legal power and was not implemented fully. As a result, there have been large funding gaps in HIV activities. There are even some important activities that are not funded, such as outreach services performed by NGO workers. For NGO workers who perform outreach and counseling, there have been no incentives paid by the government. Incentives for these workers mostly came from donors (KII with NGO).

**Quality of Care**

**Existing Policies.** The implementation of the HIV control program is overseen by the central government through the Sub-directorate of HIV/AIDS at the MoH. They are responsible for formulating the policies, developing implementation guidelines including norms, standards, and procedures, providing technical guidance, and establishing evaluation and reporting mechanisms from DHO to PHO, from PHO to MOH (MOH Regulation No. 64/2015).

The policy on Permenkes No. 21/2013 jo. Permenkes No. 87/2014 states that quality of HIV care should be monitored through supervision, audits, and monitoring and evaluation meetings. Although evaluation of programs should also be conducted, no definite timeframe is stated in those regulations.

Quality of care in health facilities is also maintained through the accreditation of health facilities, which is the responsibility of the Directorate General of Health Services. Accreditation of Puskesmas and other primary health care facilities is regulated by the MoH Regulation no. 46/2015, while accreditation of hospitals is regulated by MoH Regulation no. 34/2017. All primary and referral health care facilities must be accredited by the Accreditation Commission every three to five years, depending on the type of health facilities. The commission surveys and observes all components of care including individual and population health care. HIV/AIDS care, as one of the services provided by the health facilities, is also included in the accreditation assessment, which means that for HIV/AIDS care, all standard operating procedure (SOPs),
Manuals, and guideline of care must be available and be rigorously implemented at the health facilities being accredited.

Based on the recent Government Regulation (No 2 2018), HIV care is included in the Minimum Service Standards (SPM) that all district governments must comply with, (i.e., that every person at risk of HIV infection is able to receive standard HIV testing.) The policy stipulates that HIV testing should be performed by health workers at primary care facilities (Puskesmas and their network) and referral health facilities – both government and private facilities. Re-examination at three, six, and 12 months must be performed after the first examination for people with STIs, transsexual/transgender, PWID, and prisoners with negative HIV testing results. This policy will be effective by 2019.

**Implementation Issues.** Indonesia Medical Association (*Ikatan Dokter Indonesia [IDI]*) rarely audits and evaluates quality of care, including prescribing practices. Despite the monitoring systems in place for in-service level, the monitoring practices vary highly across facilities and often very much depend on budget availability.

Of the total number of health facilities in Indonesia, only about 50% are accredited. Barriers to accreditation include a lack of human resources at health facilities to apply and meet the accreditation standards. Moreover, accreditation of health facilities is often seen as an ultimate objective rather than means to achieve and maintain quality of care (KII with MoH program manager).

**Task Shifting**

**Existing Policies.** Regulations in Indonesia establish clear and rigid boundaries of tasks and functions that cadres of HRH can conduct. For example, the Act on Health (Law of health No. 26/2009) states that diagnosis and treatment must be performed by physicians and that drugs can only be prescribed by physicians (Law of Medical Practices No. 2009/2004). Even so, there is a policy on task shifting in situations where there are shortages or an absence of physicians. Task shifting is possible, and tasks can be delegated to nurses or midwives under the supervision of a physician or the head of the DHO. As a result, health workers can carry out medical actions based on delegation of authority from doctors and assignments in areas with certain limitations as explained below:

- **Delegation of authority/action.** The transfer of medical authority to health professionals (non-medical) is possible. Article 65 of Law 36/2014 concerning health personnel states that health workers can receive medical actions from medical personnel, provided that:
  1. actions delegated include the abilities and skills possessed by the recipient of the delegation;
  2. the implementation of the devolved action remains under the supervision of the assignor;
  3. the assignor of the assignment is still responsible for actions devolved during the implementation of the action in accordance with the delegation given; and actions that are delegated do not include decision making as the basis for implementing the action.

- **Delegation of medical authority to nurses.** The transfer of medical authority to nurses has a special legal basis (*lex specialis*). Based on Article 29, Article 32 of Law 38/2014 concerning nursing, the delegation of medical authority to nurses can only be
given in writing by a medical personnel (doctor). Delegation of authority can only be delegated to professional nurses or trained vocational nurses who have the required competencies and the actions must be carried out under supervision.

- There is no specific legal basis for delegating medical authority to the midwife, other than the general rules (lex generalis), namely Law 36/2014 on Health Personnel.

- **Duty of nurses with certain limitations.** Nurses can also exercise medical authority when performing tasks within certain limitations. Implementation of tasks with certain limitation is an assignment carried out in the absence of medical personnel and/or pharmacy personnel in an area where the nurse is on duty.

- The condition of the absence of medical personnel and/or pharmacy personnel in an area where the nurse is assigned is determined by the head of the Technical Unit who organizes government affairs in the local health sector.

- In carrying out tasks under certain limitation, nurses are authorized to:
  1. perform treatment for common diseases in the absence of medical personnel;
  2. refer patients according to the provisions of the referral system; and
  3. provide limited pharmaceutical services in the absence of pharmaceutical personnel.

  (Article 29, Article 33 of Law 38/2014 on Nursing).

- Regarding midwives, there is no specific legal basis governing the duties of midwives with certain areas of limitation, to take medical action.

**Implementation Issues.** Most issues concern task shifting/delegation of authority. The MOH has established CST teams to standardize the provision of ART in hospitals and Puskesmas. A CST team consists of a medical doctor, a nurse, a lab technician, and a recorder/reporter. The team should be trained by certified trainers. By establishing this team in an assigned hospital and puskesmas, task shifting from a doctor to a nurse is possible, and many health facilities, especially those in remote areas or facing a shortage of medical doctors, have implemented this approach. On the other hand, task-shifting often occurs without formal delegation, especially in the absence of physicians, and many of the physician's tasks are performed by the available health workers, especially nurses. There have been many anecdotal reports where nurses who perform individual tasks also prescribe and administer prescription drugs to patients.

**Data Use**

Timely and accurate data is necessary for effective, evidence-based implementation of HIV and HRH-related policies. Overall, there is a lack of data regarding the number and distribution of HRH in the health sector at the provincial and district levels. Moreover, timely databases of health workers at the local level do not exist or are not maintained adequately because of the high turnover of health workers, and even worse, by a lack of HRH data linkages between national and province/district level. As a result, the HRH planning at the local level is not often based on long term projections. Often, the MoH must perform assessments or surveys, such as the Health Workers Survey (RISNAKES), to obtain an accurate number of health workers for HRH planning, which can be an expensive and time-intensive process.
Site-level assessment results

This section describes evidence from 10 selected, non-representative sites in Jakarta to glean a more granular appreciation of how HIV and HRH policies are implemented.

Overall, the ten sites reviewed in this assessment obtained a sufficient number and type of health workers, however, the self-reported knowledge and ability to perform tasks across the HIV services is inadequate. Specifically, for Fast Track Indonesia and in consideration of HRH optimization, higher skilled clinicians perform lower-skilled tasks such as HIV counseling and testing with frequency; most nurses did recognize their role for ART activities, and nor did pharmacists for KP-specific tasks, respectively.

Note: The private clinic and the sub-sub-district facility (Puskesmas kelurahan) are excluded from some of the following results, as they differ from the Puskesmas kecamatan in ways that would make them distinguishable from other facilities and could skew the findings. Where these facilities have been excluded, the text will note that the results only include the eight Puskesmas kecamatan.

As summarized in Table 5 below, the eight Puskesmas (PKM) kecamatan experience generally low service volume and have staffing that surpasses the "core team" minimum of five. On average, all the health worker teams surveyed in the eight Puskesmas kecamatan (primary health care facilities) in Jakarta reported having advanced or sufficient knowledge for about three-quarters (76.5%) of the HIV service delivery tasks assigned to them and expressed confidence in their ability to perform over two-thirds of these same tasks (69.6%).

Table 5. Summary results from the site-level assessment

<table>
<thead>
<tr>
<th>PKM</th>
<th>HIV Services June-August 2018</th>
<th>Core team</th>
<th>Knowledge</th>
<th>Confidence to perform</th>
<th>% Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8 6 82 ART</td>
<td>+</td>
<td>Advanced</td>
<td>Confident, capable to mentor</td>
<td>66%</td>
</tr>
<tr>
<td>B</td>
<td>20 15 237</td>
<td>+</td>
<td>Sufficient</td>
<td>Confident but need support</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>0 0 61</td>
<td>+</td>
<td>Basic</td>
<td>Needs practice</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>10 6 111</td>
<td>+</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>20 11 171</td>
<td>+</td>
<td>0%</td>
<td></td>
<td></td>
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<tr>
<td>F</td>
<td>10 9 265</td>
<td>+</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>2 7 81</td>
<td>+</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>13 12 241</td>
<td>+</td>
<td>34%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Detailed, site-specific information can be found in the site-specific reports created by HRH2030 in Annex R. These reports present overall findings and may identify potential barriers, bottlenecks, and impediments to HIV service delivery; for further information, users should further explore Annex R for additional nuance for informed decision-making.
1. HIV Service Delivery Data Review Results

The FY18 Q3 service delivery data at all 10 sites were obtained. As these data were not fully verified at the writing of this report, and the site-level data are sensitive, they will not be disclosed in an identifiable manner.

The 10 sites represented 21% of the total PEPFAR-supported Jakarta sites (10/48). Based on the verified FY18 Q3 HIV service delivery data captured at the time of the data collection period, these ten sites served 37.0% of all people receiving testing and counseling services (5,913/15,987); 55.7% of all people newly testing positive for HIV (384/689); 38.6% of all people currently receiving ART (4,346/11,267); and 43.7% of all people newly enrolled on ART (313/716). Relative to many HIV service delivery units in other LMICs with similar staffing levels, these sites are responding to a reasonable service volume workload.

Unit managers reported daily volumes of all patients to be between 100 (PKM Kelurahan Kramat, Senen) and 700-900 (PKM Kecamatan Cengkareng). The volume of daily HIV patients ranged from one to two patients (PKM Kelurahan Kramat, Senen) to 200 patients (PKM Kecamatan Kramat Jati); and ranges of daily ART patients were between three to give (PKM Kecamatan Gambir) and 100-150 (Ruang Carlo). All sites were open for at least 40 hours each week, with morning and afternoon weekday hours, but more limited weekend hours; some were only open on the weekend for emergencies. Of note, high-volume site Ruang Carlo stays open until 20h00 and for four hours on Saturday morning. We recognize that there are additional nuances to the data (i.e., seasonal drops in service utilization) that require further examination.

2. Unit Manager Questionnaire Results

A total of 10 unit managers from ten service units were interviewed. Respondents consisted of: five Heads of Puskesmas; one Head of Clinic Unit (Ruang Carlo); two Heads of Implementing Unit for Individual and Community Health Units; and two HIV Service coordinators. The heads of Puskesmas indicated that they lacked control over some of the detailed information asked, both related to HIV services (e.g., the number of patients accessing HIV/ARV services), and related to HRH (e.g., who was present that day, number of employees). Several heads of Puskesmas were accompanied by Administration Unit (Tata Usaha, TU) officers and/or HIV service coordinators, or who submitted the questionnaire to the Head of the Individual Health Business Implementation Unit/Community Health Unit and the HIV service coordinator for completion. The questionnaire generally took 60 minutes to be completed.

Across the eight Puskesmas kecamatan sampled, about 5.7% (72/1,257) of all health workers staffed were working on HIV service delivery. Figure 6 includes the five “core team” health worker types needed for site activation: doctor, nurse, pharmacist, lab technician, and recording and reporting officer. Of those cadres, about 9.8% (65/664) work in HIV service delivery. Of all cadres at the sites, the largest proportion of lab technicians were performing HIV services: 42.9% (18/42). Unit managers of the Puskesmas kecamatan identified seven of the 237 midwives (2.95%) as providing HIV services, despite their defined role in PMTCT.
When unit managers of the eight Puskesmas kecamatan were asked who performs in each HIV service area and why, across all service areas (listed in Table 2), they reported that community counselors were untrained for tasks they performed 66.7% of the time. Across all cadres and service areas, unit managers reported that health workers would perform a task due to either a health worker shortage or high patient volume about 28.8% and 31.7% of the time, respectively.

Unit managers noted a range of reasons for which some of their health workers may not be present on the day of the questionnaire: maternity leave, sick leave, trainings, and annual leave. Five of the eight Puskesmas kecamatan cited “reassignment/transfer by government” as among the top three reasons for health workers to leave the facility, with “long distance from residence to Puskesmas,” “continuing education,” and “relocation with spouse” as other more frequently cited reasons. Ruang Carlo noted that no staff have quit or transferred.

When asked about the biggest HRH challenges at the facility, staff shortages were the most frequently noted challenge, cited by six out of the eight sites, followed by inadequate infrastructure (four sites) and inadequate clinical competence (three sites). The top HIV training priorities cited by unit managers were “counseling” and “medication support service.”

HIV “Core team”

In Indonesia, specifically in DKI Jakarta, there are no rules or guidelines in determining who or what functions are mandated at the HIV department. However, the site-level assessment demonstrated that the HIV core team required by local (DHO) requirements consisted of five health workers: a doctor, nurse, lab analyst, pharmacy worker, and recording and reporting officer:

- **Doctors**: At almost all health facilities, doctors serve concurrently as coordinators, except for Kramat Jati, where the HIV service coordinator is a senior nurse. In general, doctors confirmed that they carry out almost all tasks in HIV services.
- **Nurses**: Most sites reported one to two nurses assigned to HIV services, though this depended on the number of patients, the availability of health workers, and the policies of the head of the health center.
- **Lab Analysts**: Usually one facility has more than four lab analysts, but only one to two people are dedicated to HIV services. In general, Puskesmas could only provide laboratory services for HIV patients in the form of antibody tests and syphilis tests, while other tests such as CD4 or VL are carried out in private hospitals or laboratories, with the blood specimen collected at the Puskesmas and then sent to the hospital or private lab for analysis. Some health centers provide direct referral of the client to the lab. Ruang Carlo provides VL and CD4 examination services.
- **Pharmacy / Pharmacist / Pharmacist Assistant Officer**
• **Recording and Reporting Officers:** Several Puskesmas assign this task to young cadres. Usually young cadres are PLWHA who have the potential and are paid by the Puskesmas to dedicate themselves to HIV services.

Additional staff included:

• **Midwives:** At almost all health facilities (except in Kramat Jati Puskesmas), midwives were not part of the HIV core team even though the Puskesmas ran the PMTCT program. PPIA becomes an "additional task" for midwives to conduct HIV screening for all pregnant women. Other tasks — such as conducting ARV counseling for pregnant women and mentoring during HIV result counseling for HIV-positive pregnant women — are carried out by doctors/nurses in the HIV department. At Tanjung Priok, there is no PMTCT-trained midwife. The PKM Kramat Jati has a "standby" midwife in the HIV clinic. The HIV and STI clinics were merged into “Jasmine Poli”, thus midwives became part of the HIV Team.

• **Community counselor or cadre:** In all Puskesmas, the "counselor" function is attached to the function of the doctor or nurse, such that no health staff has a dedicated counselor. In addition, community counselors were not found at any Puskesmas. Some Puskesmas collaborate with CSOs, and their role is limited to patient outreach. Several Puskesmas, such as Tanjung Priok, Setiabudi, and Cengkareng, have a staff called Youth Cadre. Youth cadres come from PLWHA who have the capacity needed by the Puskesmas and have a commitment to assist HIV services at the Puskesmas. They are paid by the Puskesmas as daily workers free from BLUD funds.

All sites surveyed had a definitive HIV core team, apart from the lower-tiered PKM kelurahan. There, some staff are involved in HIV services based on integer programs such as TB-HIV and PPIA (PMTCT).

3. **Rapid Task Analysis Results**

Data collection was successfully self-reported by a total of 68 health workers from the 10 sites completed prior to the focus group discussion.

Following is the distribution of 65 respondents, based on Puskesmas and their functions, as shown in Table 6.
Table 6. Distribution of Rapid Task Analysis Respondents by Site and Cadre

<table>
<thead>
<tr>
<th>PKM Kecamatan Cakung</th>
<th>Community Counselor</th>
<th>Doctor</th>
<th>Lab Technician</th>
<th>Midwife</th>
<th>Nurse</th>
<th>Pharmacy</th>
<th>Record &amp; Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PKM Kecamatan Cengkareng</td>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PKM Kecamatan Gambir</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PKM Kecamatan Kramat Jati</td>
<td></td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PKM Kecamatan Penjaringan</td>
<td></td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PKM Kecamatan Setiabudi</td>
<td></td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PKM Kecamatan Taman Sari</td>
<td></td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PKM Kecamatan Tanjung Priok</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ruang Carlo</td>
<td></td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PKM Kelurahan Kramat</td>
<td></td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>3</strong></td>
<td><strong>13</strong></td>
<td><strong>11</strong></td>
<td><strong>10</strong></td>
<td><strong>12</strong></td>
<td><strong>9</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

The self-reports of surveyed health workers’ HIV knowledge and skills is reviewed by health worker type. While there is great richness in the cadre-specific data visualizations (Figures 7-13), it is useful to review the site-specific combinations of self-reported health worker skill mix at the individual site level (Annexes R 01-08)\(^\text{14}\). Additional data are available on health workers’ self-reported form of training for tasks: whether through pre-service training, formal in-service training, clinical mentoring, or informal on-the-job training. Overall, many health workers have not received training on tasks for which they have been assigned or are performing at the selected sites. A small minority of those trained on the tasks reported acquiring them through pre-service training.

The Rapid Task Analysis results can also be reviewed with self-reported unassigned tasks removed (i.e., removing the grey section of the stacked bar chart); however, it is valuable to consider how theoretically designated tasks as listed within the instrument are considered by the health workers. For example, X task may theoretically be a nurse’s task from the perspective of the unit manager, but the nurse may not personally report that the task is his or her own.

For the unit manager questionnaire results, the following results only include the eight Puskesmas kecamatan.

\(^{14}\) Due to the potentially sensitive content of the individual site-level reports, they have been anonymized.
Doctors reported the highest proportion of training for tasks of all cadres, though most trainings were over one year ago. A minority of respondents identified palliative counseling as their assigned task; they were mostly untrained in palliative and addiction counseling.
Many nurses did not identify the tasks listed within the Rapid Task Analysis as their assigned tasks. Of those who did identify them, adherence counseling and ART initiation counseling were the areas that they performed with the greatest confidence and frequency.

Figure 8. Nurses’ self-reported HIV knowledge, skills, and training by task (n=10)
Of all their HIV-related tasks, lab technicians reported the lowest levels of knowledge and confidence conducting pre-ART support exams and inputting lab results data to the HIV/AIDS information systems (Sistem Informasi HIV/AIDS & IMS - SIHA); their greatest knowledge and confidence were in monitoring the availability of tools; HIV and syphilis lab checks for mobile testing; and HIV lab activity logging.

Figure 9. Lab technicians’ self-reported HIV knowledge, skills, and training by task (n=9)
For most defined tasks, pharmacists reported higher confidence in performing them than their knowledge in that same clinical area. Only one pharmacist reported training on writing usage reports and administering methadone for PWID harm reduction, respectively.

Figure 10. Pharmacists’ self-reported HIV knowledge, skills, and training by task (n=8)
For tasks they perform frequently, recording and reporting officers cited the highest levels of confidence: inputting data to SIHA and a database called KOHORT, and recordkeeping for HIV-TB-STI reports. Less frequent tasks such as completing logs (LASS and PTRM) had lowest self-reported competency.

Figure 11. Record and reporting officers’ self-reported HIV knowledge, skills, training by task (n=9)
For midwives, ART enrollment and counseling were tasks for which they have not been trained, nor did they report these to be their tasks. For PMTCT activities, 55.6% reported performing them almost every day, but only 22.2% reported adequate confidence to perform them, despite a majority (6/9) reporting formal in-service training in this area.

Results from the rapid task analysis for community cadres are not aggregated, given the very small sample size (n=3).
4. Client Flow Mapping Results

A total of 18 ART refill clients were observed at all sites, including 16 clients observed in the eight Puskesmas kecamatan. Client flow mapping was not conducted at the PKM Kelurahan, where ARV services are not provided. The Android-based observation instrument (i.e., Open Data Kit [ODK]) was considered easy to operate by community counselor for client flow observation. In the future, CSOs and LINKAGES could use these instruments to observe the flow of services and the duration of service for HIV patients; LINKAGES would have the required capacity to support data management and analysis.

On average, the 16 clients observed in Puskesmas kecamatan by trained community cadres spent 51% of their time at the site in a waiting room, ranging from 10.8% to 84.6%. Length of visit ranged from 18 minutes to 92 minutes. The small sample size of clients should be recognized as a limitation of this analysis. (Figure 14)

Figure 14. Time spent in waiting rooms / total time spent at PKM Kecamatan by ART refill clients (n=16)

5. Health Worker Focus Group Discussion (FGD) Results

An FGD was completed at each of the 10 selected sites. A total of 59 health workers participated, representing a range of “core team” staff.

Health workers of the eight Puskesmas kecamatan (n=49) participating in the focus group discussions identified workforce problems across all problem type categories as displayed in Table 7. Each focus group identified problems in multiple categories, demonstrating a complex variety of facility-specific problems. Overall, every single facility focus group identified problems in the “inefficient work processes” category, while most (seven out of eight) identified problems in the “health worker competency gaps,” “low engagement,” and “poor allocation of staff and
tasks” categories. Generally, facilities reported a need for training in specific areas (as is supported by some of the low confidence and training results in the RTA), high workloads for HIV staff, and inefficiencies in recording and reporting. The focus group discussions also highlighted problems outside of these categories that negatively affect HIV service delivery, including inadequate supplies and infrastructure (as noted by participants of the unit manager questionnaire).
<table>
<thead>
<tr>
<th>PKM Code</th>
<th>Health worker competency gaps</th>
<th>Low engagement</th>
<th>Poor allocation of staff and tasks</th>
<th>Inefficient work processes</th>
<th>Other health systems issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>- The need to upgrade knowledge and competence</td>
<td>- Perceived ongoing stigmatization towards HIV clients from the internal, non-Pelangi Puskesmas staff.</td>
<td>- High workload of Pelangi (HIV core) team. - Limited # personnel in Pelangi policlinic.</td>
<td>- Mostly related to poor allocation of staff or tasks and low engagement perceived from the other units.</td>
<td>- Inadequate supplies / equipment - Poor infrastructure</td>
</tr>
<tr>
<td>B</td>
<td>- Lack of trained personnel, especially pharmacists, lab analysts, and midwives. - Competency gap in counseling for recording and reporting staff/peer cadre due to the specific circumstance when doctor and nurse are on assignment outside.</td>
<td>- Not mentioned</td>
<td>- Higher workload for some personnel. Doctor often has outside assignments, on top of the technical and administrative work inside. Formally trained personnel are likely to have more responsibility than non-trained/peer-trained ones, particularly for pharmacist and lab analyst.</td>
<td>- Process of data collection, recording, and updating is not efficient. Data from mobile testing is not timely obtained from the other unit. Several types of reporting need to be inputted to SIHA.</td>
<td>- Poor infrastructure: Lack of dedicated space/room for counseling, true to the Klinik Arsa, MCH, and pharmacy</td>
</tr>
<tr>
<td>C</td>
<td>- Not mentioned</td>
<td>- Sometimes, staff who had been trained in TB-HIV did not examine TB-HIV patients - Medication consultation was not conducted at the pharmacy, but at the HIV policlinic</td>
<td>- No clear division of roles and services among PFTRM, IMS, and HIV. Specifically, no staff responsible for IMS Policlinic. - Limited number of counselors in HIV Policlinic and no back-up staff during the absence of HIV Policlinic staff. - Lack of lab technician at the laboratory; lab analyst overwhelmed by workload. - Lack of agreement between HIV team and management on allocation.</td>
<td>- Status of patient is held at Sakura Policlinic instead of registration desk because of lack of room. - No clear segregation of the patient code of PFTRM, IMS, and HIV at registration desk - HIV patient status number different from general patient number - IMS Policlinic does not have clear technical system</td>
<td>- Reagent stock expired on August 2018, no information on schedule of reagent delivery - Confusion around legal basis for providing HIV and IMS lab test results to patients - HIV team would like premarital HIV test to be free of charge</td>
</tr>
<tr>
<td>D</td>
<td>- Lack of trained personnel, in anticipation of higher client volume, as experienced by counselors, lab analysts, and pharmacists.</td>
<td>- Difficult to reach the testing target due relationship with CSOs and relevant decision-makers in the private sector where key populations can be found. Health professionals in the private sector working to care for key populations have different priorities and incentives to uphold privacy (of their work and clients, e.g., owners of entertainment clubs, massage parlors). No binding inter-sectoral regulation to overcome the above testing challenges.</td>
<td>- Not mentioned</td>
<td>- Patients' data (MRs) from other units are not timely communicated to SOPHIA clinic, as happened with data from the registration desk and at MCH.</td>
<td>- Poor infrastructure: no dedicated space/room for counseling to respect privacy of HIV clients, as experienced by SOPHIA clinic and pharmacy.</td>
</tr>
<tr>
<td>E</td>
<td>- Budgeting and planning competencies for the overall management - including service unit heads - which can affect future ARV supply/HIV testing programs.</td>
<td>- Lack of common perspective, understanding, and empathy on what HIV work entails across the Puskesmas. - Lack of awareness and understanding to plan and budget interlinked/collaborative HIV programs, impacting stocking/supply of reagents and ARV - Lack of effective response from the upper management to Jaring Cinta</td>
<td>- Lack of personnel to backstop whenever the core team is not available/away, as experienced by doctor, nurse, RR staff, and pharmacists.</td>
<td>- Long queue at registration desk and again in the pharmacy is experienced by HIV patients. Sometimes they must come back another day since the lab has reached a maximum quota</td>
<td>- Poor infrastructure: Lack of necessary facilities in Jaring Cinta (computer, chairs, AC/fan, waiting room TV). Need dedicated room to ensure privacy in adherence counseling and pharmacy. - Inadequate supplies/equipment: ARV stock comes in limited supply, sometimes delayed. Universal protection device/PEP has long been requested but never procured.</td>
</tr>
<tr>
<td>PKM Code</td>
<td>Health worker competency gaps</td>
<td>Low engagement</td>
<td>Poor allocation of staff and tasks</td>
<td>Inefficient work processes</td>
<td>Other health systems issues</td>
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<tr>
<td>F</td>
<td>- Competency gap for nurse who hasn't been formally trained in CST and the young/peer cadre who is not used to dealing with data input/recording despite receiving a basic training.</td>
<td>needs to safely operate in a high-risk environment without proper protection - A general feeling shared by the team about less attention towards the team's personnel and less respect toward Jaring Cinta's patients.</td>
<td>- There are the right people on the jobs (except the young/peer cadre) but insufficient number, particularly at Mandiri and the lab. - The required split of focus between technical/clinical responsibility and reporting/recording does not only increase workload but makes health workers prone to mistakes in documenting/recording patients' data. - For Mandiri team, this split of focus in-house is further divided into caring for different categories of clients: VCT, newly tested, and refill HIV clients as well as STI patients who altogether make a high monthly volume. - With PITC screening and testing on HIV, the lab is especially inundated by specimens from multi-units.</td>
<td>- Computerized system, like SIHA, seems to remain less efficient in the way it requires reentry of data just like the first time for routine validation process. Recording &amp; Reporting staff says it is like &quot;double inputting data&quot; to the same platform. - Handwritten process is prone to mistakes (in both writing and reading), taking more time to make essential corrections.</td>
<td>Dedicated computer for data input to ENA has long been broken. - Low client demand: Approximately 50% adherence; Jaring Cinta would like to improve but not yet able. (Challenge: ‘Loss to follow up’ is beyond control)</td>
</tr>
<tr>
<td>G</td>
<td>- For the long-time RR and new nurse who have not been formally trained in CST.</td>
<td>- There may be a mismatch in expecting the young/peer cadre to be good at data input if in the beginning s/he was expected to focus on communicating with a specific key population.</td>
<td>- There is only one day in a week (Wednesday) where the Aster clinic has the full HIV team with doctor and nurse on standby. On other days the doctor and nurse are assigned in other services, leaving only the Recording and Reporting officer on standby. - The counseling function needs to be clarified and more personnel allocated to perform it at PITC screening points.</td>
<td>- Clarity in providing pre-marital service is lacking. - Advanced notification/labeling is needed for lab personnel and equipment's prevention and safety measures. - VL testing is done at two different labs (Pasar Rebo Puskesmas and a private laboratory) depending on the client's time on ARV. This needs to be further clarified, as Pasar Rebo and Cakung have different catchment areas. It might not be straightforward for potential clients within Cakung's catchment area to access Pasar Rebo services due to distance, transport.</td>
<td>- Poor infrastructure: Mandiri work space is not set up for private counseling, particularly for new clients. - Inadequate supplies/equipment: Unavailable VL reagent cartridge for months, while VL machine is ready to use.</td>
</tr>
<tr>
<td>H</td>
<td>- Competency gaps for doctor at Poli IMS, lab analysts for CST, and staff at screening posts for HIV-related form filling/recording.</td>
<td>- Not mentioned by FGD participants, but FGD moderator noted that the separate entrance far from the main entrance makes patients go around and takes more time for patients to reach the entrance - implies a link to the unspoken stigma raised in the FGD.</td>
<td>- True for nurse and RR at Poli IMS when covering for absent staff. - True for lab analysts compared to specimen volumes and kinds of testing needed per specimen. With PITC screening and testing on HIV, lab is especially inundated by specimens from multi-units.</td>
<td>- Computerized system, like SIHA and ENUS, seems less efficient as it requires reentry of same data on different sheets. Aa good example of what efficiency looks like from SITT (IS for TB). - Lab is on a higher floor accessible from main entrance, separate and far from the Poli IMS entrance.</td>
<td>- Poor infrastructure: Aster clinic, MCH, and the pharmacy need a properly sized room appropriately set to keep privacy when doing counseling. - Inadequate supplies: Quality of reagent supplied by the Sudin is sometimes questioned.</td>
</tr>
</tbody>
</table>
**Recommendations & Conclusion**

Overall, the HIV policies developed at the central level and decentralized levels and reviewed in this assessment are sufficient to support implementation of Test and Treat, though implementation guidance is required to promote success. Where SUFA had implications for increased workload for laboratory technicians and others, due to many required routine examinations, Test and Treat should serve to streamline these workflows.

Although HIV-related competencies are prescribed in the competency standards for physicians, there is no regulation that specifies to what extent they should be included in pre-service education curriculum, and as a result, the quality of HRH produced by higher education institutions varies. However, the standards of care documents do not adequately provide guidance in consideration of the diverse contexts in which they may be implemented, notably to provide more specific guidance for where there is no doctor, and where the formal health system relies on the labor of non-clinical, community-based, contracted or volunteer counselors.

While the HRH policies to describe planning and recruitment processes are very detailed, the stakeholders responsible for health workforce development, planning, deployment, and support within the public sector are spread across multiple ministries and multiple levels of government, and are not focused solely on HIV, or even on the health sector. Thus, it should be recognized there is no understanding, motivation, or platform by which decision makers can effectively consider how to plan and deploy the workforce based on Test and Treat or DSD. While this policy implementation barrier is common around the world and is not limited to HIV services, the limited interpretation and implementation of many health workforce policies due to separate spheres of authority remains challenging.

Despite the autonomy of local governments in HRH planning and recruitment, their financial capacity to hire health workers is often limited, creating HRH shortages and maldistribution across health facilities and geographic areas. Use and availability of accurate and timely HRH information systems are limited and inhibit long-term planning. The implementation of performance-based payment and quality control mechanisms, such as accreditation and SPM, may stimulate local government to improve HRH situation.

To effectively scale up the new Test and Treat policy, in the immediate-term, the MoH should develop new HIV standards of care that consider HRH issues, including workload pressures and clearer guidance on task shifting. As of the writing of this report, we understand that standards of care are in development with the USAID- and PEPFAR-supported LINKAGES project. In the medium-term, the MoH and HIV implementing partners could consider scaling up and routinizing the site-level HIV-HRH assessments using the HRH2030 tools that have been adapted to the Indonesian context.

**For HIV service delivery & standards of care:**

*Clarify HRH roles and responsibilities for Test and Treat*

Overall, HIV policies and other guidance are mainly sufficient to support implementation of Test and Treat, though more guidance for contextualization is required to promote success. Policy gaps included:
• Stable patients are undefined within HIV guidelines, limiting a site manager’s ability to task shift these patients from doctors to nurses. Within PEPFAR-supported sites, they are advised to follow the World Health Organization (WHO) guidelines.
• In anticipation of higher volumes of patients initiating and maintaining ART, current policies do not permit multi-month scripting, which would reduce pharmacist workload and monthly patient volume.
• Differentiated service delivery (DSD) models are not addressed. The global community is currently hesitant to embrace DSD for key populations, given the additional risk factors for which they should be regularly managed.
• As the Test and Treat policy was released during this assessment period, it was noted that the policy’s accompanying standards of care guidance was not released at the same time, but we understand that they are forthcoming. These guidelines should be explicit to include HRH considerations, including clearer directives for site managers to prepare HIV core teams for task shifting/sharing.

Recommendations
➔ Define stable patients and task shifting/sharing responsibilities within updated Test and Treat/ MoH HIV guidelines
➔ Review existing data systems to track multi-month scripts (where monthly contact is assumed)
➔ Develop quality assurance mechanisms for safe multi-month scripting
➔ Where informal DSD can be documented, such as mobile outreach/lab testing, generate evidence to determine which DSD models could be most feasible in the Jakarta context, considering disease burden and HRH availability, if any (see additional recommendation under “Policies for HRH Regulation”)

For Education:
Increase quality of health workforce skills in HIV
Concerning policies on education, including HIV competencies and pre-service education:
• There is no standard as to how HIV should be included in pre-service curriculum; new health professional graduates are not always adequately prepared to independently manage cases of HIV.
• In-service training results and recommendations are discussed in the HRH performance and site-level sections below.

Recommendations
➔ Integrate HIV standards of care in “core team” PSE curricula, including definitions of the anticipated task shifting/sharing responsibilities. As health professional councils are reviewing the next five-year curricula in 2019, the timing is opportune. For newly graduated health workers, there is a need for TB-HIV training, especially in priority and generalized epidemic areas.
➔ Once HIV standards are integrated in PSE, ensure graduates with this training are tracked and this training is documented in the SI-SDMK or other national interoperable platform, so that planners know how many new graduates received this core training, as the in-service trainings for current practitioners is expected to be rolled out incrementally.
➔ Define/cost scale up of skills needs for multi-month scripting and/or other DSD models, and for which health workers, which relates to the HIV guidelines noted above.
Schedule in-service trainings to align with staff rotations, if relevant (as most sites visited in Jakarta suggested staff rotations and high turnover are less an issue within the HIV unit than others at the Puskesmas).

For HRH Regulation & Planning, and Management:

*Use data to strengthen HRH functions for managing HIV services, including for community cadres*

Across the health worker types, the following were identified as issues to address:

- The clear and rigid boundary of tasks and functions for HRH in Indonesia presents some service bottlenecks and will present challenges to scaling up and sustaining HIV services where there is shortage of doctors. There is resistance from professional organizations to shift the task to nurses (especially regarding prescribing medicine), despite the increased global evidence that nurses can successfully initiate and manage ART patients.

- Community cadres, such as community counselors, do not operate within a sustainable legal framework that supports their current role conducting HIV outreach, testing, and counseling, which is essential to relieve doctors’ and nurses’ workload and would be critical to any application of DSD. The role of community cadres is especially important to share the non-clinical workload of clinical staff, in particular when there are high-volume testing campaigns, such as the premarital HIV testing campaign in Central Java, and as the anticipated number of patients increases and is sustained over time. Lower skilled cadres will be important to promote more effective and higher-quality services, so clinicians may focus on more complicated cases.

- High turnover of health workers due to relocation by the local government may impede the sustainability of some capacity building interventions for the health system overall; however, high turnover was not specifically noted within the site-level assessment in the HIV unit in Jakarta, as these urban posts are considered desirable. Turnover is expected to be a greater issue in more rural areas, such as Papua, and should be further explored (FY 19).

- Local governments have a high degree of financial autonomy to manage health facilities and Puskesmas, however successful implementation depends on the local government’s capability to adapt the national regulation to the local level and manage the funding for the Puskesmas.

**Recommendations**

- Conduct additional implementation research to understand the potential benefits of recognizing and engaging community-based cadres to support non-clinical HIV services (testing, counseling, ART referrals).
  - Map the availability, competencies, and forecasted costs/efficiencies of non-health community, or lower skilled cadres who can provide HIV testing services.
  - Using workforce pressure information, consider reassigning existing health worker counselors to manage difficult cases only, to reduce their workload.
  - Document evidence and conduct advocacy with the Ministry of Home Affairs, and other stakeholders, including professional councils, associations, and the national/local private sector, to enable and sustain task shifting from health workers to non-health workers.
  - Potential research questions could include:
    - How can we use NHWA to help us answer questions related to HRH availability for HIV services? How can SI-SDMK be used to track these HIV-focused health workers?
Support the MoH, PHO, DHO, site managers, and partners to discuss and determine the types of evidence needs, entry points, and workload limits that could potentially support incremental task sharing or differentiated care. For example, multi-month scripting (MMS) could be considered at high-volume sites or where the pharmacy workload across all services is high. From a patient-centered perspective and in the interest of high-quality services, MMS should also be considered when monthly refills present hardship for the client, which can be assessed by HIV unit staff with support from community cadres. Repeating the HIV-HRH assessment at the same sites, in particular to monitor service volume and staff workload, can inform future workload needs that could make a compelling case for pursuing differentiated care models, as well serve to monitor if any changes made since the baseline have had impact.

HRH2030 engagement in the National Health Workforce Accounts implementation may serve as an opportunity to convene national and decentralized HRH planners, local government authorities, the BPPSDMK, and others to better document HRH turnover and streamline HRH planning and priority staffing.

Strengthen local governments’ capability to adapt national capitation regulations and manage funding for the Pukesmas.

At the site-level:
Support local teams to understand specific workforce problems affecting HIV services and develop improvement action plans

Overall, the 10 sites reviewed in this assessment are staffed with a sufficient number and type of health workers, however, the self-reported knowledge and ability to perform tasks across the HIV services is inadequate.

- The feasibility of digital client flow mapping was confirmed, by engaging community counselors, but results are limited to a small sample size.
- Health workers reviewed site-level barriers and most all teams reported — to varying degrees and of varying types — workforce-related problems that are potentially contributing to HIV service delivery bottlenecks. These included: health workforce competency gaps, low engagement, insufficient allocation of staff and tasks, inefficient processes, as well as other non-workforce problems, such as inadequate infrastructure, equipment, or supplies.

Recommendations
Conduct site-level dissemination and review of assessment results to promote facility-led improvement action plans, such as those described in the Toolkit on Optimizing Health Worker Performance and Productivity to Achieve 95-95-95 Targets (HRH2030 is planning this activity in FY19). Specific site-level HRH challenges and health systems issues identified through the site-level assessment should be reviewed with the unit managers, HIV service managers and teams, and district health offices to develop action plans to determine which issues can be addressed by the health workers themselves. For issues deemed beyond the health workers’ control, data on the issue should be delivered through an advocacy initiative, proposing solutions and relevant stakeholder responsibilities.

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15 Our team also notes that the Aplikasi Perencanaan Kebutuhan SDM Kesehatan/HRH Planning Needs Application (PUSRENGUN) collects routine data at the site-level on service statistics and human resources that could be referenced.
16 www.hrh2030program.org/prodperftoolkit
Health workers may require more dedicated skills building and performance support, which in the short- to medium-term, reduces the proportion of working hours that they can provide services. An initial investment should be made to staff more workers, and/or allocate more time to provide supportive supervision to staff as they learn and practice skills that may be needed at high-volume sites.

Support use of the DHO and PKM budgets to coordinate targeted, practical skills building for priority HIV tasks (based on rapid task analysis and further exploration), such as: low-dose/high-frequency training, coaching, clinical mentoring, peer/champions, interprofessional support, supportive supervision, quality improvement, and/or other evidence-based learning approaches that could be reasonably sustained with DHO or Puskesmas financing, or capitation funds. If in-service trainings are the preferred mode for skills building, then they must be practical and team-based to reinforce task sharing directives. They should be tracked within the SI-SDMK forms to ensure efficiencies and so HRH planners have a clearer understanding of training needs.

Interested DHOs or Puskesmas could consider adapting and applying these tools in other service areas, or across all services at the same site, to understand site-specific HRH enablers and barriers more broadly.

Build capacity to routinely (i.e., annually) apply the site-level tools at PEPFAR-supported sites. Support the application of tools in Papua, where the HRH and local policy differs from Jakarta (planned FY 19). Consider prioritizing districts with greatest challenges to meet service targets, or sites with the largest gaps across the clinical cascade. To manage and effectively use resultant data, HRH2030 can support DHOs and Puskesmas and partners (e.g., LINKAGES) to automate reports, use local data streams, or integrate them with a Power BI dashboard to review and analyze site-level metrics.

In next steps, HRH2030 recommends applying the site-level assessment tools to the Papuan context, where the HRH capacity and coverage, especially for higher skilled clinicians, differs from Jakarta. Specific considerations for Papua include:

- How the local government in Papua interpret and execute The MOH Regulation No. 21/2016 (please see page 3, 2nd paragraph);
- The skill mix and distribution of health workers available in Puskesmas in Papua (per the Act on Health Workers, 2014); do they meet the minimum requirements in Puskesmas?
- To support the implementation Test and Treat, how does ARV storage and from province to district level affect the availability of treatment at the site level?

The new Test and Treat policy has important skill and workload implications for the human resources for health providing HIV services across Indonesia. Its successful implementation requires an available, qualified, competent health workforce to provide HIV services across the clinical cascade and to sustain the increasing number of PLHIV expected to maintain their ART regimen for life. The policy- and site-level assessment suggests the importance of addressing several implications for HRH management and must be addressed across the health labor market to control the HIV epidemic in Indonesia, notably to support the acquisition of new HIV competencies across diverse teams of health and non-health workers through locally contextualized and sustained professional development.
References


*Please refer to Annex F for the full list of regulations reviewed under the Policy Assessment.*
POLICY ANNEXES

[hyperlink to PDF of Policy Annex document]

Annex A. List of Interview Guide
Annex B. Key Informant Interview Guide
Annex C. Informed Consent - English
Annex D. Informed Consent - Bahasa
Annex E. List of Key Informants
Annex F. List of Regulations
Annex G. Policy Inventory
Annex H. Text Analyses of Primary Regulations
Annex I. Regulations of HRH in HIV/AIDS in Hierarchy of Legislations
SITE-LEVEL ANNEXES

[hyperlink to PDF of Site-level Annex document]

Annex J. Rapid Site-Level Health Workforce Assessment Tool: Unit Manager Questionnaire (English)
Annex K. Rapid Site-Level Health Workforce Assessment Tool: Unit Manager Questionnaire (Bahasa)
Annex L. Rapid HIV Task Analysis (English)
Annex M. Rapid HIV Task Analysis (Bahasa)
Annex N. Client Flow Mapping Tool (English)
Annex O. Client Flow Mapping Tool (Bahasa)
Annex P. Health Worker Focus Group Discussion Guide (English)
Annex Q. Health Worker Focus Group Discussion Guide (Bahasa)
Annex R. Site-level Data Reports (Anonymized)