



HEALTH WORKFORCE POLICY RECOMMENDATIONS FOR TIMOR-LESTE

Based on results from a health labor market analysis

POLICY BRIEF

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The objective of this policy brief is to synthesize key findings and pertinent and timely recommendations from the Timor-Leste Health Labor Market Analysis (HLMA) report published in November 2023. The brief will inform policymakers and implementing partners on how to devise sub-national and national interventions to advance human resources for health (HRH) policy. Although the HLMA report was completed before the development of Timor-Leste's new Integrated Health Program (IHP) model, the recommendations highlighted below remain relevant within the context of the new program model, and the policy options presented are aligned with the current priorities of the Ministry of Health (MOH) and its partners.

Health labor market context

After Timor-Leste's independence in 2002, there was a shortage of health professionals, with approximately 1,500 health workers serving the country, 120 of whom were medical doctors (Alonso and Burgha 2006). Since then, Timor-Leste has made significant improvements in increasing the production of health professionals using bilateral agreements and partnerships with countries like Cuba to train medical doctors, and through investments in national universities and study abroad scholarships. These initiatives demonstrate the country's commitment to building a robust healthcare workforce. The result is a significant increase in the total number of medical professionals rising to 4,214, including 949 general

medical doctors and 74 specialist doctors actively working in the public health system. However, the distribution of the available workforce and the quality of services provided remain a challenge. Additionally, the steady production rate has continued to grow without a comparably corresponding demand factor, leading to, at the macro level, an oversupply of health workers relative to available job opportunities. This is due to a lack of national-level, multi-sectoral planning and coordination mechanisms between the different line ministries and higher education institutions (both public and private). The issue of oversupply is compounded by the inability of the public sector, as the primary employer of health workers, to absorb all the graduates due to limited budget availability.



At the health workforce policy level, there is incongruence between global and national recommendations for health worker-to-population ratios and recommended allocation of the number and composition of health workers at each facility level and type. For example, although the current workforce does not meet the World Health Organization's standards of health worker-to-population ratio, hiring more general doctors and nurses is not possible because the labor market is saturated. Conversely, the number of specialist doctors produced is less than the number of available vacancies and insufficient to meet the population's health needs. Further, the workforce recommendations in the Essential Services Package call for more than double the current number of health workers in the public sector. Yet, these recommendations are unattainable from a budget perspective and inefficient given the low levels of health-seeking behavior in the general population, especially in rural areas.

At the administrative and management levels, as a relatively new country with a nascent health system, Timor-Leste is in the process of strengthening and investing in foundational human resource management systems and policies that enable effective planning and distribution of the health workforce. Strengthening administrative and management capacity will improve health service delivery quality through effective oversight, standardized services, and targeted support to enhance health workers' performance. Priority challenges that need to be addressed include 1) a costed national human resources for health strategic plan, 2) an approach to better align the health workforce pipeline with demand, 3) an improved performance management system, 4) implementation of health worker financial incentives mandated by law, and 5) institutionalization of competency standards for medical professionals. Further, the country has priority policy areas that require multi-stakeholder collaboration, such as addressing quality concerns with pre-service training, establishing regulatory mechanisms to manage an emerging private health sector, and establishing a health professional council. These issues and the data behind the analysis are detailed in the full HLMA report found on the LHSS

website [here](#). LHSS facilitated the development of the HLMA report with the MOH, funders, and implementing partners.

This policy brief translates the prioritized short- and medium-term recommendations from the HLMA report into policy options. Since the publication of the HLMA report, Timor-Leste held elections that resulted in leadership changes and the introduction of a new health service delivery policy framework known as the Integrated Health Program (IHP) model (Timor-Leste Ministry of Health and World Health Organization [WHO] 2024). This policy brief offers recommendations to the MOH, and other stakeholders aligned with both the five models of integration outlined in the IHP and the priorities identified through the HLMA development process.

Why focus on the health workforce?

Health workers are an essential input for a high-functioning health system with a direct influence on service quality and output and population health outcomes. A well-trained, motivated, and supported health workforce drives health system results. As the primary employer and policymaker, the Government of Timor-Leste has a unique opportunity to influence the production, demand, and quality of the health workforce.

Timor-Leste has consistently demonstrated political commitment to sustain financial investments in health, and specifically the workforce. For the 2023 fiscal year, the social capital sector — which includes health, education, and social services — was deemed a priority and received the largest proportion (36%) of public funds (Government of Timor-Leste 2022). Overall, as a percentage of health expenditures, the government spent an average of 52 percent on salary and wages and technical assistance. This significant investment in the health workforce must be leveraged to ensure gains in health outcomes through improved workforce performance and productivity.



What policy options can help address priority health workforce challenges?

In recognition of changes in leadership and policy framework, LHSS consulted a few additional stakeholders not previously consulted during the HLMA study.¹ The following topics were identified as priority policy areas that can be addressed in the next 3–5 years: 1) adopt and institutionalize a demand-based workforce planning model, 2) optimize the distribution of the current health workforce, and 3) improve workforce performance and productivity. Further, the topics were prioritized considering alignment with the IHP framework, feasibility of implementation in short- and medium-term, and relevance to the next national strategic plan for human resources for health.

Adopt and institutionalize demand-based workforce planning

For a small country like Timor-Leste with six higher education institutions training healthcare professionals and the government being the primary employer, aspiring to achieve an equilibrium in the labor market is relatively more attainable than most other country contexts. However, this will require multi-pronged policy interventions and strong coordination and governance mechanisms that include private and public sector training institutions and multiple ministries.

Addressing this issue from the supply side by reducing the number of prospective and graduating students in the healthcare field is a policy option. However, since 80 percent of health professionals are trained in private universities with profit incentives, this may be difficult to implement. Introducing a quota system to limit the number of annual admissions by increasing

¹ In addition to the stakeholders consulted for the HLMA report, LHSS consulted with additional stakeholders who will influence HRH policymaking and implementation in the next 3-5 years. These included the MOH (Director General of Corporate Services, the former director for the National Directorate for Human Resources), WHO, UNICEF, and Partnership for Human Development (PHD).

the entry qualification requirements and introducing board exams as a precondition to licensing may help address the oversupply issue. These measures are also likely to simultaneously improve service quality. Such initiatives, however, need to consider equity principles to mitigate inadvertently disenfranchising certain populations.

On the demand side, the government does annual workforce planning based on the Essential Services Package, which generalizes staff allocation based on facility type. This approach does not consider key factors such as demographics, disease burden, service delivery data trends, and other factors. One of the policy recommendations welcomed by consulted stakeholders is doing multi-year demand-based workforce planning using established tools such as the workforce indicator of staffing needs (WISN)², alongside facility readiness assessments.³ This will be done at the macro-level and should be used to inform the next iteration of the national human resources for health strategic plan and requires the National Directorate for Human Resources (NDHR) to institutionalize agile human resources management practices to align annual primary healthcare workforce planning with WISN recommendations. This requires institutional capacity building to ensure HR administrators are trained on tools and systems for data-informed planning, routine monitoring, and effective management of personnel in coordination with municipalities. Further, at the meso- and micro-level, municipal health directors should engage Community Health Centre (CHC) facility managers to inform their personnel decisions and have the authority to make decisions, including reallocating staff as needed, with timely and transparent recordkeeping to inform NDHR.

² Although WISN has the most documentation, resources, and expertise that can support implementation, other similar tools such as [HOT4PHC](#) are alternatives that can be more agile and user-friendly.

³ The user manual for the tool can be found [here](#). [This example](#) from Indonesia (pages 1-9) provides a relatable example to the Timor-Leste context.

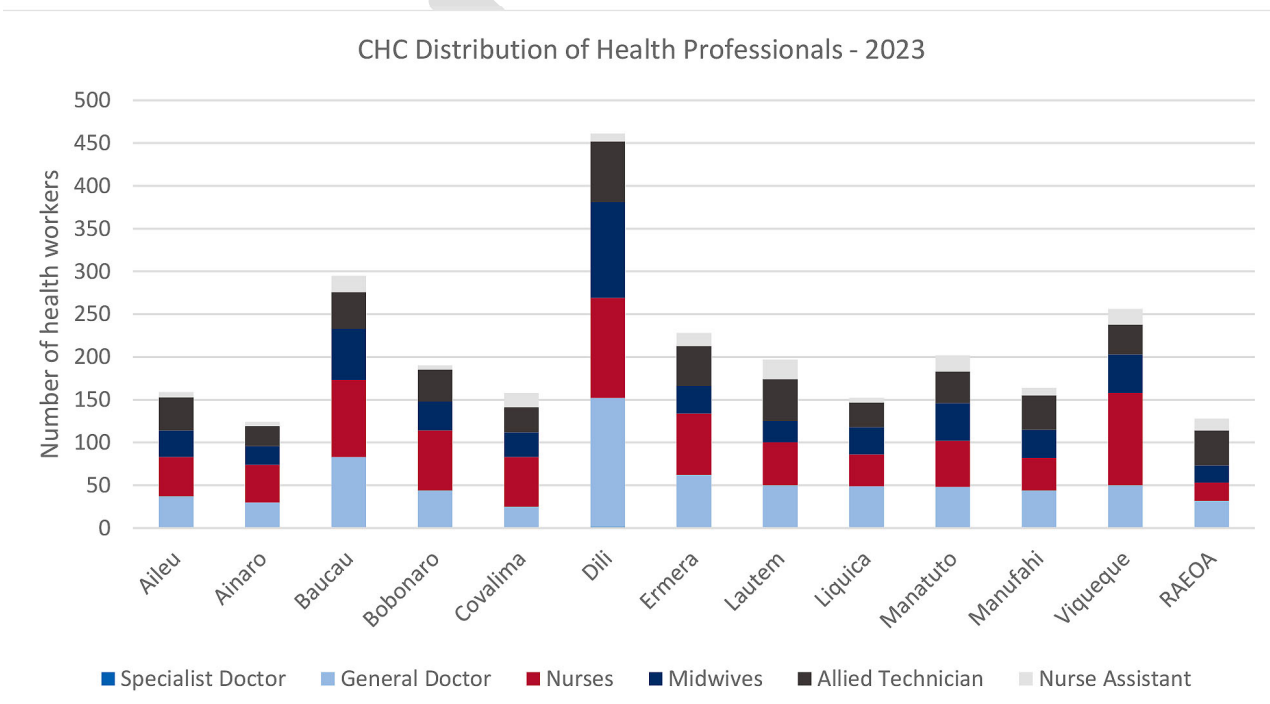


Optimize the distribution of the current health workforce

Related to the lack of efficient and streamlined workforce planning at all levels is the challenge of maldistribution with a majority of the workforce concentrated in urban areas and regional hospitals as shown in Figure 1 and Table 1 below. To add to the complexity of overstaffing in regional hospitals and understaffing in some CHCs, except for Aileu, the municipalities do not meet WHO’s recommended ratio of 4.45 health workers per 1,000 patients. However, this does not denote a need to increase the overall number of health workers as the health-seeking behavior of the population is low. Further, stakeholder interviews highlighted that based on service delivery data, on average, a health professional has 2.7 outpatient consultations per head. However, a study from 2016 indicated an average of 10.2 patients per day (with a standard deviation of 7.5) and a slightly higher average for urban facilities (Hou et al 2016).

Table 1 below shows the need to reallocate health workers to minimize overstaffing at regional hospitals and to increase equitable access to services in CHCs. Further, considering a short supply of specialist doctors and a sufficient number of nurses, midwives, and general medical doctors, a hub-and-spoke model of service delivery focused on rotating specialist doctors to CHCs, and as necessary, through mobile clinics and health post visits is one approach to address the equity challenges while using existing resources to fill the service delivery gap in remote areas. This is especially important as studies show that residents of rural areas and lower socio-economic status are less likely to seek health care services at the secondary and tertiary levels where the specialists are based, as well as medical equipment and supplies are more available relative to the primary level (Guinness et al 2018).

FIGURE 1: HEALTH PROFESSIONALS CHC DISTRIBUTION BY MUNICIPALITY (2023)



Source: Data from the Health Labor Market Analysis Report (2023). Note: There are a total of four specialist doctors at the CHC level (2 in Dili and one each in Manatuto and Viqueque). They do not show prominently on the figure due to the low number and the scale in the figure.



TABLE 1: PERCENTAGE OF OVERSTAFFING IN REGIONAL HOSPITALS (2023)

REGIONAL HOSPITALS	NURSES	DOCTORS
Baucau	32%	-33%
Maliana	61%	100%
Maubisse	32%	117%
Oecusse	46%	83%
Suai	68%	167%

Source: Data from the Health Labor Market Analysis Report (2023)

Given the level of trust they are afforded by their communities, community-based health workers and volunteers, such as mother support groups (MSG) and Promotor Saúde na Famílias (PSF), as well as health-focused civil society organizations (CSO), serve a crucial role in the successful implementation of the hub-and-spoke model. They have the unique ability to serve as language and cultural interlocutors between patients in the community and doctors. Although the professionalization and full integration of community-based volunteers as officially recognized health workers is not a current policy priority for the MOH, it is still important to ensure they receive standardized training and incentives to promote service delivery quality. The IHP model recognizes the importance and value of community-based lay health workers. Using systematic, bidirectional referrals, the integration of community-based lay health workers and effective coordination of outreach and facility-based services will help optimize use of available health workers by expanding access and reach to the population, especially in remote settings.

The hub-and-spoke model is being implemented in some health programs and for TB lab services though not in an institutionalized and integrated manner. Service continuity through bidirectional referral systems and medical record systems are essential components that need to be in place for the effective implementation of this intervention. Also, challenges in transportation and infrastructure make certain areas difficult to access, especially during the rainy

season. In response and with systems maturity, introducing electronic medical records, telehealth services, or medical decision-guiding tools for lower-level health workers, as appropriate by health program and patient profile, may be worth considering.

Improve workforce performance and productivity

Workforce performance. Overall personnel management is a significant challenge due to individual and institutional capacity at the national, municipal, and facility levels. Basic data that can be used to inform management, such as absenteeism and performance ratings, are inconsistently documented and routinely inaccurate and incomplete. As a matter of process, administrators complete and submit reporting forms, however, the information is inadequate and not used for management purposes. For example, work attendance sheets at health facilities, which are completed manually using paper forms, showed haphazard reporting. The number of facilities that reported each month varied, never representative of all the facilities in a given municipality, and the number of health workers per facility was inconsistent from month to month. Also, attendance was not recorded against a staff roster to measure absenteeism by health worker. However, during focus group discussions, municipal health directors noted challenges with absenteeism, especially in remote settings, with health workers citing multiple personal reasons or unexplained absences which are not captured by the system.

Rural Incentives. In addition to institutional and individual capacity building for health administrators, the MOH should consider implementing existing laws that serve as motivating factors and incentives to improve health workers' performance and productivity. In remote areas, where health service access is inequitable relative to urban areas, implementation of the law that stipulates a 15–40 percent supplemental pay depending on the level of remoteness is a key policy lever that can be used both to make these posts attractive and compensate for the challenges such as poor infrastructure and



housing, and potential separation with family. Other incentives, such as housing and transportation allowances, should also be implemented consistently.

Productivity. Another significant gap is the lack of established competency-based performance evaluation standards. In the absence of such standards health workers are unable to receive constructive feedback or affirmation on their performance. This also hinders their eligibility for promotions and salary increases when the budget becomes available. The non-functioning career progression system and nonadherence to laws that entitle health workers to allowances, coupled with the increased cost of living, undermines health worker motivation and thus productivity. However, attrition is low, an average of 2–3 percent per year, due to higher compensation rates for health workers in comparison to other civil servants with limited employment opportunities.

Given the maldistribution issue and budget constraints, it is highly recommended for the MOH to consider redistributing the current workforce to address staffing shortages in remote areas. Effective implementation of remote area incentives, where an estimated 74 percent of Timorese reside, will be a necessary component in trying to reallocate health professionals from overstuffed to understaffed facilities and make remote posts more attractive. Although there are budgetary concerns, the MOH should collaborate with relevant line ministries to map facilities' remoteness levels and consider collaborating with partners to help fill the financing gap to implement these incentives and maximize the outputs of current investments in HRH through increased productivity. The current overstaffing in urban areas results in the inefficient use of skilled personnel while maintaining the budget burden with suboptimal coverage of health service needs. Thailand's successful approach of integrated policy interventions, including hardship allowance, development of rural infrastructure, favorable career paths for specialization, and social strategies through the formation of affinity groups for remote-based medical professionals to redress maldistribution could serve as a reference for Timor-Leste (Wibulpolprasert and Pengpaibon 2003).

Another consideration is to institutionalize a staff rotation policy to ensure health workers have sufficient opportunity and exposure to work with varying caseloads and diverse patients. In Oecusse and Baucau, this approach is already being implemented with some medical doctors rotating from CHCs to referral hospitals quarterly. This supports capacity building and general doctors' ability to manage complicated cases at the CHC level, while reducing foot traffic at referral hospitals.

What enabling factors need to be in place for successful policy design and implementation?

Data. The lack of information management systems, poor data recording, access, and analytics capacity with weak management and oversight systems contribute to poor planning and missed opportunities to optimize health workforce allocation, productivity, and motivation. The availability of reliable, accurate, and timely data is an essential enabling factor for evidence-based policymaking. Timor-Leste's health system struggles with fragmented data systems. Assessing the functionality and governance of existing data systems, including redesigning to ensure interoperability between different systems or centralization of information systems should be a priority. Systems recommended for review are the MOH's training management information system and human resource information system, which are currently not being used or managed in Excel due to staff capacity and lack of continued support. While acknowledging MOH's investments in these systems with support from USAID and other partners, sustainable implementation and institutionalization of these tools requires other significant investments in building institutional and individual capacity in database management, data analysis, use, and reporting.

Institutional capacity. Building the organization and individual capacity of NDHR staff at the national level and their counterparts at the municipal level is crucial. This will ensure the effective implementation of recently developed, foundational procedures captured in human resources manuals as well as the policy



recommendations outlined in this brief and the HLMA report. As the primary employer of health workers in the country, enhancing the managerial capacity of MOH's human resources staff and developing standardized operating procedures to effectively manage the health workforce are necessary to achieve HRH objectives.

Continuity in health policy implementation through transitions. Although there has been sustained political support for health investments through government transitions, changes in policy priorities and implementation approaches hinder progress in achieving results. The shifts also require additional administrative management and policy maneuvering that use more time in the design and planning stages versus in implementation. Some shifts in policy priorities and direction are inevitable. Still, countries that have made significant gains in developing and optimizing their health workforce to meet UHC goals underscore the importance of a consistent focus on overarching objectives and

coordination across the MOH, related ministries, sub-national authorities, CSOs, and donor partners (Cometto et al 2020). Implementation of existing laws related to remote postings, institutionalization of foundational human resources for health management procedures and systems, demand-based workforce planning, and information management systems should remain a constant through political transitions. In addition, the community-health focused programs—SISCa and Saude na Familia—have not been consistently implemented through leadership transitions and overlap in delivery modalities. With the introduction of IHP, and the interest in consolidating community health programs, there is an opportunity to devise a comprehensive community health service delivery approach, including the recognition and intentional integration of community health workers and volunteers. CSOs, such as REBAS, can play a key role in advocating for sustained political and financial commitment to community health programs through government leadership transitions.



Photo credit: Emilio dos Santos, LHSS/Timor-Leste



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The Local Health System Sustainability Project (LHSS) under the United States Agency for International Development (USAID) Integrated Health Systems IDIQ helps low- and middle-income countries transition to sustainable, self-financed health systems as a means to support access to universal health coverage. The project works with partner countries and local stakeholders to reduce financial barriers to care and treatment, ensure equitable access to essential health services for all people, and improve the quality of health services. Led by Abt Global LLC, the five-year project will build local capacity to sustain strong health system performance, supporting countries on their journey to self-reliance and prosperity.

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