



Learning Brief

HRH Resource Optimization to Improve Health Care Service Delivery and Quality

Synthesis from the JLN Learning Exchange

Local Health System Sustainability Project

Task Order 1, USAID Integrated Health Systems IDIQ



Local Health System Sustainability Project

The Local Health System Sustainability Project (LHSS) under the 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 Associates, 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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Acronyms

- BEmONC – Basic emergency obstetric and newborn care
- CEmONC – Comprehensive emergency obstetric and newborn care
- CHAI – Clinton Health Access Initiative
- CPD – Continuing professional development
- DOH – Department of Health
- HBP – Health benefits package
- HRH – Human resources for health
- HSSP – Health Sector Strategic Plan
- JLN – Joint Learning Network
- LGU – Local government units
- LHSS – Local Health System Sustainability Project
- LMIC – Low- and middle-income countries
- mCPR – modern contraceptive prevalence rate
- MMR – Maternal mortality ratio
- MOA/U – Memorandum of agreement/understanding
- MOH – Ministry of Health
- NHS – National Health Services
- PHO – Provincial health office
- USAID – United States Agency for International Development
- WFOM – Workforce Optimization Model
- WHO – World Health Organization



Introduction

Document Purpose

The Local Health System Sustainability Project (LHSS), in collaboration with the Joint Learning Network for Universal Health Coverage (JLN), organized and led the facilitation of an online-based learning exchange focused on Human Resources for Health (HRH) Resource Optimization to Improve Health Care Service Delivery and Quality. The learning exchange was offered under the JLN's Service Delivery and Quality technical initiative to examine practices to improve technical efficiency in HRH and make the best use of human resources in the health system to deliver high-quality services. Technical efficiency is defined as the effectiveness with which a given set of inputs is used to produce an output. In this case, it means using the minimum number of inputs to produce a given mix of goods and services in the health sector. Factors contributing to technical inefficiency in HRH have been widely identified in the literature. For example, technical inefficiencies in health care settings can result from inadequate education and training, an unmotivated and underqualified workforce whose productivity and performance are low, workforce shortages, high turnover, poor working conditions, and more. A large gap remains in understanding how interventions with measurable effects can be implemented to mitigate these technical inefficiencies. This learning exchange focused on engaging policy makers to discuss approaches that minimize inefficiencies in health workforce management to increase health impact with the available resource envelope.

Policy makers, academics, and frontline practitioners from 12 countries participated in two cross-country virtual engagements. The 12 countries were Ethiopia, Kenya, Malawi, Malaysia, Mongolia, Morocco, Nigeria, Philippines, South Africa, Timor-Leste, Uganda, and Ukraine. In line with the JLN approach, the topics discussed during the learning exchange were country-driven. Through initial scoping calls, the facilitation team identified seven common topics of interest among participants, and the country representatives further narrowed them down to four topics through a ranking process. The virtual engagements were structured such that country representatives gave presentations on two topics with each followed by a question-and-answer session and a facilitated plenary discussion. The presenters for each topic were identified based on their demonstrated success in the topic area, and their interest and availability to present during the two learning exchanges.

The purpose of this learning brief is to synthesize and share the learnings from the exchange, including the content from the country presentations and facilitated discussions. The intervention and observed outcomes and strength of evidence vary for each country example given the range of topics covered and methods of evaluation implemented. This learning brief can be used as a resource for HRH managers, planners, program managers, and frontline practitioners to learn how other countries are approaching and successfully designing and implementing solutions to their HRH challenges. It can also be used as a reference for health policy makers, funders, and implementing partners to inform the design and implementation of HRH resource optimization initiatives covered in this brief.

Section content and organization

The sections in the document are organized by the four topic areas discussed during the learning exchange and a summary section with key takeaways:



- I. Developing and effectively implementing a national-level, multi-year, HRH strategic plan
- II. Capacity strengthening through supportive supervision and digital training systems for continuing professional development
- III. Health worker attraction and retention mechanisms (financial and non-financial incentives)
- IV. Hospitals cluster model to optimize health workforce allocation and streamline service delivery
- V. Recommendation

Each section will introduce the topic and define the specific HRH problem that was discussed during the exchange, followed by the interventions implemented and the outcomes achieved by each country presented. Recognizing the importance of understanding and approaching HRH interventions within the broader health systems context, each section briefly describes the respective country's health system. The summary and key takeaways section describe the lessons learned, and considerations for other countries interested in adopting the recommended approaches to their country context.



Developing and Effectively Implementing Strategic Plans

The existence of a multi-year HRH strategic plan is an important precondition for effective leadership and governance in the health sector. Complementary to national health policy or strategy documents, an HRH strategic plan recognizes health care service delivery depends on the availability of human resources in the health system. As demonstrated by the country presentation and discussions during the learning exchange, the availability of a strategic plan helps mobilize and streamline resources, prioritize investments in the health workforce, and sequence interventions for optimal outcomes. Some of the challenges highlighted in the literature and during the discussions include fragmentation of authority and lack of accountability given the need for leadership involvement in multiple ministries and sectors, lack of data to make evidence-based policy decisions, and limited capacity – managerial and technical – to design, implement, and continually monitor progress against strategic plans. The presentations from the Philippines and Malawi demonstrate how each country has applied multi-sectoral, iterative, and data-informed approaches that consider the political economy context, in developing their respective HRH strategic plans.

National Human Resources for Health Master Plan – Philippines

Context. The health system in the Philippines has undergone several policy reforms and organizational changes starting with the inception of the health sector reform agenda in 2000. Such reforms have brought about several strategies for HRH development. Nonetheless, the Philippine health care system continues to face issues and challenges, especially with its health workforce, which were highlighted during the COVID-19 pandemic. The most pressing health workforce challenges include competency gaps, lack of engagement and motivation due to poor working conditions, outmigration, and unattractiveness of working in the health sector due to issues related to pay, protection, job security, and limited career advancement opportunities. From a management and planning perspective, the number of health workers in the country is inadequate. Maldistribution, lack of accurate and complete health workforce data to inform planning, limited coordination with stakeholders in the HRH sector, fragmented HRH governance and unclear accountability of actors, and poor implementation and monitoring of existing policies were also some of the issues that needed to be addressed.

Intervention. To address these HRH challenges at the national level, the Philippines' Department of Health (DOH) strategically advocated for the inclusion of HRH in national laws that govern health policies. The Universal Health Care Act (RA 11223) was signed into law in 2019. It has a dedicated chapter on HRH that mandates 1) the development of a National HRH Master Plan, 2) the creation of a national health workforce support system to support local public health systems – especially those in geographically isolated and disadvantaged areas, 3) creation of scholarship and training programs administered by the Commission on Higher Education, and 4) implementation of mandatory service agreement schemes following completion of pre-service education. The DOH fulfilled the first of these health workforce-related mandates by developing the National HRH Master Plan 2020-2024.

The plan is multi-sectoral and agile by design, and includes national, local, and private actors; it aligns with social service programs with consideration for the local context. It is considered a living document that will be revised as and when needed (the latest revision was in November 2021). More importantly, localization also means national health goals are translated into

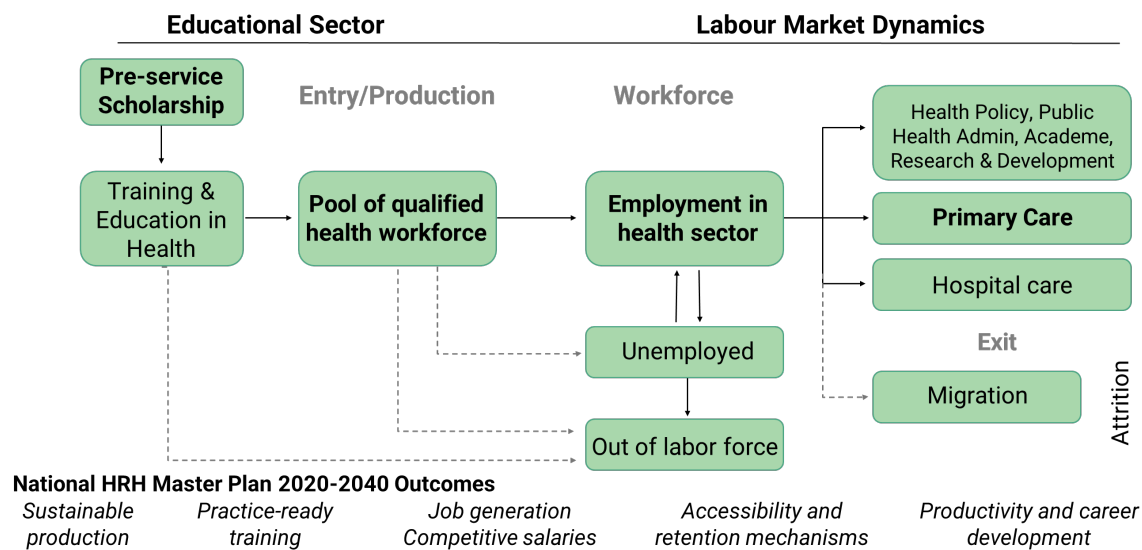


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costed, concrete actions that are funded and owned at the local level through the local investment plans for health.

In developing the master plan, the DOH used the health labor market approach (see Figure 1) to identify improvement areas and policy levers to achieve desired outcomes. Namely, in the education sector, the focus is on the sustainable production of health workers and designing training to help health workers graduate practice-ready. On the labor market front, at the entry stage, the focus is on job generation and attractiveness through competitive salaries. Further, interventions that address accessibility and retention and productivity and career development target workforce optimization. The overall goal of these interventions is to contribute to providing the right number, competence, and skill mix of health workers performing the right work at the right place and time for the right compensation.

Figure 1. Health labor market for universal health care



Source: 2020-2040 Human Resources for Health Master Plan: Strategy: https://hrh2030program.org/wp-content/uploads/2020/08/x12.4_HRH2030PH_Strategy-paper-HRHMP.pdf

Stakeholders. The National HRH Master Plan 2020-2040 was developed by the DOH and the HRH Network Philippines, with support from development partners such as the U.S. Agency for International Development’s (USAID’s) HRH 2020 Project Philippines and the World Health Organization (WHO). The development process was collaborative and iterative, with a clearly defined governance structure and accountability framework, as well as time-bound, action-oriented objectives. The DOH’s pre-established HRH network with three technical working committees – 1) entry (education, training, pre-deployment), 2) workforce (working conditions and productivity), and 3) exit and re-entry (migration and reintegration) – played a key role in providing input for the development and ongoing refinement and implementation of the HRH master plan. Moreover, in a context where health care governance, financing, and HRH are decentralized to the local government units (LGUs), having an HRH network where national and multisectoral members can collaborate has played a crucial role in the adoption and localization of the HRH Master Plan.



Outcomes. The HRH Master Plan has six key result areas that guide the design and monitoring of interventions: data governance and information management; health education strengthening and regulation; HRH welfare, protection, and career development; HRH migration and reintegration; institutionalization and localization of the master plan; and institutionalization and strengthening of the HRH network.

Thus far, the DOH has made progress in all areas including the development of the national health workforce registry, which serves as an automated information and communications system that collates and processes data on medical and allied health professionals from national agencies and stakeholders (Box 1). The data are used for evidence-informed HRH workforce planning, strategy and policy formulation; program design; execution; and oversight. To advance health education, the DOH has developed an e-learning platform that provides free online courses to all health workers in the Philippines (private or public). Courses offered include clinical subjects and health care management courses for health officers at the provincial, municipal, and city levels, including courses on the effective implementation of universal health care. To address

HRH welfare, protection, and career development, the DOH lobbied to pass legislation that will standardize competitive compensation, benefits, and incentives in both public and private sectors at the national and local levels. In addition, the DOH led the development of competency and job standards for clinical roles, rolled out an e-learning program that offers continuing professional development (CPD) certified courses to obtain necessary credits, and established a public health track for the career progression and specialization of practicing health professionals. To mitigate the inadequate and inequitable distribution of HRH, especially in remote and rural areas or GIDA (geographically isolated and disadvantaged areas), the DOH is supporting LGUs through the National Health Workforce Support System, whereby the DOH deploys additional health workforce covered by the national budget and may provide other financial assistance as needed.

The National HRH Master Plan is a living document born from multi-sectoral linkages and collaboration. It is a plan crafted with the aim of providing directions and key strategies to guide the development and management of the Philippine health workforce toward health system strengthening and in support of the gradual realization of universal health care in the country.

The Workforce Optimization Model – Malawi

Context. Malawi is in the process of developing its third Health Sector Strategic Plan (HSSP III), which prioritizes a health benefits package (HBP) providing free access to health care services to all Malawians, in support of achieving universal health coverage goals. The HSSP III will have ambitious goals that will bring historically siloed strategies for each health system building block under “One Plan, One Budget, and One Report.” Given resource constraints, delivering the HBP will require efficient allocation of existing assets, including optimization of currently available health workers.

Box 1. Notable Outcomes

- National health workforce registry
- Free e-learning platform accessible to all health workers
- Standardization of competitive compensation, benefits, and incentive packages for health workers in the public and private sectors
- Competency standards for clinical roles
- National health workforce support system to provide technical assistance and additional funds to geographically isolated and disadvantaged areas



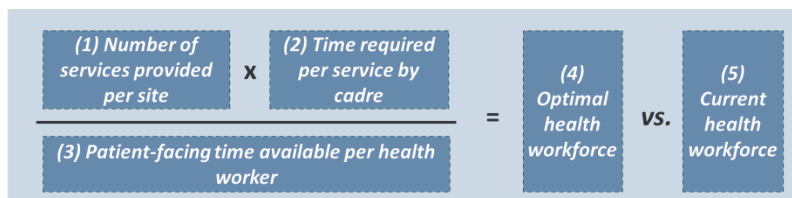
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Malawi faces a significant shortage of health workers. The health worker-to-population ratio is 1.5: 1,000, much lower than the WHO’s target of 45: 10,000. However, it is important to note the vacancy rates are based on standardized staffing norms that are not updated frequently and do not consider variations in demand across facilities or other indicators such as demographics and disease burden. As a result, health workers are distributed inequitably across districts, with some having acute shortages.

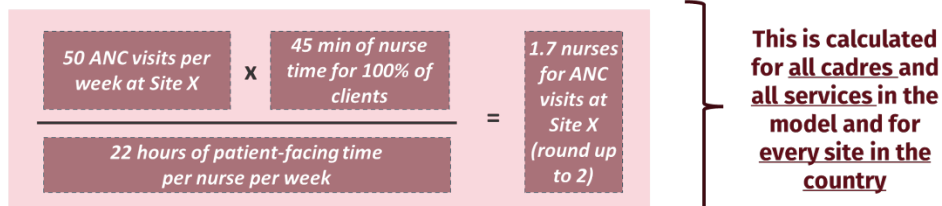
HRH decision-making is decentralized to multiple levels of the system, including workforce planning, hiring, and management, with significant power held by stakeholders outside of the health sector. For instance, the District Councils of the 29 districts of Malawi have district-level health workforce budgets. However, ultimate decisions for health worker staffing norms and resource allocation, such as funding level for each district, are made by the Department of Human Resources Management and Development in the Office of President and Cabinet and by the Ministry of Finance. The availability of timely, accurate, and complete HRH data also poses a challenge for HRH planning and management.

Intervention. To ensure evidence-based health systems planning for the HBP using data and optimization of existing resources, the Malawi Ministry of Health (MOH) worked with the Clinton Health Access Initiative (CHAI) to develop a demand-based model to estimate the optimal number and type of health workers needed to target levels of health services for the HBP. The tool, developed by CHAI, is called the Workforce Optimization Model (WFOM). It is currently being used to inform health workforce planning for the HSSP III, and previously informed the HRH Strategic Plan for 2018-2022. The WFOM uses existing health service delivery data integrated with analytics around health care worker activities and productivity to define health workforce targets at the facility level and recommend options for optimal distribution that best address health care service needs. Recommendations generated by the WFOM include details on the number of health workers required at each facility, disaggregated by level of care (district/community hospitals, urban/rural health centers) and by health worker cadre (see Figure 2).

Figure 2. Example calculation for the WFOM



EXAMPLE (nurse time for ANC visits):



Source: 2022 JLN Learning Exchange. Malawi’s Presentation on HRH Resource Optimization to Improve Health Care Service Delivery and Quality

Note: ANC = antenatal care

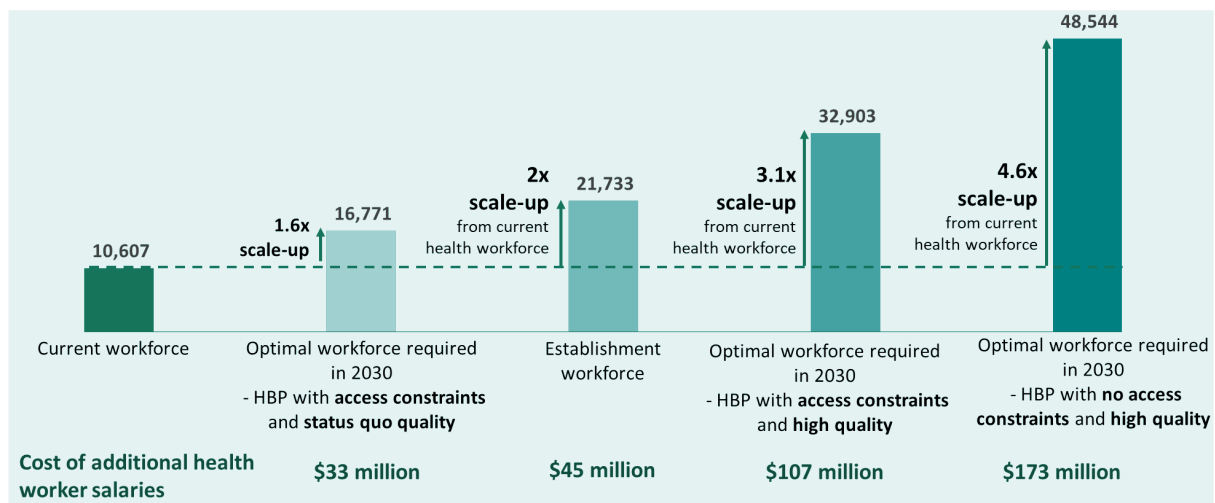


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Stakeholders. The new approach of housing all health sector strategic plans under “One Plan, One Budget, One Report” has helped engage diverse stakeholders with representation across government and development partners through the HSSP III steering committee. Frontline health workers, including medical, nursing, pharmacy, and laboratory officers from various districts were also involved through multiple consultation workshops to provide input on the time-motion estimates and health worker patient-facing time assumptions.

Outcome. The results informed the overall prioritization of the HSSP III by estimating health workforce costs as one of the major cost drivers for HBP delivery, which in turn informed policy decisions about the level of ambition of HBP delivery that was feasible within the country’s existing fiscal space (see Figure 3). The adaptability and agility of the tool also helped policy makers and partners to respond by rapidly generating and modifying scenarios based on budget specifications or to add additional services requested by disease programs, compared to other workforce optimization tools, which are less flexible and responsive in quickly generating multiple scenarios in response to policy maker demands. Moreover, the results from the WFOM will help the MOH determine recruitment targets by cadre for each district and the corresponding enrollment targets for each cadre at training institutions, as well as identify and recruit faculty needs, scale up scholarships, and upgrade equipment and infrastructure to deliver quality pre-service education where possible within the HSSP III resource envelope.

Figure 3. WFOM costing estimates under several scenarios that consider service delivery quality and access



Source: 2022 JLN Learning Exchange. Malawi’s Presentation on HRH Resource Optimization to Improve Health Care Service Delivery and Quality

Note: These outputs are from the WFOM. The data only include staffing for 672 district hospitals, community hospitals, and health centers. Central hospitals are excluded, as the specialized nature of their work is not well-suited to the WFOM. Within the workforce optimization model, quality was calibrated as a function of the time that each health worker spends per patient per service delivered. For scenarios that assume HBP delivery at high quality, the number of minutes required to provide a service at high quality (i.e. not rushing through patients and following clinical guidelines) was established using a consultation workshop with medical, nursing, pharmacy, and laboratory officers from various districts to revise assumptions used in previous modeling exercises, which were originally based on time-motion observations and expert opinion. For scenarios that assume HBP delivery at status quo quality, the activity times were calibrated downward to reflect realistic amounts of time that health workers currently spend with patients.



Capacity Strengthening Through Supportive Supervision and Digital Training Systems for CPD

Health workforce capacity strengthening is one of the key levers to optimize existing resources in support of improving service delivery quality and efficiency in low-and middle-income countries (LMICs). During the learning exchange, the presentations and discussions focused on in-service training through a distance-learning system in Ukraine, and the use of supportive supervision to strengthen and optimize the existing workforce in Leyte province of the Philippines. Both presentations demonstrated how continuous learning opportunities and coaching for health workers play a role in improving the quality of service delivery from management and clinical perspectives.

Supportive supervision – Leyte province, Philippines

Context. Health service delivery at the district level is organized through a cluster system called “integrated health zones”. Leyte has 10 of these zones, which include hospitals, rural health units/centers, and *barangay*¹ health stations, all under the management and leadership of the provincial health office (PHO). Leyte province has been implementing supportive supervision for its basic emergency obstetric and newborn care (BEmONC) program since 2011. The initiative stemmed from the need to improve maternal and newborn health and family planning services.

Intervention. The supportive supervision program is implemented province-wide, which includes 40 municipalities and one city. The supervision teams are composed of comprehensive emergency and obstetric care (CEmONC)-trained doctors, nurses, and midwives stationed at the hospitals and providing support to their peers who provide BEmONC services at rural health units/centers and private birthing facilities managed by midwives.

Box 2. Supportive Supervision Checklists

- **Facility readiness:** supervisors assess the facilities readiness to provide BEmONC services by reviewing the availability of human resources, facility service delivery, equipment, drugs and supplies, LGU support and Phil Health accreditation.
- **Clinical records review:** supervisors select random clinic records to assess the quality of services for antenatal care, labor record, partograph, immediate post-partum care, prenatal care, and newborn care.
- **Client feedback:** supervisors interview two or three clients to obtain their feedback and assess client satisfaction based on care they received during delivery and availability/completion of the mother-child book (a personal booklet provided to parents for record-keeping, with guidance on postnatal and newborn care).

¹ Lowest administrative unit in the Philippines



Supervisors use all the checklists during each quarterly visit to monitor management and service delivery including facility readiness, providers' competence, record keeping, and more (Box 2). Supervision visits are conducted quarterly, and each visit includes reviewing documents, observing providers' performance, and evaluating medical equipment and supplies. At the end of each visit, supervisors, supervisees, and local health managers meet to debrief and have group problem-solving sessions, in which they develop problem-solving action plans.

Although the supervision process was working well and service delivery indicators for maternal and newborn care were improving, the PHO recognized the missed opportunity of using the data generated from supervision visits to inform management decisions and address common issues across facilities in the province. Additionally, transferring the paper-based checklists to an Excel-based database required extensive time and significantly delayed data reporting, rendering the information mostly unusable. Consequently, in November 2019, the PHO digitized supportive supervision checklists for BEmONC and family planning programs to increase data access and visibility across the different levels of the health system.

The digitization was implemented using an open-source platform, Open Data Kit, accessible on Android devices and web browsers. Digitization democratized access to data from supportive supervision visits whereby frontline health workers or supervisees and managers had access to each facility's performance data and expectations. It also saved health workers' time dedicated to encoding and eliminated data entry errors. Moreover, facility managers are now using the checklists to conduct self-assessments in between quarterly supervision visits to address action plans and using this as an internal continuous quality improvement tool.

Stakeholders. The Leyte PHO has owned and managed the supportive supervision program since its inception. Stakeholders involved in the design, funding, and implementation process include domestic and international counterparts. Domestic partners include the Region 8 DOH Office, Leyte's Governor's Office, Municipality Mayor's Offices, private birthing facilities, and, most importantly, the frontline health workers. International partners include Japan International Cooperation Agency, through the Project for

Box 2. Supportive Supervision Checklists, continued

- **Management and coordination with community health teams:** supervisors assess the quality of monthly data on BEmONC services reported from the community (from barangay health stations and information gathered by barangay health workers) and the consolidation at the facility level, and address any health team support issues.
- **Referral system:** supervisors review the functionality of the referral system by reviewing referral records to assess if referrals were justified and made to the appropriate center, and provide feedback as necessary.
- **Family planning:** supervisors assess the quality of family planning services including family planning counseling, and IUD and implant insertion and removal, and ensure patients receive their methods of choice. Note this checklist only applies to private clinics.
- **Summary of findings:** this checklist summarizes findings from checklists one through six, including incidents of maternal and neonatal deaths, which will be reviewed further if and when they occur. The checklist is also where recommendations are recorded and action items from previous visits are reviewed and discussed.



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Strengthening Maternal and Child Health Services in Eastern Visayas, Philippines; and USAID, through Community Maternal, Neonatal, Child Health and Nutrition Scale UP, and Human Resources for Health in 2030 (HRH2030) projects.

Outcomes. Outcomes from the supportive supervision program include improved rapport and coordination between the hospitals and rural health units, which is where supervisors and supervisees are stationed. Application of a group problem-solving

Box 3. Notable outcomes:

- MMR reduced from 106 to 20.92 per 100,000 live births in a span of eight years
- mCPR increased from 39 percent to 62 percent

approach during feedback sessions and the development of action plans at the end of each supervision visit is helping resolve issues identified during supervision (or those the health facilities were experiencing) more efficiently and effectively, with clear owners for action items and time-bound goals, including through better coordination of required resources to resolve identified issues.

The Leyte PHO has also seen a marked improvement in health outcome indicators since the implementation of the paper-based supportive supervision program, which contributed to the reductions in maternal mortality ratio (MMR) (from 106/100,000 live births in 2013 to 20.92/100,000 live births in 2021) (Box 3).² The MMR stayed below the Sustainable Development Goal of less than 70/100,000 live births in the same period. Unmet family planning needs were also reduced, and the modern contraceptive prevalence rate (mCPR) increased from 39 percent to 62 percent,³ exceeding the benchmark of 60 percent since 2017. Results from the implementation research that will capture outcomes from introducing digitized supervision checklists with complementary dashboards are expected to be published in early 2023⁴.

Distance learning – Ukraine

Context. In Ukraine, amid health care reforms, the country has had to battle the global COVID-19 pandemic and war, which have impeded progress and interrupted the health care system transformation efforts. Health care workers in Ukraine are facing high burnout due to constant external pressure, an unpredictable environment, and the current war with Russia, which has interrupted the health care system transformation process. The overall environment has contributed to low motivation, a need for an innovative approach to continue providing training and certification resources to civil servants and frontline health workers, and a need to upgrade the skills of health care workers and ensure their orientation to new directives related to their roles.

Box 2. Supportive Supervision Checklists, continued

- **Action plan:** the action plan template is used to list specific, time-bound tasks that need to be completed based on discussions during the feedback session.

² The reduction in MMR is related to addressing issues of delayed treatment administration, for example, treating pre-eclamptic pregnant women with magnesium sulphate at the primary care center level before referral to CEmONC hospitals to prevent severe complications from eclampsia.

³ Monitoring of post-partum IUD insertion and other family planning methods, including the availability of supplies and ensuring patients are educated about different methods available to them, has contributed to increasing new acceptors and current user rates.

⁴ The research is being conducted by USAID's HRH2030 program in partnership with the Leyte PHO and the Asia Pacific Management and Research Group.



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Intervention. To tackle the challenges related to health worker motivation and performance, the National Health Services (NHS) established the NHS Academy in 2019 as part of the health care sector reform process. The NHS Academy is a free, distance-learning system that supports professional development for medical workers and is also used for certification training to meet CPD requirements. For instance, doctors in Ukraine are required to earn 50 CPD credits per year, which they can do by learning, including by completing courses through the distance-learning platform (as well as participating in conferences and writing articles). The CPD completion reports are submitted to the licensing authority (Attestation Committee), which documents the completion of CPD requirements and administers an exam that doctors need to take every 5 years to maintain their licenses.

The system is designed to be user friendly with a chatbot feature to support consultation and support users. The courses are also accessible offline. Courses offered focus on primary health services, administering reimbursements for government-backed health care costs for specific health conditions, and managing and providing services for the medical guarantee program (free, government-sponsored health care for citizens who sign a declaration with a doctor to designate them as their primary doctor).

For civil servants, specifically those performing administrative or management roles, training needs are identified through an annual training needs assessment. Training is also determined based on the respective organization's strategic plans or if there are changes in legislation or business processes that employees need to learn. For doctors, training needs arise when there are changes in work processes, new e-health services, and new legal requirements that govern their practice. Additionally, training providers offer virtual conferences and master classes on various medical topics that serve as an opportunity to learn new treatments, medical protocols, research findings, and so forth, which are relevant both for young specialists and for experienced ones.

Stakeholders. The development and implementation of the distance-learning system involved international and domestic partners and collaboration from private and public sector entities.⁵ On the domestic side, training courses for civil servants are developed by NHS experts as well as through partnerships with local organizations such as Project Management Bureau LLC, providing pro bono service to help develop training material on business processes. For doctors, various institutions, including the MOH and Center for Public Health use the platform to deliver courses procured from external entities. The WHO and USAID have also worked with the MOH to develop courses and conduct webinars.

Outcomes. Although assessing the outcomes of the system has not been possible due to the current context in Ukraine, so far, there are 156,5000 users registered, and 40 percent of NHS employees have obtained certificates for courses they completed through the distance-learning system. Further, the NHS reports the organization is functioning more efficiently as a result of rolling out the distance-learning system. Moreover, employees are receiving training based on their needs and have an increased understanding of their roles and their contribution to the organizational goals. Primarily because individual training plans are linked to organizational strategic plans and employees have readily available training to improve their skills in areas they may need additional support.

⁵ WHO, USAID, UNICEF, NHS of Great Britain, Deloitte, Ernst & Young, Ministry of Healthcare of Ukraine, National agency of Ukraine on Civil Service Issues, Ukrainian School of Government, Kyiv School of Economics, and Kyiv-Mohyla Academy.



Health Worker Attraction and Retention Mechanisms (Financial and Non-Financial Incentives)

Health worker attraction and retention mechanisms, especially for posts in rural and remote areas, are a challenge faced by most countries. Failure to attract and retain staff leads to inefficiencies in service delivery and administrative processes. In general, these inefficiencies are driven by poor working environments, lack of training and professional development opportunities, low salary and benefits compared to the expected performance, and more. Policies that institutionalize financial and non-financial incentives have yielded improvement in health workers' motivation, job satisfaction, and interest to work in rural and remote areas. The presentation from Ethiopia demonstrated how financial and non-financial incentives, supported by national-level health policy priorities, targeted management, and funding improved health worker motivation and retention.

Health worker attraction and retention – Ethiopia

Context. As in most countries, staff attraction and retention in rural and remote areas is a challenge in Ethiopia. In recognition of this, the national HRH strategic plan highlights enhancing motivation and retention as one of the 14 strategic objectives. Although Ethiopia has made impressive progress in workforce availability, there is still a significant shortage of health workers – the workforce density is 10 per 10,000 population, which is considerably less than the WHO's recommendation of 44.5 per 10,000. Moreover, attracting and retaining staff in rural and pastoralist areas, where the staff attrition rate was 6.6 percent, was a challenge.

An estimated 78 percent of the population receives health care services from the public sector. Motivation, retention, and job satisfaction of health workers in the public sector, therefore, influence the quality and accessibility of health care services for the majority of Ethiopians. Assessments conducted by the MOH and partners found poor work environments, low salaries and benefits, limited opportunities for professional development and promotion, weak supervision, and poor staff relationships as the drivers that affect job satisfaction.

Intervention. To remedy these problems, the MOH designed and implemented financial and non-financial incentives. Examples of interventions include revision of salary scale aligned with job evaluation and grading, improvements in work climate, consistent implementation of duty allowance, strengthened supportive supervision, increased opportunities for training, CPD and career advancement, and recognition of best performing health workers. Moreover, there was increased investment to improve the availability of medical equipment and supplies. To attract and retain health workers posted in hard-to-reach areas, the MOH designed tailored incentive packages (accelerated post-graduate training opportunities and hardship allowance) and instituted regulations such as compulsory public service deployment to areas that have HRH shortages. Other factors that contributed to success are building the capacity of HRH managers and training and recruiting students from underserved areas. Additionally, to increase the commitment of health workers, the MOH instituted pre- and post-deployment training on health systems challenges and on the responsibility to serve the public.



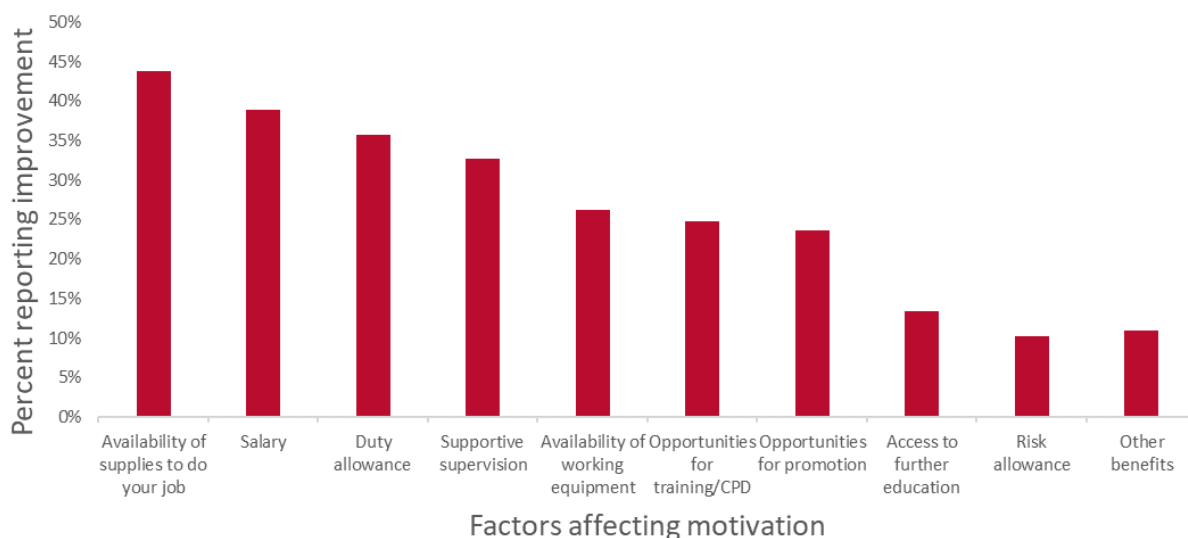
To assess the effectiveness of interventions and monitor progress to ensure policies in place are responsive to the needs of the health workforce, the MOH undertook a periodic motivation and retention study.

Stakeholders. Stakeholders, including MOH officials at the national and regional levels, the Ministry of Finance, the Civil Service Commission, health professional associations, private health sector actors, and implementing partners are involved in the design, implementation, and assessment of interventions. Engagement mechanisms include national HRH steering committee meetings and regional HRH review meetings. For research support, USAID’s health workforce projects in Ethiopia⁶ have played a leading role in helping the MOH conduct the studies and operationalize its findings through policies.

Outcomes. A recent study, completed in 2022, relative to a study completed in 2014, showed increased job satisfaction, a reduction in intention to leave, and a decrease in attrition rates for all health workers assessed. Job satisfaction levels showed marked improvements, with an aggregate 14.3 percentage point increase from 2014 to 2022. Additionally, the health workforce was more stable with a two-thirds reduction in intention to leave across all health worker types and decreased attrition rates for doctors, nurses, and anesthetists.⁷

Figure 4 shows the perceived improvements in drivers of motivation. It is important to note that three of the top five drivers – availability of supplies, supportive supervision, and availability of working equipment – are drivers of motivation that not only influence health worker performance and motivation but improve facility readiness and ability to provide high-quality health services.

Figure 4. Perceived improvement in drivers of motivation



Source: 2022 JLN Learning Exchange. Ethiopia’s Presentation on HRH Resource Optimization to Improve Health Care Service Delivery and Quality

⁶ Strengthening Resources for Health (2012-2018) and Health Workforce Improvement Program (2020-2025)

⁷ Attrition rates for midwives increased by 0.3 percentage points, and there was no change observed for health officers.



Hospital Cluster Model to Streamline Referrals and Optimize Health Workforce Allocation

Organizing hospitals into clusters, based on geography and patient traffic, to increase efficiencies by leveraging use of shared resources – doctors, equipment, procurement, and so forth – and streamlining patient referrals have yielded positive outcomes such as decongesting facilities, reducing wait time for procedures and the cost of delivering care. This approach also enables the decentralization of managing the hospitals within each cluster as opposed to direct management from the MOH at the national level. Moreover, as demonstrated in Malaysia, the flexibility and decentralization of how the hospitals are governed increased shared responsibilities and ownership of management among hospital leadership, leading to improved performance at the cluster level compared to the hospitals being managed as single entities pre-reform. The hospital cluster models implemented in Australia and Hong Kong have served as examples to other countries, such as Malaysia, that are seeking alternative hospital governance models for the delivery of secondary- and tertiary-level medical services while ensuring optimal use of available resources. With respect to human resources, shared schedules for on-call doctors and rotations and needs-based training and coaching for general doctors by specialist doctors are some of the key interventions that have made significant progress in Malaysia's public hospital system.

Integrated Service Delivery Through a Hospital Cluster System – Malaysia

Context. Malaysia has a dual health care system with a majority of the population (70 percent) seeking hospital care from the public sector. Similarly, a majority of general and specialist doctors also work in public hospitals. There are a total of 147 public hospitals managed by the MOH at the central level. Seventy hospitals have resident specialists while the remaining 77 have general doctors. An earlier intervention paired hospitals without resident specialists with hospitals that have resident specialists through a network system with a bi-directional referral system. However, implementation was a challenge due to a lack of ownership, limited skills, and lack of clinical supervision. This led to discontinuity of care and inefficient use of resources with patients who could be seen at general hospitals choosing to go to hospitals with resident specialists due to perceptions about the quality of care.

Intervention. To remedy this issue, the MOH transformed the hospital system from a single entity to a group or cluster of hospitals as one entity. They started with a pilot of three clusters in 2014, with each cluster including hospitals representing urban and rural areas. The clustering approach improved integrated service delivery and encouraged better collaboration and partnership among hospitals in the same cluster as management and performance were assessed at the cluster level. Based on the promising findings from the pilot, the cluster approach was scaled up nationwide between 2016 and 2020 to form 42 cluster hospitals.

The process of forming the clusters included mapping the hospitals based on geographical and historical referral patterns and patient flow. Each cluster had a lead hospital that served the management and oversight role for other hospitals in the cluster. The lead hospital was designed to have resident specialists, and the highest bed capacity, infrastructure, and medical equipment and supplies. At the operational level, the clusters developed and shared training based on the needs of the doctors and services provided in each hospital, with a focus to upskill



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and maintain the competency of general doctors and paramedics, resulting in improved human resource capacity. The medical staff was also pooled across clusters, and scheduling, including sharing on-call duties, was centralized and the staff was shared among hospitals. Additionally, through pooled procurement mechanisms, whereby medical equipment and supplies were purchased through a central entity, the clusters were able to realize overall cost savings on overhead and operational costs.

Stakeholders. Led by the MOH, stakeholders involved in informing the design and implementation of the cluster model included state-level health departments, hospital directors, specialist doctors, and training institutions. The MOH developed a steering committee chaired by high-level officials – the secretary general and director general of health – with the role of providing management direction and instituting policy changes. State-level officials led in providing guidance for policy implementation. Lastly, training institutions and universities provided training courses and conducted research to monitor progress and assess the outcomes of the transformation.

Outcomes. The outcomes of the transformation include improved utilization of previously underutilized non-specialist hospitals as measured by the increased bed occupancy rate ranging from 30 to 50 percent before transformation to between 60 and 80 percent after transformation. There was also increased utilization of emergency department services, as well as other services that do not require specialist doctors, at non-specialist hospitals. This indicates increased competency of providers at non-specialist hospitals, as supported through the training programs, and improved public perception of quality as well. Moreover, through increased provider competencies to provide certain specialized services, some general hospitals have transitioned to specialist centers providing services such as plastic surgery, cataract center, urology hospital, nephrology, geriatric services, rehabilitation, and infectious disease management. The expansion of specialist services has made an impact on service delivery through reduced wait time for cataract surgery from 9 months to 3 months, reduced wait time for AVF (dialysis) from 6 months to 3 months, and 98 percent of patients receiving treatment for bone fracture having their issue resolved within 7 days, as opposed to 90 percent of patients before this service expansion.



Key Takeaways: Common Barriers and Enablers in HRH Optimization Across Countries

National-level HRH policies and strategies. Improving health care service delivery in LMICs depends on the optimization of available HRH resources. It became clear during the learning exchange meetings that HRH is interrelated with not only other elements of the health system but also other sectors. Therefore, an overarching national-level policy with the necessary political buy-in and engagement mechanisms for multi-sectoral actors is one of the necessary preconditions for the successful design and implementation of HRH resource optimization initiatives. For example, in discussing the use of health labor market analysis to inform long-term HRH strategic planning, there was recognition that the education-to-labor market continuum may not be limited to the parameters in the health sector. Rather, the dynamics of the labor market in other sectors may act as pull factors that contribute to people who have trained in health care choosing to work in a different sector.

Strong leadership and political will among domestic and international stakeholders, especially politicians and frontline health workers, are crucial preconditions that must be in place to enable the success of HRH optimization efforts. All the presentations highlighted the importance of having a national-level plan with a multi-sectoral approach that guides health workforce planning. The presence of such a plan, supported by political leadership, is an element that all country participants identified as a prerequisite for success. For example, in Ethiopia, health workforce priorities, such as motivation and retention being highlighted as a priority, resulted in dedicated funding and resources from government entities and development partners to address the issue.

Furthermore, to ensure that implementation of national HRH policies in decentralized governance systems does not result in differential implementation and thus outcomes, it is important to put in place management systems and accountability mechanisms, such as data sharing, monitoring and evaluation, and a steering committee or working group with representation of all stakeholders that monitor implementation. In the absence of management systems and meaningful engagement of stakeholders, there is a risk of stakeholders resisting support or participation in implementing policies, fragmented governance, and unclear accountabilities leading to poor implementation of policies. In developing the Universal Health Care Act (and the resulting HRH Master Plan) in the Philippines, and the HSSP III in Malawi, the importance of situating health workforce policies and targets within the sector-wide health policies enabled evidence-based advocacy to obtain feasibly adequate financing and resource allocation for implementation. Additionally, in Malawi, to mitigate fragmented governance due to decentralization, the Office of the President is working with stakeholders to integrate health workforce planning into national functional reviews to inform resource allocation decisions from the central to district levels.

Leadership, especially in HRH, at district and facility levels is another factor that creates variable outcomes across regions, districts, and facilities. Facility readiness, the working environment among facility teams, and implementation of non-financial incentives, such as staff recognition, fair and transparent implementation of promotions and grants for professional development



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opportunities, and other staff support mechanisms, depend upon leadership at the local level. Therefore, it is important to invest in strengthening the capacity of HRH managers at all levels.

In instances where local political leaders and HRH managers are supportive of public health initiatives in general, and HRH specifically, having in place legally binding documents (or testimonies of commitment) such as memoranda of agreement/understanding (MOA/U) is a good practice. These documents help to align goals, expectations, and roles and responsibilities of all entities involved in policy implementation and provide an accountability mechanism. For example, in the Philippines, the national-level law Universal Health Care Act is effectively implemented at the lowest governance level (LGUs) through a governance document (the local investment plan) that is funded and managed at the local level. It is further complemented by an MOA, whereby the provincial government and LGUs outline details of implementation such as health worker time allocation, transportation, and funding to implement quarterly supportive supervision visits.

Conducting a scoping or situation analysis ensuring the meaningful engagement of program participants – frontline health workers, HRH managers, and local leaders – was highlighted as one of the key initial steps to increase the likelihood of success at the implementation stage. Through the scoping process, program managers will have the opportunity to identify needs and, most importantly, design interventions that are context-specific and responsive to needs identified through the process. For example, in Leyte province of the Philippines, the digitization of the paper-based supportive supervision program was identified as a need by the program managers at the provincial level, but factors that would enable success, such as a help desk for technical issues, the need to update the content of the paper-based forms, and automated reminders for facility self-assessments, were all identified through the involvement of frontline health workers.

Non-financial incentives to recognize high performance, including merits and award ceremonies, improve health worker motivation and continued engagement. The work environment, for example, the availability of medical equipment and supplies, infrastructure, and facility readiness, also directly impacts health worker motivation, satisfaction, and retention. Moreover, as demonstrated by the presentation from Ethiopia and the outcomes of the motivation and retention study, foundational human resource functions such as clear job descriptions, transparent performance assessment systems linked with promotion opportunities, and the availability of CPD programs, along with adequate and timely salary and benefits, are key predictors for health workforce job satisfaction, retention, and motivation.

Although digital health has improved health service provision and management, unequal access to connectivity continues to be a challenge in most countries, including the ones that participated in this learning exchange. Rural or remote areas, where the population usually has less access to care and health workers have limited access to training and professional development opportunities, have benefited from digital health interventions but continue to face challenges as well. For example, although health worker training and service delivery data submission and access are improved through digital health platforms, limited access to the internet due to infrastructure, budget, or equipment issues are barriers to fully realizing the potential of the interventions.

Data access, synchronization, and use to inform continual monitoring and policy formulation plays a pivotal role in ensuring implementation fidelity and designing needs- and context-responsive policies or interventions. One of the perennial challenges in the health sector in LMICs is the lack of data systems and infrastructure that enable access to user-friendly, actionable data to inform policy and program decisions. This includes the importance of having



complete, accurate, and timely data for workforce planning and decision-making. Although there has been marked progress, most LMICs continue to face challenges in this area, especially with HRH data, and the existence of disparate data systems that are not interoperable, as well as capacity issues with data literacy and analysis.

For instance, in Leyte province of the Philippines, BEmONC supportive supervision data were reviewed within the context of their routine service delivery data indicators for maternal and newborn health and family planning at province-wide maternal, neonatal, and child health meetings where formal recognition of employees and facilities, as well as service delivery and HRH decisions, are made. Ensuring that feedback mechanisms are built into the process through virtual means or incorporation into existing decision-making mechanisms enables program managers to be agile and responsive to the realities of implementation.

Furthermore, countries need to consider investing in people, equipment, and technology to ensure data are collected, transmitted, and analyzed in a timely manner to inform implementation from a policy and funding perspective. For example, in Malawi, where the WOFM is being used to determine health workforce planning and allocation, although the system itself can be made available for the MOH staff to use independently, it requires robust skills in Excel and Stata to effectively manage the tool and develop permutations using the model. In most countries, considering partnerships with universities as an intermediate step to institutionalizing health workforce analytics may be a realistic option that minimizes reliance on external sources or partner funding.

External factors related to economic and political issues can serve as barriers to, or enablers of, success in implementing and designing HRH policies and intervention, therefore impacting health worker motivation and productivity. For instance, in countries like Ethiopia, where poor working conditions in rural and remote areas are common, the increasing cost of living due to inflation and lack of comparable salary increases affected health workers' motivation.

Other issues such as the effects of the COVID-19 pandemic and civil unrest also directly impact health worker performance, motivation, and productivity, including the discontinuation of routine programs that can serve as an incentive. For instance, in Leyte province of the Philippines, strict quarantine requirements and redeployment of health workers resulted in the supportive supervision program being suspended for 3 months. In Ukraine, the onset of the ongoing war with Russia disrupted the health sector transformation process. The NHS saw the disruption as a driving force that necessitated nimbleness to change and adapt by expanding access to courses available on their distance-learning platform and using it to disseminate updates in national guidelines and protocols.



Recommendation

This learning exchange had high interest in the application stages and active engagement and contribution from the participants during the learning exchange (Box 4). We received applications from 80 individuals from 25 countries who work in government, non-profit organizations, consulting firms, and implementing partners. Further, all participants expressed interest in engaging HRH resource optimization activities, including through technical assistance, additional learning exchanges, and a longer engagement period such as forming a JLN collaborative.

Due to time and funding constraints, this exchange included scoping calls with participating countries, an introductory meeting, and two learning exchanges that covered four topics. Consequently, the time was not sufficient to examine and discuss the topics in depth. The facilitation team recommends the organization of additional learning exchanges or the formation of a learning collaborative to further discuss the following topics, which were highlighted as interest areas by participants in this exchange: rural health workforce retention, effective implementation of national HRH strategic plans in a decentralized health system, intersectoral and multi-level (national, regional, district) HRH stakeholders engagement and coordination, digital systems for HRH performance management, and managing health workforce migration.

Box 4. Participant Feedback

“I thank you for the new experience. This is my first exchange at an international event, and I appreciate this opportunity. I received the information which I can use in my current work and for future projects. If I can be helpful to anyone, I am ready to do.”
 - Participant from Ukraine

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“Using the experience shared in the JLN to improve HRH resource optimization in my country.”
 - Participant from Uganda

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I will improve the learning among my students on contemporary issues around HRH resource optimization.
 - Participant from Kenya

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“[I will] leverage the learnings to inform HRH decisions during the design and implementation of health programs.”
 -Participant from Nigeria

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“ [The exchange was] very useful, applying the lessons to the functional review at my workplace.”
 - Participant from Malawi

