

Article

Leveraging Higher Education to Resolve Healthcare Constraints

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Abstract

Health workers are those who are engaged in actions with the primary intent of enhancing health – serving as the backbone of any functioning health system. Improving health service coverage and realizing the right to the enjoyment of the highest attainable standard of health is dependent on health workers' availability, accessibility, acceptability, and quality. Many highly skilled human resources for health (HRH) professionals continue to migrate locally and internationally for higher salaries, better work conditions, opportunities, or quality of life. This requires comprehensive strategies, investment, and international cooperation to manage migration and skills distribution. On the supply side, high attrition rates among Higher Education Institutions (HEIs) offering health care related courses were also observed. Although there are initiatives in place to address the HRH

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issues, achieving the Sustainable Development Goals (SDG) targets in 2030 and implementing the Universal Health Care (UHC) Act remains challenging.

Focus group discussions (FGDs) were conducted to draw up actionable solutions and policy reforms to address these challenges. Data analysis and outputs of the FGDs led to the conclusion that the country is in a crisis with regard to the health workforce. Based on the discussions, three major clusters of issues must be addressed: (1) retention and reintegration; (2) migration management (domestic and international); and (3) supply, demand, and the health labor market. In view of the crisis on the country's health workforce, the paper recommends the following: (1) creation of a multi-agency high-level Council/Center/Office to formulate and coordinate the implementation of priority policies endorsed by the HRH network towards supply, retention, reintegration, and migration management of health workers; (2) enforcement of mandatory data entry by government and non-government agencies dealing with management of health professionals, through an interactive information portal for analysis needed for real-time harmonized policy decision making; and (3) provision of a synchronized dynamic HRH development (pre-service and in-service programs) and allocation of needed health workforce to ensure universal access to healthcare.

Keywords: health workforce, retention, reintegration, domestic migration, international migration

Introduction

Health workers are those who are engaged in actions with the primary intent of enhancing health – serving as the backbone of any functioning health system (WHO 2016b; WHO 2022b). Improving health service coverage and realizing the right to the enjoyment of the highest attainable standard of health is dependent on health workers' availability, accessibility, acceptability, and quality (WHO 2013). This includes all of those who provide direct personal care services in the home, in health care and residential settings, assisting with routine tasks of daily life, and performing a variety of other similar routine tasks (WHO 2022a). Healthcare workers are

instrumental in driving innovation and advancements in medical treatment protocols, medical technologies, pharmaceuticals, and patient outcomes (Barchielli et al. 2021).

The Global Health Workforce Alliance (GHWA) identified some of the global issues in HRH such as workforce distribution disparities, challenges in recruitment and retention, impact of global health challenges, and health workforce education and training (WHO 2014). Additional issues in HRH include gender discrimination and inequality (Newman 2014), skill mix imbalance (WHO 2017), workforce financing (WHO 2016a), and workforce burnout (Dyrbye et al. 2017). The COVID-19 pandemic highlighted the role played by the healthcare workers but also heightened the global issues in health care where around 115,000 health workers died of COVID-19 (WHO 2021), one in three had anxiety and depression and as many as half experienced burnout (Abdul Rahim et al. 2022).

The World Health Organization (WHO) estimates a projected shortfall of 10 million health workers by 2030, mostly in low- and low-middle income countries. However, countries at all levels of socioeconomic development face, to varying degrees, difficulties in the education, employment, deployment, retention, and performance of their workforce (WHO 2024). According to Walton-Roberts and Bourgeault (2023), migration of the health workforce is a global problem with local implications. Based on their study, in Britain and North Ireland, 47 percent of the new general practitioner trainees in 2021 were international medical graduates; and the National Health Service (NHS) aims to recruit more than 51,000 international nurses by 2024. Additionally, the NHS survey revealed that 33 percent of the doctors were from India (9,435); Pakistan (4,257), Egypt (3,451), and Nigeria (2,493). In terms of nurses and health visitors, there are 86,349 who did not have British nationality and the leading source countries were: India (23,334), the Philippines (22,071), Nigeria (5,537), Ireland (4,419), and Zimbabwe (3,380). Agyeman-Manu et al., (2023) indicated that high income countries have 6.5 times more health workers per population than low-income countries. The growing migration of health workers is expected to further weaken the health systems of 55 countries in the 2023 WHO health workforce support and safeguard list (WHO 2023).

To address global HRH issues, the role of international collaboration plays a crucial role. Initiatives like the GHWA (WHO 2014) and partnerships between countries for knowledge exchange, capacity building, and resource sharing are essential in globally strengthening HRH, along with emerging solutions such as task-shifting, telemedicine, community health worker

programs, and technology for education and training. The global strategy for HRH outlines a framework for countries to strengthen their healthcare workforce, ensuring equitable access to quality healthcare services which include among others policy development and planning, education and training, recruitment and retention strategies, and regulation and licensing (WHO 2016b).

In the Philippines, as with the rest of the world, HRH plays a crucial role in delivering healthcare services and achieving national health goals. However, the country faces several challenges and issues related to its healthcare workforce, such as shortages and maldistribution (WHO 2016b), migration of healthcare workers (Robredo et al. 2022), quality of education and training (Guinto et al. 2018), underinvestment in healthcare workforce, health workforce policy and regulation (WHO 2016b), and retention problems (Dussault & Franceschini 2006). An important emerging issue especially in the pursuit of UHC is the clarification of the role of community health workers at the primary care level. Traditional roles such as providers of health information seem to be inadequate and need to be replaced with more strategic roles such as health system navigator to assist patients and their families better.

Several other barriers contribute to HRH issues such as transportation costs, long travel distances, and limited healthcare infrastructure, disproportionately affecting residents of rural and marginalized communities (Rural Health Information Hub 2024). Addressing these barriers requires targeted interventions to improve access to healthcare workers and facilities.

The Philippine government has already enacted policies such as the Republic Act (R.A.) No. 11223 or UHC Act and implemented various initiatives to address HRH challenges, including scholarship programs, deployment incentives, and rural health practice programs. These initiatives encompass education and training programs, deployment strategies, retention incentives, and regulatory reforms, such as: Doctor to the Barrios Program or the Philippine National Rural Physician Deployment Program (Leonardia et al. 2012), Registered Nurses for Health Enhancement and Local Service (Senate of the Philippines 2011), Philippine Health Agenda (DOH 2016), the Health Human Resource Deployment Program (Abrigo et al. 2021), and reintegration of returning migrant healthcare workers (Moncatar et al. 2023).

R.A. 11223 has mandated the formulation and implementation of a national master plan for human resources for health. The plan is expected to provide policies and strategies for the “appropriate generation, recruitment,

retraining, regulation, retention, and reassessment of the health workforce based on population health needs”. The National Human Resources for Health Master Plan (NHRHMP) 2020-2040 (DOH 2021) was developed to address the (1) absence of accurate information on the health workforce to guide policy and planning, (2) limited collaboration among stakeholders, (3) fragmented HRH governance, and (4) poor implementation of policies. The Master Plan is aligned with the vision of “Filipinos have long and healthy lives by 2040” as stated in AmBisyon Natin 2040 (NEDA 2016).

The education sector, composed of higher education and skills training institutions, plays a pivotal role in building the national HRH through the health education market for the appropriate supply of quality and committed health workers and professionals. In the NHRHMP, it is envisioned that HRH production will be sustainable and evidence-informed, leading to the training of quality and practice-ready HRH responsive to local health needs. At the same time, the health education curriculum needs to be re-oriented towards primary health care (Figure 1).

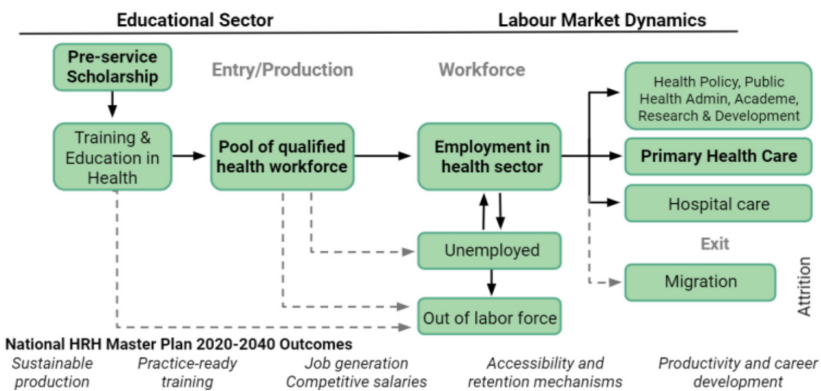


Figure 1. Health Labor Market Framework for UHC. Source: National Human Resources for Health Master Plan 2020-2040 (DOH 2021)

Another issue is the retention of the health workforce in the local health sector. Both internal migration and outmigration further drive the inadequate and inequitable distribution of healthcare workers (HCWs) in the country. The country has been experiencing brain drain with the migration of skilled physicians and mid-level professionals (Albuero and Abella 2002). They have recommended that new information and communication technologies, in the level of higher education and in the practice of the profession, may address the international migration by providing opportunities to reduce

attractiveness of outward migration. Data from 1990 to 2017 have shown that the number of healthcare migrants has been steadily increasing (USAID HRH2030 2020). The total number of migrants from the period reached 60,000, wherein the majority were nurses. Some health professionals have also taken non-health jobs due to compensation differentials. Further, 2015 to 2020 data extracted from the Philippine Overseas Employment Administration Overseas Filipino Workers Statistics has also shown a steady number of HRH migrants totaling to 131,607 for 36 professions in 134 countries (DMW n.d.). Based on the Global Strategy on Human Resources for Health: Workforce 2030 by the World Health Organization (WHO 2016b), a ratio of 44.5 per 10,000 population is recommended to reach the 12 Sustainable Development Goals indicators. The recommended HRH skill mix consists of 14.3 for physicians, 27.4 for nurses, and 2.8 for midwives.

Thus, it is important to address the shortage of health professionals in the country with evidence-informed policies and programs addressing healthcare worker migration and focusing on the critical role of higher education and training institutions in HRH generation.

The study aims to (1) assess the country's human resources for health deficits considering the current international and local migration trends of healthcare professionals and the supply and demand based on the health labor market; (2) identify gaps, opportunities in higher education, and health workforce retention; and (3) recommend policy reforms on the retention and reintegration, and migration management (domestic and international), based on available data on the health workforce supply, demand, and the Philippine health labor market.

Methodology

Study design and subjects

A core group representing key agencies was established to review existing materials from various sources. Due to gaps in the information from printed and official websites, three FGDs were organized, in collaboration with the National Academy of Science and Technology (NAST), to elicit more recent information on the ground on the following themes: human resources for health retention and reintegration; migration management; and supply, demand and the health labor market. Questionnaires were developed for each of the themes and sent to invited participants prior to the FGD to give them an opportunity to discuss their responses with their respective groups.

Responses were discussed during the FGDs. Each of the FGDs had themed plenary talks prior to the breakout sessions. The participants were informed during the forum that the FGD sessions will be recorded. To maintain confidentiality, all identifiers of the participants and respondents were removed.

The participants were representatives from the professional societies from 15 health and allied professions (dental hygienists, dental technologists, dentists, medical technologists, midwives, nurses, nutritionist-dietitians, occupational therapists, optometrists, pharmacists, physical therapists, physicians, radiologic technologists, respiratory therapists, and x-ray technologists), the education sector, government, and non-government agencies (Table 1). Purposive sampling was implemented to ensure that each of the disciplines have representation primarily based on professional societies, government agencies (e.g., CHED, DOH, DOLE, DMW) relevant in addressing HRH issues, education sector with health-related courses, non-government, civil society, and private groups relevant to primary healthcare delivery.

Table 1. List of Organizations Invited to the Focus Group Discussions

PROFESSIONAL SOCIETIES
Association of Respiratory Care Practitioners Philippines, Inc.
Dental Technologists Association of the Philippines
Integrated Midwives Association of the Philippines
Midwives Foundation of the Philippines*
Mother and Child Nurses Association of the Philippines*
National Association of Public Health Nurses Inc.
Optometric Association of the Philippines*
Philippine Academy of Occupational Therapists, Inc.
Philippine Association of Medical Technologists, Inc.
Philippine Association of Nutrition, Inc.
Philippine Association of Radiologic Technologists Inc.
Philippine Association of Speech-Language Pathologists
Philippine Dental Association
Philippine Dental Hygienists' Association
Philippine League of Government and Private Midwives Inc.*
Philippine Medical Association
Philippine Nurses Association
Philippine Pharmacists Association Inc.
Philippine Physical Therapy Association, Inc.
Philippine Society of Public Health Physicians*
Philippine Stakeholders for Nutrition and Dietetics, Inc.

EDUCATION SECTOR
Association of Deans of Philippine Colleges of Nursing Association of Philippine Medical Colleges College of Medicine, University of the Philippines Manila Philippine Association of Schools of Medical Technology and Public Health Philippine Association of State Universities and Colleges
GOVERNMENT SECTOR
Commission on Higher Education Department of Health Department of Labor and Employment Department of Migrant Workers Second Congressional Commission on Education Technical Education and Skills Development Authority Union of Local Authorities of the Philippines
NON-GOVERNMENT, CIVIL SOCIETY, AND PRIVATE ORGANIZATIONS
Philippine Hospital Association Private Hospital Association of the Philippines

*no representative sent to FGD

Data collection and analysis methods

Data on HRH was obtained from the Health Human Resource Development Bureau (HHRDB) of the Department of Health (DOH) on the following professions: dental hygienists, dental technologists, dentists, medical technologists, midwives, nurses, nutritionist-dietitians, occupational therapists, optometrists, pharmacists, physical therapists, physicians, radiologic technologists, respiratory therapists, and x-ray technologists.

Responses to the questionnaires were tallied. Raw data from FGDs were analyzed using NVivo (Version 14), a qualitative data analysis tool, for developing the themes and finding connections from the responses, mapping these connections, and providing the reports related to the number of connections in each of the major and sub-themes.

A qualitative research method design was employed using Thematic Analysis. Thematic analysis is a flexible method for identifying, analyzing, and reporting patterns (themes) within qualitative data. It emphasizes understanding the data's meaning through the lens of participants' experiences and perspectives (Braun and Clarke 2006).

Inclusion, exclusion, and ethical considerations

Only professions regulated by the Professional Regulation Commission (PRC) with licensure examinations were included in this study. All baccalaureate courses are Philippine Qualifications Framework (PQF) Level VI except Medicine which is PQF VII. Representatives of their respective professional societies were invited to the FGDs. All government and non-government agencies relevant to health were invited to send representatives to the FGDs.

Results and Analysis

In this paper, only data for physicians, nurses, and midwives were available for review. Figure 2 shows the data consolidated by the DOH from the following sources: Commission on Higher Education (CHED) for numbers on enrollees, dropouts, and graduates; PRC for number of takers, number of passers, passing rates at board examinations, number of health workers with active licenses; and health facilities for the number of employed health workers. There was an attempt to get information on the number of health workers in non-health professions (i.e., industry) but without success.

The following observations were drawn from Figure 2:

1. In Part 1. HEI Section, dropout rates were significantly high for Medicine (74 percent), Nursing (79 percent), and Midwifery (66 percent).
2. In Part 2. Board Exam Section, board examination passing rates were low for Medicine (68 percent), Nursing (69 percent), and Midwifery (52 percent).
3. In Part 3. Health Workforce Section, the number of active licenses shows adequate number of nurses (538, 068) and midwives (73,624) based on standards set by WHO.

The average annual number of migrants refer to international migration. There is no data for domestic migration (rural to urban; health profession practice to non-health jobs such as in the BPO industry, army/navy, etc.). There are no data for unemployed physicians, nurses, and midwives.

These data did not consider geographic assignment.

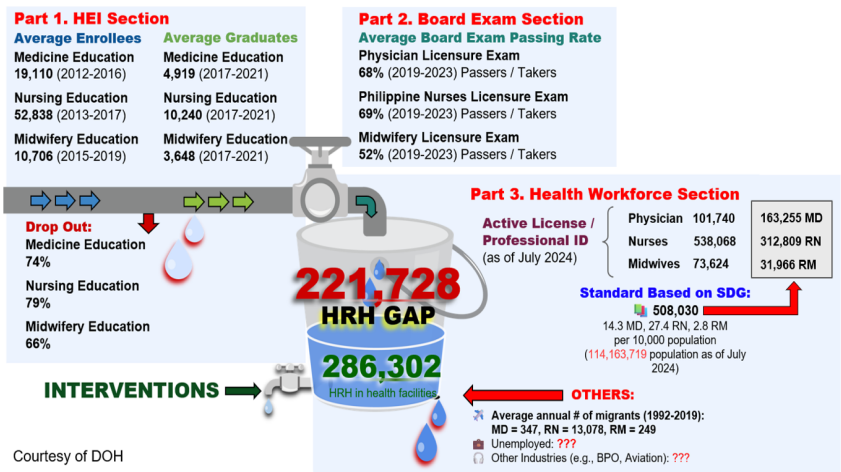


Figure 2. Enrollees, graduates, dropout rates, passing rates, licensed workers, employment and migration of physicians, nurses, and midwives

Prior studies focused on migration and retention, have provided various recommendations such as improvement of information and communication technologies, creation and implementation of policies on the said concerns.

Although there is recent data for 2024 from the PRC on the average board exam passing rates and active license/professional ID holders (Appendix 1), the figure above used the earlier dates to show continuity in the tracking of enrollees until they are expected to graduate and take the licensure exams.

Considering the minimum expectation for SDG requirements, the Philippines needs 508,030 health workers for a population of 114,163,719 (July 2024). Compared to the number of HRH with active licenses at the PRC, there is a shortage of physicians and a seeming surplus for nurses and midwives. Yet, it actually ends up in shortages because of migration and other leaks in the health labor market. Out of 508,030 needed HRH, only 286,302 comprised the employed HRH in health facilities (Figure 2, Part 3. Health Workforce Section), reflecting a shortage of 221,728 in the country. There is no reliable information on the working location of physicians, nurses, midwives, and other licensed health professionals.

The PRC is currently consolidating data on passing rates in licensure examinations of all health professions in the past 10 years to help forecast how many HRH professionals will be produced in the coming years (Supply

Side). Another challenge is determining the actual number needed for other health professions outside of medicine, nursing, and midwifery (Demand Side).

The FGDs presented issues of the health workers. Based on participants' responses during the breakout sessions, there are three major themes under which HRH issues can be categorized: (1) Education and Training Gaps; (2) Retention, Reintegration and Migration; and (3) Shortage and Maldistribution. Retention and Migration have the greatest number of connections (223) with the participants followed by Education and Training Gaps (101) as the major issues in HRH. The number of connections refers to the number of times a particular topic has been mentioned during the breakout sessions. Results of the FGDs on HRH issues are presented in Table 2 and Table 3 with issues according to the three major themes.

Table 2. Results of Focus Group Discussions on HRH Issues

THEMES	ISSUES
Theme 1: Education and Training Gaps	High attrition and low passing rates
	Variable quality of higher education institutions and lack of Higher Education Institutions (HEIs) offering specific HRH programs
	Current health sciences education curricula seem to fail to produce practice-ready HRH
	Contentious retention and Return Service Agreements
Theme 2: Retention, Reintegration, and Migration	Weak Positive Practice Environment including appropriate recognition and valuing of some HRH staff
	Inadequate HRH Workforce Financing (salaries, benefits, infrastructure)
	Weak job Security and Career Pathways (Plantilla, career advancements, training pipelines)
	Weak Reintegration system for returning HRH
Theme 3: Shortage and Maldistribution	Skill mix imbalance (encroachment in other professions, lack of delineation in practice, some professions not fully integrated)
	Unresolved challenges in HRH rural practice
	Concentration of HRH distribution in urban areas
	Inadequate staffing resulting in overwork, overload, and stress

**Table 3. FGD Results on Number of Connections of HRH Issues
According to Themes and Sub-themes**

HUMAN RESOURCE FOR HEALTH ISSUES	NUMBER OF CONNECTIONS
Theme 1. Education and Training Gaps	101
1. Education Gaps	85
a. Support for Passing Exams	8
b. Enrolment and Retention at Colleges	6
c. Lack of Data	21
d. Lack of Faculty	7
e. Lack of HEIs Offering the Programs	12
f. Limited Production of HRH	6
g. Passing Rates	4
h. Return Service Agreement	20
i. Support for Passing Exams	1
2. Training Gaps	16
a. Lack of Continuing Education Programs	9
b. Lack of Support for Training	7
Theme 2. Retention and Migration	223
1. Easy Migration Pathways	6
2. Family and Personal Reasons	31
3. Health Workforce Financing	67
a. Benefits	14
b. Facilities and Resources	7
c. Salaries	46
4. Lack of Position and Career Growth	46
a. Lack/No Position of Plantilla	16
b. No Career Growth of Pathways	27
c. No Job Security	3
5. Skill Mix Imbalance	12
a. Encroachment in Other Professions	4
b. Lack of Delineation in Practice	4
c. Some Professions are Not Fully Integrated	4

HUMAN RESOURCE FOR HEALTH ISSUES	NUMBER OF CONNECTIONS
6. Unethical Recruitment Practices	5
7. Workforce Burnout	45
a. Overwork, Overload, Stress	20
b. Poor Working Conditions	18
c. Undervalued, Unrecognized	7
d. Working in Other Fields	11
Theme 3. Shortage and Maldistribution	9
1. Challenges in Rural Practice	1
2. Concentration in Urban Areas	4
3. Inadequate Staffing	4

Policy Discussion

During the preliminary meetings of the core group, three major clusters of HRH issues were identified: (1) retention and reintegration, (2) migration (domestic and international) and (3) supply, demand, and the health labor market. Data from the DOH, PRC, and United States Agency for International Development (USAID) HRH 2030 study were presented. It revealed gaps in information especially in the allied health professions such as dentists, therapists (physical, occupational, speech pathologists), radiology technologists, and medical technologists. These professions were also contributing to the HRH migration issues in addition to the more commonly addressed professions such as the physicians, nurses, and midwives. Because of these gaps, the FGDs were organized to actively engage the various professions in the discussion of HRH issues to elicit new information, provide more context, and derive perceived solutions from the ground.

Analysis of relationships of HRH Issues - lack of prioritization on investment on health workforce

The paper identified direct and indirect relationships among issues legitimately derived from the FGD responses. There are seven issues discussed by the FGD participants: (1) education and training gaps, (2) health workforce financing, (3) lack of position and career growth, (4) retention and migration, (5) workforce burnout, (6) shortages and maldistribution, and (7) skill mix imbalance.

Analysis of their responses under each theme revealed that retention and migration are the effects of the other six contributory issues (probable causes). This cause-and-effect relationship is presented in Figure 3 and explained further. Interestingly, retention and migration also cause shortage and maldistribution (effect) as presented in Figure 4.

The country needs a health workforce that is available and equitably distributed, competent and practice-ready, and highly motivated, enjoying decent work environments in order to address the seven contributory issues.

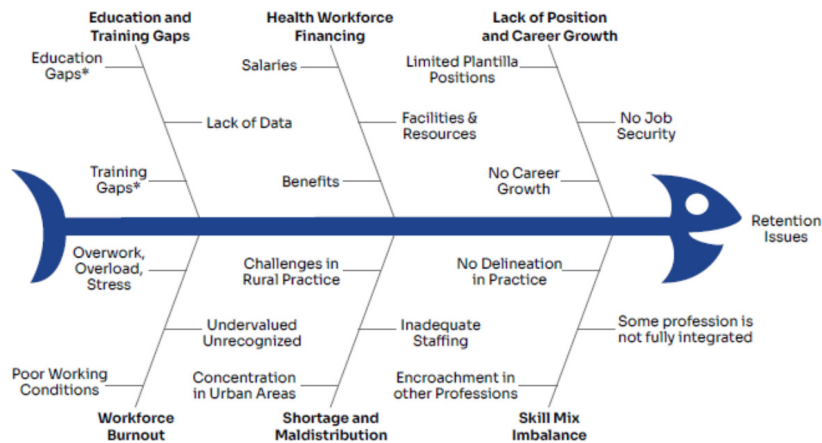


Figure 3. Healthcare Issues Contributing to Retention and Migration

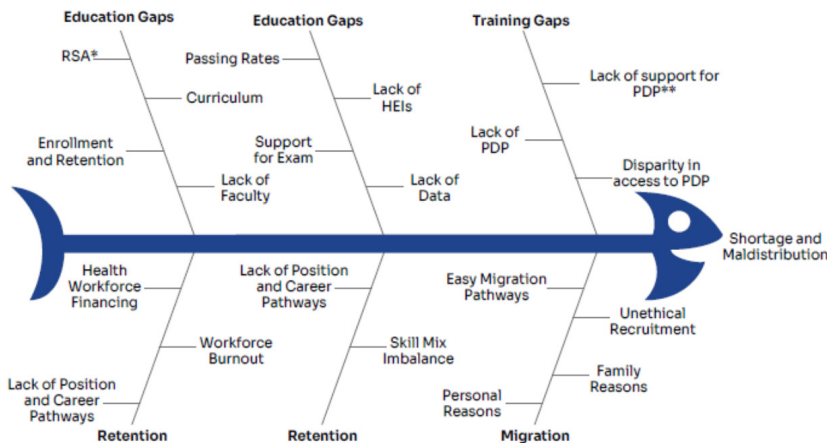


Figure 4. Healthcare Issues Contributing to Shortage and Maldistribution

Major challenge - data generation and data sharing

This paper demonstrated the value of good data for an accurate analysis of the health workforce situation. Figure 2 gave the alarming status of three professions—physicians, nurses, and midwives. It showed the weaknesses of our system—high dropout rates, low passing percentage of board examinations, and lack of location of practice.

This is the first published data on comprehensive labor market information with analysis from pre-service (enrollment, graduation, board exam) to in-service (registered professionals with active license/professional IDs, migration). The high attrition rate per stage was instrumental in drafting of recommendations.

The data generated for migration is only for international movement but we realized during the core group meetings and FGDs that there was also domestic migration – from rural to urban setting and from health profession to non-health professions such as the BPO industry engaged in non-active healthcare delivery. There is also a recent observation of movement of health workers from the private to public health facilities.

The situation is alarming because the numbers reflect seemingly adequate numbers of nurses and midwives renewing licenses at the PRC and yet, we know that there are many parts of the country without health workers. Issues on demand and supply also affect the maldistribution of available health workforce. At present, there is no accurate practice location map for all physicians, nurses, and midwives. In addition, data on the graduates of medical, nursing, and midwifery courses working in non-healthcare institutions are not readily available. These findings reinforce the existing literature on the lack of data for further analysis.

Alarming also are the attrition rates in medicine, nursing, and midwifery courses. The 22 medical schools in state universities are currently providing a supply of physicians, but decreasing the attrition rate will be a bigger factor in increasing the number of physicians rather than establishing additional medical schools. This is an indirect measure of the quality of the schools and this can be remedied with focus on institutional accountability and responsibility in producing high quality, competent and committed health professionals.

No conclusions could be made about the other professions because the data was not yet available for analysis. It will not be a surprise if similar observations will be gathered.

During the FGDs, it was evident that not all professional groups have the capacity for data generation and storage. The professional groups also expressed security concerns on data sharing. Recognizing now the importance of data sharing for policy generation, the professional groups agreed to attend a two-day workshop to be hosted by the National Academy of Science and Technology (NAST) on data issues. The goal is the creation of a secured common data portal compliant with the existing laws, rules and regulations on data privacy for the various groups to use for data entry and storage.

A country in crisis!

The country's health workforce is definitely in a crisis. Based on the status of the three health professions, the Philippines will have great difficulty in achieving the SDG targets for 2030. More importantly, it will be very challenging to implement the Universal Health Care Act without an adequate, competent, practice-ready, and highly motivated workforce.

There are attempts from concerned agencies to alleviate the problem in recognition of the seriousness of the issue as well as the need for the explicit articulation of the direction of HRH Management. The HHRDB of the DOH is coordinating with other agencies for generation of data on enrollees, dropouts, passers, and location of practice for a real-time situation of the health workforce. The Department of Foreign Affairs is leading the Inter-Agency Body to develop a Joint Memorandum Circular (JMC) on Strengthening Bilateral Labor Agreements for all Healthcare Workers. The JMC will have a five-pronged framework for Strategic Management of the Philippine Health Workforce aligned with the National Human Resources for Health Master Plan:

1. Rational Responsive Production. HRH production for a country (supply side) should be responsive to the country's needs. It should also be driven and informed by data from the demand side with all factors such as demographics, burden of disease, risk and hazard profile of the country, and domestic and international migration taken into consideration.
2. Managing the Flow. Once HRH are qualified (i.e., in the case of licensed health professionals), they are expected to stay in the country and ideally, contribute to the health labor market as providers of health services, administrators/managers of health systems, academicians, or researchers for a number of years to allow the "production" of their "replacement" should they decide to leave the domestic health labor market.

3. **Sustained and Sustainable Retention.** Retention is the priority of this framework. This means developing the country as a “green pasture” that will be attractive enough and competitive for HRH to want to stay and serve. This requires a whole-of-society and whole-of-government effort, as well as the establishment of financial and non-financial incentives from all levels of governance. Retention efforts should be attractive enough to make health workers want to stay and serve where the need is greatest such as Geographically Isolated and Disadvantaged Areas (GIDAs) or Socioeconomically Disadvantaged Areas. This can be achieved by utilizing a combination of benefits, creation of more tenured, permanent (plantilla) items, nudging the private sector to pay better, housing, scholarships, etc.
4. **Managed Migration.** Migration should be a matter of choice and not necessity. Should HRH decide to seek work abroad despite the efforts for sustained and sustainable retention, the government should ensure that the rights and welfare of Filipino HRH are protected and upheld through the government by means of government bilateral labor agreements that are enforceable and can be monitored with accountabilities. The bilateral labor agreements should be mutually beneficial for both the receiving country and the Philippines at the health system level.
5. **Reintegration.** The government should create space for returning HRH to contribute to the health sector in order to maximize the experience and expertise they have gained while working outside of the country.

Policy Recommendations

In view of a crisis as regards its health workforce, we strongly recommend the following urgent measures:

1. **Creation of a high-level multi-agency Council/Center/Office** to formulate and coordinate the implementation of policies recommended by the HRH Network towards rational responsive production (supply), sustained and sustainable retention, managing the flow of health workers across the health labor market, equitable distribution of health workers and migration management of health workers and reintegration.

The purpose of the creation of a high-level Council/Center/Office is to establish a body with adequate authority for effectively and responsively addressing health workforce issues including recruitment, training,

retention, and equitable distribution of healthcare professionals in the country in a timely manner. In coordination with existing agencies tasked to address workforce issues (DOH, DOLE, Department of Migrant Workers, etc.), the council will be responsible for overseeing and guiding the timely resolution of health workforce issues with the following objectives:

- a. Evaluate the current workforce status, project future needs, create actionable plans to address identified challenges and opportunities (strategic oversight and workforce planning), and produce timely, regular national and local assessments and actionable recommendations (e.g., quarterly reports);
 - b. Engage policy makers to support effective workforce-related legislation and funding (policy advocacy and development) both at the national and local levels to ensure the provision of decent work conditions;
 - c. Promote diversity (skill-mix, gender, community workers vs. health professionals, generalists/primary health care workers vs. specialists) and equity within the healthcare workforce to ensure community access to quality care (equity and inclusion); and
 - d. Foster collaboration among healthcare providers, educational institutions, government agencies, and community organizations (stakeholder engagement) to solve HRH issues such as inequitable distribution, competency enhancement, and the like.
2. Enforcement of mandatory data entry into an accessible and interactive information portal for real-time analysis needed for responsive and harmonized policy decision making.

A National Portal for Healthcare Workforce Data will serve as a centralized and comprehensive platform for collecting, storing, and disseminating critical workforce information. This is provided by R.A. 11223 (Section 25) which mandates the development of a national health worker registry. By consolidating data from diverse sources into a single, accessible portal, this initiative aims to enhance transparency, facilitate data-driven decision-making, and support the development of timely targeted interventions to address workforce challenges. The following will be the objectives:

- a. Provide a unified platform that will aggregate workforce data from various sources (centralized data);
 - b. Offer ease and secure access to up-to-date information (enhanced data access);
 - c. Support evidence-based decision-making (data driven insights);
 - d. Aid in the development of strategies and policies by providing comprehensive data (workforce planning and policy development); and
 - e. Promote transparency to serve as basis in holding stakeholders accountable in addressing workforce challenges (transparency and accountability) in accordance with R.A. 11223.
3. Urgent provision of synchronized dynamic HRH development systems (pre-service and in-service), to ensure the availability of a competent, practice-ready, highly-skilled, and motivated health workforce that is responsive to population needs, equitably distributed, and sustainably retained across the country, especially in underserved areas to ensure universal access to health care.

The Philippines is considered to have the ability to produce an adequate number of health workers, enough to address its population's needs as well as to sustain health worker migration to other countries. However, health labor market data shows that there are massive shortages of health workers in many areas across the nation that hamper the achievement of desired Philippine health care outcomes. Among the reasons for this paradox is the wide variance in the quality of health sciences education that results in a large number of dropouts and low number of licensure examination passers (Appendix 1). From 2017–2023, the highest passing percentage was registered by Optometry with 82.3 percent. Medicine was second with 71 percent, 56.9 percent for Nursing and 45.7 percent for Midwifery. However, taking into consideration the year 2023 alone, Nursing had 74.9 percent passing percentage while Medicine went down to 54.5%. Midwifery still had 47.3 percent. There are more than enough schools in Nursing and Midwifery (529 and 304, respectively in 2023). Further, the number of medical schools has increased with the passage of the Doktor Para sa Bayan Act (R.A. 11509).

The current HEIs also have curricular and training capacity issues that sometimes result in graduates who are not practice-ready, nor competent or highly skilled. There are tried and tested higher education health science programs that produce practice-ready health workers of different cadres specifically, doctors, nurses and midwives that show remarkable retention results over the years that should be replicated faster with government subsidy and attention. One such program is the University of the Philippines Manila School of Health Sciences programs (University of the Philippines Manila—School of Health Sciences, 2025) that are now in four provinces. Replication of these programs in both the public and private sector, through the mechanisms provided by Doktor Para sa Bayan Act and UHC Act, can improve the supply of practice-ready graduates who are ready and willing to serve the underserved communities that need them most.

Post-graduate issues of ensuring career progression through continuing education and lifelong learning approaches abound so that work motivation and career development become demotivators rather than motivators. Practice acts are not updated to ensure meaningful career progress such as nurses moving into advanced practice nurses within the ambit of the Philippine Nursing Act of 2002 (R.A. 9173). The Medical Act of 1959 (R.A. 2382) has also not been updated. Professional practice legislations have not provided the impetus and evolution of roles and spurred professionals to innovate their roles and practices. A case in point is the proposed Comprehensive Nursing Act of 2023 that has not been enacted even while it was submitted to Congress since 2016 with similar bills filed in the succeeding Congress such as the House Bill No. 3298 and Senate Bill No. 1447 in the 19th Congress. Key but contentious components of the legislation provide for Advanced Nursing Practice of nurses which will be especially helpful for UHC realization in doctorless areas or in primary care of highly urbanized areas that are underserved; provision for National Chief Nursing Officer as promulgated by WHO to hold a person accountable to coordinate the solutions for nursing issues within a country; bringing the salary levels of nurses in private health facilities up to par to government compensation levels to achieve equity and retention. In addition, the current practice laws are disparate and promote professional turfing rather than teamwork which is necessary for high quality health care.

By improving HRH development systems from rational production to equitable deployment towards retention of available competent, highly skilled, and highly motivated health workers, the following recommendations are espoused:

- a. Ensure the meaningful regulation of HEIs offering health sciences education for them to produce high quality, practice-ready, committed health workers who appreciate teamwork (inter-professional) in providing primary services to the population they serve;
- b. Secure the balance between producing more health workers and developing quality health workers by ensuring that health sciences education is neither politicized nor commercialized;
- c. Develop and cascade supervision and work enhancing strategies across health facilities and health care settings to motivate and improve health worker performance in improving health outcomes;
- d. Pass proposed health professional practice laws such as the current Comprehensive Nursing bill (e.g., House Bill No. 3298 and Senate Bill No. 1447 of the 19th Congress) that have languished in the legislature for three congresses now because of the unwillingness of legislators to approve increases in compensation and other decent work provisions, and to make these positive work environments the norm rather than the exception.
- e. Endorse proposed bill on Career Progression and Specialization Program and Credit Accumulation and Transfer System submitted to the Second Congressional Commission on Education 2 (EDCOM II). It will upgrade the qualification and competency level of professionals which could later translate to better career prospects and opportunities, promotion, and higher salary for professionals. It also reinforces quality assurance in the provision of professional service and keeps the professionals at par with their international counterparts.

Conclusion

The crisis of the health workforce in the country was evident in the data and FGD outputs presented in this study. In assessing the country's HRH deficits, the creation of a National Portal for Healthcare Workforce Data compliant to data privacy laws, rules and regulations is imperative. Another factor contributing to the gap in the HRH is the high attrition rates among HEIs offering health care related courses. Improving HRH systems from pre-service to service will not only allow the country to produce

competent, highly skilled, and highly motivated health workers but retain the workforce to narrow the projected gap in healthcare. Further, aggressive policy measures at the national level must urgently address retention and reintegration, migration (domestic and international), supply, demand, and the health labor market. To promote accountability, ensure continuity, and respond to the concerns of the health workers, creation of a high-level multi-agency Council/Center/Office is essential.

All sectors, both public and private, engaged with health must be involved in the planning, implementation, supervision, and review of creative strategies to address the deficit in the health workforce. A multisectoral collaboration with a systemic approach anchored in sound policies can avert a country in crisis and make universal health care for all Filipinos a reality.

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Appendix 1

Statistics on Human Resources for Health Registration and Licensure Examinations

Number of Registered HRH Professionals as of August 21, 2024*

PROFESSION	REGISTERED PROFESSIONALS	ACTIVE PROFESSIONALS (WITH VALID PROFESSIONAL ID)
1. Medicine	170,563	102,220
2. Medical Technology	123,979	74,415
3. Midwifery	188,082	73,397
4. Pharmacy	99,403	62,245
5. Dentistry	62,620	33,766
6. Optometry	12,394	6,234
7. Nutrition and Dietetics	22,484	10,459
8. Nursing	999,467	538,960
9. Physical Therapy	38,714	17,621

PROFESSION	REGISTERED PROFESSIONALS	ACTIVE PROFESSIONALS (WITH VALID PROFESSIONAL ID)
10. Occupational Therapy	5,762	3,265
11. Radiologic Technology	28,104	22,257
12. Respiratory Therapy	7,454	6,520

*Courtesy of Professional Regulation Commission

Statistics on Licensure Examination for HRH Professions from 2017–2023*

PROFESSION	NUMBER OF EXAMINEES	NUMBER PASSED	PASSING PERCENTAGE
1. Medicine	41,354	29,375	71.03%
2. Medical Technology	50,335	35,034	69.60%
3. Midwifery	23,127	10,577	45.73%
4. Pharmacy	37,616	22,944	61.00%
5. Dentistry	6,948	3,536	50.89%
6. Optometry	1,455	1,197	82.27%
7. Nutrition and Dietetics	6,773	4,476	66.09%
8. Nursing	138,023	78,583	56.93%
9. Physical Therapy	13,758	8,603	62.53%
10. Occupational Therapy	3,070	1,925	62.70%
11. Radiologic Technology	22,252	9,837	44.21%
12. Respiratory Therapy	5,614	3,727	66.39%

*Courtesy of Professional Regulation Commission

Number of participating schools in the Licensure Examinations (2023–2024)*

PROFESSION	NUMBER OF PARTICIPATING SCHOOLS IN THE LICENSURE EXAMINATIONS (2023–2024)
1. Medicine	81
2. Medical Technology	150
3. Midwifery	304
4. Pharmacy	117
5. Dentistry	34
6. Optometry	10

PROFESSION	NUMBER OF PARTICIPATING SCHOOLS IN THE LICENSURE EXAMINATIONS (2023-2024)
7. Nutrition and Dietetics	52
8. Nursing	529
9. Physical Therapy	93
10. Occupational Therapy	25
11. Radiologic Technology	108
12. Respiratory Therapy	29

*Courtesy of Professional Regulation Commission