





The Future of Philippine Healthcare Jobs and Skills (2025-2040)

Health Sector Skills Council Project Technical Report

UNILAB Foundation
Philippines Business for Education (PBEd)

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EXECUTIVE SUMMARY

Background/Context

As the nation prepares itself for universal health care (UHC), good governance of the Philippine healthcare workforce is critical. According to the Professional Regulation Commission (PRC), there were a total of 1,846,855 licensed health workers by the end of 2024. However, the private healthcare sector accounted for PHP 316 billion out of PHP 10.1 trillion in 2024 or only 3.1 percent of the total GDP for services. Health has the lowest output of all ten service sectors which include retail, real estate, and financial services, based on the 2024 Third Quarter National Accounts of the Philippine Statistics Authority (PSA). Additionally, the private sector has a bigger share of hospital services than the public sector. The PSA reported that by the end of 2022, 850 out of 1,284 hospitals (or 66 percent) are owned by private healthcare institutions.

Human Resources for Health (HRH) is an important thrust of Australia and the Philippines, through the program, A Future that Works (AFW), an initiative supported by the Australian Government and implemented by the Philippines Business for Education (PBEd). AFW seeks to address the jobs-skills mismatch in the country and ensure the competitiveness of the industry by establishing a sector skills council, a group of experts tasked to provide needed insights and research on the present labor market needs.

Taking off from the AFW framework, the Unilab Foundation and PBEd implemented the Health Sector Skills Council (HSSC) project, with the aim of exploring the feasibility of creating a sector skills council for healthcare through research, stakeholder engagements, and a capacity-building activity for future thinking.

Problem Statement

Are we preparing a future-ready Philippine healthcare workforce? To respond to this question, Human Resources for Health (HRH) in the Philippines can be broken down into three (3) issues: 1) a numbers issue, 2) a skills issue, and 3) a willingness-to-serve issue.

The issue of numbers is seen in the fragmentation of the healthcare service delivery system to patients, which is unconsolidated and uncoordinated. Public sector services are constantly in high demand and will continue to grow despite logistical challenges. Government efforts are admirable but increased private sector participation and contribution will be necessary to reinforce the healthcare workforce plans.

An updated and consolidated database of skills, healthcare workers, healthcare systems, and other healthcare-related indicators to efficiently and effectively make data-driven decisions also does not exist.

The skills mismatch of healthcare professionals is the product of current academic programs. There is too much emphasis on health skills and not enough on bridging various health professions to achieve better outcomes such as patient and client care. There is also ambiguity in the interpretation of outcomes through the curricular standards set by government regulators.

Furthermore, the opposing values of private and public sectors have resulted in misalignment from education to qualifications to employment which contributes to a market failure in the health ecosystem.

The willingness to serve is a function of compensation and benefits. For some workers, wages are insufficient. The migration of the healthcare workforce to other countries is competing with domestic needs.

Methodology

This project looked at the different education and employment systems using a mixed-method approach. Several activities were conducted to be able to come up with data-driven insights.

First, a desk review was used to determine the capacity of academic institutions to develop and improve skill sets as regulated by the Commission on Higher Education (CHED) and the Technical Education and Skills Development Authority (TESDA) including an analysis of relevant policies. This was followed by a nationwide workforce survey conducted in partnership with the Department of Health (DOH) that targeted a thousand respondents. A focus group discussion with human resource experts was also held to surface difficulties in managing the current generation of the healthcare workforce. A multi-sectoral forum aimed to validate existing problems with HRH in both the public and private sectors was also organized.

Finally, a capacity-building activity on Futures Thinking and Design Thinking was implemented with participants from the government sector, academe, and the private sector with the goal of coming up with potential solutions and innovations to the challenges identified and faced.

Key Message and Solutions

A solution for a future that works for the healthcare sector will involve adopting innovations that will enhance healthcare jobs and skills. The Health Sector Skills Council (HSSC) project concludes that the HRH Network should serve as the nidus of the HSSC with the assistance of a consortium of private sector stakeholders. Best practices from models like Australia may be considered as benchmarks of collaboration such as the joint licensing of nursing and midwifery disciplines as an integrated discipline, and the Technical and Further Education (TAFE) model in the enhancement of the Philippine healthcare workforce through private and public partnership.

A re-design of the national health workforce master plan to cover both private and public health professionals is necessary. The One Hospital Command System (OHCS) of the DOH, which worked effectively during the pandemic, where private and public health agencies collaborated together is a good template to adopt and adapt for HRH management. The system can be expanded to establish an integrated database of current health professions available to serve, including information on their skills. A practical application is data visualization, showing where the diseases are and where the HRH is, which can lead to evidence-based health program management.

Upskilling through TESDA's training programs may provide a solution to the skills gaps. Private sector organizations and facilities are encouraged to upskill their workforce to avail of incentives such as lessened regulatory pressures (i.e. taxes and documentary requirements) that will be made available because of the Enterprise-Based Education and Training (EBET) Act signed last November 2024. Initiatives towards achieving an academic degree in healthcare such as the crediting of competencies

and outcomes of the training programs into academic units would also address gaps in certification and licenses.

Reforms in health worker education are long overdue. This can be done through a coordinating body by merging international and domestic healthcare standards. The goal is to ensure health workers are competitive and updated to serve both global and domestic market needs. At another level, the health industry is governed by a set of directors who are not necessarily current in the evolving health agenda. We propose a government-mandated executive healthcare leadership program for both public and private health organizations. The objective is to influence the shareholders' meaningful participation in UHC with a focus on HRH issues in their organizations.

Multi-sectoral integration of health, labor and employment, and education must be led by the government. This institution exists as the HRH Network, led by the DOH. However, it is acknowledged that without private sector support, reforms in health service delivery will not be sustainable. The proposed council will be tasked to answer questions such as:

- How many workers are needed for the future?
- What kind of discipline and skills will be needed?
- Where will these skills be needed?
- What economic incentives will create retention?
- How will opportunities be created for returning overseas health workers?

A consortium of private sector representatives from both the education and the health industries will advise on career pathways, what systems research to conduct, and how to bridge educators with health professionals and students. Because of the complexity of the health care delivery services, we propose two functional sub-councils: primary care providers (e.g. general medical practitioners, nurses, midwives, barangay health workers, and emergency response personnel), and specialists (e.g. specialist medical practitioners, pharmacists, nutritionist-dietitians, occupational therapists, and psychologists among others).

It is also vital to localize HRH development through the provincial, city, or municipal-level leadership because the issues in these localities are unique. It is also recommended to find pilot areas and current working examples at the regional and provincial levels on healthcare workforce planning experiences.

Current Landscape of Philippine Human Resources for Health

The handling and administration of healthcare education and skills development can be seen under CHED and TESDA, including Senior High School education under the Department of Education, using a Philippine Qualifications Framework as a standard to provide the foundation for a career in healthcare. Yet, concerns have surfaced on the alignment of these competencies with what is required and needed by the healthcare workforce. Certification and licensure exams may be able to ensure their qualifications are up to quality standards, yet a mismatch between healthcare education and healthcare jobs still exists. Initiatives from relevant government agencies, such as legislative policies and programs, have been issued and implemented towards the resolution of these concerns.

2040 Landscape of Human Resources for Health in the Philippines

The results of the survey conducted to gauge the sentiments of healthcare workers with regard to their present work condition, compensation, and healthcare delivery shows a strong awareness on the various HRH issues and its causes. The lack of coordination among institutions and the government that leads towards a fragmented healthcare surfaced as well. The respondents recognize

the DOH as the mechanism able to lead the resolution of these issues, with the cooperation of both private and public sectors and the creation of a coordinating body to bring about an improvement to the whole HRH ecosystem, including the compensation, security, safety, and access to benefits for their own health. Alignment towards the goal of UHC is also needed.

Insights on the challenges and issues identified in healthcare gathered through focus group discussions and a forum further support the need for consolidation and collaboration among stakeholders towards a future-ready healthcare workforce. Solutions to address these challenges, aimed at different aspects of HRH were presented.

An HRH Gearbox model is introduced as a prospective model to integrate all healthcare jobs and skills interventions per profession, with the value chain composed of interdependent components (education, licensing, employment, entrepreneurship, migration, and reintegration) that influence each other, with education being the main driver of all future efforts. Akin to a gearbox, it best reflects how to create an interoperable and interdependent mechanism so that each profession can grow together, vital to the delivery of UHC.

Innovations in Support of Future Philippine Healthcare Jobs and Skills Development

Taking off the lessons learned from Australia's HRH experience, innovations and reforms in the Philippine's healthcare ecosystem include an alignment in education and skills development through a value chain approach. The proper and timely implementation of existing government policies and structures would strengthen public sector initiatives. Vital to its success is the full cooperation, support and ownership of the private sector through the creation of a coordination mechanism and consortium for healthcare jobs and skills development.

Recognizing the need to gather and utilize quality data, harnessing and maximizing its potential is crucial for timely and relevant initiatives for healthcare, through the creation of a database and dashboard for data visualization.

Monitoring and Evaluation Support for Health Jobs and Skills Programs

Effective monitoring, data validation, and evaluation activities are critical to any of the proposed programs, integrating various development objectives found in the DOH's National Human Resources for Health Master Plan 2020-2040 (Master Plan), the Philippine Development Plan (PDP) 2023-2028, and the Sustainable Development Goals (SDGs). A critical success indicator is the buy-in from the private sector, including different health professionals.

Key performance indicators are planned for education, employment, and retirement. Education indicators can be the number of relevant skills developed, number of innovations executed, number of innovative research presented, and number of programs aligned with the Universal Health Care Act (Republic Act No. 11223). Employment indicators can be the improvement in wages or work conditions, retention or length of employment with an institution, and regularization (in the case of contract workers). Retirement indicators can be the number of retirement plans and re-entry opportunities adopted by retirees.

Conclusion

Observations on the misalignment of agencies, the exclusion of the private sector from the HRH master plan, and the disconnect between workforce production, deployment, and actual health system needs resonate strongly. The interplay among academic institutions, regulatory bodies, and financial incentives shapes the HRH supply in ways that may not fully align with national service demands. The market-driven nature of career choices, coupled with institutional distortions such as hospital-led demand, further complicates the issue of maldistribution. These are the challenges that the healthcare workforce faces.

However, the proposed sector skills council model will not be sufficient at the moment to address these HRH issues as it focuses only on one aspect of the whole ecosystem, i.e., workforce development, and its structural template is more oriented towards the integration of the private sector though the TESDA industry boards.

The complexity of the Philippine HRH ecosystem demands the creation of a **value chain approach**. It begins with an appreciation of the production/education side, followed by examining the regulatory regime for health workers, and then the employment/jobs and distribution, and with this, the issues of compensation and benefits to retain or to migrate and how individuals reintegrate back into the Philippines. There are problems at every point of this value chain. These gaps will be addressed by a coordinating body moving forward.

CHAPTER 1: THE CURRENT LANDSCAPE OF PHILIPPINE HUMAN RESOURCES FOR HEALTH

The landscape of the Philippine Health System is complex. One of the key components that shape this system is Human Resources for Health (HRH) and how this is governed. Current findings show that healthcare jobs and skills are currently not integrated. There is fragmentation or the lack of alignment in healthcare education, employment, regulations, and the support and collaboration between the private and public sectors, seen through uneven skill absorption, dropouts in healthcare degree programs, discontinuation of the profession, exorbitant tuition fees and costs for upskilling, low compensation and benefits in a demanding work environment, and career plans that are not aligned to the local needs as personal choices are biased towards serving outside the country.

More pronounced is the fragmentation between jobs and skills as this sets the foundation to achieve better healthcare outcomes for society. A deeper look into the education system would surface the disconnect in qualifications standards, learning foundations, and the offshoots of outcomes-based learning in higher education and competency-based learning in technical-vocational education and training (TVET) and actual healthcare skills and competencies. On the other hand, Philippine healthcare jobs are heavily regulated by law, and the tightness of regulatory pressures on workers causes problems in their working conditions, compensation and benefits, and willingness to serve in the domestic healthcare system.

This fragmentation is also observed and mentioned by several research studies on healthcare and its human resources.

- (Panelo, et al. 2024) Lack of systems integration resulting in a "weakened supervision of the local system by regional and national bodies, a fractured health information system impacting local and national policymaking, limitations on career paths for health workers confined within political boundaries, and altered the incentive structure for local governments, hindering the provision and financing of health services?"¹
- (de Claro, 2024) "Poor coordination that impedes timely information sharing, efficient resource allocation and effective response to health threats?"²
- Healthcare fragmentation is also affected by mismanagement of Philippine education and employment conditions, which includes healthcare skills learning across all grade levels, licensing standards, compensation, and decent working conditions leading to an imbalance in healthcare worker supply and demand.
- Attrition and low numbers are concerning. The DOH reported that "only two out of 10 students (5,585 out of 23,434) taking up medicine from 2015 to 2019 were able to graduate" "Similarly, nursing schools saw 48,652 enrollees during the same period, but only 11,014—or 23 percent—managed to finish the program."
- Others aren't practicing after they gain their license. In 2023, the Professional Regulations

¹ Panelo, Solon, Ramos, et al. in de Claro et. al. "The role of local health officers in advancing public health and primary care integration: lessons from the ongoing Universal Health Coverage reforms in the Philippines: BMJ Global Health 2024;9:e014118.

² Vergil de Claro, Juan Bernardo Lava, Clemencia Bondoc, Laurentiu Stan - The role of local health officers in advancing public health and primary care integration: lessons from the ongoing Universal Health Coverage reforms in the Philippines: BMJ Global Health 2024;9:e014118.

³Cabalza, Dexter. "New solution to lack of PH health workers eyed." Philippine Daily Inquirer, January 1, 2025. https://newsinfo.inquirer.net/2020330/new-solution-to-ph-lack-of-health-workers-eyed

Commission stated that there are not enough active professionals in the healthcare sector. For nurses, out of 951,105 who are new or are present, only 509,297 (53.5 percent) are active. For physicians, 95,039 out of 159,283 (or 59.7 percent) are active. Midwives tallied only 64,475 as active practitioners out of 182,300 who were licensed to practice⁴. 'Active practitioners' refers to those who have renewed their license for Midwifery. The denominator refers to the overall licensed Midwifery professionals including those who are not actively licensed. In reality, PRC assumes that those who renewed license every 3 years as active but they might in fact be performing non-health work.

- While the licensing numbers show encouraging signs of recovery since COVID-19, there are still reported shortages that have the potential to cripple the healthcare system since a professional-to-patient ratio standard has to be met. For example, physician shortage was noted in 2023, since the ratio must be 10 per 10,000 population, but this is recorded at 8 per 10,000 population. This fragmentation also contributed to the growth of shortages. During the first half of 2024, the reported shortage of the DOH was at approximately 190,000⁵ which grew to 220,000 by the second half of the year.

Landscape of Philippine Healthcare Education, Skills & Qualifications

Philippine Qualifications Framework (PQF)

Philippine healthcare education is heavily based on qualifications, and developed across different levels of learning, with emphasis on the undergraduate and national competency levels. The role of higher education and TVET is to ensure that their qualification standards are met as the resulting competencies and skills are what a healthcare professional needs to demonstrate to be able to practice their chosen profession.

There are 21 regulated healthcare professions registered in the Philippine Qualifications Framework (PQF) with defined levels of knowledge, skills, and values (KSVs), areas of application, and degree of independence in a specific job role. The healthcare qualifications under the PQF have various levels of KSVs, ranging from Level I to Level VII. Regulated healthcare professions are those that require graduating from a specific academic degree or National Certification (NC) as mandated by law while non-regulated professions are those which do not require a mandatory licensing process but possess qualifications to practice in the healthcare sector in support of the regulated professionals. Below is a list of professions in the healthcare sector divided into three categories, with corresponding KSVs and areas of application based on the PQF.

Table 1. Profile of the healthcare professions based on the Philippine Qualifications Framework

	Profession	KSVs and Degree of Independence (based on PQF Level)
Licensed (Mandated by Law)	NC I and II: Dental Technology	PQF Level I (NC I): Knowledge and skills that are manual or concrete or practical and/or operational in focus, in varied situations with minimal supervision.

⁴ "PRC: Only 59.7 percent of Philippines' doctors practicing; nurses, only 53.55 percent". GMA News Online, March 27, 2023.

https://www.gmanetwork.com/news/topstories/nation/865188/prc-only-59-7-of-philippines-doctors-practicing-nurses-only-53-55/story/

⁵ Mangaluz, Jean. "PH has a shortage of 190,000 healthcare workers says DOH". Philippine Daily Inquirer, May 22, 2024. https://newsinfo.inquirer.net/1943481/ph-has-a-shortage-of-190000-healthcare-workers-says-doh.

	Profession	KSVs and Degree of Independence (based on PQF Level)
	NC IV: Dental Hygiene	PQF Level II (NC II): Knowledge and skills that are manual, practical, and/or operational in focus with a variety of options, in conditions where there is substantial support, guidance, or supervision, limited judgment or discretion is needed. PQF Level IV (NC IV): Knowledge and skills that are mainly theoretical and/or abstract with significant depth in one or more areas; contributing to technical solutions of a non-routine or contingency nature; evaluation and analysis of current practices and the development of new criteria and procedures, which involves some leadership and guidance when organizing activities of self and
	Baccalaureate (Undergraduate): 1. Dentistry 2. Food Technology 3. Medical Technology/Medical Laboratory Science 4. Midwifery 5. Nursing 6. Nutrition and Dietetics 7. Optometry 8. Pharmacy 9. Occupational Therapy 10. Physical Therapy 11. Psychology 12. Psychometrics 13. Radiologic Technology 14. Respiratory Therapy 15. Sanitary Engineering 16. Speech-Language Pathology 17. Veterinary Medicine 18. X-Ray Technology	others. PQF Level VI: Demonstrated broad and coherent knowledge and skills in their field of study for professional work and lifelong learning, with a substantial degree of independence and or/in teams of related fields with minimal supervision.
Non-licensed	Post-Graduate: Medicine and Graduate Degrees (master's degree) in licensed healthcare disciplines such as Master of Arts in Nursing, Master of Science in Nutrition, and Master of Physical Therapy among others NC II:	PQF Level VII: Demonstrated advanced knowledge and skills in a specialized or multi-disciplinary field of study for professional practice, self-directed research, and/or lifelong learning, with a high substantial degree of independence that involves the exercise of leadership and initiative in individual work or in teams of multi-disciplinary fields. See the description of Level II above

Profession	KSVs and Degree of Independence
1. Massage Therapy 2. Wellness Massage (Hilot) 3. Health Care Services 4. Emergency Medical Services 5. Caregiving Services for:	PQF Level III: Knowledge and skills that are a balance of theoretical and/or technical and practical. Work involves understanding the work process, contributing to problem-solving, and making decisions to determine the process, equipment, and materials to be used; may involve individual responsibility or autonomy, may involve some responsibility for others, and participation in teams including team or group
Baccalaureate (Undergraduate): 1. Molecular biology 2. Nursing (underboard, with units) 3. Midwifery (2-year program with diploma or certificate) 4. Clinical and laboratory technician program 5. Health economics 6. Health policy 7. Health communications 8. Traditional medicine	coordination may be involved. Not applicable (qualifications are not yet completely registered in the PQF, but identified as support for the healthcare system based on DOLE's reports and registry of occupations)

Other occupations that are not subject to regulations and are not defined in the PQF are local government-based frontline healthcare personnel as part of the community health teams (CHTs), especially barangay health workers (BHW) who may have varied qualifications such as underboard or TVET. These workers are vital to operationalize UHC and they should also receive regular upskilling and proper compensation to allow them to continue their commitment to serve and equip them for

the health needs of the future⁶.

Foundational knowledge in healthcare in higher education

Healthcare education programs have a prescribed set of academic units, subjects, instructional references, and a learning schedule in their respective PSGs. Some disciplines share specialized subjects in healthcare other than general education, research, entrepreneurship, and management subjects as part of their degree program. Below is the list of subjects that are shared in nearly all healthcare education programs in five key domains under the sciences, mathematics, and cross-disciplinary knowledge (e.g. combination of two or more disciplines) found in the CHED Policies, Standards, and Guidelines (PSGs).

Table 2. Common subjects in all baccalaureate healthcare disciplines in CHED PSGs

BIOLOGY AND LIFE SCIENCES	CHEMISTRY	PHYSICS	MATHEMATICS AND INFORMATION	CROSS-DISCIPLINAR Y KNOWLEDGE
1. Biology 2. Embryology 3. Microbiology 4. Molecular Biology 5. Bacteriology 6. Parasitology 7. Genetics 8. Hematology 9. Histology 10. Immunology 11. Neuro Anatomy 12. Parasitology 13. Pathology 14. Physiology	1. Analytical Chemistry 2. Clinical Chemistry 3. Qualitative Chemistry 4. Quantitative Chemistry 5. Organic Chemistry 6. Inorganic Chemistry	1. Physics 2. Applied Physics	TECHNOLOGY 1. Applied Statistics 2. Statistics 3. Health Informatics 4. Digital Technology in Health Care	1. Biochemistry 2. Biostatistics 3. Bioethics 4. Biophysics 5. Epidemiology 6. Health Economics 7. Kinesiology 8. Nutrition and Diet Therapy 9. Pathophysiology 10. Pharmacology

The top 5 most common subjects across all the licensed healthcare professions are anatomy, physiology, microbiology, biochemistry, and pharmacology with Biology and Life Sciences and Cross-Disciplinary Knowledge being the most common. Medicine has the widest coverage of all these common healthcare science subjects because physicians have the most important role in the healthcare system.

Table 3. Top five courses shared among baccalaureate healthcare disciplines

HEALTHCARE SCIENCE SUBJECT	DISCIPLINES SHARED
Anatomy (13 disciplines)	1. Dentistry
	2. Medical Technology/Medical Laboratory Science
	3. Medicine
	4. Midwifery
	5. Nursing
	6. Nutrition and Dietetics
	7. Optometry
	8. Radiologic Technology
	9. Occupational Therapy

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⁶ Hartigan-Go, MD KY, Prieto ML, Valenzuela, MPM SA. Important but Neglected: A Qualitative Study on the Lived Experiences of Barangay Health Workers in the Philippines. Acta Med Philipp [Internet]. 2024 Oct. 4 [cited 2025 Jan. 16]. Available from: https://actamedicaphilippina.upm.edu.ph/index. PHP/acta/article/view/9589

HEALTHCARE SCIENCE SUBJECT	DISCIPLINES SHARED
	10. Physical Therapy
	11. Respiratory Therapy
	12. Speech-Language Pathology
	13. X-Ray Technology
Physiology (13 disciplines)	Medical Technology/Medical Laboratory Science
Thysiology (15 disciplines)	2. Medicine
	3. Midwifery
	4. Nursing
	5. Nutrition and Dietetics
	6. Optometry
	7. Pharmacy
	8. Radiologic Technology
	9. Occupational Therapy
	10. Physical Therapy
	11. Respiratory Therapy
	12. Speech-Language Pathology
	13. X-Ray Technology
Microbiology (7 disciplines)	1. Dentistry
	2. Food Technology
	3. Medicine
	4. Midwifery
	5. Nursing
	6. Nutrition and Dietetics
	7. Optometry
Biochemistry (7 disciplines)	1. Dentistry
	2. Food Technology
	3. Medicine
	4. Nursing
	5. Nutrition and Dietetics
	6. Optometry
	7. Veterinary Medicine
Pharmacology (7 disciplines)	1. Dentistry
	2. Medicine
	3. Nursing
	4. Optometry
	5. Pharmacy
	6. Radiologic Technology
	7. X-Ray Technology

In addition to these learning fundamentals for students, these subject areas are known to bring together students from all healthcare disciplines. This is necessary so that they can gain a proper understanding of the roles of other professions and appreciate the interdisciplinary nature of healthcare. These may also be offered as micro-credentials to students in Senior High School (SHS) and in technical training institutions to gain skills before entering work or continuing their education in college. It is possible that these common subjects shared across all health-related disciplines provide options to decide on healthcare careers.

However, attrition in these degree programs may be a result of learning difficulty and low skill

absorption in subjects of an interdisciplinary nature like biochemistry or pharmacology. For instance, anatomy and physiology subjects listed in the CHED PSGs were not designed to adjust to the varying aptitudes of SHS graduates. Because of the level of difficulty in science subjects upon entry from SHS, students may not be prepared well nor be able to demonstrate knowledge and skills competently. In this case, healthcare professionals may be called upon to help students learn better in healthcare-related subjects as early as Grade 11. There is an opportunity for the student to excel in interdisciplinary learning (e.g. such as biochemistry and pharmacology) if they are introduced to this during SHS.

Another problem lies when students eventually branch out to specialize in their respective disciplines after receiving the common healthcare subjects, which may limit their abilities and appreciation of interprofessional collaboration. This must be explored from the vantage point of educational outcomes and desired competencies for all health professions.

CHED's role in Baccalaureate Healthcare Education

CHED is responsible for determining the specifications of degree programs for these disciplines, prescribing courses and the minimum number of units and hours, requisite equipment and facilities for learning, and the qualifications of instructors/professors/lecturers for the discipline among many others based on an outcomes-based model. These are embodied in the PSGs that they release to implement undergraduate programs in these healthcare disciplines. CHED released PSGs for 26 baccalaureate degree programs in healthcare from 2016 to 2023. Only 2 programs (the Accelerated Pathway for Medicine Pilot Program and the Midwifery Baccalaureate Program) explicitly reference primary care and universal health care as mandatory subjects and topics for skill development as of December 2024.

Since the adoption of the K to 12 Curriculum and the shift to an Outcomes-Based Education at the higher education level, there is an expectation found in several healthcare professions' PSGs that these healthcare disciplines should collaborate as multi-disciplinary teams to deliver healthcare services.

CHED's Higher Education Development Program (HEDP)

From 2021 to 2024, funding was allocated for scholarships for the study of Medicine as part of its Higher Education Development Program (HEDP). The Seed Fund for the Development of Medical Schools, a program of CHED in 2021, aims to support medical education programs by funding the learning resources and research capabilities of educators and students and strengthening extension and community-based programs of these institutions. With a seed grant of PHP 150 million annually, this education program is expected to increase the capabilities of medical students in delivering universal health care, which is also pursuant to the Universal Health Care Act (Republic Act No. 11223) and the *Doktor para sa Bayan* Act (Republic Act No. 11509).

In Fiscal Year (FY) 2022 and 2024, CHED earmarked funds for the return service support of those who have passed the boards as new medical practitioners. This is to also fast-track the entry of more licensed physicians into the healthcare system.

Accelerated Pathway for Medicine (APMEd) Pilot Program

An additional effort to allow faster entry of physicians is to lower the years of study. In 2023, CHED developed the guidelines for the Accelerated Pathway for Medicine (APMEd) Pilot Program which streamlines and reduces the number of required baccalaureate degree units for an individual to

enter into medical school. The components of the program made a significant reduction to the years of Pre-Medical Education (2 years), which is followed by the mandated minimum requirement for Basic Medical Education (4 years), and an internship period (1 year), which brings the total of duration of this program to seven (7) years.⁷

Scholarship Program for Future Medical Technologists and Pharmacists

A similar scholarship program is currently managed by CHED for other healthcare professionals starting in 2024 funded by DOH amounting to PHP 51,872,940 and will help track the status and performance of the DOH scholars in Medical Technology and Pharmacy disciplines in state universities and colleges. CHED issued its Memorandum Order No. 11, s. 2024 (Implementing Guidelines on the Scholarship Program for Future Medical Technologists and Pharmacists) on November 25, 2024 to guide the implementation of this scholarship; this is also in line with the Master Plan's strategic objective to fund various disciplines that will address the imbalance of healthcare worker supply and demand.

Designation of Center of Excellence (COE) and Center of Development (COD)

Higher education institutions (HEIs) have presented efforts to upgrade their student, faculty, and organizational performance. CHED created the Center of Excellence (COE) and Center of Development (COD) designation for institutions with exemplary performance in board examinations, instructional quality, research and publication, and internationalization or links with international/foreign HEIs.⁸ The designation is applied for by HEIs and granted by CHED through the Technical Panel of a discipline.

The COE standard is met when institutions exhibit best practices and initiate innovative approaches in a specific healthcare discipline, possess advanced research capabilities, provide extension assistance to the local community where it is situated, and undertake efforts to develop and improve instruction to an acceptable quality. The COD standard is met when institutions exhibit the ability to accelerate the discipline through strategic projects it initiates, have ongoing faculty development programs, and have several linkages with other HEI or related institutions at the local, regional, national, and international levels. As of 2022, CHED designated 26 healthcare education programs from 18 HEIs, with 13 COEs and 13 CODs. The discipline with the most numerous Centers of Excellence and Development is in the Nursing discipline; with 6 COEs and CODs.

Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP) Law

Initially mandated as a program under CHED through Executive Order (E.O.) No. 330 in 1996, ETEEAP is a mode of learning wherein a higher education institution identifies, assesses, validates, and assigns academic units to competencies achieved from training programs taken from various sources, formal, informal, and non-formal, and work experiences. This alternative mode of learning seeks to expand accessibility to skills and attainment of degrees, accreditation of demonstrated learning,

⁷ CHED Memorandum Order No. 11, s. 2023. "Accelerated Pathway for Medicine (APMed) Program: A Pilot Implementation for Development of Future-Ready Physicians". Commission on Higher Education. URL: https://ched.gov.ph/wp-content/uploads/CMO-NO.-11-S.-2023.pdf.pdf

⁸ "Implementing Guidelines for the Identification, Support, and Development of Centers of Excellence and Centers of Development for Health-Related Education Programs". CHED Memorandum Order No. 17, 2006. Manila: Commission on Higher Education, 2006.

⁹ "Center of Excellence and Center of Development Programs". Commission on Higher Education, 2022. https://ieducationphl.ched.gov.ph/wp-content/uploads/2022/02/List-of-Centers-of-Excellence-and-Development.pdf

awarding and transferability of credits, quality assurance in converting work experience and hours into credentials, and flexibility and pacing which adjusts to a learner's circumstances.

In the healthcare professions education, there are six (6) disciplines delivered through the ETEEAP modality as of 2023; CHED deputized 18 colleges and universities to deliver 23 degree programs in the country.¹⁰ The Philippines recently institutionalized ETEEAP through Republic Act No. 12124, signed into law on March 5, 2025.

TESDA's role in Technical Training in Healthcare Services

TESDA is primarily responsible for determining important competencies for those availing of skill-based programs and setting the training standards including overall number of hours, trainer qualifications, and a detailed process of training among many others. These are embodied in Training Regulations (TR) which TESDA releases for graduates to receive an NC. Dental Technology and Dental Hygiene are two fields whose NCs require licensure in PRC under the Professional Regulatory Board (PRB) for Dentistry. There are 26 TRs in healthcare towards gaining skills as non-licensed healthcare professionals, with a specific suggested number of training hours devoted to demonstrating all competencies (basic, common, and core) as the main credentials to achieve a certification.¹¹

NC trainees are subject to assessments of these competencies through demonstrations and simulations. TESDA also codified these competencies as alphanumeric markers to help training providers determine appropriate methods of assessment and gauge readiness.

Under its National Technical Education and Skills Development Plan (NTESDP) for 2023-2028, the healthcare sector is one of its top 10 priority sectors in terms of program development and implementation, enhanced assessment and certification, industry partnerships, and infrastructure investments.

System for TVET Accreditation and Recognition (STAR) Program

TVET has a quality assurance and recognition program for top-performing schools that are licensed to offer technical training. The System for TVET Accreditation and Recognition (STAR) Program is a system of recognizing TVET programs that have exceeded the minimum requirements of program registration. This system determines which NCs have Competency-based Training (CBT) in Technical Vocational Institutions (TVIs) that can meet the skill requirements of the industries or sectors that are being served by graduates of these programs. This recognition system also provides quality assurance to ensure continuity of excellence in the downloading of competencies of NC learners. Incentives under the STAR program include "exemption from compliance audits and granted allocations for scholarship grants based on their capacity during the period of validity" and these vary based on the star rating established. As of 2023, 5 institutions and 7 programs were awarded under the STAR Program in the Human Health/Healthcare Cluster program, with three institutions that offer Health Care Services technical training.

TESDA Certification

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In contrast to the baccalaureate-level outcomes, TESDA Certifications under its Human Health/

¹⁰ "Deputized Higher Education Institutions (as of December 2023)." Commission on Higher Education, 2023. https://ched.gov.ph/wp-content/uploads/ETEEAP-HEIs-as-of-Dec-18-2023-1.pdf

¹¹ "List of Promulgated TRs as of January 2024." Technical Education and Skills Development Authority, 2024. https://www.tesda.gov.ph/Uploads/File/TRCode/List-of-TRS-as-of-Jan-2024.xlsx

Healthcare Cluster all have four common competencies which are reflected in every process of certification. All technical training under the Human Health/Healthcare Cluster must be able to:

- 1. Implement and monitor infection control policies and procedures;
- 2. Respond effectively to difficult/challenging behavior;
- 3. Apply basic first aid; and
- 4. Maintain a high standard of patient/client services.

Each of these competency standards is more purposive and relevant to the attainment of healthcare support from the side of the non-licensed professions. This means that each non-regulated profession has the capability to demonstrate patient/client services which may or may not be under the supervision of a licensed healthcare professional, especially those directly involved in primary care such as physicians, nurses, and midwives.

However, the existing outcomes and competency-based models in higher education and technical training have not seen any major transformation which allows openness to learning on national healthcare policies such as universal health care and have not been designed with forecasting and future skill projections in mind. These programs are considered conventional and traditional in their systems of learning in healthcare.

Private Sector Engagement through Scholarship and Training Programs

A Work Skills and Satisfaction (WSSS) Survey for the Health Sector was conducted as part of TESDA's Needs Anticipation methodologies to generate the skills, utilization, gaps, shortages, and future skills requirements of employers with their graduates. It covered the following sub-sectors under the Health Sector namely Primary Care Facilities, Health Care Facilities, and Supporting Services (Health Maintenance Organization, Health Information Management Services - Clinical and Documentation Service Providers, and Health Information Management Services - Health IT Providers). Recommendations from this survey include the strong collaboration with established industry organizations for its upskilling and reskilling programs, and the creation of a TVET Board for the Health Sector.

Firms in the private sector are encouraged to upskill their workforce through TESDA's healthcare learning and development scholarship programs, and consequently avail of incentives such as lesser regulatory pressures (i.e. taxes and documentary requirements) through the Enterprise-Based Education and Training (EBET) Act signed last November 2024. Since the majority of participating facilities consider a TechVoc or NC for 10 to 50% of the healthcare positions, and hard-to-fill occupations easily addressed by TVET such as 2D Echocardiography Technician, Nursing Attendant, Nursing Assistant, Programmer, Medical Coding, and Billing, among others, maximizing TESDA's programs would be beneficial in filling the gaps in healthcare jobs and skills mismatch.

However, with the high attrition rate in the private health sector due to geographic location and low compensation leading towards poaching, the low investment (less than 10% of the payroll) for training and upskilling may be a measure to cut costs and redirect funds elsewhere.

Philippine Credit Transfer System (PCTS)

A Joint Memorandum Circular (MC No. 01, series of 2023) between CHED and TESDA intends to operationalize a framework that would facilitate and award credit for learning outcomes achieved by undergraduates to allow them to complete their bachelor's degree. With the health sector as one of its priority sectors for pilot implementation, it seeks to aid learners, the education sector, the government, and the community through the reduction of inefficiencies in the delivery of education

and training.

Healthcare and Technology Skills

In a 2023 Asian Development Bank (ADB) study, there were observations that education systems using the traditional way of teaching are slow to revise its curricula to adapt to complexities and demands of the health sector, health technologies, and a changing climate in the handling and burden of disease. The delivery of quality and effective services virtually needs a willing and technologically literate workforce and patients. To add to these challenges, changes are needed which include strengthening competencies in service orientation, technical skills, ethical commitment, and social accountability. The strength of the service orientation is serviced to the service orientation in the service orientation.

These concerns over the quality and effectiveness of services are not only attributed to the students but also institutional performance in both higher education and TVET. There is also concern about the small number of quality-assured institutions by TESDA. There may be little to no interest from institutions in becoming part of this recognition system due to the small incentives given. There is also a gap in private and public sector financing for enterprise-based training owing to a fear of regulatory fees such as business registration. It remains to be seen how the sector will respond to the new and emerging competencies such as Digital Health, or relevant health technologies.

Skills in technology usage for healthcare delivery have improved working conditions and healthcare outcomes for patients. The World Health Organization (WHO) states that all forms of technology including those implemented in medical operations plays a vital role in the transition from hospital care to the community, and maximizing the utilization of the skills of providers at all levels, with digital technologies playing a role in the improvement of job satisfaction and retention of health workers. Digitizing health records improves patient safety for drug prescriptions, improves preventive care for various medical conditions, and improves communication, efficiency, and information management for all stakeholders involved.¹⁶ These skills in informatics are already expressed in the curricula for Medicine, Dentistry, Nursing, Pharmacy, Radiologic and X-Ray Technology, and Physical Therapy, which are specific to each profession but not in the health field in general (i.e. health informatics, pharmacy informatics, etc.).

Moreover, there is an emphasis on capacitating HRH workers to handle more advanced medical equipment that feeds more relevant patient and health data leading to the central registry of diseases (i.e. WHO's International Classification of Diseases), also vital for public health reporting; this is also part of the continually-developing field of Digital Health, which is not part of the current scope of learning experiences found in the existing PSGs of the healthcare professions.

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¹² Coghlan, Benjamin et. al. "Proceed with Care: Meeting the Human Resources Needs for Health and Aged Care in Asia and the Pacific". ADB Briefs, No. 285. Asian Development Bank, December 2023, p.2

¹³ Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, Fineberg H, Garcia P, Ke Y, Kelley P, Kistnasamy B, Meleis A, Naylor D, Pablos-Mendez A, Reddy S, Scrimshaw S, Sepulveda J, Serwadda D, Zurayk H. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. Lancet. 2010 Dec 4;376(9756):1923-58. doi: 10.1016/S0140-6736(10)61854-5. Epub 2010 Nov 26. PMID: 21112623.

¹⁴ Generalao, Ian. "Revamping enterprise-based training in the Philippines: Addressing barriers and disincentives to industry involvement". PIDS-EDCOM II Policy Notes No. 2024-10. Manila: Philippine Institute of Development Studies, 2024. https://pidswebs.pids.gov.ph/CDN/document/pidspn2410.pdf
¹⁵ Ibid.

¹⁶ Atasoy H, Greenwood BN, McCullough JS. The Digitization of Patient Care: A Review of the Effects of Electronic Health Records on Health Care Quality and Utilization. Annu Rev Public Health. 2019 Apr 1;40:487-500. doi: 10.1146/annurev-publhealth-040218-044206. Epub 2018 Dec 19. PMID: 30566385.

<u>Organization in Focus: The UP-Manila School of Health Sciences (UPM-SHS) - Orienting Healthcare Education as a Function of Nation-Building</u>

The UPM-SHS system has opened its doors to students who aim to study healthcare with the end goal of serving the communities where these students were raised. This institution was established before the Doctors to the Barrio (DTTB) program in 1992 and has been creating pathways to local service by collaborating with DOH, the Department of the Interior and Local Government (DILG), and the local government units (LGUs) to allow their students to gain exposure and eventually work in their communities. The UPM-SHS employs a similar principle to the DTTB, but the latter's return service orientation is not ingrained in graduates of the former.

The UPM-SHS has four campuses which are all widely dispersed outside of the Philippine capital: in Baler, Aurora and Tarlac City (both in Region III); Palo, Leyte (Region VIII in the Visayas); and Koronadal, South Cotabato (Region XII in Mindanao). It features a 77-week-long training under a stepladder curriculum model that employs an unconventional pathway towards community service by mixing and matching training courses from the professions of Midwifery, Nursing, and Medicine. Students who take the curriculum can gain needed experience to follow the tracks they aim to take:

- a. Towards a certification in Midwifery and gaining work experience for certification in Community Health Work (CHW);
- b. Towards a degree in Nursing needed to qualify for the Nursing Licensure Examination, but as a understudy; and
- c. Towards a degree in Medicine needed to qualify for the Physician Licensure Examination.

The unconventional approach of UPM-SHS has made good use of standards defined through ETEEAP for work-based learning while taking into account the mandatory regulations of these professions. While the model is not new, it may be an investable model that can further support the local health systems; and opportunities for participation of these school models in the local health board may be further explored to enhance healthcare education outcomes. An effort to bridge TVET and higher education deserves attention as the UPM-SHS announced a partnership with TESDA on February 3, 2025, to develop certificates and micro-credentials for SHS graduates that augment the courses offered in its schools, with modules such as autopsy technical support, advanced cadaver care, and support for simulation-based health sciences training developed for academic support and may later be used as employment credentials¹⁷.

Concerns in the Philippine Healthcare Skill Learning

Healthcare education program concerns are mainly problems in the intake and retention of students who aim to complete their studies and proceed with their respective professions. Concerns over the costs (monetary, time) and the practical knowledge, impact institutions place a burden upon students and later, patients.

Healthcare upskilling over the course of the health worker becomes more critical because of evolving new technologies, and the emerging threats of climate change among others. These upskilling principles should begin early at SHS because of the downstream effect on the healthcare ecosystem.

 $\underline{https://newsinfo.inquirer.net/2030781/up-manila-tesda-offer-tech-courses-for-medical-support-staff\#ixzz8z9vZ\underline{i9hD}$

¹⁷ Cabalza, Dexter. "UP Manila, TESDA offer tech courses for medical support staff". Philippine Daily Inquirer, February 3, 2025.

Deskilling and attrition

The slots occupied by students who aim to complete their degree programs in the healthcare professions remain unmonitored, including those shifting into the profession. What graduating students in SHS have been earlier oriented on selecting their preferred field, especially if they aim to enter any healthcare profession, is a study that remains to be conducted to be able to determine how information is bridged between graduating students and higher education institutions or technical training institutions. The admissions standards for the baccalaureate and NC programs vary from each institution.

Case Study: Path of an Unsuccessful Aspiring Nurse

In 2024, Ipsos¹⁸ conducted a study charting the longitudinal skills and career path of a nurse, which highlights the different choices and stages of deviation upon which both nursing students and professionals experience. A key finding in the study stated that "the lack of practicing nurses is a critical issue affecting the local health system — putting pressure on current and future nurses". PRC registration data in 2024 reveals that even with over 1 million registered nurses, close to one-third (34 percent) only practice and directly participate in the healthcare system. There seems to be no standard career pathing model that aims to encourage a better roadmap for graduating SHS students who will enter Nursing education. Even so, there is a very high attrition of undergraduate students who initially selected Nursing but opted to shift out, marking a dropout rate of close to 79 percent in various colleges and universities, which is "a journey halted by challenges, leading to an early exit from nursing education and a pivot to other academic pathways". What this also means is that a college with a capacity to produce 100 nurses ends up only graduating 21.

The study highlighted how students selected their degree and which institution they opted to enroll in partially influenced by family and friends, as well as what their expectations of the nursing program are. Findings state that students are prepared for the gauntlet of nursing education as they expect it to be "academically challenging, but rewarding" once they graduate as they have been primed for "intense coursework, clinical rotations, and high-pressure situations, recognizing that these challenges are essential for their professional development and future success in the healthcare field."

Students who were not thriving in their degree program find the course "challenging, demanding, and stressful", which can also be attributed to the high learning curve that these students experienced during their transition from SHS. Likewise, even with bustling enrollment rates some who drop out believe that they made a mistake by initially choosing Nursing as their degree of entry, with more than half shifting out to non-medical and non-licensure programs. Those who dropped out will not likely return to gain their Nursing degree. But given this, some foundational skills from their initial learning in their Nursing program were gained such as attention to detail, memorization, and confidence in communicating. What this means is that there needs to be a better recruitment or screening process for college student applicants for assurance of completion and focused scholarship opportunities. It remains to be seen if other studies can be commissioned like those of nurses for other professions, especially those that are experiencing a low turnout in the board examinations such as the x-ray technology or speech-language pathology professions.

¹⁸ Dugay, Christine. "A Blueprint for Action: Solving the Nursing Crunch 2.0." Ipsos Strategy and Optum Philippines, June 26, 2024.

Board examination passing rates are also telling of the attrition on the entry of new healthcare professionals in the past 3 years. The average passing rate ranges from 2021 to 2024 between 36 percent and 72 percent for professionals who are identified in the DOH's National Health Workforce Support System (NHWSS) as facility-based workers. The top three passers in the past three years are nursing (72 percent), nutrition and dietetics, and physical therapy (both at 66 percent). The five disciplines with the lowest passing rates in the past years are x-ray technology (36 percent), radiologic technology (46 percent), dentistry (51 percent), and midwifery and occupational therapy (both at 57 percent). Imbalances on the entry of new passers into the healthcare professions against the current active workforce are constantly monitored.

Costs and financial burdens born by society and individuals

Society will bear the consequences of unaddressed deskilling and attrition concerns, as certain behaviors and skills of professionals are questionable. For instance, varying medical service costs and excess prescriptions are a result of unaddressed skill mismatches in the healthcare professional practice. Willis Towers Watson conducted a study related to the cost and utilization of medical services and procedures in the Philippines. The most important driver, and a key factor in bloated medical costs, are behaviors perpetuated by healthcare providers and insured members. The study stated that "the top factor reported is medical practitioners recommending too many services (79 percent), including overprescription of both medications and diagnostics, which results in unnecessary and excessive costs." Fragmented healthcare delivery is correlated to the variances in costs, and the causes can be attributed to the limiting scope of professional collaboration to address medical conditions in the short term, but not people's holistic wellness in the long term.

In other words, the wastage in medications and in the diagnostic value (both the time and the skill of the professional) are a major by-product of this skill gap. Health maintenance organizations (HMOs) are also performing their best to help manage the medical inflation caused by professional fees, with the report that the potential increase in professional fees of 80 to 150 percent, exacerbated by the manpower shortage, drives medical inflation to double digits for 2025 and beyond.

These costs are also associated with the risk of patient harm. In a 2024 WHO guidance, it stated that healthcare costs may increase harm and financial vulnerability of patients when admitted by private healthcare delivery mechanisms. It also claimed that these fees are enabled by a free market of unregulated healthcare service costs and suggested that "more stringent regulation may also be essential in contexts where profit-driven market influences are strong, as compared to contexts where education and health service delivery are provided entirely by the public sector."²⁰

<u>Case Study: Detecting Medication Errors in a Hospital and Raising the Alarm of Healthcare</u> <u>Profession Skilling Gaps Affecting Economic and Social Costs</u>

Skills absorption and proper assessment methods for students can lower margins of error in the diagnosis of healthcare conditions. This statement is best observed in a study published in October

²⁰ Health practitioner regulation: design, reform and implementation guidance. Geneva: World Health Organization; 2024. License: CC BY-NC-SA 3.0 IGO.

¹⁹ "Philippines healthcare benefit costs projected to continue its double-digit increase at 18.3 percent in 2025, WTW survey finds". Willis Towers Watson, January 6, 2025. <u>Philippines healthcare benefit costs to continue its double-digit increase - WTW</u>

2024.²¹ Researchers from the University of the Philippines Manila-College of Pharmacy studied medication errors in the inpatient pulmonary services of the Philippine General Hospital-Department of Medicine from August to December 2022 by sifting through patient medical records. The errors that were listed were grouped into three:

- a. prescription, which includes incomplete prescription, non-listing of drug interactions, and listing unofficial abbreviations among others;
- b. transcription, which includes wrong identification of patients and entry duplication; and
- c. monitoring, which includes unmonitored safety procedures or effectiveness after taking medications.

A total of 6,517 medication errors were listed, with 6,459 errors (99.1 percent) coming from prescriptions. Only 1.17 percent of these medication errors were known to cause harm to a patient, but the potential of harm could increase if there are no proper skill interventions done to reduce these medication errors; these can also inflate medical services costs. Below is a summary table of the errors that were tallied which includes the type of error, specific nature or sub-type, frequency, and percentage against the overall list.

Tracing the causes of medication errors is critical in reducing the likelihood of the event. The causes might be stemming from insufficient competency and skills. These errors will also likely add socio-economic burdens to patients. Victims of errors face additional diagnostics, treatment, and hospital stay costs; as well as professionals, who may face professional disciplinary actions for causing these errors. A poor working environment which includes overwork can lead to such errors.

Table 4. Frequencies over Specific Subtype of Errors

Туре	Subtype	Frequency	%
Prescribing	Unclear or no medical indication	4	0.1
	Contraindication	0	0.0
	Inappropriate dosage strength	24	0.4
	Inappropriate dose	5	0.1
	Inappropriate dosage form	6	0.1
	Inappropriate frequency	33	0.5
	Inappropriate duration	3	0.0
	Duplicate therapy	36	0.6
	Drug interaction	1176	18.2
	Brand prescribing	10	0.2
	Incomplete prescription	4052	62.7
	Incomplete review of medications	145	2.2
	Unofficial abbreviations	891	13.8
	Others	74	1.1
	Total	6459	100.0
Transcribing	Wrong patient	0	0.0
	Double entry in RADISH inpatient charts	3	100.0
	Total	3	100.0
Monitoring	Not monitored for safety	27	49.1
	Not monitored for effectiveness	14	25.5
	Results not available	14	25.5
	Total	55	100.0

Source: Abunales, J.L. et. Al. "Evaluation of Medication Errors among Inpatients in a Tertiary Government Hospital's Pulmonary Medicine Services: A Cross-sectional Retrospective Study" Acta Medica Philippina, Acta

²¹ Abunales, J.L. et. Al. "Evaluation of Medication Errors among Inpatients in a Tertiary Government Hospital's Pulmonary Medicine Services: A Cross-sectional Retrospective Study" Acta Medica Philippina, Acta Med Philipp [Internet]. 2024 Oct. 7 [cited 2025 Jan.26]. Available from: https://actamedicaphilippina.upm.edu.ph/index. PHP/acta/article/view/10684

External environment uncertainty

For over three decades, several influences from the external environment have influenced healthcare outcomes. Two key externalities remain in the conversation: artificial intelligence and climate change as constant concerns that healthcare workers face.

<u>Artificial Intelligence in Healthcare</u>

The WHO claimed that digital innovations as well as the introduction of modernized tools and instrumentation have continuously changed health care delivery. Further, it states that "they have been shown to enhance people's access to health services, improve health systems' responsiveness to the needs of individuals and communities, and increase the quality and efficiency of health services." On the other hand, if not undertaken properly, the introduction of digital technology might add a cost burden and create inequity in access to health services.

A growing acceptance of the investment of AI among healthcare leaders in the Asia Pacific Region has been noted in recent years. Data from the Philips Future Health Index for the Asia Pacific Region shows that between 2022 to 2024, more than 80 percent of healthcare leaders predict that AI will become a top investment in the next 3 years. According to the 2024 Future Health Index, "healthcare leaders are mainly using automation to reduce the administrative burden on healthcare professionals and streamline services for patients, such as appointment scheduling" and "[i]n the next three years, they see workflow prioritization as the biggest opportunity for automation. This can help healthcare professionals deal with high volumes of patients without compromising on quality." However, responsible AI use is a skill that should be required in education to enable its benefits because the healthcare sector has an array of international and domestic ethics rules. Investment in AI creates a better environment to deliver healthcare efficiently and effectively, coupled with the skills that healthcare workers possess in providing key services for better AI use such as maintenance.

For example, the Mapua University launched a professional learning community in its School of Health Sciences on January 31, 2025, to integrate Al use among students and faculty to explore, enhance, and revolutionize engagements with technology, necessary to drive new healthcare solutions.²³ There are also pitfalls to technology that HRH practitioners must prepare for. Despite the convenience and capacity of electronic health records to improve data keeping and clinical outcomes, there are also risks that include issues in financing, adoption, implementation, maintenance, privacy, and security.²⁴

Al and the process of automation also pose their own significant problems. As it is an evolving piece of technology, the lack of tested systems and regulations can lead to errors in decision-making and prescription. These may cause harm during the delivery of healthcare. Moreover, Al may also be trained on information that is biased, misleading, or inaccurate, which can produce inaccurate

²² "Better care for more people: Bridging gaps in healthcare". Future Health Index 2024. Philips. https://www.philips.com/c-dam/corporate/newscenter/global/future-health-index/report-pages/experience-transformation/2024/first-draft/philips-future-health-index-2024-report-better-care-for-more-people-global.pdf

²³ Mapua School of Health Sciences. January 31, 2025.

https://www.facebook.com/mapuahealthsciences/photos/-join-us-for-an-exciting-ai-powered-learning-experie nce-were-gearing-up-for-happ/533144506436570/

²⁴ Menachemi N, Collum TH. Benefits and drawbacks of electronic health record systems. Risk Manag Healthc Policy. 2011;4:47-55. doi: 10.2147/RMHP.S12985. Epub 2011 May 11. PMID: 22312227; PMCID: PMC3270933.

responses.²⁵ Philips also stated that a pressing concern of some healthcare leaders is the fact that automation may be troublesome for the healthcare system "if healthcare professionals become overly reliant on it and they may lose touch with essential skills and knowledge in their field."²⁶

Philips also recommends that "healthcare organizations therefore need to ensure that staff continue to receive adequate training and opportunities to develop their expertise, with automation supporting rather than replacing their professional judgment. It can further help create salient links, ingest data, form hypotheses and connections that can help produce prompts for researchers and professional and non-professional healthcare workers."²⁷

Climate Change and Healthcare

Climate change and other related concerns within the natural environment such as varying types and levels of pollution, hotter and more humid environments, and the rising levels of water or drying up of key bodies of water contribute to adverse health outcomes²⁸. On the interplay between health and environment, the impacts of climate change on health and vice versa are based on the seriousness or frequency of health problems and new or unanticipated health problems that have not been witnessed before in people or places²⁹. If the increased demand for new expertise or interdisciplinary exercises between public health and climate change is not constantly addressed, then the health risks based on climate change effects will be slowly incubated.

The ADB also recommends that the health sector urgently "respond to reduce its contribution to climate change—which is more than 5 percent of net global emissions by implementing low- or zero-emissions facilities, operations, and supply chains."³⁰ which will require new roles and skills that are needed by healthcare workers participating in the system. More recently, the DOH also identified several critical areas of concern in individual health which will require fresh upskilling initiatives by which the healthcare workforce is required to respond. These include the emergence of lifestyle diseases, new infectious diseases including zoonoses, and mental health.³¹ In the context of community health, the DOH aims to address issues related to environmental health, health promotion, pandemics, disasters, and biosecurity.³²

There is less input from the private health sector in raising awareness of such health threats. Industry might be able to inform the health sector of their needs in numbers and in this regard, not necessarily the future skills needed (covering public health). This also means that there is a crucial need to compel education to cover such existential issues in their curriculum across health professional disciplines.

²⁵ "WHO outlines considerations for regulation of artificial intelligence for health." Geneva: World Health Organization, October 19, 2023.

https://www.who.int/news/item/19-10-2023-who-outlines-considerations-for-regulation-of-artificial-intelligence-for-health

²⁶ Future Health Index 2024. Philips, p.9.

²⁷ Ibid.

²⁸ Asian Development Bank, 2023, p.2

²⁹ "Climate Change and Human Health". United States Environmental Protection Agency. Accessed on 15 December 2024. https://www.epa.gov/climateimpacts/climate-change-and-human-health

³⁰ Asian Development Bank, 2023, p.2

³¹ Health Labor Market Analysis Report 2023. Manila: Department of Labor and Employment, 2023, p.12 ³² Ibid.

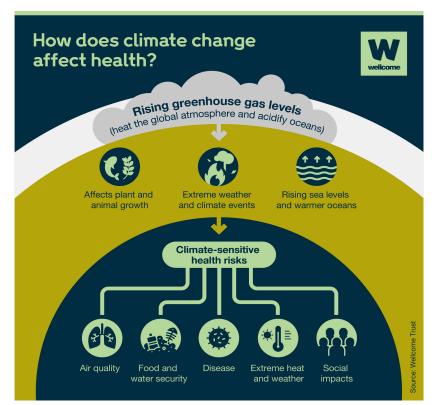


Figure 1. Effects Chain of Climate Change on Health Outcomes Source: Wellcome Trust, 2022 https://wellcome.org/news/health-effects-climate-change-explained

<u>Case Study: One Health Advocacy in the Higher Education Systems of Southeast Asia and the Philippines</u>

One Health continues to be a growing movement in public health spaces. The One Health concept is about the integration and interdependencies between human and animal health which require a collaborative global approach. The WHO and the World Organization for Animal Health (WOAH) have been actively developing paths to allow better interdisciplinary collaborations between both public health and animal health practitioners. In Southeast Asia, the movement began in higher education spaces as early as 2011. The Southeast Asia One Health University Network (SEAOHUN) was established to foster regional social and intellectual excellence, with its core mission to "develop a resilient and competent One Health workforce by leveraging education, research, and training excellence provided by member universities".³³

This network was supported at the regional level by the United States Agency for International Development (USAID), with 112 universities participating in the region including the Philippines. Its Philippine counterpart which is the Philippine One Health University Network (PhilOHUN) was established in 2019, and now has members from 20 HEIs in the country³⁴. The establishment of One Health in education was formalized as a study area in 2018 under the CHED PSG for the Doctor of Veterinary Medicine Program.

In the course of a landscape analysis of healthcare skills and examining the healthcare education

³⁴ Philippine One Health University Network. https://www.seaohun.org/philohun

³³ Who We Are. Southeast Asian One Health University Network (SEAOHUN). https://www.seaohun.org/who-we-are

system, questions were raised. If health professional education programs are heavily regulated by CHED, why do graduates of college programs take additional time and financial resources-in review centers just to pass licensure exams? Likewise, how can the Department of Education (DepEd), TESDA, CHED, PRC, the Department of Science and Technology (DOST), and the DOH work together with the private sector to solve these skilling problems? In the same manner, if TVET fits into the UHC infrastructure, why is there little investment and what stops employers from partnering with TVIs to participate meaningfully in healthcare delivery?

Landscape of Philippine Healthcare Careers

Philippine healthcare jobs and careers are well-scoped, widely researched, and regularly discussed. Employment standards for the licensed professions begin during the period of review of new graduates for the board examinations, while those for the non-licensed professions begin during immersion within their related industry/sector.

Licensed Professionals

The Professional Regulations Commission reported a total of 1,846,855 registered licensed professionals from the 21 healthcare-related professions as of December 25, 2024. The top 5 number of professionals registered (both newly registered after licensure examination and currently registered) are nurses with 1,001,720 (56.7 percent), midwives with 189,194 (10.7 percent), physicians with 174,311 (9.8 percent), medical technologists with 127,542 (7.22 percent), and pharmacists with 100,282 (5.6 percent). On the other hand, the bottom 3 in the number of professionals registered are radiologic and X-ray technologists with 37,845 (2.14 percent), nutritionist-dietitians with 22,540 (1.28 percent), and occupational therapists at 5,770 (0.33 percent).

Economic Output of Healthcare Services

Data from PSA's National Accounts of the Philippines (for the 3rd Quarter) shows the overall status of different industries and sectors. The human health services sector in the country will need significant investment in the next few years, as it generated the lowest economic output based on 2024 PSA reports on sectoral gross domestic product (GDP). Compared to other industries, the dismal performance of healthcare as a GDP generator may need to be correlated to HRH development concerns involving shortages, compensation and benefits, skill gaps, and working conditions. On the other hand, this may also involve concerns over the disclosure of medical and professional fees, which may also impact the GDP figures of the sector. With only a 3.1 percent contribution to the overall GDP in the services sector, help is needed to address HRH concerns. The following table presents the income data from the 10 service industries including human health and social work services at 2018 constant prices, from the first to the third quarter starting 2022 until 2024.

Table 5. Income data from Service Industries from first to third quarter 2022 - 2024

TOTAL GDP (SERVICES) - in PHP million From Q1 to Q3	2022 8,896,174	2023 9,519,225	2024	Percentile (by Q3 2024)
01. Wholesale and retail trade; repair of motor vehicles and motorcycles	2,625,818	2,771,675	2,932,326	2.8
02. Transportation and storage	481,563	551,159	598,267	5.8
03. Accommodation and food service activities	228,068	286,037	320,419	3.1
04. Information and communication	496,667	516,547	543,318	5.3

TOTAL GDP (SERVICES) - in PHP million	2022	2023	2024	Percentile (by Q3 2024)
From Q1 to Q3	8,896,174	9,519,225	10,152,487	2024)
05. Financial and insurance activities	1,487,397	1,601,328	1,746,478	17.2
06. Real estate and ownership of dwellings	825,979	854,812	904,448	8.9
07. Professional and business services	910,688	973,970	1,049,417	10.3
08. Public administration and defense;				
compulsory social security	729,052	733,233	755,167	7.4
09. Education	610,813	651,353	668,945	6.5
10. Human health and social work activities	266,780	287,461	316,071	3.1

Source: 3rd Quarter National Accounts of the Philippines (NAP) 2024, Philippine Statistics Authority, released on January 30, 2025.

PSA reported data on Human Health and Social Work Activities in its Annual Survey of Philippine Business and Industry (ASPBI). The latest data available is preliminary as of 2022^{35,36}. Five industry sub-groups are under this cluster: a) hospital activities; b) medical and dental practice activities; c) other social work activities without accommodation; d) other human health activities; and e) all other human health and social work industry groups. From 2021 to 2022, the hospital activities sub-group contributed the largest share of workers in this sector (157,368 workers in 2021 and 150,470 workers in 2022). It also accounted for the highest share of revenues (PHP 194 billion in 2021 and PHP 192 billion in 2022 in revenues) and expenses (PHP 166 billion in 2021 and PHP 163 billion in 2022) within the group. The revenues and employment data under this sub-group have provided a better glimpse into the private sector performance in healthcare vis-a-vis the economic performance measured by GDP including those that are not directly related to healthcare (i.e. other social work activities and social work industry groups not specified).

The Department of Labor and Employment (DOLE) releases annual labor market reports for specific sectors. In its 2023 report on the healthcare sector, there are also notable major vacancies that need to be filled based on data from both private and public sector institutions. Nurses still top the list of vacancies in private firms. There are more vacancies noted in the private sector, but public sector vacancies which the DOH reported also reveal the major problems in both sectors. Clarity on the pathways of healthcare workers across other professions, going out of the profession, or leaving for other countries should be discussed between the private and public sectors.

Table 6. Number of vacancies for each healthcare profession

Position	Vacancies
Staff Nurse	14,266
Professional Nurse (General)	4,885
Company Nurse	1,871
Health Consultant	1,310
Home Health Care Nurse	1,238
Nurse 1 (Gov)	824

³⁵ "2021 Annual Survey of Philippine Business and Industry (ASPBI) - Human Health and Social Work Activities Section: Final Results". Philippine Statistics Authority, October 7, 2023.

https://psa.gov.ph/content/2021-annual-survey-philippine-business-and-industry-aspbi-human-health-and-social-work

³⁶ "2022 Annual Survey of Philippine Business and Industry (ASPBI) - Human Health and Social Work Activities Section: Preliminary Results". Philippine Statistics Authority, August 15, 2024.

https://psa.gov.ph/content/2022-annual-survey-philippine-business-and-industry-aspbi-human-health-and-social-work

Position	Vacancies
Medical Technologist	727
Nursing Associate Professional	666
Physical Therapist	636
Medical Officer (Gov)	596

Source: Health Labor Market Analysis Report 2023, Department of Labor and Employment, p.6.

Employment efforts in the public sector have been ongoing even before the launch of the Master Plan. There are regular augmentation mechanisms that have been implemented since 2017, with significant public investment growth in the budget of the DOH for the NHWSS. In the same DOLE 2023 Report, healthcare professional deployment programs have been in place, with the following professionals deployed in national and local public health facilities:

- 1. Physicians through the Doctors to the Barrios (DTTB) Program (ongoing since 1992)
- 2. Nurses
- 3. Rural Health Midwives
- 4. Medical Technologists
- 5. Dentists
- 6. Public Health Associates
- 7. Family Health Associates
- 8. Pharmacists
- 9. Nutritionist-Dieticians
- 10. Physical Therapists

Limitations of existing regulations

Management of job and career outcomes have been historically defined and dichotomized into four dimensions: the first dimension is on licensing by which professional regulation is handled mainly by the PRC; the second dimension is on employment, with subdivisions on the public sector managed mainly by both the DOH and the Civil Service Commission (CSC) and on the private sector which is monitored by DOLE; the third dimension is on entrepreneurship by which standards for entry into healthcare as a business venture are determined by the Department of Trade and Industry (DTI); and the fourth dimension is on the out-migration and re-entry of healthcare workers, with the Department of Migrant Workers (DMW) largely responsible for the deployment, on-site protection, and sustainable return and reintegration of migrant healthcare workers. These also create limitations on integrating regulations that can push for potential reforms in managing jobs and skills development because each government agency has no interoperable framework to resolve issues. To begin with, the current policy structures on licensing and adjudication of professional careers are all assigned to the PRC.

Licensing and regulation of healthcare professionals are bound by legislation that dates back to the 1950s. These professionals are regulated through the professional regulatory boards (PRBs) of the PRC, strengthened by virtue of the PRC Modernization Act of 2000 (Republic Act No. 8981). PRBs determine what professionals must demonstrate across their careers and the bases of entry into the profession; they are also responsible for governing board examinations for prospective entrants, license renewal, and continued upskilling of current regulated professionals. As time has passed and as institutions have changed, education standards continue to evolve while legislation on licensing of healthcare workers has stayed put; and attempts to change legislation in recent years have by far been limited.

There is strong participation of professional organizations within the PRBs to determine licensing and employment standards. PRC allows the participation of accredited professional organizations (APOs)

who determine the examination criteria and assessment questions, continuing professional development (CPD) credit standardization, and adjudication of professional practice complaints³⁷.

The duration or validity period of accreditation of APOs is 3 years. APOs possess the following rights and privileges and are required to deliver the following duties and responsibilities:

Table 7. Features of accredited professional organizations based on the Professional Regulations Commission quideline (Board Resolution No. 2018-1089)

	Key Rights and Privileges	Duties and Responsibilities		
1.	Represent the profession for which such an organization has been established and	1.	Define the professional responsibilities of its members;	
	accredited;	2.	Ensure that its members adhere to the Code of	
2.	Submit nominees for vacant positions on the Board;		Ethics, Responsibilities, and highest professional and technical standards;	
3.	Bid for the yearly award for the outstanding professional organization;	3.	Improve the standards of the profession through effective collaboration with the Board and the PRC;	
4.	Nominate for the annual outstanding professional of its profession;	4.	Look into the conditions affecting the practice of the profession and propose policies or measures to	
5.	Designate a representative to sit as the first		the Board or the PRC for its improvement;	
	member of the CPD Council;	5.	Ensure the welfare, and best interest as well as a	
6.	Be part of the oath-taking ceremony of the		harmonious relationship among its members; and	
	new professionals; and	6.	Report violations of the professional regulatory law	
7.	Exercise analogous rights and privileges		to the PRC, through the Office of the Legal Service,	
	under the law.		for possible prosecution or filing of complaints.	

The PRC continues to monitor and track the performance of these APOs. Below is a list of the APOs for the healthcare professions registered in 2024 and their expiry of accreditation with the PRC.

Table 8. List of Accredited Professional Organizations Registered with the Professional Regulations Commission

PROFESSION	PROFESSIONAL ORGANIZATION	ACCREDITATION EXPIRY DATE	
Dentistry	Philippine Dental Association (PDA)	June 15, 2025	
Medical Technology	Philippine Association of Medical Technologists, Inc. (PAMET)	March 9, 2026	
Medicine	Philippine Medical Association (PMA)	October 1, 2025	
Midwifery	Integrated Midwives Association of the Philippines (IMAP), Inc.	April 13, 2027	
Nursing	Nursing Philippine Nurses Association Inc. (PNA)		
Nutrition and Dietetics	Nutrition ist-Dietitians' Association of the Philippines (NDAP)		
Optometry	Integrated Philippine Association of Optometrists, Inc. (IPAO)	November 30, 2026	
Pharmacy	Philippine Pharmacists Association, Inc. (PPhA)	November 22, 2025	
Psychology	Psychology Psychological Association of the Philippines Inc. (PAP)		
Radiologic Technology Philippine Association of Radiologic Technologists, Inc. (PART)		May 21, 2027	
Respiratory Therapy Association of Respiratory Care Practitioners Philippines, Inc. (ARCPP)		August 17, 2026	
Sanitary Engineering	Sanitary Engineering Philippine Society of Sanitary Engineers,		

³⁷ Resolution No. 2018-1089. Revised Rules on the Accreditation of Professional Organizations and Integrated Professional Organizations. Professional Regulation Commission. URL: https://www.prc.gov.ph/prc-resolution-no-2018-1089

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PROFESSION	PROFESSIONAL ORGANIZATION	ACCREDITATION EXPIRY DATE	
	Incorporated (PSSE)		
Speech-Language Pathology	Philippine Association of Speech-Language Pathologists, Inc. (PASP)	September 22, 2026	
Veterinary Medicine	Veterinary Medicine Philippine Veterinary Medical Association, Incorporated (PVMA)		

The vital roles of APOs in the granting of CPD credits to the health professions must be questioned and examined as to how they contribute to the development of healthcare skills of the future. APOs might have a future role in bridging SHS under DepEd, with the Baccalaureate programs under CHED, and the technical training for NCs under TESDA.

Existing practices and trends in healthcare jobs

While the licensing numbers show encouraging signs of recovery since COVID-19, there are still reported shortages that have the potential to cripple the healthcare system. In the case of physicians, DOLE in its Labor Market Report for 2023 noted the shortage with a standard prescription for doctors per 10,000 population. The ratio should be 10; but in 2021, the last known ratio is just 8 per 10,000 population. For context, a caveat that needs to be raised here is that the definition of a physician is rather ambiguous. The assumption for this is a registered licensed physician is performing general practice (as a general practitioner or "GP") of medicine and not clinical specialty medicine.

However, there are far more specialists than GPs and there may be analysis distortion (e.g. 8 to 10,000 is not the actual ratio observed). There may be physicians who do not see patients but undertake administrative work, and this ratio can be distorted. Then there is the phenomenon of "dual-practice physicians" who are both engaged in private practice and public health, with extensive literature stating that this can "negatively affect public health service access, quality, efficiency, and equity, as doctors often pursue a balance of public and private work that maximizes their income and other benefits"³⁸. Because of these conditions, a question must be posed: how should government physicians with private health care practice be counted? The Philippines offers a dichotomous manner for health or sick care services.

Most DOH competencies are focused on acquiring, maintaining, and expanding soft skills. However, there is also an emerging concern about the skills performed by healthcare workers in these facilities. In 2021, DOLE developed a study on the analysis of decent work outcomes, stating that across public and private healthcare facilities in the National Capital Region (NCR), Metro Cebu, and Metro Davao, respondents reported an alarmingly poor performance of skills demonstrated at the workplace. It stated that "among the primary reasons reported by hospitals for poor performance include deficiency in soft skills (39 percent), lack of expected behavioral skills (32 percent), shortage of technical and socio-economic skills (26 percent), and lack of leadership skills (24 percent)." What this means is that there is an emphasis on distinct professions and their prescribed roles and responsibilities. There is a need to reframe the treatment of health professionals into a team that mutually supports and reinforces each other's work. However, this concept is not particularly practiced after students graduate with their healthcare degrees, even if an identified outcome of their education is inter-professional collaboration as stated in several CHED PSGs. The private health

³⁸ Muruga, K and Iveta, L. "Exploring Medical Practitioner's Dual Practice: Motivating Factors and their Impact on Work Performance" WSEAS Transactions on Business and Economics, Published on November 28, 2024. DOI: 10.37394/23207.2024.21.191

³⁹ Estrella, Raymond. "Study on the Filipino Health Workforce: A Sequential Exploratory Analysis of Decent Work Outcomes in Metro Manila, Metro Cebu, and Metro Davao Hospitals." Institute for Labor Studies. Manila: Department of Labor and Employment, 2021.

sector does not seem to have a structured institutional position like that of the government.

Departing healthcare workers: out of the healthcare sector and out of the country

Healthcare workers often take different paths when they have attained a preferred number of years of experience in the healthcare system. Foundations of these paths have also been charted since they attained their respective baccalaureate degrees. Some paths have been defined for these professionals during their stay in the local healthcare system.

Four paths have emerged, with no available and relevant information on professionals who participated in several of these endeavors such as entrepreneurship and research and academic careers:

- Research, academe, and professional consultancies: those who are actively teaching or retired from the workforce to become trainers or educators, and may have taken professional consultancies on public health, nutrition, sanitation, and other related development fields;
- 2. Entrepreneurship: those who are actively working but with a goal to gain skills to build a business, which may or may not be related to healthcare delivery;
- 3. Migration (with intent to immigrate): those who aim to leave the Philippine healthcare system and transfer to another country's healthcare system with the intent to become a citizen of that country; and
- 4. Migration (with intent to re-enter or reintegrate): those who aim to leave the Philippine healthcare system but with plans to retire in the Philippines after a defined period of stay.

The migration of healthcare workers has been closely observed by the Philippine Government as early as its first deployment of nurses to the United States in the early part of the 20th Century. Since the release of the Global Code of Practice on the International Recruitment of Health Personnel of the WHO (henceforth known as the "Global Code of Practice") was released, the Philippine government has been performing steps to purposively regulate the outbound departure of healthcare workers to other countries, mindful of the public health impact of their departure out of the domestic healthcare system. During the COVID-19 pandemic, the Philippine Overseas Employment Administration (POEA) was still actively establishing measures to regulate the outflow of healthcare workers, as it placed them on a list of Mission Critical Skills (MCS) who are needed to serve in the domestic healthcare system. The regulatory infrastructure has changed since the DMW was established and the ending declaration of the COVID-19 pandemic. At present, no deployment caps are established jointly by the Department of Foreign Affairs (DFA), DOH, DMW, and DOLE for outbound healthcare workers.

The mechanism by which labor agreements with other countries and occupations known as bilateral labor agreements (BLAs) have undergone changes since the establishment of the DMW. These contain specific standards for the compensation or remuneration and benefits of these workers, protections against labor violations, and observation of safe and fair working conditions among others. Under the recent re-arrangement of labor migration governance, the Philippines renewed its bilateral labor agreements with several destination countries of healthcare workers. In a recent study by the Ateneo School of Government in 2024, major concerns over the domestic benefits needed for the local workforce were not explicit in Philippine BLAs with specific destination countries. It was recommended that the Philippines "must also push for additional strategic and technical support from destination countries to maintain a sustainable supply of Filipino nurses to cater to the local healthcare system in the negotiation process." At the same time, there has to be a leveraging

⁴⁰ Hartigan-Go, Kenneth and Bongcac, Marianne and Castillo, Angel Faye and Del Rosario, Laura and Eleazar, Ella Mae and Liamzon, Cristina M and Mendoza, Ronald U. and Mina, Enrico and Prieto, Melissa Louise, Navigating

mechanism to allow workers to contribute while being on-site beyond necessitating remittances. It also stated that these leveraging mechanisms "should be a fundamental part of the Philippines' strategic action plan—if one exists—to preserve our local pool of skilled human resources and to ensure that migration becomes a choice rather than a necessity for Filipino workers."

<u>Situational Analysis: The Pivot to Europe as the Future of the Philippine Overseas Healthcare Labor</u> <u>Market</u>

DMW released its Overseas Labor Market Situationer in December 2024. A growing demand for healthcare workers is seen in several European Union countries, as their healthcare workforce numbers are in a steep decline since the COVID-19 pandemic. Healthcare labor needs, particularly for nurses and caregivers, are growing in countries such as Austria, the Czech Republic, Germany (also including radiologic technologists and physiotherapists), Finland, and Slovenia. In a specific case, Austria's labor market for healthcare workers is contracting, and requested the Philippine government to allow Filipino nurses to be deployed for a medium-term period under their Red-White-Red Card Program which "offers a residence and employment permit for up to 24 months" and a Blue Card Program for skilled workers to allow them a pathway towards eventual citizenship⁴¹. The Philippines and Austria entered into a Bilateral Labor Agreement in October 2023, which was ratified by both states in March 2024. The agreement states conditions for the hiring, protection, and cooperation to support Filipinos working in the country, but without any reference to allow workers any form of return service to the Philippines by bringing back their skills gained to the local economy.

In November 2024, the government of Austria committed to help mitigate the impact of departing healthcare workers by also supporting domestic upskilling initiatives, as a result of renewed commitments through the DMW; these specially reference key international instruments such as the Global Compact for Safe, Regular and Orderly Migration handled by the International Organization for Migration (IOM) and the Global Code of Practice. A similar arrangement is ongoing with the government of Germany through the Global Skills Partnership program and a deployment project of Philippine healthcare workers implemented through the German firm Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) known as the "Triple Win Project", which strictly observes the standards of deployment in the Global Code of Practice.

Concerns in the Philippine Healthcare Careers

The future supply of health professionals is "largely linked to the ability of the education and training sector to operate in step with demand". In the Philippine report to the Philippine Pacific Initiative on Sustainable Health Workforce for Health Security on November 28, 2024, the shortfall of workers grew to approximately 220,000⁴⁴, which is 29,000 more than the 191,000 shortage reported last June

the Nursing Exodus: Investigating Philippines' Bilateral Labor Agreements and its Impact on Nursing Migration (November 12, 2024). Available at SSRN: https://ssrn.com/abstract=5017445 or https://dx.doi.org/10.2139/ssrn.5017445

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⁴¹ Overseas Labor Market Situationer, Volume 1 Issue 1. Department of Migrant Workers, November 2024, n 8-10

⁴² Overseas Labor Market Forum, Department of Migrant Workers, November 28, 2024. https://www.facebook.com/watch/live/?ref=watch_permalink&v=520863597584633

⁴³ Asian Development Bank, 2023, p.5.

⁴⁴ Cabalza, Dexter. Philippine Daily Inquirer, January 1, 2025.

2024⁴⁵. Efforts to achieve zero deficit of healthcare workers are needed by applying workforce retention measures, finding ways to improve compensation and benefits, and improving job security and labor rights; this way, labor outcomes will help influence education by providing a better appreciation for students on the rigors of healthcare service delivery work.

Workforce Retention Strategies

Multiple studies have been referenced on the troubling shortage of healthcare workers in the past years. One such study from Liwanag, et. al. made a comprehensive projection of the future supply and demand of select professions. ⁴⁶ Workforce densities of doctors, nurses, and midwives were mapped to develop measures to counteract future shortages across certain professions. In studying data between 2010 and 2019, the combined density data pertaining to the number of doctors, nurses, and midwives at the time may suggest that there is an adequate supply of healthcare workers for the population, further stating that "these data could create the illusion that the health workforce in the Philippines was already adequate to achieve UHC and that policy interventions to address health workforce shortages would no longer be necessary." ⁴⁷

However, upon further recalibration of worker-to-patient ratios, the recalculated densities of certain professions suggest that there is still an imbalance in the prioritization of which disciplines to develop. In the same study, the target density of physicians for the Philippines after 2019 should be 14.3 per 10,000 population. But the standard as of 2023 is still 8 out of 10,000. There is considerable growth in the density of nurses and midwives. The growth in nurse density is attributed to its prioritization in higher education, but this is not true with the midwife density given that the midwifery profession can be attained as early as two (2) years after graduation from SHS to obtain a Diploma.

The same study also developed projections on the future supply and demand of the physician, nursing, and midwifery professions. Pitted against historical data and the cornerstone policy of UHC, the numbers show that the densities of the nursing and midwifery professions will suffer a considerable decline between 2025 to 2050; while growth will be seen with the medicine profession in the same period.

Furthermore, without a more holistic approach to address supply and demand as well as the instructional quality of healthcare education and effective retention strategies, its negative effects on public health (e.g. malpractice or misuse of skills, and health disinformation), there will be a lack of a systemic understanding and preparation for the future that will inhibit the capability of the HRH within the Philippines. This includes recommendations to shift to a skills-based, rather than solely qualification-based, educational approach that involves the "rapid production of high-quality modules that education providers can roll out in response to the latest trends and aligned with workforce needs".⁴⁸

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⁴⁵ Ombay, Giselle. DOH: Lack of healthcare workers an obstacle to PH goal of being among Asia's healthiest by 2040". GMA Integrated News, June 13, 2024.

https://www.gmanetwork.com/news/topstories/nation/910004/doh-lack-of-healthcare-workers-an-obstacle-to-ph-goal-of-being-among-asia-s-healthiest-by-2040/story/

⁴⁶ Liwanag, H.J., Uy, J., Politico, M.R., Padilla, M.J., Arzobal, M.C., Manuel, K., Cagouia, A.L., Tolentino, P., Frahsa, A., & Ronquillo, K. (2022). Cocreation in Health Workforce Planning to Shape the Future of the Health Care System in the Philippines. Global Health: Science and Practice, 10(6). https://doi.org/10.9745/GHSP-D-22-00176

⁴⁷ Ibid.

⁴⁸ Asian Development Bank, 2023, p.7

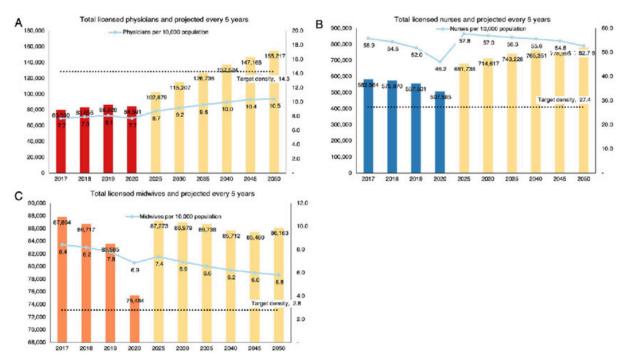


Figure 2. Number of Licensed Physicians, Nurses, and Midwives in the Philippines from Year 2017 – 2020 (Numbers for 2020 were underestimated because of the delay in the licensure examination due to the COVID19 disease.) 49

The WHO also made an important analysis of the public and health risks posed by excessive regulatory mechanisms in the healthcare professions. For the WHO, the banding together of the healthcare workforce is necessary "to decide on regulatory mechanisms and standards that are appropriate for the different health practitioner groups. If the public has enough knowledge on the subject to make an informed choice of practitioner and intervention, and this carries a lower level of risk, then less restrictive regulation or alternative risk reduction measures could provide sufficient protection." This means that determining the level of regulatory restrictions can also change perceptions of harm which patients and the public may experience. WHO further stated that "the most restrictive regulatory mechanism (that is, licensing) might be extended to additional health practitioners when it is proportionate to the risk of patient harm from the practitioners and population health benefits from licensing."

Considering this, there are no available longitudinal studies on the Philippine licensure examination process to determine its actual efficacy in testing for competency and skills. While the questions and result areas for board examination are published by law, the questions and assessment methods change per year; likewise, examination questions are also restricted from public view by virtue of legislation. This makes it difficult to determine if the examination process can actually better demonstrate competencies. Likewise, there are no clear guidelines or interactions among the professional societies towards inter-professional CPD credits which may enhance knowledge in a specific healthcare field and restart an appreciation of other professions.

Compensation and benefits

Variations in compensation across the country are caused by a fragmentation of healthcare and cost of living in these areas as well as the difference between private and public sector settings. Data from DOLE's Occupational Wage Survey (OWS) in 2022 show that entry-level compensation in government is higher than in the private sector. For example, the nursing profession has the largest compensation

⁴⁹ Liwanag, HJ et. al., 2022

⁵⁰ World Health Organization, 2024, p.36

⁵¹ Ibid.

range in both the public and private sectors, ranging between PHP 36,619 for an entry-level nurse (for Nurse I at Salary Grade 15) monthly minimum salary to PHP 90,078 monthly maximum salary (for Nurse VII at Salary Grade 24) in the public sector; whereas midwives receive the lowest average monthly wage across the regulated professions in the private sector at PHP 15,886. Below is the OWS data for the healthcare sector divided into two sub-component industries: medical transcription and human health except those employed in public health.

Table 9. DOLE Occupational Wage Survey 2022

Average Monthly Wage Rates of Time-Rated Workers on Full-Time Basis in the Healthcare Sector		
(in Establishments Employing 20 and More Workers)		
Occupation	Wage Rate in PHP	
A. Medical Transcription Activities		
Medical Doctors/Generalist Medical Practitioners	-	
Paramedical Practitioners	-	
Medical Assistant	35,027	
Medical Transcriptionists	18,892	
Information and Communications Technology User Support Technicians (related to	41,024	
Medical Transcription)		
Accounting and Bookkeeping Clerks	25,631	
Other elementary occupations (unskilled workers)	11,711	
B. Human Health Activities except Public Health Activities		
Medical Doctors/Generalist Medical Practitioners	51,251	
Specialist Medical Practitioners	57,476	
Nursing Professionals	20,715	
Midwifery Professionals	15,886	
Dentists	29,885	
Pharmacist	18,734	
Physiotherapist (Physical Therapist)	19,939	
Dieticians and Nutritionists	17,652	
Medical Imaging and Therapeutic Equipment Technicians	20,279	
Medical and Pathology Laboratory Technicians (Medical Technologists)	19,056	
Accounting and Bookkeeping Clerks	16,195	
Health Care Assistants	15,119	
Other elementary occupations (unskilled workers)	12,931	
Physiotherapy Technicians and Assistants	12,757	

Based on this data, several healthcare workers in the private sector are living close to the poverty line. PSA determined the average poverty threshold of a family with five (5) members of at least PHP 13,873 a month in 2023.⁵² Physiotherapy technicians and assistants' average monthly pay is less than PHP 1,000 below the poverty line while midwives and health care assistants earn more than PHP 2,000 above the poverty line. The rate of compensation for workers in the private sector remains dismal, despite the sheer number of licensed and practicing professionals.

While the compensation scheme might show some promise in the public sector, there needs to be a better scoping of those healthcare workers who are on short-term contracts, which contribute to underpaid working conditions and eventually lead to debts to cover daily expenses⁵³ and explain why such a high number of nurses and midwives create a nationwide condition of their economic vulnerability due to the nature of their compensation scheme. This also has an impact on the quality

⁵³ Alibudbud R. Addressing the Burnout and Shortage of Nurses in the Philippines. SAGE Open Nursing. 2023;9. doi:10.1177/23779608231195737.

⁵² "11 out of 18 Regions Recorded Significant Decreases in Poverty Incidence in 2023". Philippine Statistics Authority, August 15, 2024. https://psa.gov.ph/statistics/poverty

of private sector compensation which has led to the exodus of certain professions to the public sector and eventually considering overseas employment as a necessary option.

Decent work and labor rights: working conditions and protections necessary

Standards for decent work include job security, occupational safety and health, and strict implementation of labor laws. DOH fully expressed its commitment to ensure fair compensation, decent work conditions, and benefits for health workers based on the National Objectives for Health and the Master Plan. However, it is still unknown as to what mechanisms and potential collaborations it will have across other government agencies and the private sector to ensure that these will be observed. This is because these standards are mediated differently; in the case of public health, the Civil Service Commission, DOH, and the LGU all participate in the process of ensuring redress for public sector workers, and in the private sector, DOLE manages the adjudication.

DOLE emphasized in its 2023 labor market report that labor inspection (known as Technical Advisory Visits or TAVs) in healthcare facilities is an essential component towards upholding occupational safety and health standards, ensuring rights are protected, and revenues are secured from potential harm. The TAV system can assist "employers in adhering to labor laws and standards, thereby safeguarding employees' rights and fostering ethical practices in workforce management."⁵⁴ Occupation-based data on workers' grievances could help the private sector and government in identifying what professional regulatory laws are violated. This will become more apparent as the Philippines declares its commitment to uphold international standards on labor inspection as it ratifies the Labour Inspection Convention, or International Labour Organization (ILO) Convention No. 81 last November 2024, which will also extend to the healthcare sector.⁵⁵

<u>Case Study: The Paths Taken by an Unlicensed Nursing Graduate, a Non-Practicing Licensed Nurse, and those Aiming for International Migration</u>

The Ipsos Study on the Nursing Crunch also charted the other paths of Nursing graduates, aiming to identify new attrition points and incept potential ways to mitigate the concerns over the declining conditions of the nursing profession. Three other paths after the attrition of nurses during their baccalaureate program have been mapped; the next is upon graduation, there is a path for a graduate who is unsuccessful in passing the board examination, a path for non-practicing licensed nurses, and a path toward international migration.

In between academic completion and the licensure process, preparations for entry into the healthcare workforce are mainly facilitated by the board review; contrary to the known practice of using review centers, the study showed that 65 percent of graduates chose to pursue a self-paced review and find difficulty reviewing due to time constraints, difficulty of the exam content, and financial obstacles. The takers who did not pass also considered retaking the boards but have initially pursued other careers within and outside healthcare to earn; these paths are mainly on business process outsourcing (BPO), establishing a business, or working in related fields such as the pharmaceutical industry.

For those who have been successful in passing their board examinations, preparations have been expensive, as nearly half (43 percent) of examinees enrolled in review centers, with passers who felt that they had adequately prepared for the examinations. The expectations of newly licensed nurses

⁵⁴ Department of Labor and Employment, 2023, p.21.

⁵⁵ "Philippines ratifies ILO Convention on Labour Inspection". International Labour Organization, November 5, 2024. https://www.ilo.org/resource/news/philippines-ratifies-ilo-convention-labour-inspection

⁵⁶ Dugay, Christine. "A Blueprint for Action: Solving the Nursing Crunch 2.0". Ipsos Strategy, June 26, 2024.

before entry into the healthcare system are career progression, benefits, and flexible working hours; however, upon entry, their expectations have changed due to salary concerns and a lack of career growth. The shift to government work for some nurses is largely determined by the vertical trajectory of the nursing profession with 7-level roles for nurses who are in public health facilities (from Nurse I to Nurse VII). Those who leave after joining the healthcare system take other career paths such as BPO, business establishment, academe, government work, and other health and wellness activities with no direct patient interface.

Finally, the study also highlighted the known advantages of nursing, which is access to international migration. Other data sources show that 8 out of 10 students enrolled in their Nursing program expressed their intent to migrate and aim to stay in the local healthcare system for a defined number of years to gain experience before they leave the country. Students and those nurses actively serving in the healthcare system still wish to go overseas for greener pastures and find ways to gain a license to practice in countries such as the United States by taking the International English Language Testing System (IELTS) and the National Council Licensure Examination (NCLEX). A tragic note would be that 7 out of 10 nurses expressed intent to work overseas permanently, either as long-term and circular migrants or as emigrants with overseas citizenship. For the sake of argument, if a student nurse left the nursing program due to financial constraints, will the nursing academic institutional leaders offer a part-time nursing education program to accommodate working students under ETEEAP, and will this be a market to develop as part of a strategy to build numbers?

Describing the landscape of healthcare careers requires a combined view of labor and public health. Taking off from this guidance, the following are some vital conclusions from this mapping effort. For the private sector, professional organizations including the PRC-accredited and privately-run healthcare institutions set the rules for training accreditation and defining their standards. While they produce a vital health workforce, they also create inefficiencies as the current environment of healthcare is in a free-market model that does not assist in promoting health equity.

Fees are charged with reference and guidelines but according to what the market is willing to bear. An unregulated healthcare workforce in the private sector will hinder better health access by neglect and eventually, UHC implementation. Two questions must be posed: how can the private health sector be incentivized enough to help address healthcare jobs and skills concerns? Should continuing professional education of private healthcare professionals be more closely regulated, and what can be done to create a middle ground for all private professionals to discuss their concerns collectively, other than through their respective professional organizations?

Current Efforts of the Philippine Government

Policy alignments to advance HRH efforts in the country were made with the issuance of the implementing rules and regulations (IRR) of the UHC Law in 2019 and the Master Plan in 2020. The Marcos administration is keen to enhance HRH efforts, through the National Objectives for Health (NOH) 2023-2028 and with HRH in Action Agenda No. 7 of the current NOH, the DOH is expected to carry out three strategic interventions:

- 1. Increasing the availability of health workers to deliver services in health facilities and communities:
- 2. Strengthening capacities of health workers to deliver quality health services; and
- 3. Improving the working conditions of healthcare workers at all levels of the healthcare system as requested by health professionals and workers on the frontlines.

The current NOH also defines the key performance indicators that the DOH will observe within the 5-year target by the end of the administration, data sources, and responsible unit within the department.

Table 10. DOH Key Performance Indicators

Indicator	Baseline (Year)	2028 Target	Data Source	Responsible Unit in the DOH
Percent of cities and provinces with adequate HRH-to-population ratio	2022: Physician (3 percent) Nurse (2 percent) Midwife (82 percent)	Physician (72 percent) Nurse (72 percent) Midwife (95 percent)	Administrative Data	Health Human Resource Development Bureau (HHRDB)
Percent of cities and municipalities with an adequate number of Primary Care Worker-certified HRH	To be determined (TBD)	80 percent	Administrative Data	HHRDB
HRH Engagement Index	TBD	TBD	UHC Household Survey	(PMSMD)

Source: National Objectives for Health 2023-2028, Department of Health, 2024, p.101

These strategies are being implemented by the DOH through the HRH Network, to ensure the indicators are met. The Office of the President directed all government agencies to implement the National HRH Master Plan. The DOH will be the monitoring agency of the National Government Agencies (NGAs) while coordinating and collaborating with the private sector, civil society organizations, and relevant stakeholders on the implementation and programs under the master plan, and institutionalizing the HRH Network and the creation of a Technical Working Committee TWC) to deliberate and take appropriate actions on technical issues concerning the implementation of the plan⁵⁷. The DOH is also working to enhance its National Health Workforce Registry (NHWR) which they aim to launch by the end of 2025⁵⁸. However, there are no prescribed approaches to the review process that the DOH will perform to better predict and prepare for the future of jobs and skills with other private and public stakeholders.

Other gaps in the Master Plan are observed such as identification of future skills, attrition and preservation of slots in healthcare education programs of schools and streamlining and cross-application and integration of all healthcare skills across the professions. This may also affect the curriculum and offerings of SUCs, and the delivery of healthcare education programs. Other concerns must also be mapped with the private sector in relation to healthcare jobs such as external environmental advancements specifically in climate change and future technologies, and an increasingly competitive global skills environment, as employment outcomes influence education and education outcomes influence employment.

Inter-agency collaborations

Several national government policies have since been crafted to align with the Master Plan. For instance, joint administrative orders allow regulators to update their policies on education, licensing, employment, and migration in response to domestic needs. Since 2021, four (4) joint policies among national government agencies have been in response to jobs and skills development, as seen below:

⁵⁷ Office of the President Memorandum Circular No. 72, Series of 2024. "Adopting the National Human Resource for Health Master Plan 2020-2040, and Directing the Implementation Thereof". Issued on October 28, 2024.

⁵⁸ Director Johanna Banzon, HSSC Validation Session, February 17, 2025. Hybrid: Zoom, Bayanihan Center, Mandaluyong City.

Table 11. Joint Policies Amona NGAs on Jobs & Skills Development

Table 11 . Joint Policies Among NGAs on Jobs & Skills Development			
Government Agencies	Title of Policy	Main Objectives	
1. DOH 2. CHED 3. PRC 1. DOH 2. CHED 3. TESDA 4. PRC 5. DOST	Joint Administrative Order No. 2021-0001: "Guidelines for the Reorientation of Healthcare Professions Education Curricula and Training Programs to Primary Health Care" Joint Administrative Order No. 2021-0001: "Guidelines for Expanding Health Professional and Health Worker Scholarships and Return Service Agreements for Universal Health Care" Joint Administrative Order No.	 Establish guidelines for reorientation of the curricula from current standards towards primary health care (PHC) Install implementation mechanisms to integrate PHC principles into the licensed professions including licensure examinations Provide guidelines on the implementation of HRH scholarships, training grants, and return service agreements for UHC Install partnership mechanisms on monitoring scholarship service obligations towards increased entry of new healthcare workers and distribution for UHC Outline guiding principles for the realization of 	
1. DOH 2. Department of Education (DepEd) 3. CHED 4. TESDA 5. Department of Social Welfare and Development (DSWD) 6. Legal Education Board (LEB) 7. Department of the Interior and Local Government (DILG)	Joint Administrative Order No. 2022-0001: "Guidelines on Healthy Settings Framework in Learning Institutions"	1. Outline guiding principles for the realization of healthy learning institutions as envisioned in the UHC Act; 2. Provide a framework for development and prioritization of healthy learning institution programs and/or standards; and 3. Determine implementation and enabling strategies to designate healthy learning institutions. Healthy learning institutions (HLIs) are institutions that foster health and well-being of learners and personnel, such as child development centers, community learning centers, basic education institutions or elementary and secondary schools, HEIs, TVIs, and legal education institutions or law schools.	
DOH and CHED	Joint Administrative Order No. 2023-0001: Implementing Guidelines for the Nurse Workforce Complementation and Upskilling Program for Clinical Care Associates (CCA)	Set the guidelines and mechanisms to facilitate hiring and upskilling of underboard nursing graduates as Clinical Care Associates in both private and public hospitals as augmentation of the healthcare workforce and preparations for the licensure examination	
1. DOH 2. DOLE 3. CSC	Joint Administrative Order No. 2023-0001: "National Policy Framework on the Promotion of Healthy Workplace"	 Set directions and provide key strategies to guide the development and implementation of settings-based health promotion policies, plans, and programs for the Filipino workforce Identify the roles and responsibilities of key stakeholders in the promotion of healthy workplaces 	
1. DOH 2. Department	Joint Circular No. 1, series of 2023: "Revised Standards on the Organizational Structure and Staffing	Establish the standards for the filling of positions in TRC including worker-to-bed capacities	

Government	Title of Policy	Main Objectives
Agencies		
of Budget	Pattern of Treatment and	
and	Rehabilitation Centers (TRC)	
Management		
(DBM)		
1. DOH	Joint Circular No. 2, series of 2023:	Establish the standards for the filling of positions in
2. DBM	"Revised Standards on the	Level III hospitals including worker-to-bed capacities
	Organizational Structure and Staffing	
	Pattern for Level III General	
	Government Hospitals (TRC)	

The DOH has established competency frameworks to aid its upskilling programs for healthcare professionals. These frameworks are developed in line with existing education and licensing policies such as the PQF Law, Continuing Professional Development (CPD) Law, and the Ladderized Education Law, designed for DOH-controlled facilities such as hospitals, such as Trauma and Rehabilitation Centers (TRCs), regional offices, and the central office of the DOH. A Learning and Development Management System (LDMS)⁵⁹ was developed with the following objectives: a) execute these frameworks and identify gaps in specific healthcare system competencies; b) design and implement appropriate interventions; and c) create evaluation criteria.

The DOH established five (5) sets of competencies, that are leveled according to each profession and role in the healthcare system.

Table 12. Competency standards in the DOH LDMS

Category	Competency	Definition	Present in:
Core Competencies	Exemplifying integrity, professionalism, and service excellence	Skills and values that must be demonstrated throughout the career of a public health worker	All Salary Grades
Organizational competencies	Communication, interpersonal, organizational awareness, and promoting innovation	Skills and values that promote organizational effectiveness and integration with other members of the organization	All Salary Grades
Leadership competencies	Collaboration and inclusive working relationships, change management, managing performance and coaching, and strategic thinking	Skills and values that promote accountability and sustainability of organizational goals	Senior Technical Staff and those who are at the top of the healthcare facility management such as Medical Center Chiefs
Health systems management competencies	-	Skills and values that pertain to the knowledge of specific healthcare delivery processes, which were gained from prior learning during high school, baccalaureate, or technical training	Junior and Senior Technical Staff and top management of healthcare facilities

⁵⁹ DOH Administrative Order No. 2021-0007. "Guidelines on the Integrated Learning and Development Management System of the Department of Health". Issued on January 12, 2021. URL: https://law.upd.edu.ph/wp-content/uploads/2021/05/DOH-Administrative-Order-No-2021-0007.pdf

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Category	Competency	Definition	Present in:
Technical competencies	89 competencies such as built environment and sanitation services, primary care, food and nutrition, laboratory practice, and accounting among many others	Skills and values that pertain to specialized components in healthcare delivery	

The DOH also adopts the WHO standard on Workforce Indicators of Staffing Need (WISN), which distributes the workload among healthcare workers in high-demand facilities. The standards include methods of delegating and devolving tasks within the shift of a healthcare worker, taking into account the workload and eventually easing the level of attention of a health worker to a patient.

Other executive efforts include the DOST-Philippine Council for Health Research and Development (DOST-PCHRD) which encourages submissions on HRH research as part of the National Unified Health Research Agenda (NUHRA) 2023-2028. Also, in accordance with the Master Plan Strategic Objective on "co-ownership and co-implementation of the HRH Master Plan, with clearly defined roles and accountabilities of key players", the DBM, DOLE, and PSA have also referenced this in their policies and records.

Legislative Policies

Opportunities to file related legislation on HRH and healthcare worker upskilling initiatives are still open to a wider time frame until the year 2040, hence opportunities to legislate efforts for HRH development can cover 5 congressional terms. In the case of the current 19th Congress which started in 2022 and ended in July 2025, 3 legislative inquiries and 2 bills have been filed in the House of Representatives and the Senate on HRH. The bill that was filed focused on amendments to the Magna Carta for Public Health Workers in 2022 and creating a Magna Carta for Barangay Health Workers in 2024.

Table 13. Legislative Policies on HRH

Chamber & Bill/ Resolution No.	Complete Title	Date Filed	Status as of February 10, 2025
Senate Bill No. 162	Amending Certain Provisions of Republic Act No. 7305 or the Magna Carta for Public Health Workers and for Other Purposes	July 13, 2022	Pending with the Committee on Health and Demography on August 1, 2022 Details of the amendments: a. Salary grade (SG) benchmark for specific public health workers which are: - Medical Officer I (SG 17)
			- Medical Officer ((SG 17) - Nurse I (SG 16) - Dentist I (SG 15) - Optometrist I (SG 13)

Chamber & Bill/ Resolution No.	Complete Title	Date Filed	Status as of February 10, 2025
			- Medical Technologist I, Pharmacist I, Physical Therapist I, Radiologic Technologist I, and Occupational Therapist I (SG 12)
			- Respiratory Therapist I and Speech Therapist (SG 11)
			- Midwife I (SG 10)
			b. Adjustment of rates such as hazard pay, subsistence allowance, and special risk allowance among others
House Resolution No. 461	Directing the Committee on Health to Conduct an Inquiry, in Aid of Legislation, on the Implementation of the National Human Resources for Health Master Plan (NHRHMP) 2020-2040 as Mandated by Republic Act No. 11223, otherwise known as the Universal Health Care (UHC) Act	October 3, 2022	Pending with the Committee on Health as of November 8, 2022
House Bill No. 6557	An Act Providing for the Magna Carta of Barangay Health Workers	December 14, 2022	House of Representatives adopted Senate Bill No. 2838 as an amendment to this version on February 5, 2025; with the Bicameral Conference Committee awaiting the President of the Philippines to sign the Senate version into a law
Senate Resolution No. 536	Resolution Urging the Committee on Sustainable Development Goals, Innovations, and Futures Thinking to Conduct an Inquiry, in Aid of Legislation, on the	First Regular Session (March 8,	Conducted a Technical Working Group discussion within Congress on July 17, 2023 Filed in the Committee on Sustainable
	Status of Human Resources for Health (HRH) in the Philippines	2023)	Development Goals, Innovations, and Futures Thinking
House Resolution No. 1815	Resolution Directing the Committee on Health to Conduct an Inquiry, in Aid of Legislation, on the National Human Resources for Health Master Plan (NHRHMP) 2020-2040	July 30, 2024	Pending with the Committee on Health as of August 7, 2024

Chamber & Bill/ Resolution No.	Complete Title	Date Filed	Status as of February 10, 2025
Senate Bill No. 2838	An Act Providing for the Magna Carta of Barangay Health Workers	September 24, 2024	House of Representatives adopting this version on February 5, 2025; with the Bicameral Conference Committee awaiting the President of the Philippines to sign the bill into a law

With the ILO, the Philippines has ratified one (1) international labor convention for healthcare personnel: the Nursing Convention of 1977 or ILO Convention No. 149, ratified in 1979 and is reflected in the Nursing Act of 2002. During the 112th session of the International Labor Conference in Geneva, Switzerland from June 3 to 14, 2024, the Philippines. through DOLE, reported the status of key articles of this convention, especially on the remuneration of nursing personnel (Articles 2.2b), and on the conditions of employment and work of nursing personnel (Articles 5 and 6), which have significantly improved. However, a consolidation of efforts between DOLE and DOH as well as the education sector is needed to best manage the expected strategic outcomes for other professions.

Current Funding Streams in the Public Sector

Funding in HRH is a crucial step in the development of education and jobs. Annually, the DBM through the National Expenditure Program (NEP) of national government agencies enacted the budget for the fiscal year, the General Appropriations Act (GAA). For HRH, funds are allocated to the DOH and CHED to help address shortages by augmenting the available workforce, improving individual and institutional healthcare capacities, and enhancing the working conditions of healthcare workers in the public sector.

The NHWSS is the most important HRH initiative of the Philippine government, mandated through the UHC Act as a human resource mechanism that allows deployment and upskilling opportunities for the public health workforce. From 2021 to 2024, funds for HRH under the "Health Human Resource Sub-Program" contained the deployment, institutional capacity and management, and the NHWSS activities towards health workforce development. For the year 2025, NHWSS is subsumed into the Health Service Delivery Subprogram of the DOH, and HRH institutional capacity management is subsumed into the Health Systems, Policy, and Standards Sub-Program.

The allocated budget for HRH in DOH's NEP consists of Personnel Services (PS) which cover compensation and benefits for hired personnel, and Maintenance and other operating expenditures (MOOE) which comprises expenses for logistics, facility and equipment maintenance, and purchase of materials required to carry out the program.

Table 14. DOH appropriations for HRH from FY 2021 to FY 2024, including its proposed NEP for FY 2025

SOURCE	ALLOCATION (in PHP)				
CATEGORY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025 (Proposed)*
Human Resou	rces for Health Depl	oyment			
PS	15,741,266,000	16,283,728,000	Merged into NHWSS	Merged into NHWSS	Merged into NHWSS
MOOE	841,654,000	721,516,000	Merged into NHWSS	Merged into NHWSS	Merged into NHWSS
Human Resources for Health Institutional Capacity Management					
PS	37,575,000	42,691,000	43,046,000	37,619,000	34,453,000

MOOE	102,462,000	222,600,000	139,264,000	227,324,000	428,145,000
National Healt	National Health Workforce Support System (NHWSS)				
PS	Did not exist	Did not exist	16,315,993,000	17,202,095,000	17,202,095,000
MOOE	Did not exist	Did not exist	631,492,000	776,588,000	768,985,000
	16.722 billion	17.270 billion	17.129 billion	18.243 billion	18.433 billion

Source: Department of Budget and Management

DOH further stipulated in its NEP for 2025 that "after passing the board examination, the scholars of the program shall render return service to the government in accordance with the guidelines issued by the DOH and CHED, as may be applicable" in line with the Medical Scholarship and Return Service (MSRS), mandated by the Doktor Para sa Bayan Act. A shared tracking system between the DOH and CHED for publicly funded scholars shall be developed and implemented which will "effectively provide periodic monitoring of the scholarship program and shall ensure that the enrollment capacity is strictly observed in the implementation thereof." As of 2024, twenty-two (22) HEIs are participating in the MSRS Program, with 21 of them being state universities and colleges (SUCs) and only 1 privately-owned HEI, covering 16 regions of the country. For the first time (in FY 2025), DOH and CHED will share spending for the scholarship program for medical students.

The combined allocations for HRH in the public sector saw a growth of 12.4 percent in the past three years, from a total budget of PHP 16.81 billion in 2021 to PHP 18.91 billion in 2024. Given the tremendous support for the public sector growth and investment equity, this amount of spending should have allowed the government to augment the number of healthcare workers, increase upskilling opportunities, and enhance faculty and facility development.

Curricular enhancements

One attempt to review the implementation of a healthcare-related discipline was planned in June 2020, which was the Enhancement program for the disciplines of Social Work, Guidance Counselling, and Psychology; however, funding for this program was diverted to fund the COVID-19 response efforts of the Philippine government.⁶³ Other implications also include potential problems in education such as instructional quality of STEM-related subjects in basic education which are relevant to health (including biology and chemistry) and jobs mismatches as the disciplines may not be exactly updated to industry needs. Which is why qualifications, certification, and licensure reforms must happen as the descriptors in the current Philippine qualifications registry of professions may run the risk of being outdated due to technological advancements and shfting economic priorities over time⁶⁴. Reviving this effort for the healthcare professions is necessary to align with the government's thrust toward UHC.

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⁶⁰ National Expenditure Program: Department of Health. Department of Budget and Management. https://www.dbm.gov.ph/wp-content/uploads/NEP2025/DOH/DOH.pdf

⁶¹ Ibid.

⁶²Medical Scholarship and Return Service (MSRS). Commission on Higher Education.

https://ched.gov.ph/medical-scholarship-and-return-service/?appgw_azwaf_jsc=UNgo-7UCmJCzbZjwDNiTUZiH_es8v_OKWnL4FNG4Ycho#

^{63 &}quot;CHED contributes P15B for COVID-19 response". CHED Press Release, 7 June 2020. https://ched.gov.ph/wp-content/uploads/CHED-contributes-P15B-for-COVID-19-response.pdf

⁶⁴ Second Congressional Commission on Education. "Fixing the Foundations: A Matter of National Survival: EDCOM II Year Two Report", 2025, p.319.

CHAPTER 2: SURVEY RESULTS - 2040 LANDSCAPE OF HUMAN RESOURCES FOR HEALTH IN THE PHILIPPINES

To investigate the perspectives and experiences of healthcare professionals in their present conditions and how they see their future, a survey was run with various healthcare professionals in the Philippines. Its aim is to gain a comprehensive understanding of various aspects related to the current and future Philippine healthcare landscape including the challenges and solutions relative to HRH governance.

Methodology

An online survey was distributed to healthcare professionals and healthcare workers in public health institutions nationwide, targeting doctors, nurses, midwives, dentists, and barangay health workers, via a directive from the DOH and disseminated within their covered facilities. The research was endorsed by the DOH-Health Human Resource Development Bureau (DOH-HHRDB) and was ethically cleared by the Department of Science and Technology-Philippine Council for Health Research and Development (DOST-PCHRD). The survey tool received results starting September 1 until November 30, 2024. The directive also provided information about the project and research objectives, along with a link and QR code to access the online tool. They were requested to complete the survey and distribute the data collection tool to target respondents within their networks.

The data extracted from the online survey was cleaned. Descriptive statistics were generated to report the results of the survey. The data were then analyzed to develop a comprehensive understanding of the Philippine healthcare system vis-a-vis HRH and gather the perspectives and experiences of healthcare professionals from public health institutions. Initially, to determine the total sample size based on the population, a probabilistic sampling method was used. To further determine the sample size per cluster, a non-probabilistic sampling method.

Results and Findings

Profile of Survey Respondents: Disaggregation by Sex, Age, and Location

The survey respondents consist of 1,384 healthcare workers, with no recorded result or entry duplicates; most respondents (1,075 respondents or 75 percent) are female, and 5 respondents (less than 1 percent) opted not to disclose their sex. With respect to age, most of the respondents (567 respondents comprising 41 percent of the sample) were aged 35 to 44 years old, which is the mean age of the Philippine labor force. Finally, the survey was nationwide in scope which had results from all regions of the country. The largest share of respondents come from the Mindanao super-region, with 501 respondents (35 percent overall). In addition to this, it is surprising that only 13 respondents (0.9 percent) come from the private sector, while 1,332 (96 percent) are from the public health sector, 25 (1.8 percent) stated that they are affiliated with both private and public, and 14 (1 percent) have incomplete or unknown affiliations. Dual affiliations are attributed to doctors who perform dual practice in public and private healthcare. Another notable dataset are the top 5 occupations of the respondents, with specific results stated in the table below. The imbalance in males and female distribution of respondents and the top occupations by sex can provide an insight on the proper planning of gender and development efforts that may be part of the next review

process of the HRH Master Plan.

Table 15. Top 5 occupations of respondents by sex

Top 5 male occupations	Top 5 female occupations
 Nurses (151 responses) Administrative staff - all aides, assistants, and officers (87) Doctors (37 responses) Radiologic technologists (36) Social workers (34) 	Top 5 positions (females): 1. Nurse (583 responses) 2. Midwife (170) 3. Administrative staff - all aides, assistants, and officers (113) 4. Doctors (67) 5. Radiologic technologist (37)

More specific geographic datasets are displayed in the tables below. This diverse representation across all professions and demographic statistical significance in the study provides a very clear depiction of what the healthcare workforce looks like at present, which may also contribute to the HRH statistics of the DOH.

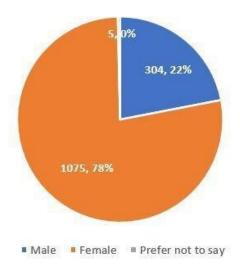


Figure 3. Survey data sex disaggregation

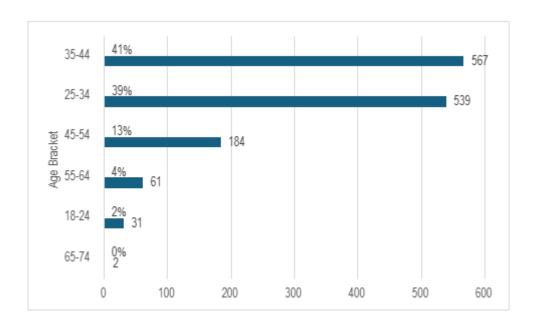


Figure 4. Survey data age disaggregation

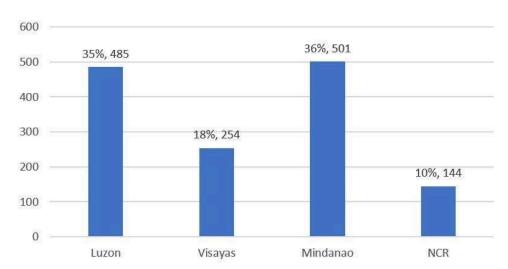


Figure 5. Survey data super-regional geographic distribution

Key Issues in Philippine Healthcare

With respect to the key issues in Philippine healthcare, respondents ranked financing and budget as the leading concern, followed by human resources, health service delivery or facilities, access to health technology such as laboratories, medicines, and devices, issues on information communications and technology, and lastly, governance and policy. Other issues mentioned by the respondents as prompted, include a toxic work environment, low wages, and regularization. On the question of whether the Philippine healthcare service is fragmented, a majority (56 percent or 773 respondents) of the healthcare workers answered in the affirmative while 37 percent (517 respondents) answered in the negative. 94 respondents (7 percent) expressed that they did not know the answer.

Healthcare fragmentation

Fragmentation is defined as the unconsolidated and uncoordinated systems of healthcare delivery, reliant upon a series of factors such as policies, people, and processes. Lack of coordination was the most identified cause of fragmentation among the respondents (41 percent or 569 respondents). There have also been several other identified causes of fragmentation from 73 respondents such as limited human resource management skills and budget, limited access to healthcare services for the public and healthcare workers alike, corruption, political issues and governance, poor policy implementation, low-quality services, and social inequities and determinants.

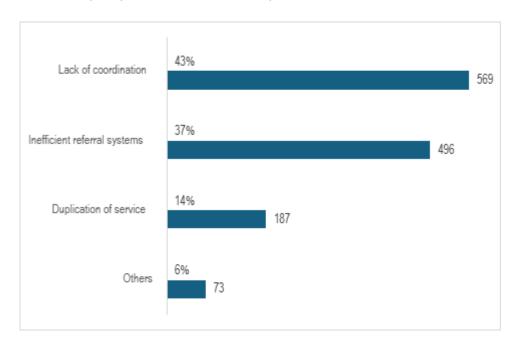


Figure 6. Results on healthcare fragmentation

To address fragmentation in Philippine Healthcare, 45 percent (619 respondents) suggested standardizing practices and protocols in healthcare. Thirty-eight (38) percent (526 respondents) noted improving communication among healthcare providers as a solution. Thirty-three (33) percent (456 respondents) identified the need to establish a coordinating body. Other suggested ways to address the issue include allocating a higher budget for healthcare, increasing the workforce as well as providing permanent positions and attractive salaries, engaging in the proper use of funds, ending corruption and creating a transparent government, strengthening laws related to Health Care Service, improving health infrastructure, ensuring equitable access to healthcare service, continuing the implementation of UHC, and investing in health research and development.

Feasibility of a coordinating body for the HRH workforce

The survey tool further confirmed that DOH must lead this effort, which also shows the support that they have for DOH's mandate. With respect to the mandate of the Coordinating Body for Human Resources for Health, 28 percent (385 respondents) identified that overseeing HRH planning and allocation was its mandate. Another 28 percent identified the development of HRH policies and strategies, while 27 percent (372 respondents) answered the monitoring of HRH training and deployment. Other suggested mandates according to healthcare workers include ensuring compliance via the NHWR, ensuring the security of employment, providing feedback and evaluation

to Human Resources for Health, increasing the budget for hiring additional workforce, and enforcing stricter governance and anti-graft measures.

On fulfilling the role of a coordinating body for Human Resources for Health, 27 percent (379 respondents answered the Department of Health, while less than 5 percent of respondents suggested that the local government unit or the private sector should lead. As far as representation for this coordinating body, respondents indicated various stakeholders as potential members of the Coordinating Body for Human Resources for Health. Twenty-eight (28) percent (390 respondents) answered that these should be represented by healthcare professionals, while 35 percent (341 respondents) identified government offices and officials, and 20 percent (278 respondents) answered representatives from private healthcare institutions. Other suggested members include educators from academe, public healthcare personnel, stakeholders from the community, and representatives from government health institutions.

Workforce satisfaction rating

With respect to employment satisfaction, the majority of respondents (70 percent or 975 healthcare workers) answered that they were satisfied. This is because these respondents come from the public sector, by which those who are tenured in their public health positions enjoy competitive salaries and benefits. Respondents who have reported dissatisfaction (9 percent) are those who are non-tenured or belong to the private sector.

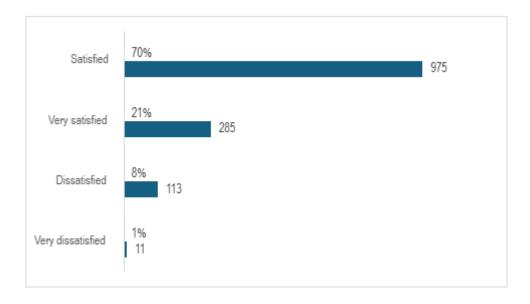


Figure 7. Satisfaction rating

In contrast to their satisfaction rating, the respondents identified eight key issues in HRH. Top of the list are the workload of health workers and practitioners (62 percent or 859 respondents), compensation and benefits (60 percent or 831 respondents), supply or number of health workers and practitioners (59 percent or 815 respondents), career growth and opportunities (57 percent or 785 respondents), skills and competencies of health workers and practitioners (37 percent or 518 respondents), motivations, expectations, and behavior of younger health workers and practitioners (32 percent or 448 respondents), willingness to serve in areas needed (24 percent or 327 respondents), and financing including scholarships and student loans (21 percent or 288 respondents). Other issues that were identified include instability caused by contractual employment and the lack of government plantilla positions, lack of career promotion opportunities and training

for professional growth, and lacking support for work-life balance and mental health.

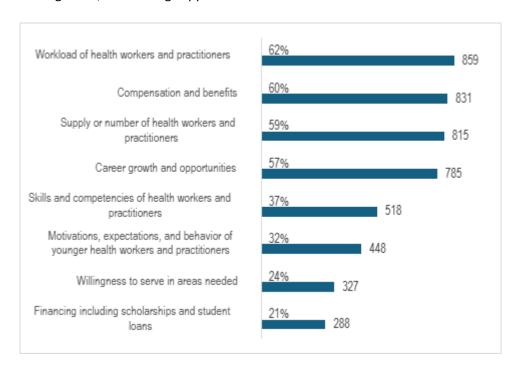


Figure 8. Issues on HRH

The respondents were also asked to choose the most important issues in human resources for health. The topmost issue was compensation and benefits, followed by the workload of health workers and practitioners, supply or the number of health workers and practitioners, skills and competencies of health workers and practitioners, and lastly, the motivations, expectations, and behavior of younger health workers and practitioners. Other identified issues include career growth and opportunities, willingness to serve in areas needed, Financing including scholarships and student loans. One factor that can help understand why the responses are more geared towards working conditions than skills or education outcomes is the size of respondents from the public health sector. This is because workers from this sector are t paid much better than those in the private sector, but receive a higher workload because of the patient volume in their facilities. Since there is a low turnout from the private sector workers in this survey, it might be necessary to further scope the overall priorities of private healthcare workers later on.

Solutions coming from the healthcare workforce

Healthcare workers also identified ways to address the issue of the quality of skills and competencies of health workers and practitioners. Their answers included improving public health programs and initiatives of the government (32 percent or 436 respondents), ensuring career development and career pathing in the workplace (32 percent, 438 respondents), strengthening collaboration among the academe, hospitals, and government (28 percent or 391 respondents), nurturing critical and systems thinking skills (26 percent, 355 respondents), automating and investing in advanced technology and facilities (23 percent or 324 respondents), opening international partnership opportunities for cross-country education and practice (21 percent or 293 respondents), enhancing the curriculum (19 percent or 261 respondents), and improving licensure regulations (15 percent or 206 respondents).

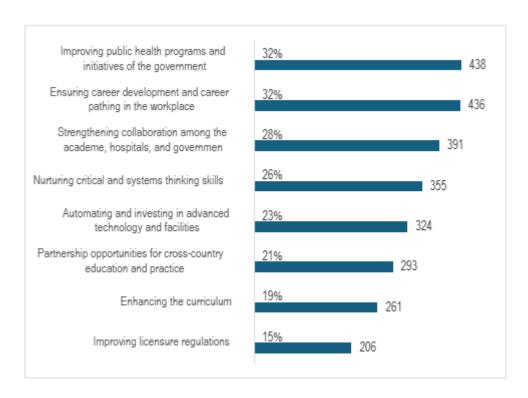


Figure 9. Solutions to HRH

Healthcare workers also identified other solutions such as adding plantilla positions, permanent employment, and the regularization of health workers, conducting stress management workshops, enhancing public-private partnerships (PPP), international collaboration, and implementing the ideal patient-to-healthcare-worker ratio. On closer analysis, five major solutions that were related to educational interventions such as training, career development, school partnerships, scholarships, and skills development in critical and systems thinking are viewed as the foundational drivers of HRH. Respondents identified the following solutions to address the willingness of health workers and professionals to serve in geographically isolated and disadvantaged areas, the top three being improving compensation and benefits packages (21 percent or 291 respondents), ensuring career development and career pathing (18 percent or 249 respondents), and enhancing recruitment and retention strategies (17 percent or 240 respondents).

They were also asked about whether the current HRH education and training programs adequately prepare healthcare professionals for the evolving healthcare landscape in the Philippines. A majority (63 percent or 857 respondents) of the healthcare workers answered in the affirmative while 29 percent (406 respondents) answered in the negative. Meanwhile, 7 percent (102 respondents) indicated that they did not know the answer. Looking at this data, there seems to be an agreement on the adequacy of training received, but there are concerns over quality assurance, given the list and track record of HEIs and TVIs who offer healthcare education programs. Likewise, adequacy of training is also tied to PRC's CPD system, but more must be known on the motivations of receiving training, whether as compliance to regulations, motivations for personal growth, or the like. When asked about whether the migration of healthcare workers and professionals out of the country should be regulated, 51 percent (712 respondents) answered in the negative, 43 percent (589 respondents) answered in the affirmative, and 6 percent (83 respondents) said that they did not know. Given the culture of communicating migration within and across certain healthcare education programs, the data can also infer the importance of delineating healthcare migration as a right, and healthcare migration as a necessity, for which the latter is most often viewed among certain professionals such as nurses and caregivers.

Compensation of Healthcare Workers (Current, Ideal for the Current Time, and by 2040)

According to the survey, the current monthly salaries of respondents have a very wide wage gap between each other, with an overall average gap of PHP 199,000 from the lowest to the highest. The lowest current monthly salary was reported at PHP 11,000 from a nurse in the public sector, while the highest current monthly salary was reported at PHP 210,000 from a midwife in the public sector. As opposed to the 2022 Occupational Wage Survey data for the private sector with midwives, as those who receive the lowest wages in the private sector, the PHP 210,000 salary from a public sector midwife may be interpreted as invalid with the assumption that this question was understood differently by those respondents. Below are the other sectoral respondents and professions with disclosed current salaries.

Table 16. Current monthly salary of health workers

Sector	Profesion	Current Salary	
Public & Private	Doctor	50,000 - 106,000	
Private	Dentist (n=1)	43,000	
Private	Doctor	50,000 - 120,000	
Private	Nurse	11,000	
Public	Dentist (n=1)	45,138	
Public	Doctor	50,000 - 100,007	
Public	Health facility architect (n=2)	30,000	
Public	Health policy, planning and financing practitioner	28,000 - 45,000	
Public	Health records practitioner	13,000 - 38,000	
Public	Human Resources for Health (HRH) practitioner	15,000 - 42,000	
Public	Medical Technologist	20,000 - 60,157	
Public	Midwife	17,000 - 210,000	
Public	Nurse	16,000 - 100,000	
Public	Nursing Aide	12,000 - 18,200	
Public	Nutritionist-Dietitian	36,000 - 49,000	
Public	Radiologic Technologist	37,000 - 38,413	

However, respondents have claimed that their aspired or ideal salaries at present would need to be more than double those they have previously received considering inflation, which further widens the gap at PHP 485,000 from the lowest to the highest. The lowest ideal monthly salary was reported at PHP 15,000 from a health records practitioner in the public sector, while the highest ideal monthly salary was reported at PHP 500,000 from a nurse in the public sector. With this projected salary data from workers at present, the Philippine government may need to revisit its key salary standardization policies for government healthcare workers and must foster collaboration so that the private sector itself can also catch up in terms of compensating its healthcare workers.

Table 17. Ideal salaries at present time reported by respondents

Sector	Sector Profesion	
Public & Private	Doctor	100,000 - 500,000
Private	Dentist (n=1)	70,000
Private	Doctor	10,0000 - 250,000
Private	Nurse	50,000
Public	Dentist (n=1)	60,157
Public	Doctor	80,000 - 300,000
Public	Health facility architect (n=2)	40,000 - 60,000
Public	Health policy, planning and financing practitioner	40,000 - 65,000
Public	Health records practitioner	15,000 - 50,000
Public	Human Resources for Health (HRH) practitioner	20,000 - 80,000
Public	Medical Technologist	30,000 - 150,000
Public	Midwife	25,000 - 50,000
Public	Nurse	45,000 - 500,000
Public	Nursing Aide	20,000 - 50,000
Public	Nutritionist-Dietitian	80,000
Public	Radiologic Technologist	45,000 - 125,000

By 2040, respondents are looking at a future with salaries that may surpass inflation projections but will also see a further widening of the compensation gaps accounting for inflation, which is close to triple, from the ideal PHP 485,000 at present to PHP 1,175,000 projected for the next fifteen years. The lowest ideal monthly salary in fifteen years was reported at PHP 25,000 from a health records practitioner in the public sector, while the highest ideal monthly salary was reported at PHP 1,200,000 from a doctor in the public sector.

Table 18. Ideal salaries by 2040 reported by respondents

Sector	Profesion	Ideal Salary in 2040 250,000 - 1,000,000	
Public & Private	Doctor		
Private	Dentist (n=1)	180,000	
Private	Doctor	150,000 - 500,000	
Private	Nurse	100,000 - 100,000	
Public	Dentist (n=1)	94,132	
Public	Doctor	100,000 - 1,200,000	
Public	Health facility architect (n=2)	50,000 - 80,000	
Public	Health policy, planning and financing practitioner	100,000 - 120,000	
Public	Health records practitioner	25,000 - 100,000	
Public	Human Resources for Health (HRH) practitioner	30,000 - 120,000	
Public	Medical Technologist	45,000 - 200,000	
Public	Midwife	37,700 - 150,000	
Public	Nurse	20,000 - 700,000	
Public	Nursing Aide	20,000 - 100,000	
Public	Nutritionist-Dietitian	100,000 - 120,000	
Public	Radiologic Technologist	52,000 - 250,000	

Respondents have also drawn comparisons between their wages and that of their peers and reported the fairness of compensation if they are average, below average, or above average. Most of the respondents (69 percent or 949 respondents) answered with a rating of "Average", while 20 percent (271 respondents) answered with a rating of "Below Average", and 11 percent (164 respondents) answered with a rating of "Above Average". This survey data is also vital for establishing a potential common point of unity of healthcare professions based on remuneration, given the clamor for increased pay among certain healthcare workers particularly in primary care such as barangay health workers, nurses, caregivers, and midwives because of their personal living and working conditions.

In terms of satisfaction with their current monthly salary, a majority (66 percent or 914 respondents)

of the healthcare workers answered that they were satisfied, 21 percent (291 respondents) said they were dissatisfied, 10 percent (140 respondents) said they were very satisfied, and 3 percent (39 respondents) said they were very dissatisfied. For the majority who responded, the data also assumes that respondents with moderate to high satisfaction are those who are in public health positions and tenured, while the rest are under contractual or job order arrangements with government or private sector employers.

Caring for carers: Access to healthcare of the healthcare workforce

On the matter of benefits, healthcare access is also key to the retention of the healthcare workforce. When asked about the challenges experienced or noticed by the respondents in accessing healthcare service, the majority answered (66 percent or 915 respondents) that long wait times or lines are a challenge to healthcare access, which can cause them serious social burdens. Other results showed that quality of service and cost are burdens they also face. Other challenges they reported include the lack of resources and facilities, corruption and political issues, insufficient healthcare workers, the attitude of healthcare workers, health system fragmentation and inefficiency, limited supply of medicines, vaccines, and medical supplies, and cultural barriers.

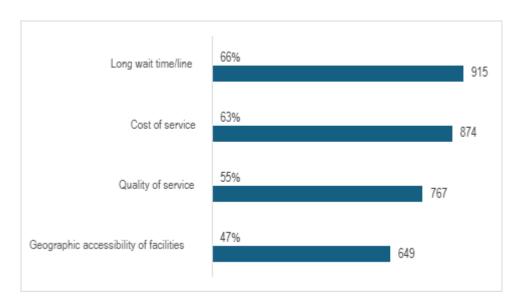


Figure 10. Challenges experienced/ noticed accessing healthcare services

Looking into the Future: Strategies to Improve Healthcare Quality and Patient Outcomes in the Philippines by 2040

Respondents were given a picklist to identify the strategies or initiatives to improve healthcare quality and patient outcomes in the Philippines that they hope to see by 2040. The picklist of responses can be one or more, and these are perceived as their priorities in the next fifteen years.

- a. Strengthening healthcare regulations (76 percent or 1,052 respondents)
- b. Increasing access to advanced medical technology (74 percent or 1,020 respondents)
- c. Enhancing training and continuous education (71 percent or 976 respondents)
- d. Improving public health program curriculum (66 percent or 912 respondents)
- e. Adopting Health Information Systems (61 percent or 848 respondents)

Other strategies that were identified include providing better compensation and benefits for

healthcare workers, having permanent positions and job security, strengthening primary healthcare and accessibility, investing in technology and innovation, reducing corruption and political interference, and updating the training, development, and curriculum.

Respondents were also asked about how they envision the future role of community healthcare workers in delivering healthcare in the Philippines. 69 percent of healthcare workers noted that they would have expanded roles and responsibilities. 18 percent answered that the status quo would remain. Finally, 8 percent answered that they would have reduced roles. Additional answers include having employment rather than volunteerism, the need to recognize pre-hospital care providers (EMTs/Paramedics), and having well-compensated and satisfied healthcare workers.

When asked about what they think would be the impact of technological progress on the future of HRH in the Philippines, 73 percent answered that it would have a positive impact, 18 percent answered that it would have a negative impact, and 10 percent answered that they did not know. Respondents were also asked if they think there are specific policy changes or reforms that could improve the HRH situation in the Philippines. Fifty-four (54) percent answered in the affirmative while 46 percent answered in the negative. While the results at present show a promise and optimism of healthcare workers in the Philippines for the future, there is a need to respond to these varying perspectives and envision a desired landscape of healthcare jobs and skills that will deliver certain promises and aspirations shared by the respondents. The results of this survey will help chart directions not only of UHC, but also of education, labor, and other socioeconomic development reforms.

Conclusion and Recommendations

In summary, the results of this survey show the strong awareness of the healthcare workforce on the various issues and their causes. On the issue of fragmented healthcare, it can be inferred that the lack of coordination can be either across public health institutions, or among private and public health institutions. This articulation of concerns can be best attributed to the institutional profile of these respondents, as 99 percent of them belong to the public health sector, as competitiveness is encouraged in the public sector due to the streamlined pay scale and qualifications as opposed to the private sector.

When talking about the establishment of a coordinating body to address the fragmentation, the majority recognized the DOH as the mechanism that can correct this. Given the recent mandate from the Office of the President to designate DOH as the lead of all national efforts, this could also mean that the public healthcare workforce can support this effort. However, the DOH will need assistance and support to manage the HRH network and bring more stakeholders from the private sector to contribute (as a potential investor) and benefit (as recipients of jobs and skills development) from this effort. The survey results also state the feasibility of a coordinating body that will manage these issues in an integrated manner.

On the question of compensation, the current, ideal, and future compensation ranges manifested an inflationary rise, which will be a cause for concern. Based on the existing landscape, a well-managed HRH ecosystem would mean a reduction in coordination problems, ease of referral, and a better welfare mechanism for workers, which could help manage salary expectations; this concern can also be solved with a public-private financing scheme.

Interestingly, even health workers have issues regarding their own access to health care. Access to healthcare is also vital in ensuring that the workforce is healthy enough to tackle healthcare system concerns. Somehow, both the financial costs (money loss) and social costs (time loss) should be

prioritized for the healthcare workforce, especially since the government aims to promote healthy workspaces in response to challenges to occupational safety and health. What these insights present is their vision of the future, but the way this is imagined based on the survey results is not clear and requires re-orienting them towards the goal of UHC.

CHAPTER 3: STAKEHOLDER DISCUSSIONS AND INSIGHTS ON HEALTHCARE JOBS AND SKILLS

The Health Sector Skills Council (HSSC) Project aims to chart new directions for Philippine HRH by providing results of stakeholder consultations as part of its activities. The process involves focus group discussions, the conduct of a multi-stakeholder Forum, and a masterclass and workshop on Futures Thinking, and Design and Health Systems Thinking.

These efforts have contributed to both drafting the landscape and recommendations for future healthcare workforce development, which also reinforce the survey results presented. The private sector added value to these discussions. The project convened a technical working group (TWG) composed of 15 healthcare advocates across various fields. The TWG held discussions across the project, focusing on updates and conditions of healthcare workers. Discussions and insights with other stakeholders were held in collaboration with the TWG. These discussions resulted in the development of a framework for collaboration towards enhancing HRH in the Philippines. Private sector inputs were valuable, particularly in the areas of education and labor reforms.

Stakeholder Discussions from the HSSC Project Activities

During a focus group discussion (FGD) which the HSSC Project organized with six (6) human resource practitioners and consultants on human resources for health, private sector difficulties in upskilling and retaining their workforce is caused by some business realities that these facilities constantly face revenues, managing turnovers, and finding incentives for the hospital and the healthcare workers to accept upskilling opportunities. These professionals resonated with the current landscape of HRH, and shared solutions that the private sector can potentially use. The discussions did not cover basic education and technical skills training, and the respondents were unable to identify some critical items that affect health workers.

A multi-stakeholder forum entitled "Horizons of Healthcare: Building a Future-Ready Philippine Human Resources for Health (HRH)" was a dialogue with prominent health professionals, decision-makers, and thought leaders, featuring eleven (11) discussions from local and international experts who discussed various aspects of human resources for health; this was attended by 120 participants. Key insights from the discussions surfaced which include need for public and private collaboration and harmonization, the recognition of community workers as part of the healthcare workforce, protecting the welfare of Filipino healthcare workers abroad, use of existing technologies and systems to reduce workforce burden and burnout and to provide evidence for the digital transformation of healthcare, upskilling through the jobs and skills council (JSC) model of Australia, and regulating and instituting the responsible use of AI in healthcare.

Participants were concerned with the future and the emerging health skills involving technology, motivation, resiliency, how the education sector can cross-pollinate, and how health and labor intersect. However, fostering links between young students and professionals was not reflected in their responses. Both the FGD and the multi-stakeholder forum demonstrate that participants have seen the importance of consolidating HRH efforts through a skills council and that the JSC model can help integrate skills with jobs and vice versa.

The HSSC Project organized a Masterclass and Workshop on HRH. The Masterclass activity sought to

increase the level of stakeholders' ability to formulate and design innovations that will advance and improve HRH conditions. By giving a Masterclass on Futures Thinking, Systems Thinking, and Design Thinking in health, key stakeholders would be better at forecasting and how to respond effectively to the challenges in healthcare jobs and skills. The key takeaways/lessons from the activity are the following:

- 1. To look back in history and learn from that (use of data and analytics);
- 2. To foster the imagination of people;
- 3. To invest in techniques to study the healthcare ecosystem;
- 4. To promote investment in education as an enabler to look into the future;
- 5. To empower better planning for the future;
- 6. To realize the importance of collaboration to reach a tipping point that change will happen;
- 7. To value strategic execution of efforts and make technology accessible to make this happen; and,
- 8. To understand that we should not predict the future, but rather, look at the plausible futures we want to realize and those we want to prevent (worst scenarios).

The Human Resources for Health "Gearbox" Model: A Consolidation Framework

Introduced as a prospective model to integrate all healthcare jobs and skills interventions per profession, this is composed of interdependent components that influence each other, with education being the main driver of all future efforts. Akin to a gearbox, the movement of a 'gear' triggers the movement of other 'gears' at a different pace based on the number and size of its 'teeth'. A value chain which links education until reintegration and potential retirement drives this model.

This gearbox model best reflects how to create an interoperable and interdependent mechanism so that each profession can grow together, vital to the delivery of UHC. It looks at the systemic interplay of different workforce development components that a healthcare professional is subject to from the start of his/her development up until the point a professional retires or takes a different path outside of the healthcare system.

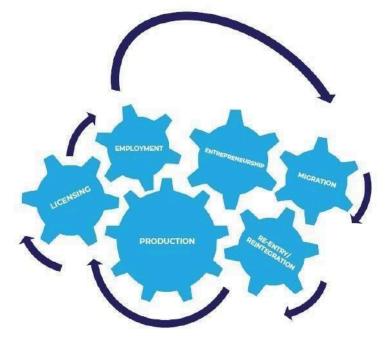


Figure 11. The HRH gearbox model as the basis for the HRH value chain

The entire model comprises six (6) 'gears' that display interoperable and interdependent components that enable his/her realization as a participant in healthcare. Each component is described below with its corresponding features, related domains, and what inputs are required to operationalize this for better workforce development interventions.

- 1. **Production (Education)**: Largest component which includes services such as:
 - a. Upskilling and retooling programs;
 - b. Student services (scholarships, tuition, research capacity, and practicum/internship opportunities); and,
 - c. Faculty services (grades/assessments and career tracking/guidance.
- 2. Licensing: Covers regulating qualified professionals, with services including:
 - a. Review school registry/accreditation;
 - b. Streamlining renewal requirements and costs as well as labor market needs among employers, government, and HEI/TVI; and,
 - c. Skills and qualifications matching.
- 3. **Employment:** Key healthcare delivery component, with services for workers including:
 - a. Updates/new information on healthcare rules and regulations (local and international);
 - b. Job application landing portal within the domestic healthcare system (both private and public [civilian or military]); and,
 - c. Welfare and benefits mechanism (i.e. insurance, back pay/claims, mandatory fringe benefits such as Social Security System or SSS and PAG-IBIG), and tax remittance.
- 4. **Entrepreneurship:** Development of healthcare enterprises to support the healthcare system; services include:
 - a. Enterprise registration and regulations
 - b. Incentives and investments for healthcare delivery (facilities and equipment)
- 5. **Migration:** Emigration is an isolated component that should be more of a choice than a necessity; Its services are the following:
 - a. Pre-employment services which include country information and a preview of the healthcare system
 - b. Pre-departure services which include family briefings return planning, and welfare and benefits mechanisms (via DMW-OWWA)
 - c. Post-arrival/onsite services such as contract renewals or re-entry planning (through DMW-Migrant Worker Offices)
- 6. **Re-entry/reintegration:** Return from overseas or from a non-healthcare career or enterprise, with services such as:
 - a. Post-arrival/onsite services such as contract renewals or re-entry planning (through DMW-Migrant Worker Offices)
 - b. Refresher course/reskilling

Collectively, these individual components form the overall healthcare workforce development mechanism. If adopted, it can transform the Philippine health workforce of the future. A council that can integrate and operationalize these components together is envisioned to address the existential fragmentation. Currently, the DOH is mandated to execute healthcare jobs and skills development efforts. The successful implementation of HRH programs at the DOH will need support from stakeholders.

CHAPTER 4: INNOVATIONS IN SUPPORT OF FUTURE PHILIPPINE HEALTHCARE JOBS AND SKILLS DEVELOPMENT

Using Australia's experience in managing jobs and skills development as a benchmark, the HSSC Project, operated by Unilab Foundation and the Philippine Business for Education, proposes innovations and recommendations for reform to offset the problems faced, grounded on the existing development objectives that would bring together private and public sector players in education, employment, and health. The project predates the directive of the Office of the President in November 2024 to direct the DOH to implement and coordinate all HRH development plans.

National government agencies, specifically the DOH and members of the HRH Network, private sector organizations, private healthcare employers, professional organizations, and the academe would find the discussion vital for the management of healthcare. In this regard, connecting private and public sector health players is vital to ensure that the HRH value chain will remain operational. There has to be a more comprehensive understanding of each component starting from production or education, followed by licensing, then employment, or entrepreneurship, and onwards to migration, and reintegration back into the Philippine healthcare system. It is also imperative to view the expected barriers to the solutions and innovations that will be carried out. Hence, the process that operationalizes this in each value chain component is seen below:

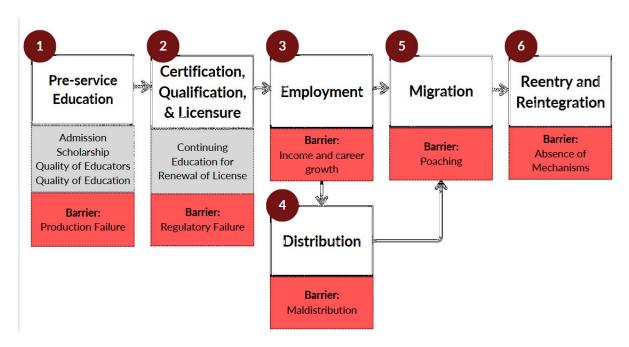


Figure 12. The HRH value chain operational framework.

Improving healthcare jobs and skills: lessons from Australia's experience

Australia adopted UHC and has been in effect since 1984. The continuity and improvement of UHC across the years have also been attributed to the education and employment outcomes. Healthcare jobs and skills in Australia are determined by a tripartite mechanism known as jobs and skills councils (JSCs), and healthcare education and learning delivery for specific healthcare credentials is also effectively managed through their technical and further education (TAFE) system.

The Jobs and Skills Council (JSC) model

Managed directly by Australia's Department of Employment and Work Relations (DEWR), this entity brings together unions, employers, and governments which aim to deliver the proper demand-driven vocational education and training (VET) for learners and employers and acts as a key platform to find solutions to continually evolving challenges to jobs and skills concerns.

The JSC model is widely known to manage the following workforce development areas: workforce planning, training product development, industry stewardship, and implementation and monitoring of workforce development interventions, with the goal of improving the VET system responsiveness as well as driving high-quality outcomes for the VET sector, learners, and business. For the healthcare sector, HumanAbility is an independent JSC that the DEWR selected to specifically manage skills for the sectors of health, children's education and care, human services, and sports and recreation services. In its current state, the Philippines officially vested the similar functional authority of a JSC with the DOH, and a similar mechanism to this is the HRH Network; however, the structural template for a JSC model in the country is more oriented towards the private sector integration through the Industry Boards governed by TESDA.

In this respect, the DOH and private healthcare institutions can learn Australia's JSC to vest its authority on workforce planning and implementation of learning and development interventions. The private sector is capable of handling training product development and industry stewardship together with the DOH. On the other hand, regulating and licensing healthcare workers can be better streamlined through multi-sectoral linkages, which Australia successfully implemented when they combined regulating the nursing and midwifery professions.

Case Study: Australia's Practice of Regulating Both Nurses and Midwives

Australia began regulating its nurses and midwives as early as the 20th Century. A strong advocacy was pushed by the Australian Nursing and Midwifery Federation (ANMF) to strengthen national registration standards and workforce data collection for its sector. Since 1924, it continued to develop the nursing and midwifery workforce. In recent years, it managed to create a consolidated mechanism across different education, licensing, and employment structures in Australia through a strong multipartite registration arrangement between the Nursing and Midwifery Board of Australia (NMBA), Australian Nursing and Midwifery Accreditation Council (ANMAC) and the Australian Health Practitioner Regulation Agency (AHPRA). The goal of this consolidation is to ensure "that nurses and midwives are well prepared to provide safe, competent, and compassionate care across the nation" ⁶⁵ with the aim of creating a better working environment for the sake of public safety and high-quality practice.

https://anmj.org.au/the-role-of-regulation-in-nursing-and-midwifery-in-australia-a-legacy-of-excellence-and-advocacy/

⁶⁵ "The role of regulation in nursing and midwifery in Australia: A legacy of excellence and advocacy." Australia Nursing and Midwifery Journal. October 31, 2024.

The ANMF believes that "the determination and maintenance of these standards should be managed by the nursing and midwifery professions to ensure integrity" and that "both registration and accreditation processes should be funded by registration fees, without cross-subsidizing other disciplines." The high degree of autonomy in the licensing process of the nursing and midwifery profession in Australia is attributed to the streamlined utilization of its resources; and in the case of other international developing contexts such as the Philippines, disciplinal integration of several fields may also contribute to this high degree of autonomy and streamlined process of licensing, which encourage professional interoperability that will better deliver UHC interventions.

Technical and further education (TAFE) model in various healthcare fields

Philippine healthcare employment outcomes will be influenced by the efficient delivery of educational services; and vice versa. In the experience of Australia, its own Qualifications Framework enables industries and academe to align their priorities for education and employment. The VET system in Australia has some similarities with the Philippine TVET system, wherein the TVI providers in the country are the main delivering entities for technical training. Australia employs a system of delivering VET through Technical and Further Education (TAFE) institutes. TAFE institutes deliver VET programs in four levels (Certificate I as the lowest and Certificate IV as the highest) like the Philippine NC leveling under its TVET.

While TAFEs have state-level funding, there is also additional support from the Federal government to increase intake and competitiveness of TAFE graduates. The Fee-Free TAFE Skills Agreement is a commitment of the Australian Federal government to offer 500,000 TAFE and VET programs for free to state governments from 2023 to 2026, which includes allied health competencies related to aged care, health care, and disability care⁶⁷. This effort to open up TAFEs also help offset the tuition cost experience of TAFE students, which also varies depending on the state.

Compared to the Philippine TVET system, TAFE institutes in Australia also deliver several key healthcare education training courses which grant students the minimum qualifications to be a licensed participant in the healthcare system, which is a stark difference from the Philippines' baccalaureate degree qualification standards based on the PQF with the exception of two dental health professions that are based on NCs I, II, and IV (Dental Hygiene and Dental Technology). Some of these courses offered through Australia's TAFE system are the following:⁶⁸

- 1. Nursing (to achieve a Diploma in Nursing);
- 2. Emergency Health Care (to achieve a Diploma in Emergency Health Care or Certificate III in Non-Emergency Patient Transport);
- 3. Disability (to achieve a Certificate IV in Disability Support);
- 4. Aged Care (to achieve a Certificate IV in Ageing Support);
- 5. Health Services Assistance (to achieve a Certificate III in Health Services Assistance) which includes patient transport, bed maintenance, infection control, and food safety;
- 6. Allied Health Assistance (to achieve a Certificate IV in Allied Health Assistance) in support of

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⁶⁶ Ihid

⁶⁷ "Fee-Free TAFE". Department of Employment and Workplace Relations. Australian Government, 3 February 2025. https://www.dewr.gov.au/skills-reform/fee-free-tafe

⁶⁸ "7 ways TAFE can launch your career in health, nursing & care". Victoria University. Accessed on 17 December 2024.

https://www.vu.edu.au/about-vu/news-events/study-space/7-ways-tafe-can-launch-your-career-in-health-nursing-care

licensed healthcare professionals (e.g. physiotherapists and occupational therapists); and 7. Healthcare Administration (to achieve a Certificate III in Health Administration) which includes maintaining patient and financial records, managing information and resources, implementing infection control policies, and using basic medical terminology.

Philippine alignments with and adaptations of the TAFE system may occur; and these credentials may be cross-applied to enhance the curriculum of all healthcare education programs in line with the UHC Act. The "cross-pollination" of healthcare education development can also directly affect the Philippines' indicator towards the internationalization of healthcare education as stated in the PDP's goals for higher education, if partnerships with Australian TAFE institutions are implemented. Industry may also take on the TAFE model to create credentials for new and current workers through healthcare apprenticeships, and there are opportunities to further develop this with the private sector due to the recent passage of the Enterprise-Based Education and Training (EBET) Framework Act to address the need for more supervised industry learning.

The examples of credentials from the Australian TAFE system may be adopted and aligned towards integrating both non-licensed and licensed professionals and advancing healthcare outcomes. For example, the codified competency system for healthcare is part of their National Training Register which is constantly updated. For healthcare, the code sets represent two areas: health (using "HLT" as a main code) and community services (using "CHC" as a main code). To fill the gap in the current skills structure of healthcare in SHS, Higher Education, and TVET, these sample competencies can be used as credentials to expand training opportunities for these students and the workforce.

Table 19. List of possible TAFE competency adoptions for Philippine higher education

Proposed TAFE CHC Competencies for	Proposed TAFE HLT Competencies for
Philippine Healthcare Education and Upskilling	Philippine Healthcare Education and Upskilling

- Coordinate client-directed services (CHCMGT006)
- Follow established person-centered behavior supports (CHCCCS044)
- Provide advocacy and representation services (CHCADV002)
- Develop, implement, and review quality framework (CHCMGT001)
- Support independence and wellbeing (CHCCCS040)
- Assist with movement (CHCCCS002)
- Facilitate ongoing skills development using a person-centered approach (CHCDIS018)
- Facilitate the empowerment of people receiving support (CHCCCS038)
- Respond to client language, literacy, and numeracy needs (CHCLLN001)
- Develop strategies to address unmet needs (CHCCCS008)
- Develop and promote positive person-centered behavior supports (CHCDIS016)
- Work effectively in trauma-informed care (CHCMHS007)
- Develop and provide person-centered service responses (CHCDIS015)
- Manage partnership agreements with service providers (CHCMGT002)
- Facilitate the interests and rights of clients (CHCADV001)

- Engage with clinical supervision and delegation (HLTAHA047)
- Apply nursing practice in the primary health care setting (HLTENN047)
- Contribute to client flow and client information management in medical imaging (HLTAHA025)
- Follow safe work practices for direct client care (HLTWHS002)
- Transport non-emergency patients under operational conditions (HLTOUT007)
- Assist in rehabilitation programs (HLTAHA031)
- Administer and coordinate Telehealth services (HLTADM008)
- Assess and deliver basic clinical care (HLTOUT004)
- Assist clients with medication (HLTHPS006)
- Transport emergency patients (HLTOUT006)
- Inform and support patients and groups about oral health (HLTOHC002)
- Conduct manual tasks safely (HLTWHS005)
- Perform clinical assessment and contribute to planning nursing care (HLTENN037)
- Process reusable medical devices and equipment (HLTINF002)
- Support the medical imaging professional (HLTAHA046)
- Assist people management in medical imaging (HLTAHA045)

Guiding Principles

Innovations should be grounded on a set of agreed values and principles that will allow partnerships to flourish and establish ways of working among different stakeholders. These guiding principles would be to retain existing structures, respect government mandates, enable private sector participation, and foster links between students, faculty, and professionals.

Retain existing policies and structures

Policies that govern the management of the workforce must be retained but should also be open to integration. For example, the recent Malacañang Directive to DOH and the Master Plan references United Nations SDG No. 3 which is "Ensuring healthy lives and promoting well-being at all ages" as a function of HRH. However, education and employment also determine health outcomes and affect other national and international development goals; therefore, this initiative will also enhance other development outcomes outside of health. Below is a list of SDG goals that will also be impacted by HRH development efforts of the DOH and other stakeholders within a three- to five-year development period, aligned with local development outcomes and indicators. These indicators are shared among, and integrated into, the operations of government agencies.

Table 20. HRH alignments outside health (in education and employment) with the PDP and SDGs

SDG Number	Goal	Alignment with the Philippine Development Plan Indicators
4.4	Increase the number of people with relevant skills for financial success	Completion rate and cohort survival rate in SHS increased
4.6	Universal literacy and numeracy	Percentage of Filipinos with functional health literacy increased
4.7	Education for sustainable development and global citizenship	For healthcare education institutions and employers: 1. Technical Education and Skills Development Authority (TESDA) certification rate in priority sectors increased (percent) 2. Employment rate of TVET graduates increased (percent) 3. The number of higher education institutions (HEI) in reputable international rankings increased
8.2	Diversify, innovate, and upgrade for economic productivity	For healthcare employers: 1. percentage of the total number of Establishments
8.5	Full employment and decent work with equal pay	For healthcare employers: 1. Employment rate of TVET graduates Increased 2. The proportion of employed college graduates in elementary occupations (percent) decreased 3. The placement rate (percent) of public employment service offices increased 4. percent of wage and salary workers in private establishments to total employed increased
8.6	Promote youth employment, education, and training	For healthcare education institutions: percentage of youth not in employment, education, or training (percent) reduced
8.8	Protect labor rights and promote safe working environments	Compliance with occupational safety and health standards (Republic Act No. 11058)

Respect for government mandate

Government mandate is established through the HRH Master Plan. This laid out all the responsibilities of government agencies in each component of the HRH value chain. The HRH Network will continue to cover public health workforce management and regulate the overseas employment of healthcare workers. It will be tasked to address the following questions on HRH issues on a regular basis:

- 1. How many workers does the country need for the future?
- 2. What kind of discipline and skills will be needed?
- 3. Where will they be needed
- 4. What economic incentives will allow retention?
- 5. How will opportunities be created for returning overseas health workers?

There is no consolidated database and information system that will provide these answers. It is acknowledged that without private sector support, this will not be easily addressed and reforms in health service delivery will not be sustainable.

Private sector participation

Healthcare institutions may also need to weigh in to support the upskilling efforts. The involvement of major healthcare networks of hospitals and clinics with nationwide coverage is also essential in support of the upskilling efforts; their interplay and role in knowledge transfer and skill development for SHS students and technical training students with the support of the DOH and participation of several TVIs and HEIs will be a major breakthrough, not only as an alternative healthcare education platform but also a major private-public partnership hub that may also effectively open economic opportunities to other industries outside of health that may influence the healthcare system.

Several major private health institutions operate a vast network of hospitals and clinics across the country. There are private hospitals that are deputized by CHED to offer degrees and there are private university-based healthcare facilities, which may also be tapped to allow basic education and TVET exposures to the healthcare professional practice. The following private health institutions with nationwide coverage can potentially participate in public and private sector partnership efforts for HRH. Some of these institutions with chains of hospitals and clinics are identified such as United Laboratories Group, Ayala Health, Metro Pacific Health, and The Medical City.

The participation of private healthcare institutions is needed to establish consolidated data for private sector healthcare workers that could be triangulated with data from DOLE. This also aims to establish mechanisms to allow DOH to engage with these private hospital groups in providing accessible potential learning and development programs that may benefit each other. One such structure that was able to facilitate this inter-organizational exchange and collaboration is the Tarlac Private Hospitals Industry Tripartite Council (TPH-ITC).

<u>Structure in Focus: The Tarlac Private Hospitals-Industry Tripartite Council (TPH-ITC) - When</u> <u>Healthcare and Labor Sectors Work Harmoniously Together</u>

In October 2023, a collaborative model between private healthcare providers and DOLE was created to help address the provincial shortage of nurses. In a joint resolution through the DOLE, management and workers' representatives from 17 private hospitals in Tarlac manifested their support to create this council that has a similar function to a private sector local health board which was instituted in the spirit of labor tripartism of private healthcare providers in the province. The TPH-ITC may later take in accredited HEIs and TVIs with healthcare education programs and eventually include APOs of the PRC operating in the province to further strengthen the province's jobs and skills landscape, as the current industry tripartite council only factors hospital and clinic employers and workers organizations.

Foster links between students, faculty, and professionals

Existing efforts to prepare the workforce for the future are missing a vital link: basic education and its role in the healthcare sector. This link is two-way. One is a top-down link that allows professionals through professional organizations to provide coaching and proper orientation on the healthcare professions as well as create innovative platforms for SHS students to appreciate the healthcare sector, prepare for the rigors of college education or TVET, and allow professionals to learn from students' experiences. The other is a bottom-up link which allows teachers to gain skills from professionals and translate these into their instruction of STEM. This may also be adopted as a policy for the government or as a partnership model for the private sector to foster professional knowledge exchange and prepare SHS students for the future.

Strategy Map

The vision of HRH is the support and collaboration between the public and private sectors, resulting in improvements in the target healthcare human resources, i.e., students, faculty, and professionals. The first phase maps out the stakeholders and enlists their support, targeting the creation of a unity statement for HRH led by the private sector, including the academe, industry, and professional organizations such as the Philippine College of Physicians (PCP), Nutritionist-Dietitians Association of the Philippines (NDAP) for nutritionist-dieticians, and Philippine Association of Radiologic Technologists (PART), among others. Without this support, or resistance to providing it triggers the need to reassess the strategies until a buy-in from the target groups and organizations is received. The unity statement paves the way to secure government support (Phase 2) and the formation of a private sector HRH Consortium via DOH for health and education and employment via DepEd, TESDA, CHED, PRC, DOLE, and DMW.

With this Consortium, corresponding functions and responsibilities combined with key inputs will produce output innovations such as a private-public HRH coordination mechanism, data visualization tools, and policy reform packages, each with its target Key Performance Indicators (KPIs) for innovations and improvements in employment, education, and retirement (Phase 3) leading to an increase in worker satisfaction with their employer and working conditions, increased appreciation on patient care of students, and increase in the retiree's contribution to employment and education support. The impact and sustainability of these innovations (Phase 4) are made possible with funding and incentives received to advance more collaborative efforts on healthcare jobs and skills development.

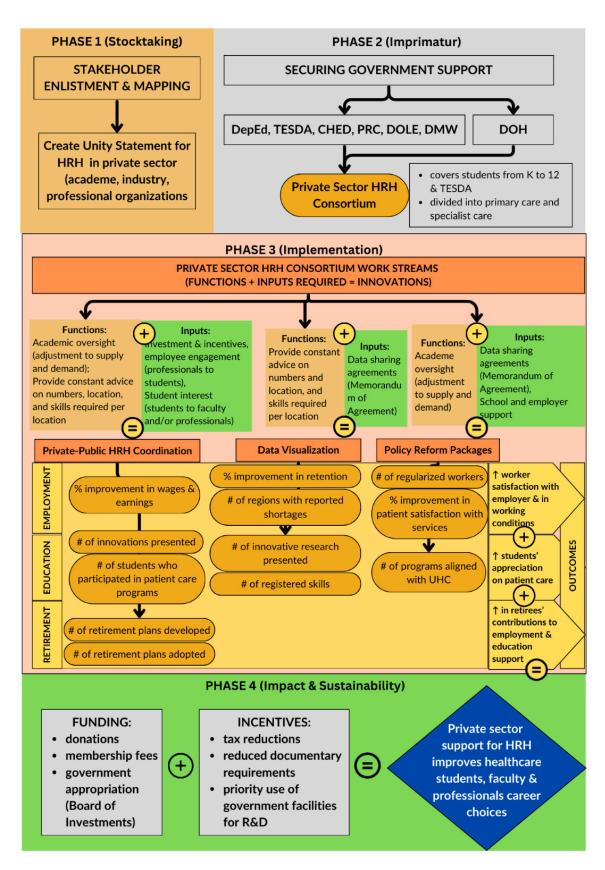


Figure 13. HRH Strategy Map (as envisioned by the report developers)

Proposed innovations

Solutions to allow a future that will work for the healthcare sector must be based on the above guiding principles and a re-orientation based on systems thinking, policy reform, and collaboration. A council cannot be formed at present and will lose traction because the private and public sectors have opposing values resulting in misalignment from education to qualifications to employment which contributes to the current socio economic issues that the healthcare sector faces. Until these guiding principles and foundations are established, these efforts will remain uncoordinated and misaligned. The following proposals are developed on these grounds: the adoption of a consolidated system; policy reform packages; and a private-sector-led consortium for HRH.

Private-public sector HRH coordination mechanism

The HRH Master Plan must consider coverage for private sector healthcare professionals in its next round of reviews. A thorough review of the relationship between private and public health workforce development activities must consider which efforts can be jointly executed and which ones will require funding. This will aid the revisions and re-design of the HRH Master Plan to cover both private and public health professional management. There have been collaborations in other areas between the private and public sectors which were considered successful; one such collaboration was the One Hospital Command System (OHCS), implemented during the height of the COVID-19 pandemic.

<u>Structure in Focus: OHCS – a continuing collaboration between the private and the public health</u> sector

Managing COVID-19 was a major imperative and required the private and public health sectors to collaborate. To augment this support, the DOH designed and implemented the OHCS in October 2020. The objective of the OHCS is to streamline the referral of COVID-19 cases among public and private health facilities and optimize the use of medical care services to unify response against the disease. The private sector's role was to provide data analysis on the availability and utilization of beds in different levels of hospitals, provide a strong communication line and proper coordination between health facilities in conducting referrals, and ensure proper transportation and coordination for suspect, probable, and confirmed cases and a protocol for emergency patients. A One Hospital Command Center (OHCC) was established at the national and regional levels for better coordination, which linked government and private sector health facilities with one another.

In its original policy, the National OHCC reported to five government organizations: the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF), the COVID-19 Operations Center of the DOH, Oplan Kalinga (or the local-level COVID-19 response of LGUs), Regional OHCCs, and the DOH Secretary. Reporting of the private sector health facilities were designated to the regional OHCCs. Below is the operational framework of the OHCS. A portion of the operation framework is seen below:

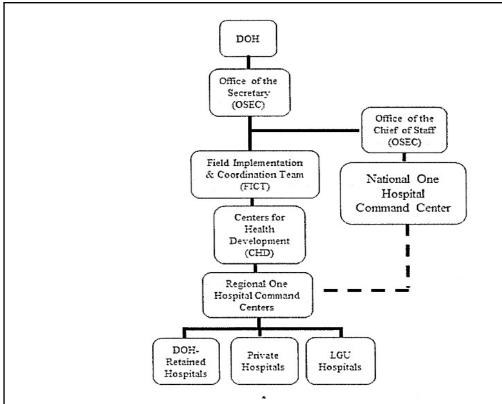


Figure 14. A section of the One Hospital Command System Framework Source: Department Order No. 2020-0653. Department of Health, October 21, 2020, p.8.

After the COVID-19 pandemic, the OHCS mechanism was later converted into a referral system for patients catering to other disease categories, which is now known as the National Patient Navigation and Referral Center. In this sense, the success and continuity of the OHCS was possible due to the participation of the private sector.

The consolidation approach of the OHCS including the management of data and referral requests is worth adopting to the management of HRH. To apply this model, the following points of comparison are detailed:

- 1. The National OHCC is like the HRH Network
- 2. The Regional OHCC mirrors the local councils that integrate public and private bodies
- 3. The local education component (provincial, city, and municipal) can be a group of schools in basic, higher, and technical education
- 4. The local employment components could be private recruitment platforms or the public employment services office
- 5. Private healthcare institutions are linked to these educational bodies
- 6. Measures of healthcare migration management will also be interfaced with the regional offices of the DMW

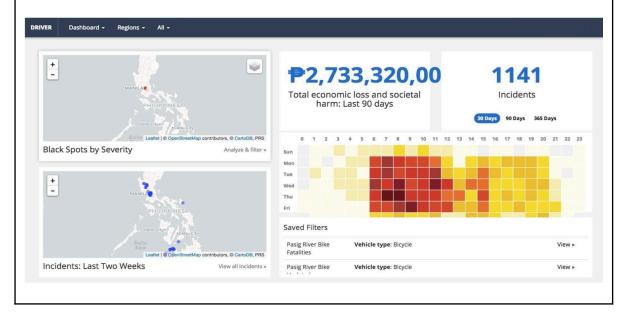
The OHCS was a data-driven solution to manage COVID-19 cases. Through this framework, it is also possible to get data insights for the private sector. This needs to consolidate macroeconomic data from DOLE, PRC, and PSA and microeconomic data on supply and demand including vacancies in recruitment portals such as JobStreet by SEEK or LinkedIn. These private sector data must also be merged with public health workforce data collected by the DOH to get a visualization that can identify other areas of concern for HRH. Hence, this consolidated data would be needed to establish an integrated database of current health professions available to serve, including information on their skills.

Data visualization tools (Geographic information system healthcare workforce heat map)

Digitalization is ongoing with the DOH as it continues to receive support from the World Bank to develop and enhance its data management capabilities for HRH through the Health System Resilience Project (HSRP) through the World Bank.⁶⁹ These include efforts to deploy and ensure the availability of healthcare workers in the HSRP sites. Data visualization and analytics measures include location matching and geotagging of health workers to specific diseases through a geographic information system (GIS), skills registry, availability of health workers to serve in a specific community, and welfare services for workers can be integrated into one dashboard which can link efforts of various stakeholders and forecast workforce needs. Such a visualization can be cited from a system used in another sector as a model of multi-sectoral consolidation. This system is known as the Data for Road Incident Visualization, Evaluation, and Reporting System (DRIVERS) of the Philippines Department of Transportation (DOTr).

<u>Case Study: DRIVERS of the DOTr – Data-Driven insights for Multi-Sectoral Responses to Road</u> <u>Traffic Crashes</u>

Road safety is both a public health and transport concern. The DOTr led an initiative to address this by developing the DRIVERS software. This system is a free web-based, open-source system that creates national and local geospatial records to analyze road crash locations.⁷⁰ It was designed to streamline reporting and provide analysis to support decision-making and develop interventions.⁷¹ It has an interface that visualizes locations of road crash data (i.e. where the crashes happen) which uses a heatmap to determine which times of day and days of a week. The interface also includes the economic loss and societal harm done in 3 months and gives a record of incidents in a span of days, months, or within a year.



⁶⁹ "Look: World Bank Reaffirms Support to the DOH Programs". September 18, 2024. https://www.facebook.com/DOHgovPH/posts/pfbid02ByDZzfs3Js3KUrrH1Kbg4mpUGQSe3Z7mybzqHYdVGFxBsxCgjezuSszt8a8G3NuQl

⁷⁰ DRIVERS System. Department of Transportation in League of Cities of the Philippines. https://lcp.org.ph/UserFiles/League_of_Cities/file/DOTr-Road-Crash-Platform.pdf

⁷¹ "DRIVERS Implementation in the Philippines: Supporting Traffic Safety Information System in Southeast Asia". https://www.itf-oecd.org/sites/default/files/docs/drivers-implementation-philippines.pdf.

Figure 15. DRIVERS Dashboard In "DRIVERS Implementation in the Philippines: Supporting Traffic Safety Information System in Southeast Asia", p.8.

The system's main innovation is linking various government agencies including the healthcare system to address this concern using retroactive data by helping government responders identify where and how to apply corrective transport and public health interventions such as road repairs and attending emergency response teams to reduce road traffic crashes. This template can be applied to HRH development and management by determining information on facilities with reported worker shortages, referrals of diseases that require primary care or specialist attention, and what kind of upskilling efforts are needed in an area with a shortage of workers.

Policy reform packages

Reforms to healthcare education are overdue. The joint inter-agency policy efforts have only responded to the concerns in the public sector and to specific professions. The loss of talent, deskilling, and compensation of healthcare workers in the private sector including emigration are also related to the leadership quality of employers. Reforms are also required to enable the private sector's participation in public health. In this sense, to allow healthcare employers to affect progress in their respective institutions, policy reform packages come in two tracks: (1) multi-sectoral healthcare education policy reviews with the integration of international and domestic education and employment standards; and (2) a mandatory executive healthcare leadership program.

- 1. Multi-sectoral healthcare education policy reviews must be led by the DOH and with the private sector groups for their insights. These reviews aim to ensure the Philippine healthcare workforce is competitive and updated to serve both global and domestic market needs. This should be able to simulate the different career progressions of each healthcare worker, like the 2024 Ipsos study on the four different undertakings of an individual studying or working in the Philippine nursing profession. The HRH Master Plan will need to include the following policies to review and streamline with UHC in its next review period:
 - a. The DepEd Basic Education Revised Currculum on the Physical Education & Health and Life Science Subjects covering Grades 7 to 10, and the STEM Track of the Senior High School Program
 - b. CHED PSGs including those issued before the UHC Law
 - c. TESDA TRs
 - d. Regulatory board resolutions relevant to the CPD of a discipline

This review process must be guided by the HRH value chain approach. Across all professions, the development of policies and forecasting of data will be determined by existing policies in education and employment (e.g. K to 12, license application and renewal, migration) and people who dictate the needs, location, and skill sets required. To illustrate this, a sample review process which can be the basis for policy and data alignments is found below.

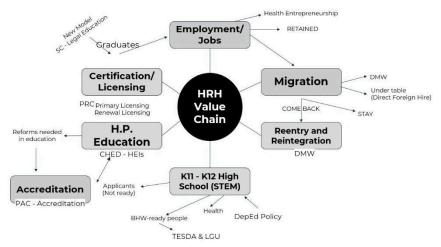


Figure 16. Process flow of policy reform

2. The private sector healthcare industry is governed by a set of directors who are not closely regulated and regularly updated on the evolving health agenda of the country. They also play a role in implementing UHC. In this case, DOH may opt to develop a mandatory executive healthcare leadership program for all private and public healthcare managers, which aims to generate champions who will promote, implement, and advocate for UHC. The policy aims to require healthcare leaders to participate and generate innovations in healthcare leadership and establish the ways and means to secure the investment needed which will sustain this program. Preliminary components of this executive program are: UHC, regulatory compliance, ethical leadership, risk management, quality assurance, digital health, health security, international and domestic education standards from basic to higher education, and international labor standards.

Leadership cohorts can later band together to form alliances or partnerships that will help the current and future healthcare workforce realize their vital role in healthcare delivery if they wish to enter either the private or the public sector. These partnerships can take the form of a consortium for healthcare education and employment.

Consortium for healthcare jobs and skills development

At present, a skills council solely run by the private sector will not be able to create these innovative practices; this could not completely develop data visualization tools to support HRH decision-making and could not institute policy reforms since this will require imprimatur from the DOH; a council can run contrary to government mandate in the context of healthcare unless this is legislated. Private sector partnerships for HRH can be nurtured through a consortium of healthcare leaders. This aims to support the current pipeline of the healthcare workforce through various educational and employment initiatives and reach out to the DOH and the HRH Network to support HRH development efforts. The consortium can perform the following collaborative activities in education and employment:

Table 21. Sample activities of the consortium for education and employment

Consortium Education Activities	Consortium Employment Activities		
For basic education:	Welfare services:		
 Career pathing and orientation 	Mental health and psychosocial support		
2. Professional skills demonstration in schools	2. Nutrition support		
3. Student and faculty immersion in	3. Town Halls with other professions		
healthcare	4. Bereavement support (for dependents)		
4. Community health literacy training			

For higher education:

- Equipment donations and maintenance training
- 2. Systems research and development
- 3. Research, entrepreneurship, and management skill assessments
- National Service Training Program for Health Literacy

Retirement preparations:

- 1. Financial literacy
- 2. Business planning
- 3. Teaching support for basic and technical education

The consortium can also leverage the fiscal incentives that will be provided in the Enterprise-Based Education and Training (EBET) Framework Act for TVET programs if it creates supervised industry learning (SIL) opportunities for NC training programs. As an initial starting point, the consortium may start covering two specific healthcare worker clusters as sub-committees: one on primary care and the other on specialist care. Professionals in primary care under the UHC Law are defined as those who provide patients with accessible, continuous, comprehensive, and coordinated care; they are general physicians, nurses, midwives, barangay health workers, emergency medical services workers, and physical therapists. Specialist care professionals refer to those who specialize in a particular aspect of healthcare such as but not limited to sanitation, nutrition, mental health, and specific diseases; they are specialist medical practitioners such as pediatricians, cardiologists, and radiologists among others, as well as pharmacists, nutritionists-dietitians, occupational therapists, and psychologists among others.

Professional organizations will also play a vital role in this initiative, as they will also have access to their licensed members. They can also help bridge students, faculty, and professionals and can also provide technical assistance in enterprise-based training. On the other hand, students are often faced with little information on the school they wish to enroll in. Schools also need real-time supply of information to make constant adjustments to their admission policies for deserving students. To address this, the Consortium can develop and pilot an application-based web portal for students and schools that aims to bridge both using matched information and predictive analytics. The kind of information that an app can generate and link users can be found below:

Table 22. Sample Information that can be generated by the app-based web portal

Student Information	School Information	
Name:	School name:	
Residence:	Location (may be matched with proximity to student	
Current Educational Level (SHS or NC):	residence, following Data Privacy safeguards):	
Grade 11	Offered courses:	
Grade 12	Student financing and scholarships:	
• NCI	 Private schools with tuition fees per course 	
NC II	 Private schools with scholarship offerings 	
NC III	 State/local universities and colleges under 	
 NC IV 	Republic Act No. 10931 (free tuition) and	
Strand in SHS/NC Cluster:	Republic Act No. 11509 (Medical Scholarship	
Entrance Examinations Taken (with Pass or Fail	and Return Service)	
criteria):	Board and lodging costs near the school:	
	Return service requirements:	

To bridge the students graduating from college to the world of being professionals, i.e., licensure exams, work application, and government work requirements, a bridging program may be included or adopted into the portal, wherein they can learn and relearn both soft skills and technical knowledge that they would need to successfully land employment and also help them interact with professionals from other healthcare domains. Entrepreneurial skills may also form part of the

program. Training modules designed for ongoing professional development and lifelong learning can be added through a partnership with other learning institutions as well as review centers, which can contribute through the provision of training content and facilitation.

Economic and geographic determinants may be considered before developing and piloting this platform such as internet reliability, logistics coverage for students and schools including transportation, and pre-existing links of schools with industry.

Consolidating healthcare leadership at the national and local level: installing an "HRH czar"

Installation of an accountable "HRH czar" is recommended, with the mandate to lead and manage the fragmented programs of HRH development from both the private and public sector; and to integrate all efforts locally and nationally to align education and employment in healthcare that will ultimately address the numerous challenges that the healthcare industry is facing.

The "czar" designation is an adaptation of a previous public health policy in the Philippines during the COVID-19 pandemic⁷²; when the Philippine president appointed four "czars" to lead various response areas: testing (led by a testing czar), tracing (a tracing czar), isolation, and treatment.

In this respect, the lessons from COVID-19 response may also apply to the existing conditions of healthcare jobs and skills, with a strong collaborative approach which will be set by the HRH czar. At the regional and provincial levels, LGUs may also authorize their own "HRH czars" who can also cooperate with the national government, as this is a power granted to them through the Local Government Code.

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⁷² Gov't assigns anti-COVID czars. Presidential Communications Office, 13 July 2020. https://pco.gov.ph/news_releases/govt-assigns-ph-anti-covid-czars/

CHAPTER 5: MONITORING AND EVALUATION SUPPORT FOR HEALTH JOBS AND SKILLS PROGRAMS

Effective monitoring, data validation, and evaluation activities are critical to any proposed innovations for HRH, integrating the outcomes found in national and international development objectives such as the DOH's Master Plan, the PDP 2023-2028, and the SDGs. Critical success factors are the buy-in from the private sector including different health professionals and sustained funding and technical support. This is because the outcomes for HRH are complex and touch on multiple sectoral priorities. In short, it is an ecosystem challenge and one that takes a longer-term view.

It is important to bear in mind that planning efforts for monitoring contain clear definitions, the proper establishment of baselines, the agreed standards for data quality, and risk management for stakeholders for better alignment. The intended audience of this chapter is the HEI and TVI heads and healthcare professions education departments, civil society organizations, private healthcare employers, and international development partners.

Critical success factors

The Master Plan initially laid out the critical success measures that the DOH aims to follow across its lifespan and scope. While the Master Plan created a fundamental mapping of stakeholders who they aim to gather support for implementation, it is essential as well to determine which resources will be beneficial or detrimental to the DOH and the private sector in executing HRH development efforts. These measures include private sector buy-in, non-resistance from the professions, and sustained funding support.

Private sector buy-in

Private sector buy-in will rely upon the leadership of private healthcare institutions. The key involvement of major healthcare networks of hospitals and clinics with nationwide coverage is also essential in support of the upskilling efforts; their interplay and role in knowledge transfer and skill development for SHS students and technical training students with the support of the DOH and participation of several TVIs and HEIs will be a major breakthrough not only as an alternative healthcare education platform but also a major private-public partnership hub that may also effectively open economic opportunities to other industries outside of health that may influence the healthcare system.

Getting their buy-in may require policy reforms and incentives that will ensure their engagement. One such measure will come from the implementation of the Enterprise-Based Education and Training (EBET) Framework Act (Republic Act No. 12063). The said law states that fiscal incentives such as tax exemptions for financial aid related to EBET will be provided "to encourage private sector commitment"⁷³ to upskill their workforce. More specifically, if healthcare institutions are registered with TESDA, they "may deduct up to 75 percent of their training expenses from taxable income

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⁷³ "New EBET Framework Act seeks to bridge job-skills gap, boost employment opportunities for Filipinos". The Second Congressional Education Commission (EDCOM II). November 7, 2024. https://edcom2.gov.ph/new-ebet-framework-act-seeks-to-bridge-job-skills-gap-boost-employment-opportuniti

starting January 2028". ⁷⁴ If healthcare institutions are involved in these educational initiatives, then more innovations will be generated in the healthcare sector. The expected outcome of these incentives is to grow the number of quality-assured healthcare training institutions that can also help offset the concerns over the numbers, skills, and willingness to serve.

Acceptance from the professions

All healthcare workers are encouraged to advance their interest and development of healthcare jobs and skills. There must be a bottom-up buy-in from them to understand the needs of healthcare in the future. This will be done through jobs and skills development. The healthcare sector is inherently hierarchical at present, which is traditionally led by physicians. However, voices from the support workers (particularly those between high school and underboard and college-level education) is essential as the clamor is strongest among the non-licensed professions with these qualifications.

In the private sector, it is more important to address the concerns of the non-licensed professionals as they need to improve their skill absorption, retention, and access to benefits to allow a better balance of healthcare delivery in both private and public settings. Discord will not advance the goal of universal healthcare. Threats to this may come from current efforts to curb the responsibilities of some professions, which is evident in a previous effort to transfer certain responsibilities from one profession to another. One such example was the concern over one of the pharmacists' responsibilities being transferred to the physicians.

<u>Situation Analysis: Dispensing Physicians (House Bill No. 10680) - Addressing the Skill and Job</u> <u>Responsibility of the Pharmacy Profession</u>

On July 29, 2024, House Bill No. 10680 was filed, which seeks to authorize physicians to directly dispense medications to patients. Dispensing is a detailed process of recording dosages, labeling, and preserving/stocking prescription medications, a skill that is strictly assigned to pharmacists to better delineate the division of labor in the healthcare sector. This responsibility is clearly stated in the Pharmacy Act (Republic Act No. 10918). This caused some concerns in the pharmacy profession, who stood united against the bill as this violates the Pharmacy Act. The Philippine Pharmacists Association released a position paper in August 2024, which expressed its strong opposition to the bill in its prefatory statement, "First, do no harm. But how can we avoid harm and conflict of interests, when the physicians who will prescribe the medications are also the ones to sell them?"⁷⁵

In this kind of situation where controversial health legislation can potentially open conflict among professions, there must be a proper avenue to be able to discuss these matters as further divisions and tensions will later distort a major goal of UHC, towards interoperability of healthcare delivery and a team approach to healthcare. Engagements must begin starting SHS and should also continue in higher education (among degree programs), technical-vocational education, and during continuing professional education (among professions). Buy-in for healthcare jobs and skills development will not grow if professional disagreements such as this are not properly addressed.

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⁷⁴ Ibid.

⁷⁵ "PPHA's POSITION on HOUSE BILL No. 10680 - 'Dispensing Physicians'". Philippine Pharmacists Association, Inc, August 13, 2024. https://www.facebook.com/photo. PHP?fbid=891870209632098&id=100064273826624&set=a.621045173381271

Sustained funding support

Funding is also identified as a critical success factor and sustained funding will be needed to implement and enhance innovative practices and services in HRH development. Since the EBET Act is still in its early stages of implementation, current efforts in the education component of HRH, which includes scholarship schemes and return service programs, need an integrative approach to funding. A study on the correlation between a provident fund contribution, accessibility of jobs and skills development programs, and enhanced work performance might be a prospective study to look at the cost-benefit analysis of potential funding for HRH.

To illustrate the successes of sustained funding support, a current government model that has a sustained funding effort based on membership contributions is referenced to reflect how funding is utilized for jobs and skills development.

<u>Organization in Focus: The Overseas Workers Welfare Administration (OWWA) as a Jobs and Skills</u> <u>Development Mechanism for Migrant Workers</u>

OWWA traces its existence to a letter of instruction to the Ministry of Labor and Employment in 1977 as a funding program. This was further instituted as an independent administrative body attached to DOLE in 1982, followed by a charter enacted as Republic Act No. 10801 in 2016. It is a membership-based trust/provident fund for migrant workers that has been governed in part by a national budget, plus membership contributions from migrant workers across all professional categories including doctors, nurses, and caregivers.

It aims to develop and implement welfare programs and services that respond to the needs of its member-overseas Filipino workers (OFWs) and their families, which includes training and scholarship grants, welfare services, and social protection programs.

OWWA receives appropriations as a national government agency but also keeps a trust fund that its members and their dependents can access. In 2024, it received PHP 11 billion worth of public appropriations and its members' fund collection amounted to PHP 3 billion. As a result, it maintains a current menu of key programs and services in relation to jobs and skills development, and social protection is also part of this component. These existing programs and services are found below.

Т	Training and Scholarship Grants		Welfare Services		ocial Protection
1.	Technical / Vocational Courses	1.	Kamusta Kabayan Helpline	1.	Disability and
	 a. Skills for Employment 	2.	Pre-Departure Orientation		Death Benefit
	Scholarship Program (SESP)		Seminar (PDOS)	2.	Medical
	 b. Seafarer's Upgrading Program 	3.	Language Training and		Assistance
	(SUP)		Culture Familiarization		Program
	c. Information Technology Training	4.	Enhancement of OWWA	3.	Welfare
	Program		Apps and OWWA		Assistance Fund
2.	Baccalaureate and Degree Courses		Electronic Case Registry	4.	Special Financial
	a. Education for Development		and Response System		Assistance
	Scholarship Program		(E-CARES)		Program
	(EDSP)/One-Time Educational	5.	Workers Assistance		

⁷⁶ 2024 Approved Budget. Overseas Workers Welfare Administration, https://transparency.owwa.gov.ph/files/2023-01-06 2024%20APPROVED-BUDGET.pdf
⁷⁷ Ibid.

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	Assistance to Dependents of		Program (WAP)	
	OFWs	6.	Crisis Management	
b.	OFW Dependents Scholarship		Program	
	Program (ODSP)			
c.	Educational Support for Children			
	of Deceased OFWs			
d.	Mariner's <i>Dugtong Aral</i> (Bridging)			
	Program			
e.	Educational Assistance for School			
	Emergencies (EASE)			
f.	Supplemental Educational			
	Assistance for School-Age			
	Children of OFWs with On-Going			
	Welfare Case			

In its 4th Quarter report for 2024, OWWA provided services to 668,017 OFW members,⁷⁸ Membership also included migrant healthcare workers such as nurses and caregivers. The mechanism that enables its delivery of the above services has been closely tracked and monitored by Congress. It maintains a funding structure from its membership and public appropriations and a governance mechanism that protects its funds from misappropriation. A similar mechanism may not work with a private sector consortium if the governance is weak, its legal framework is not established, and if the professions are resistant to such a mechanism.

Proposed Key Performance Indicators for Future Programming

These critical success factors will help advance the innovations proposed for the healthcare workforce. To demonstrate if development plans will work, it is crucial to establish the key performance indicators as the building blocks for successful implementation. These indicators are proposed for HRH, which contains the proposed innovation, precise definitions, and means of verification. Baselines and targets are not going to be proposed, as this has to undergo rigorous consultations with stakeholders involved in implementing these innovations. The establishment of the consortium itself will be expected, and it is also expected that these innovations may be carried out by the said consortium. HRH will touch on three major domains: education, employment, and retirement. These innovations and solutions being sought are calibrated to respond to the HRH Master Plan's identified concerns.

This also calls for an opportunity to allow the private sector and local governments to participate in the next round of policy review on HRH to also to better define and arrive at a common understanding of what are the upskilling needs in both the private and the public sector, and how the market can better respond to the future shifts in healthcare priorities since this is absent in the current version launched in 2021.

Education

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Education efforts for HRH cut across vertical levels (pathways from basic education to continuing professional education) and horizontal levels (across disciplines). The goals of these efforts are to develop skills, support research and development, and align qualifications with the UHC Law and as part of the current NHRHMP which helps address the following concerns: lack of accurate HRH

⁷⁸ Program Assessment Report, 4th Quarter 2024. Overseas Workers Welfare Administration. https://transparency.owwa.gov.ph/files/2025-01-30_OWWA%20PAR_Q42024.pdf

information to guide planning and policy; limited collaboration among stakeholders with multiple roles in the HRH management; fragmented HRH governance and unclear accountabilities; and poor implementation of policies on HRH management and development⁷⁹. The following indicators are tied to the innovations developed for the education sector:

Table 23. Key Performance Indicators on Education

Innovations	Innovations Indicators Precise Definitions Means of Verification					
in Education	indicators	Frecise Delimitions	ivieans of verification			
Private-public sector HRH coordination mechanism	Number of innovations executed	Innovations executed: these are technologies that are scalable, useful, and performed collaboratively among students, faculty, and/or professionals; using WHO's definition of health technology, this is "the application of organized knowledge and skills in the form of medicines, medical devices, vaccines, procedures and systems developed to solve a health problem"	Events where these innovations are launched and implemented collaboratively by students, faculty, and/or professionals in the healthcare sector in a public event.			
Data visualization	Number of innovative research presented Number of students who participated in programs related to patient care	Innovative research: these are evidence-based materials that use data-driven approaches and methodologies, aiming to contribute to the development of innovations in healthcare Students: individuals who are actively engaged in education; for purposes of programming, the scope will start at the junior high school level and can go up to the baccalaureate (higher education) and National Certificate (TVET) levels Participation: demonstrated performance of individuals in a program through formal and informal post-activity assessments Programs: these are activities which aim to grow appreciation of patient care with no direct application of healthcare skills or procedures. These programs include, but are not limited to: conferences, seminars, fora, interviews, and research that will not require any form of ethical clearance. Patient care: Defined as services for people who are in need of interventions to address their diseases, both communicable and non-communicable in nature. They are supervised by healthcare professionals, by which students will not directly perform any healthcare skill or	Presentation of research in a private sector or government activity and validation among stakeholders in the private and public sector 1. Attendance and participation in the program 2. Post-activity assessments and feedback			
Policy reform package	Number of relevant skills	procedure. Relevant skills: these are skills that are related to healthcare demonstrated by a professional, which includes primary	Curricula or training packages which are developed for students,			

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 $^{^{79}}$ National Human Resources for Health Master Plan 2020-2040. Department of Health, p. 5.

Innovations in Education	Indicators	Precise Definitions	Means of Verification
	developed	care skills and specialist skills; these skills may be adopted from international references and other countries, and tailored to the needs of the local health system	faculty, and professionals
	Number of programs aligned with the UHC Law	Programs: these are the healthcare curricula in higher education and TVET which were issued prior to the passage of the UHC Law in 2018, which may also be developed through the EBET Act of 2024; priority to be determined if primary care or specialist care will be aligned	Revised CHED policies standards and guidelines; and TESDA TRs which are collaboratively reviewed with the private sector

Employment

Employment efforts will be anchored on the current issues that the healthcare workforce is facing in the private sector which includes working conditions and compensation. The goals of these efforts are to improve wage conditions, retain workers and increase length of stay, and create job security by giving workers security of tenure. The following indicators are tied to the innovations developed for the employment sector:

Table 24. Key Performance Indicators on Employment

Innovations in	Indicators	Precise Definitions	Means of Verification
Private-public sector HRH coordination mechanism	Percent improvemen t in wages and earnings	Improvement: this is the positive growth in a worker's financial condition, which considers inflation and current living costs Wages: this is the net receivable income of a worker, without counting fringe benefits and taxes;	1. Surveys and questionnaires with respondents from private sector healthcare institutions such as but not limited to hospitals, laboratories, clinics, wellness centers, or the like which aim to gather
		Earnings: this refers to the savings and financial credit which a worker gained	midline and endline wages 2. Focus group discussions with select primary care workers and select specialists which aim to validate midline and endline wages and earnings
Data visualization	Number of regions with reported shortages	Regions: all regions in the Philippines Reported shortages: this refers to the understaffing which private healthcare facilities report to on a defined period (whether monthly or quarterly); this also includes data on the length of stay by number of months or years, and employment status whether permanent or contractual	1. Datasets from private healthcare facilities, with preference to a tabulated list of vacancies 2. Datasets from independent recruitment platforms such as JobStreet and LinkedIn

Innovations in Education	Indicators	Precise Definitions	Means of Verification
Policy reform package	Percent improvemen t in retention of workers with an employer	Improvement: this is the positive growth in the period of stay of a worker Retention: this pertains to the average length of stay by months or years per profession, and use of strategies to discourage leaving work Workers: this pertains to the healthcare workforce, specifically in primary care and specialist care Employer: this pertains to a facility who employs healthcare workers such as hospitals, laboratories, clinics, wellness centers, or the like	1. Surveys and questionnaires with respondents from private sector healthcare institutions such as but not limited to hospitals, laboratories, clinics, wellness centers, or the like which aims to gather the baseline, midline, and endline average length of stay 2. Focus group discussions with select primary care workers and select specialists which aim to validate the baseline, midline, and endline average length of
	Number of regularized workers	Regularization: this pertains to the conditions where job security is met; job security is defined as the situation where a worker's tenure is secured determined by the presence of a permanency contract	stay Questionnaires and key informant interviews with healthcare workers on job security and working conditions

Retirement

Workers may opt to plan for retirement based on personal and professional priorities. The concept of retirement will apply to workers who aim to permanently shift to another field, leave the country and return, or those who aim to venture into entrepreneurship. These ventures will be measured based on workers' plans. The following indicators are tied to the innovations developed for the retirement condition of healthcare workers:

Table 25. Key Performance Indicators on Retirement

Innovations in Education	Indicators	Precise Definitions	Means of Verification
Private-public sector HRH coordination mechanism	Number of retirement plans developed	Retirement: This refers to the departure of a worker from the healthcare system which is permanent in nature; this may be in the mode of an early retirement, entry into another industry, or immigration to another country Plans: a document that highlights the intentions of retirees to work or invest in ventures; these retirement plans may be related to healthcare such as but not limited	1. Attendance and participation of prospective retirees in a retirement planning program 2. Drafted retirement plans in a desired track such as research, entrepreneurship, or training, which may be regularly updated

	to establishing healthcare businesses, entry into consultancies, mentorship opportunities, or the like	
Number of re-entry opportunities adopted by retirees	Re-entry: This refers to the re-admission of a worker into the healthcare system Opportunities adopted: these refer to the different ventures that a	Drafted retirement plans in a desired track such as research, entrepreneurship, or training, which may be regularly updated
	healthcare worker may be involved in their return to the healthcare system; these may be related to the plans that they earlier developed which may be used to enter into entrepreneurship, consultancies, education, and research	2. Ventures of a worker who retired or re-entered the health system as researchers, entrepreneurs, or trainers.

Data quality assurance

Good data for HRH development work is more critical in light of technology adoption and consequent upskilling. Information from HRH development programs should meet the prescribed criteria for data quality. This covers validity, integrity, precision, reliability, and timeliness.

Data quality assurance must be centered on individuals and should consider sociocultural and socioeconomic profiles. These are needed for both private and public sector employment. The following variables must be built into programming and will need periodic quality assurance and assessments:

Table 26. Sociocultural disaggregates

Sex	Age	Disability Profile	Indigenous Person Profile
- Male	- 14 – 35	- No disability	- No affiliation
- Female	(Youth)	- Deaf/hard of hearing	- With affiliation
- Neither	- 35 – 60	- Intellectual	
	(Regular Labor	- Learning	
	Force)	- Mental	
	- 60+ (Senior)	- Psychosocial	
		- Non-apparent visual disability	
		- Non-apparent speech and language	
		impairment	
		- Non-apparent cancer	
		- Non-apparent rare disease	

Table 27. Socioeconomic disaggregates

Educational Attainment	Employment Typology	Licensure/ Eligibility Category	Occupation	Employment History/Year s of Exp.
- Junior High	Local public health facilityLocal private	- No	- Dentist	- Fresh
School		license	- Dental	graduate
- SHS		- With PRC	hygienist	(<1 year)
- Technical	healthcare	license	- Dental	- 1-2 years
Training	facility	(private)	technologist	- 3-5 years
(National	- Overseas	- Civil	- Medical	- 6-9 years

Educational	Employment	Licensure/	Occupation	Employment
Attainment	Typology	Eligibility		History/Year
Certificate) - determine levels - Baccalaure ate - Doctor of Medicine/ Masteral Degree/ Law - Academic Doctorate/ Postgraduat e	healthcare (OFW) - Self-employed - Entrepreneurs hip/ Business - Academe - Research and development consultancy - No employment	service profession al (public) - Board/Bar passer for civil service under Republic Act No. 1080 (public)	technologist - Physician - Midwife - Nurse - Nutritionist- dietician - Optometrist - Pharmacist - Physical therapist - Occupational therapist - Radiologic technologist - X-ray technologist - Respiratory therapist - Barangay health worker - Emergency medical services worker - Molecular biologist - Clinical analyst - Laboratory technician - Nursing assistant or aide - Operator of medical equipment and maintenance technicians of medical equipment - Health economist - Health policy specialist - Health communicator - Traditional medicine practitioner - Food technologist - Ocular pharmacologist - Psychometricia	s of Exp. - 10+ years

Educational Attainment	Employment Typology	Licensure/ Eligibility Category	Occupation	Employment History/Year s of Exp.
			n - Speech-languag e pathologist - Sanitary engineer - Veterinarian - Assistive Rehabilitation Technology Services - Community Nutrition Services - Medical Transcription - Contact Tracing - Others not specified	

CHAPTER 6: CONCLUSION AND WAYS FORWARD

A future where the healthcare sector embraces innovations and digital transformation to drive active collaborations and partnerships between the public and private sector to enhance healthcare education, certification, employment, and delivery is a future where healthcare becomes accessible and enjoyed by all. A number of digital tools can be applied to capture numbers, competence and geographical location of health workers. These create at least three products: a GIS dashboard to guide academe, health and labor authorities in making evidence based decisions. Second, the tool helps the health workers in aligning education, qualifications and employment opportunities. Third, Al tools can assist in improving the gaps made by insufficient HRH in critical areas of health and sick care. The Health Sector Skills Council (HSSC) project concludes that the HRH Network should serve as the nidus of the HSSC with the assistance of a consortium of private sector stakeholders. Best practices from models like Australia can serve as benchmarks of collaboration, and the Technical and Further Education (TAFE) model in the enhancement of the Philippine healthcare workforce through private and public partnership.

The current landscape of healthcare seems daunting with a lot of fragmentation, issues, and gaps that need to be addressed, i.e. the numbers, the skills, and the willingness to serve, all supported by various studies and surveys. The misalignment of agencies, the exclusion of the private sector from the HRH master plan, and the disconnect between workforce production, deployment, and actual health system needs to resonate strongly. The interplay among academic institutions, regulatory bodies, and financial incentives shapes the HRH supply in ways that may not fully align with national service demands. The market-driven nature of career choices, coupled with institutional distortions such as hospital-led demand, further complicates the issue of maldistribution. These are the challenges that the healthcare workforce faces.

The public sector, through DOH, CHED, TESDA, DepEd, DOLE, and DILG, among others, have already made strides to create policies and programs to address these healthcare issues and create reforms to the standards and implementation of programs for healthcare education and employment, especially with the emergence of digital technology that drastically changes the way that things can be done and achieved. Concurrently, the private sector also has their own initiatives to improve healthcare, though more focused in employment and healthcare delivery. However, these initiatives need a consolidating and coordinating authority to steer, integrate, and influence all relevant sectors to participate, support, and monitor these reforms towards the vision of a sustainable universal health care, focusing on HRH.

The complexity of the Philippine HRH ecosystem demands the creation of a value chain approach. It begins with an appreciation of the production/education side, followed by examining the regulatory regime for health workers, and then the employment/jobs and distribution, and with this, the issues of compensation and benefits to retain or to migrate and how individuals reintegrate back into the Philippines. There are problems at every point of this value chain. Digital innovations can help address these challenges by reinforcing exisiting information and communications technology (ICT) tools that the industry possesses for education and employment improvements. which the healthcare sector will benefit from. Moving forward, a value chain approach that leverages digital transformation is critical to bridging these challenges and strengthening a resilient healthcare system. Moving forward is to address these gaps. Finally, the HRH Network, assisted by a consortium of private health sector players, should be designated as the Sector Skills Council. This council must align the various agencies to strengthen the HRH value chain.

REFERENCE LIST

"11 out of 18 Regions Recorded Significant Decreases in Poverty Incidence in 2023". Philippine Statistics Authority, August 15, 2024. https://psa.gov.ph/statistics/poverty

"2021 Annual Survey of Philippine Business and Industry (ASPBI) - Human Health and Social Work Activities Section: Final Results". Philippine Statistics Authority, October 7, 2023. https://psa.gov.ph/content/2021-annual-survey-philippine-business-and-industry-aspbi-human-health-and-social-work

"2022 Annual Survey of Philippine Business and Industry (ASPBI) - Human Health and Social Work Activities Section: Preliminary Results". Philippine Statistics Authority, August 15, 2024. https://psa.gov.ph/content/2022-annual-survey-philippine-business-and-industry-aspbi-human-health-and-social-work

2024 Approved Budget. Overseas Workers Welfare Administration, https://transparency.owwa.gov.ph/files/2023-01-06_2024%20APPROVED-BUDGET.pdf

"7 ways TAFE can launch your career in health, nursing & care". Victoria University. Accessed on 17 December 2024.

https://www.vu.edu.au/about-vu/news-events/study-space/7-ways-tafe-can-launch-your-career-in-health-nursing-care

Abunales, J.L. et. Al. "Evaluation of Medication Errors among Inpatients in a Tertiary Government Hospital's Pulmonary Medicine Services: A Cross-sectional Retrospective Study" Acta Medica Philippina, Acta Med Philipp [Internet]. 2024 Oct. 7 [cited 2025 Jan.26]. Available from: https://actamedicaphilippina.upm.edu.ph/index.PHP/acta/article/view/10684

Alibudbud R. Addressing the Burnout and Shortage of Nurses in the Philippines. SAGE Open Nursing. 2023;9. doi:10.1177/23779608231195737.

Atasoy H, Greenwood BN, McCullough JS. The Digitization of Patient Care: A Review of the Effects of Electronic Health Records on Health Care Quality and Utilization. Annu Rev Public Health. 2019 Apr 1;40:487-500. doi: 10.1146/annurev-publhealth-040218-044206. Epub 2018 Dec 19. PMID: 30566385.

"Better care for more people: Bridging gaps in healthcare". Future Health Index 2024. Philips. https://www.philips.com/c-dam/corporate/newscenter/global/future-health-index/report-pages/ex-perience-transformation/2024/first-draft/philips-future-health-index-2024-report-better-care-for-more-people-global.pdf

Cabalza, Dexter. "New solution to lack of PH health workers eyed." Philippine Daily Inquirer, January
1, 2025. https://newsinfo.inquirer.net/2020330/new-solution-to-ph-lack-of-health-workers-eyed
. "UP Manila, TESDA offer tech courses for medical support staff". Philippine Daily
Inquirer, February 3, 2025.
https://newsinfo.inquirer.net/2030781/up-manila-tesda-offer-tech-courses-for-medical-support-staff
#ixzz8z9vZi9hD

"Center of Excellence and Center of Development Programs". Commission on Higher Education, 2022.

https://ieducationphl.ched.gov.ph/wp-content/uploads/2022/02/List-of-Centers-of-Excellence-and-Development.pdf

CHED Memorandum Order No. 11, s. 2023. "Accelerated Pathway for Medicine (APMed) Program: A Pilot Implementation for Development of Future-Ready Physicians". Commission on Higher Education. https://ched.gov.ph/wp-content/uploads/CMO-NO.-11-S.-2023.pdf.pdf

"Climate Change and Human Health". United States Environmental Protection Agency. Accessed on 15 December 2024. https://www.epa.gov/climateimpacts/climate-change-and-human-health

Coghlan, Benjamin et. al. "Proceed with Care: Meeting the Human Resources Needs for Health and Aged Care in Asia and the Pacific". ADB Briefs, No. 285. Asian Development Bank, December 2023.

Department Order No. 2020-0653. Department of Health, October 21, 2020.

"Deputized Higher Education Institutions (as of December 2023)." Commission on Higher Education, 2023. https://ched.gov.ph/wp-content/uploads/ETEEAP-HEIs-as-of-Dec-18-2023-1.pdf

Director Johanna Banzon, HSSC Validation Session, February 17, 2025. Hybrid: Zoom, Bayanihan Center, Mandaluyong City.

DOH Administrative Order No. 2021-0007. "Guidelines on the Integrated Learning and Development Management System of the Department of Health". Issued on January 12, 2021. https://law.upd.edu.ph/wp-content/uploads/2021/05/DOH-Administrative-Order-No-2021-0007.pdf

"DRIVERS Implementation in the Philippines: Supporting Traffic Safety Information System in Southeast Asia".

https://www.itf-oecd.org/sites/default/files/docs/drivers-implementation-philippines.pdf.

DRIVERS System. Department of Transportation in League of Cities of the Philippines. https://lcp.org.ph/UserFiles/League of Cities/file/DOTr-Road-Crash-Platform.pdf

Dugay, Christine. "A Blueprint for Action: Solving the Nursing Crunch 2.0." Ipsos Strategy and Optum Philippines, June 26, 2024.

Estrella, Raymond. "Study on the Filipino Health Workforce: A Sequential Exploratory Analysis of Decent Work Outcomes in Metro Manila, Metro Cebu, and Metro Davao Hospitals." Institute for Labor Studies. Manila: Department of Labor and Employment, 2021.

"Fee-Free TAFE". Department of Employment and Workplace Relations. Australian Government, 3 February 2025. https://www.dewr.gov.au/skills-reform/fee-free-tafe

Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, Fineberg H, Garcia P, Ke Y, Kelley P, Kistnasamy B, Meleis A, Naylor D, Pablos-Mendez A, Reddy S, Scrimshaw S, Sepulveda J, Serwadda D, Zurayk H. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. Lancet. 2010 Dec 4;376(9756):1923-58. doi: 10.1016/S0140-6736(10)61854-5. Epub 2010 Nov 26. PMID: 21112623.

Generalao, Ian. "Revamping enterprise-based training in the Philippines: Addressing barriers and disincentives to industry involvement". PIDS-EDCOM II Policy Notes No. 2024-10. Manila: Philippine Institute of Development Studies, 2024.

https://pidswebs.pids.gov.ph/CDN/document/pidspn2410.pdf

"Gov't assigns anti-COVID czars". Presidential Communications Office, 13 July 2020. https://pco.gov.ph/news_releases/govt-assigns-ph-anti-covid-czars/

Hartigan-Go, Kenneth and Bongcac, Marianne and Castillo, Angel Faye and Del Rosario, Laura and Eleazar, Ella Mae and Liamzon, Cristina M and Mendoza, Ronald U. and Mina, Enrico and Prieto, Melissa Louise, Navigating the Nursing Exodus: Investigating Philippines' Bilateral Labor Agreements and its Impact on Nursing Migration (November 12, 2024). Available at SSRN: https://ssrn.com/abstract=5017445 or https://dx.doi.org/10.2139/ssrn.5017445

Hartigan-Go, MD KY, Prieto ML, Valenzuela, MPM SA. Important but Neglected: A Qualitative Study on the Lived Experiences of Barangay Health Workers in the Philippines. Acta Med Philipp [Internet]. 2024 Oct. 4 [cited 2025 Jan. 16]. Available from: https://actamedicaphilippina.upm.edu.ph/index. https://actamedicaphilippina.upm.edu.ph/index. PHP/acta/article/view/9589

Health Labor Market Analysis Report 2023. Manila: Department of Labor and Employment.

Health practitioner regulation: design, reform and implementation guidance. Geneva: World Health Organization; 2024. License: CC BY-NC-SA 3.0 IGO.

"Implementing Guidelines for the Identification, Support, and Development of Centers of Excellence and Centers of Development for Health-Related Education Programs". CHED Memorandum Order No. 17, 2006. Manila: Commission on Higher Education, 2006.

Liwanag, H.J., Uy, J., Politico, M.R., Padilla, M.J., Arzobal, M.C., Manuel, K., Cagouia, A.L., Tolentino, P., Frahsa, A., & Ronquillo, K. (2022). Cocreation in Health Workforce Planning to Shape the Future of the Health Care System in the Philippines. Global Health: Science and Practice, 10(6). https://doi.org/10.9745/GHSP-D-22-00176

"Look: World Bank Reaffirms Support to the DOH Programs". September 18, 2024. https://www.facebook.com/DOHgovPH/posts/pfbid02ByDZzfs3Js3KUrrH1Kbg4mpUGQSe3Z7mybzqHYdVGFxBsxCgjezuSszt8a8G3NuQl

Mangaluz, Jean. "PH has a shortage of 190,000 healthcare workers says DOH". Philippine Daily Inquirer, May 22, 2024.

https://newsinfo.inquirer.net/1943481/ph-has-a-shortage-of-190000-healthcare-workers-says-doh.

Mapua School of Health Sciences. January 31, 2025.

https://www.facebook.com/mapuahealthsciences/photos/-join-us-for-an-exciting-ai-powered-learning-experience-were-gearing-up-for-happ/533144506436570/

Medical Scholarship and Return Service (MSRS). Commission on Higher Education. https://ched.gov.ph/medical-scholarship-and-return-service/?appgw_azwaf_jsc=UNgo-7UCmJCzbZj wDNiTUZiHes8v OKWnL4FNG4Ycho#

Menachemi N, Collum TH. Benefits and drawbacks of electronic health record systems. Risk Manag Healthc Policy. 2011;4:47-55. doi: 10.2147/RMHP.S12985. Epub 2011 May 11. PMID: 22312227; PMCID: PMC3270933.

Muruga, K and Iveta, L. "Exploring Medical Practitioner's Dual Practice: Motivating Factors and their Impact on Work Performance" WSEAS Transactions on Business and Economics, Published on November 28, 2024. DOI: 10.37394/23207.2024.21.191

National Expenditure Program: Department of Health. Department of Budget and Management. https://www.dbm.gov.ph/wp-content/uploads/NEP2025/DOH/DOH.pdf

National Human Resources for Health Master Plan 2020-2040. Department of Health.

"New EBET Framework Act seeks to bridge job-skills gap, boost employment opportunities for Filipinos". The Second Congressional Education Commission (EDCOM II). November 7, 2024. https://edcom2.gov.ph/new-ebet-framework-act-seeks-to-bridge-job-skills-gap-boost-employment-opportunities-for-filipinos/

Office of the President Memorandum Circular No. 72, Series of 2024. "Adopting the National Human Resource for Health Master Plan 2020-2040, and Directing the Implementation Thereof". Issued on October 28, 2024.

Ombay, Giselle. DOH: Lack of healthcare workers an obstacle to PH goal of being among Asia's healthiest by 2040". GMA Integrated News, June 13, 2024.

https://www.gmanetwork.com/news/topstories/nation/910004/doh-lack-of-healthcare-workers-an-obstacle-to-ph-goal-of-being-among-asia-s-healthiest-by-2040/story/

Overseas Labor Market Forum, Department of Migrant Workers, November 28, 2024. https://www.facebook.com/watch/live/?ref=watch_permalink&v=520863597584633

Overseas Labor Market Situationer, Volume 1 Issue 1. Department of Migrant Workers, November 2024.

Panelo, Solon, Ramos, et al. in de Claro et. al. "The role of local health officers in advancing public health and primary care integration: lessons from the ongoing Universal Health Coverage reforms in the Philippines": BMJ Global Health 2024;9:e014118.

Philippine One Health University Network. https://www.seaohun.org/philohun

"Philippines healthcare benefit costs projected to continue its double-digit increase at 18.3 percent in 2025, WTW survey finds". Willis Towers Watson, January 6, 2025. Philippines healthcare benefit costs to continue its double-digit increase - WTW

"Philippines ratifies ILO Convention on Labour Inspection". International Labour Organization, November 5, 2024.

https://www.ilo.org/resource/news/philippines-ratifies-ilo-convention-labour-inspection

"PPHA's POSITION on HOUSE BILL No. 10680 - 'Dispensing Physicians'". Philippine Pharmacists Association, Inc, August 13, 2024. https://www.facebook.com/photo.

PHP?fbid=891870209632098&id=100064273826624&set=a.621045173381271

"PRC: Only 59.7 percent of Philippines' doctors practicing; nurses, only 53.55 percent". GMA News Online, March 27, 2023.

https://www.gmanetwork.com/news/topstories/nation/865188/prc-only-59-7-of-philippines-doctors-practicing-nurses-only-53-55/story/

Program Assessment Report, 4th Quarter 2024. Overseas Workers Welfare Administration. https://transparency.owwa.gov.ph/files/2025-01-30 OWWA%20PAR Q42024.pdf

Resolution No. 2018-1089. Revised Rules on the Accreditation of Professional Organizations and Integrated Professional Organizations. Professional Regulation Commission. https://www.prc.gov.ph/prc-resolution-no-2018-1089

Second Congressional Commission on Education. "Fixing the Foundations: A Matter of National Survival: EDCOM II Year Two Report", 2025.

"The role of regulation in nursing and midwifery in Australia: A legacy of excellence and advocacy." Australia Nursing and Midwifery Journal. October 31, 2024.

https://anmj.org.au/the-role-of-regulation-in-nursing-and-midwifery-in-australia-a-legacy-of-excellence-and-advocacy/

Vergil de Claro, Juan Bernardo Lava, Clemencia Bondoc, Laurentiu Stan - The role of local health officers in advancing public health and primary care integration: lessons from the ongoing Universal Health Coverage reforms in the Philippines: BMJ Global Health 2024;9:e014118.

"WHO outlines considerations for regulation of artificial intelligence for health." Geneva: World Health Organization, October 19, 2023.

 $\frac{https://www.who.int/news/item/19-10-2023-who-outlines-considerations-for-regulation-of-artificial}{-intelligence-for-health}$

Who We Are. Southeast Asian One Health University Network (SEAOHUN). https://www.seaohun.org/who-we-are

APPENDICES

Chapter 1: The Current Landscape of Philippine Human Resources for Health

A. Healthcare-related professional education: laws and Policies, Standards, and Guidelines (PSGs) of the licensed professions (Tertiary and TVET)

Profession/ Discipline	Educational Attainment (PQF Level)	Government Agency, Policy Number, and Year Issued	Titles and Brief Remarks
Dentistry (DMD)	Tertiary (Level 6)	No. 3, s. 2018	Policies, Standards and Guidelines for the Doctor of Dental Medicine (DMD) Program Philippine Dental Act of 2007
Dental Hygiene	TVET (Level 4)	1. TESDA Training Regulations 2. Republic Act No. 9484 (2007)	National Certificate (Level IV) on Dental Hygiene Philippine Dental Act of 2007
Dental Technology	TVET (Levels 1, 2 and 4)	1. TESDA Training Regulations 2. Republic Act No. 9484 (2007)	National Certificate (Levels I, II, and IV) on Dental Technology Philippine Dental Act of 2007
Food Technology	Tertiary (Level 6)	1. CHED Memorandum Order No. 7, s. 2019 2. Republic Act No. 11052 (2018)	1. Policies, Standards and Guidelines for the Bachelor of Science in Food Technology - <u>with</u> <u>Certificate Degree</u> 2. Philippine Food Technology Act
Medical Technology/Me dical Laboratory Science (RMT)	Tertiary (Level 6)	1. CHED Memorandum Order No. 13, s. 2017 2. Republic Act No. 5527 (Republic Act No. 6138 as amended, 1970) 3. Presidential Decree No. 498, s. 1974 4. Presidential Decree No. 1534, s. 1978	1. Policies, Standards and Guidelines for the Bachelor of Science in Medical Technology/Medical Laboratory Science (BSMT/MLS) Program 2. Philippine Medical Technology Act of 1969 3. Amendments to the Medical Technology Act (Sections 2-4, 7-8, 11, 13, 16-17, 21 and 29) 4. Amending Further Republic Act Npo. 5527 with Amendments from Presidential Decree No. 498, s. 1974
Medicine (MD)	Tertiary (Level 7)	and 5946, as amended – 1965 and 1969)	1. Policies, Standards and Guidelines for the Doctor of Medicine (MD) Program 2. Accelerated Pathway for Medicine (APMed) Program: A Pilot Implementation for Development of Future-Ready Physicians 3. Philippine Medical Act of 1959 (with Amendments to Sections 3-7, 9-16, 18-22, and 25) 4. Recognition of Specialty Societies and Specialty Boards, and Certification of Specialists

Midwifery (RM)	Tertiary (Level 6)	1. CHED Memorandum Order No. 3, s. 2023 2. Republic Act No. 2644 (1960), (Republic Act No. 7392 as Amended)	1. Policies, Standards and Guidelines for the Bachelor of Science in Midwifery (BSM) Program - with Certificate and Diploma Degrees 2. Philippine Midwifery Law (amended as Philippine Midwifery Act of 1992)
Nursing (RN)	Tertiary (Level 6)	1. CHED Memorandum Order No. 15, s. 2017 2. Republic Act No. 877 (Republic Act Nos. 4704 and 7164, as amended – 1966 and 1991) 3. Republic Act No. 9173 (2002) 4. PRC-Board of Nursing Resolution No. 22, s. 2017	 Policies, Standards and Guidelines for the Bachelor of Science in Nursing (BSN) Program Philippine Nursing Law Philippine Nursing Act of 2002 Promulgation of the Philippine Nursing Practice Standards (PPNPS)
Nutrition and Dietetics (RND)	Tertiary (Level 6)	1. CHED Memorandum Order No. 14, s. 2017 2. Presidential Degree No. 1286 (1977) 3. Republic Act No. 10862 (2016) - repealing P.D. No. 1286	2. Nutrition and Dietetics Decree of 1977 3. Nutrition and Dietetics Law of 2016
Optometry (OD)	Tertiary (Level 6)	1. CHED Memorandum Order No. 15, s. 2018 2. Republic Act No. 8050 (1995)	Policies, Standards and Guidelines for the Doctor of Optometry Program Revised Optometry Law of 1995
Pharmacy (RPh)	Tertiary (Level 6)	l	1. Policies, Standards and Guidelines for the Bachelor of Science in Pharmacy Program 2. Philippine Pharmacy Act (1969) 3. Philippine Pharmacy Act
Occupational Therapy (OT)	Tertiary (Level 6)	1. CHED Memorandum Order No. 52, s. 2017 2. Republic Act No. 11241 (2018)	1. Policies, Standards and Guidelines for the Bachelor of Science in Occupational Therapy Education Program 2. Philippine Occupational Therapy Law of 2018 (separating Occupational and Physical Therapy)
Physical Therapy (PTRP)	(Level 6)	1. CHED Memorandum Order No. 55, s. 2017 2. Republic Act No. 5680 (1969)	1. Policies, Standards and Guidelines for the Bachelor of Science in Physical Therapy Education Program 2. Philippine Physical and Occupational Therapy Law (Republic Act No. 11241 is separate legislation which isolates Occupational Therapy)

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Psychology (RPsy) and Psychometrics (RPm)	1 ' '	1. CHED Memorandum Order No. 34, s. 2017 2. Republic Act No. 10029 (2009)	1. Policies and Standards for Undergraduate Programs in Psychology - Bachelor of Arts & Bachelor of Science 2. Philippine Psychology Act of 2009 a. Differentiated from Psychometrician practice under Article III, Sections 3-c and d b. Psychologists and Psychometricians share one Professional Regulatory Board	
Radiologic Technology (RadTech) and X-Ray Technology (XT)	(2010: 0)	1. CHED Memorandum Order No. 7, s. 2018 2. Republic Act No. 7431 (1992)	 1. Policies, Standards and Guidelines for the Bachelor of Science in Radiologic Technolgy Education Program 2. Radiologic Technology Act of 1992 	
Respiratory Therapy (RTRP)	Tertiary (Levels 6)	1. CHED Memorandum Order No. 53, s. 2017 2. Republic Act No. 10024 (2009)	Policies, Standards and Guidelines for the Bachelor of Science in Respiratory Therapy Philippine Respiratory Therapy Act of 2009	
Sanitary Engineering (RSE)	Tertiary (Level 6)	1. CHED Memorandum Order No. 98, s. 2017 2. Republic Act No. 1364 (1955)	Policies, Standards and Guidelines for the Bachelor of Science in Sanitary Engineering, Effective Academic Year 2018-2019 Sanitary Engineering Law	
Speech-Langua ge Pathology (RSLP)	I	1. CHED Memorandum Order No. 59, s. 2017 2. Republic Act No. 11249 (2019)	Policies, Standards and Guidelines for the Bachelor of Science in Speech-Language Pathology Program Speech Language Pathology Act	
Veterinary Medicine (DVM)	Tertiary (Level 6)	1. CHED Memorandum Order No. 1, s. 2018 2. Republic Act No. 9268 (2004)	Policies, Standards and Guidelines for the Doctor of Veterinary Medicine Program Philippine Veterinary Medicine Act of 2004	

B. Healthcare-related professions education policies: Training Regulations (TRs) of the non-licensed professions (TVET)

Profession/ Discipline	National Certificate (PQF Level)	TESDA Policy (Board Resolution) Number and Year Issued	Qualification Descriptor and Nominal Duration (Number of Hours), as stated in the Training Regulation
Animal Health Care and Management	NC III (Level 3)	2007-14, 2021-13	Consists of competencies that a person must achieve in providing livestock health care in both backyard and commercial livestock farms under the supervision of a veterinarian. Hours: 208

Assistive Rehabilitation Technology Services (Wheelchair)	NC II (Level 2)	Board Resolution No. 2021-28	Consists of competencies that a person must achieve to properly and systematically receive wheelchair referral and appointment, assist the wheelchair clinician during assessment, coordinate procurement of the appropriate wheelchair size and its parts, assemble wheelchairs and fabricate/install modifications, assist the wheelchair clinician during wheelchair checkout and fitting and user training, and perform maintenance and repair wheelchairs. These competencies are required to an individual who engage with in the wheelchair service delivery for wheelchair users.
Assistive Rehabilitation Technology Services (Prosthetics)	NC II (Level 2)	Board Resolution No. 2021-14	Consists of competencies that a person must achieve to create a positive mold from a negative cast, fabricate a transtibial/ankle disarticulation prosthesis, a transfemoral/knee disarticulation prosthesis, a trans-radial/wrist disarticulation prosthesis, a trans-humeral/elbow disarticulation/shoulder disarticulation prosthesis and perform basic repair and/or replacement of the prosthetic devices. These competencies are required to an individual who engage with in the delivery of prosthetic devices.
Assisting	NC II	Doord Desclution No.	
Assistive Rehabilitation Technology Services (Orthotics)	NC II (Level 2)	Board Resolution No. 2021-20	Consists of competencies that a person must achieve to create a positive mold from a negative cast, fabricate a foot orthosis, an ankle-foot orthosis, knee-ankle-foot orthosis, wrist-hand orthosis, customized plastic thoraco-lumbo-sacral orthosis and perform basic repair and/or replacement of the orthotic devices. These competencies are required to an individual who engage with in the delivery of orthotic devices.
			Hours: 1,053
Barangay Health Services	NC II (Level 2)	Board Resolution No. 2019-08	Consists of competencies that a person assist the household to identify health problems to promote health and well-being, share knowledge and skills among members to provide information, education and communication (IEC) and/or household teaching in disease promotion and control, ensure the proper maintenance of health station and safe custody and its medical supplies, materials and health records, monitor health status of household members under his/her area of service coverage, maintain updated list/records of health activities.

Biomedical Equipment Servicing	NC II (Level 2)	Board Resolution Nos. 2006-09, 2023-11	Consists of competencies that must be possessed to enable a person to install, perform corrective and preventive maintenance and evaluate and refer biomedical equipment. Hours: 617
		D 10 1 11 11	
Caregiving (Newborn to Pre-Schooler)	NC II (Level 2)	Board Resolution No. 2020-19	Consists of competencies that a person must achieve to participate in the implementation and monitoring of newborn's care plan, perform caring skills for newborn, recognize newborn's growth and development, participate in the implementation and monitoring of infant's care plan, provide physical needs, care and support to infant, foster social, intellectual and emotional development of infant, participate in the implementation and monitoring of toddler's care plan, perform caring skills for toddler, recognize growth and development of toddler, participate in the implementation and monitoring of preschooler's care plan, perform caring skills for preschooler and recognize growth and development of preschooler
			Hours: 625
Caregiving (Grade Schooler to Adolescent)	NC II (Level 2)	Board Resolution No. 2020-20	Consists of competencies that a person must achieve to provide assistance and care to personal needs of grade schoolers, foster physiological needs and cognitive development of grade schooler, foster physical growth and development of grade schooler, respond to emergency for grade schooler, foster physical growth and development of adolescent, promote developmental tasks for adolescent and respond to emergency for adolescent.
			Hours: 549
Caregiving (Elderly)	NC II (Level 2)	Board Resolution No. 2020-21	Consists of competencies that a person must achieve to develop the ability to recognize aging process, participate in the implementation and monitoring of client's care plan, perform caring skills, perform specialty care procedures and assist clients in administering medication
			Hours: 561

Caregiving (Clients with Special Needs)	NC II (Level 2)	Board Resolution No. 2020-22	Consists of competencies that a person must achieve to participate in the implementation and monitoring of client's care plan, provide assistance and support to clients with special needs, recognize healthy body systems and apply medical terminology, provide care to clients with special needs, assist in administering medications to clients with special needs, provide care and support to clients with special needs, respond to emergency situations, provide immediate care and support to children with special needs, and provide immediate care and support to adults and elderly with special needs.
Community Nutrition Services	NC II (Level 2)	Board Resolution No. 2022-11	Hours: 813 Involves the conduct of assessment of the nutritional status of children under five years old, assist the Barangay Nutrition Committee in performing its functions, assist in the delivery of nutrition and related services, promote adoption of positive nutrition behaviors, and monitor and evaluate community nutrition programs.
Contact Tracing	NC II (Level 2)	Board Resolution No. 2021-28	Hours: 326 Consists of competencies that a person must achieve to conduct case investigation and contact identification, conduct profiling of contacts and follow-up, conduct referral to health facility, quarantine facility, and other relevant agencies, conduct health education programs, perform data recording and reporting and conduct monitoring and surveillance. Hours: 301
Emergency Medical Services	NC II (Level 2)	Board Resolution Nos. 2013-16, 2021-13	Consists of competencies that a person must achieve to perform cardiopulmonary resuscitation with automated external defibrillation operation, maintain life support equipment and resources, implement safe access and extrication procedures in an emergency, contribute in receiving request for ambulance service, contribute in allocating ambulance service resources, contribute in coordinating emergency resources, deliver basic ambulance communication skills, contribute in on – road operations, contribute to emergency scene management, contribute to special event scene management, contribute to routine scene management, deliver pre- hospital patient care, contribute to ambulance operations management, transport emergency patients, transport non- emergency patients and drive ambulance under operational conditions.

Emergency Medical Services	NC III (Level 3)	Board Resolution No. 2020-45	Consists of competencies that a person must achieve that prepares the emergency medical technician to provide prehospital assessment and care for patients of all ages wit a variety of medical conditions and traumatic injuries.	
			Hours: 944	
Health Care Services	NC II (Level 2)	Board Resolution No. 2005-15	Consists of competencies that a person must achieve to prepare and maintain beds, collect and maintain linen stocks at end-user locations, assist with patient mobility, assist in transporting patients, assist with bio-psychosocial support care of patients and handle waste in a health care environment. Hours: 996	
Hilot (Wellness Massage)	NC II (Level 2)	Board Resolution Nos. 2008-19, 2021-13	Consists of competencies that a person must achieve to plan the hilot wellness program of client/s, provide pre-service to client/s, apply hilot wellness massage techniques and provide post-advice on post-services to clients.	
			Hours: 120	
Massage Therapy	NC II (Level 2)	Board Resolution Nos. 2017-08, 2021-13	vors. Consists of competencies that a person must achieve to work develop massage practice, perform client consultati perform body massage and maintain and organize tools, equipment, supplies and work area.	
			Hours: 700	
Medical Transcription	NC II (Level 2)	Board Resolution No. 2006-24		
			Hours: 396	
Ophthalmic Lens Servicing	NC II (Level 2)	Board Resolution Nos. 2007-59, 2023-04	Consists of competencies that a person must achieve to enable him/her to analyze and interpret ophthalmic lens prescription, edge and mount ophthalmic appliances and apply UV coat/ tint to ophthalmic lenses. Hours: 254	
Pharmacy Services	NC III (Level 3)	Board Resolution No. 2015-16, 2021-13	Consists of competencies that a person must achieve to perform general housekeeping, monitor the supply/inventory of pharmaceutical products, Handle and control pharmaceutical products, Arrange and display pharmaceutical products, perform good laboratory practices, dispense pharmaceutical products, demonstrate product knowledge on medicines, perform health promotion education, vigilance and adhere to good manufacturing practices. Hours: 1,048	

C. CHED Centers of Excellence and Development in the Healthcare Professions (2022)⁸⁰

Count	Institution and Region	Center of Excellence	Center of Development
1	University of Santo Tomas, National Capital Region (NCR)	Medical Laboratory Science	Physical Therapy
		Medicine	
		Nursing	
		Pharmacy	
2	University of the Philippines-Manila, NCR	Medicine	
		Nursing	
3	University of the East-Ramon Magsaysay Memorial Medical Center, NCR	Medicine	Nursing
4	Saint Louis University, Cordillera Administrative Region (CAR)	Nursing	Medical Laboratory Science
5	Silliman University, Negros Island Region	Nursing	Medical Laboratory Science
6	Benguet State University, CAR		Nutrition and Dietetics
7	St. Paul University Philippines, Region II (Cagayan Valley)	Nursing	
8	Angeles University Foundation, Region III (Central Luzon)		Nursing
9	Lyceum of the Philippines University-Batangas, Region IV-A (CALABARZON)	Medical Laboratory Science	
10	Bicol University, Region V (Bicol Region)		Nursing
11	West Visayas State University, Region VI (Western Visayas)		Nursing
12	Cebu Normal University, Region VII (Central Visayas)	Nursing	
13	Liceo de Cagayan University, Region X (Northern Mindanao)		Radiologic Technology
14	Centro Escolar University, NCR		Optometry
15	Manila Central University, NCR	Optometry	
16	St. Paul University-Manila, NCR		Nursing
17	Our Lady of Fatima University, NCR		Pharmacy
18	Trinity University of Asia, NCR		Nursing
	TOTALS	13	13

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⁸⁰ Center of Excellence and Center of Development Programs. Commission on Higher Education, 2022. https://ieducationphl.ched.gov.ph/wp-content/uploads/2022/02/List-of-Centers-of-Excellence-and-Development.pdf. Latest available in public record as of February 13, 2025.

 CHED-deputized HEIs offering healthcare professions education programs through the Expanded Tertiary Education Equivalency and Accreditation Program (2023)⁸¹

Degree	Count	Institution and Region
Bachelor of Science in Nursing	1	Arellano University, NCR
(PSG prescribed units: 192)	2	St. Jude College, NCR
	3	University of Northern Philippines, Region I (Ilocos Region)
	4	University of Pangasinan, Region I
	5	University of La Salette, Region II
	6	Adventist University of the Philippines (AUP), Region IV-A
	7	Lyceum of the Philippines University-Batangas, Region IV-A
	8	Bicol University, Region V
	9	Universidad de Sta. Isabel, Region V
	10	Silliman University, Negros Island Region
	11	University of Eastern Philippines, Region VIII (Eastern Visayas)
Bachelor of Arts (or AB) in Psychology (PSG prescribed units:	1	Arellano University, NCR
109)	2	Philippine Normal University, NCR
	3	University of Batangas, Region IV-A
Bachelor of Science in Psychology	1	Lyceum of the Philippines University-Manila, NCR
(PSG prescribed units: 129)	2	San Sebastian-Recoletos, NCR
	3	St. Paul University Philippines, Region II
	4	University of La Salette, Region II
Bachelor of Science in Nutrition and Dietetics	1	St. Paul University Philippines, Region II
(PSG prescribed units: 165)		
Bachelor of Science in Physical	1	University of La Salette, Inc., Region II
Therapy (PSG prescribed units: 168)	2	Universidad de Sta. Isabel, Region V
Bachelor of Science in Pharmacy (PSG prescribed units: 169)	1	University of Immaculate Conception, Region XI (Davao Region)

E. TESDA STAR-rated institutions with health-related TVET courses (2023)82

Delivering Institution and Region	Institution	Health-Related TVET Course	Rating
	Туре		

⁸¹ Deputized Higher Education Institutions (as of December 2023). Commission on Higher Education. https://ched.gov.ph/wp-content/uploads/ETEEAP-HEIs-as-of-Dec-18-2023-1.pdf?appgw_azwaf_jsc=lwbrobmVt_lys-rJStARgjh5caEd3thFmwWdt_oeW7SE

⁸² STAR Rated Programs. Technical Education and Skills Development Authority, 2023. https://www.tesda.gov.ph/About/TESDA/24562

IGAMA Colleges Foundation, Inc., Region I	Private (HEI)	Health Care Services NC II	2 Stars
Southern Isabela College of Arts and Trades, Region II	Public (TVI)	Caregiving NC II	2 Stars
Saint Gabriel College, Inc., Region VI	Private (HEI)	a. Health Care Services NC II b. Emergency Medical Services NC II	Both with 2 Stars
New Lucena Polytechnic College, Region VI	Public (TVI)	a. Health Care Services (NC II) b. Caregiving NC II	Both with 1 Star
Davao Oriental Polytechnic Institute (Formerly: Lupon School of Fisheries), Region VI	Public (TVI)	Massage Therapy NC II	1 Star

F. Licensure examination performance of healthcare-related professions regulated by the PRC (2021-2024)

PASSERS AND PASSING RATES IN HEALTHCARE - RELATED LICENSURE BOARD EXAMINATIONS		YEARS AFTER UHC LAW (2019) & DOH NATIONAL HRH MASTER PLAN (2020) + GRADUATES OF THE K TO 12 PROGRAM											
(PRC data)		2021			2022			2023			2024		
CATEGORY A: DOH Facility-Linked Health Professions listed under the National Database of Selected Human Resources for Health (NDHRHIS)	Takers	Passers	Percentile	Takers	Passers	Percentile	Takers	Passers	Percentile	Takers	Passers	Percentile	AVG Percentile (past 4 years)
Doctor of Dentistry	1,660	731	44%	2,341	1,431	61%	1,668	732	44%	1,207	673	56%	51%
Doctor of Medicine	2,302	1,677	73%	5,958	3,826	64%	6,456	4,083	63%	6,600	3,845	58%	65%
Midwifery	1,774	908	51%	3,472	1,768	51%	4,119	2,800	68%	2,975	1,698	57%	57%
Medical Technology*	6,086	3,840	63%	8,953	4,371	49%	5,401	3,982	74%	5,574	3,872	69%	64%
Nursing**	19,574	11,094	57%	34,632	25,145	73%	49,424	38,442	78%	47,456	38,254	81%	72%
Nurtition/Dietetics	528	305	58%	1,114	719	65%	1,219	895	73%	1,209	843	70%	66%
Occupational Therapy*	400	283	71%	731	329	45%	769	451	59%	878	476	54%	57%
Pharmacy*	5,876	3,427	58%	5,698	3,068	54%	6,313	4,394	70%	5,925	4,090	69%	63%
Physical Therapy*	1,418	978	69%	3,013	1,750	58%	2,910	1,996	69%	2,511	1,722	69%	66%
Radiology/Radiological Technology**	4,094	1,562	38%	3,871	1,551	40%	5,115	2,540	50%	4,298	2,453	57%	46%
X-Ray Technology*	232	65	28%	263	49	19%	366	102	28%	101	35	35%	36%
Annual Sub-Totals	43,944	24,870	57%	70,046	44,007	63%	83,760	60,417	72%	78,734	57,961	74%	

^{*}More than one cohort per year

^{**} More than one cohort per year and with special professional licensure examinations (SPLE) for takers overseas

·		2021	, i		2022			2023			2024		, i
CATEGORY B: Other Healthcare-Releted													AVG Percentile
Licensed Professions	Takers	Passers	Percentile	Takers	Passers	Percentile	Takers	Passers	Percentile	Takers	Passers	Percentile	(past 4 years)
Dental Hygiene	Postponed	Postponed	Postponed	20	11	55%	20	15	75%	41	17	41%	579
Dental Technology	Postponed	Postponed	Postponed	16	10	63%	Postponed	Postponed	Postponed	24	17	71%	67%
Food Technology***							1,133	453	40%	995	510	51%	469
Optometry*	488	432	89%	285	179	63%	226	153	68%	327	297	91%	749
Ocular Pharmacology**	Postponed	Postponed	Postponed	14	12	86%	2	1	50%	7	6	86%	749
Psychology	Postponed	Postponed	Postponed	330	226	68%	468	339	72%	448	373	83%	75%
Psychometrician	Postponed	Postponed	Postponed	2,241	969	43%	8,370	6,133	73%	10,717	7,478	70%	62%
Respiratory Therapy* (with SPLE)	653	403	62%	397	194	49%	1,391	983	71%	1,403	1,091	78%	66%
Sanitary Engineering*	275	112	41%	366	156	43%	480	274	57%	459	322	70%	579
Veterinary Medicine* (with SPLE)	1,416	568	40%	1,535	623	41%	1,666	312	19%	1,375	671	49%	379
Annual Sub-Totals	2,832	1,515	53%	5,204	2,380	46%	13,756	8,663	63%	15,796	10,782	68%	

^{*}More than one cohort in a single year

G. PSA-Annual Survey of Philippine Business and Industry: Select Summary Statistics for Human Health and Social Work Activities (2020 to 2022)

Particulars	2020 (Final)	2021 (Final)	2022 (Preliminary)*
Total number of establishments	7,217	7,262	7,348
Total employment	218,465	218,620	215,728
Average number of workers per establishment	30	30	29

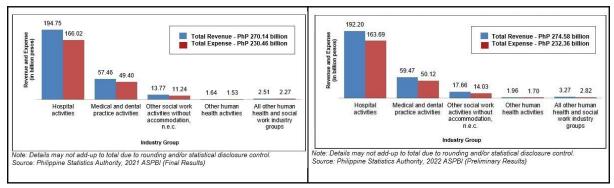
^{**} Special Certification Examination

*** Implementation of RA 11052 in effect after 2022, examinations start on 2023

Total revenue (in thousand PhP)	252,446,272	270,136,629	274,577,460
Total expense (in thousand PhP)	212,481,439	230,462,740	232,360,876
Revenue per expense ratio	1.19	1.17	1.18

^{*} Data as of latest report (published on August 15, 2024)

H. PSA Comparative Total Revenue and Expense Data for Human Health and Social Work Activities (2021 to 2022)



Chapter 2: Survey Results – 2040 Landscape of Human Resources for Health in the Philippines

I. Survey Respondents – Occupational Demographics

Total number of occupations: 54

Majority occupation: nurse (736 respondents or 53 percent overall)

Occupation	Count
Barangay nutrition scholar	1
Dentist	5
Physician/medical doctor	105
Health facility architect	3
Health policy, planning and financing practitioner	12
Health records practitioner	12
HRH Practitioner	33
Local health system practitioner	2
Medical technologist	48

Midwife	177
Nurse	736
Nursing aide	28
Nutritionist-dietician	17
Paramedic	1
Procurement practitioner	2
Radiologic technologist	22
Trained caregiver	1
Virologist	1
Other hospital/clinics/center worker - 14 roles, 41	L respondents
Accountant	1
Administrative assistant (all salary grades)	12
Administrative aide (all salary grades)	1
Administrative officer (all salary grades)	12
Administrative staff	1
Engineer	1
Financial and management officer	2
Health education and promotion officer	1
Health program officer	1
Nursing attendant	2
Social welfare assistant	2
Social welfare officer	3
Training assistant	1
Ward assistant	1
Others specified – 33 roles, 137 respondents	•
Accountant	1
Administrative aide (all salary grades)	9
Administrative assistant (all salary grades)	22
Administrative officer (all salary grades)	22
Administrative staff	1
Billing claim process insurance	1
Caregiver	1
Clerical aide	1
Computer maintenance technologist	2
Computer operator	1
Cook	2
Dormitory manager	2
Engineer	1

Executive assistant	1
Health education and promotion officer	2
Health program officer	2
Human resource management officer	1
Information technology officer	2
Laboratory aide	1
Laundry worker	1
Legal assistant	1
Medical social welfare officer/medical social worker	23
Medical technologist	1
Nursing attendant	4
Nutritionist-dietician	1
Pharmacist (including public health pharmacists)	11
Physical therapist	1
Planning officer	1
Psychologist	1
Science research analyst	1
Social welfare assistant	14
Training specialist	1
Ward assistant	1

Chapter 3: Stakeholder Discussions and Insights on Healthcare Jobs and Skills

J. Members of the HSSC Technical Working Group

Name	Current Affiliation
Ms. Elizabeth Aristorenas	Unilab Education
Mr. Ruben John Basa	Unilab Center for Health Policy
Dr. Cherry Bernardo-Lazaro	Ateneo School of Medicine and Public Health
Dr. Michael Caampued	Philippine Society of Public Health Physicians
Dr. Ronaldo Delos Santos	Mount Grace Hospitals, Inc.
Dr. Francis Dimalanta	Philippine Pediatric Society
Dr. Jan Dipasupil	Jan Medical Group, Inc.
Dr. Kenneth Hartigan-Go	Health Sector Skills Council Project
Dr. Ramon Inso	Philippine College of Surgeons
Dr. Ma. Dominga Padilla	Health Reform Advocate
Ms. Justine Raagas	Philippine Business for Education
Dr. Ma. Via Jucille Roderos-Galban	Second Congressional Commission on Education (Fellow)

Dr. Gonzalo Serafica	Center for Integrated STEM Education
Dr. Lester Suntay	World Surgical Foundation Philippines
Dr. Charles Yu	De La Salle-Medical Health and Sciences Institute

K. Perspectives from human resource practitioners in healthcare from the focus group discussion (Focus Group Discussion – October 23, 2023)

		Perspectives on Solutions/Potential Interventions	
Landscape			
1.	Hospitals are experiencing challenges in retaining health workers due to the following reasons:	1. 2.	Hospitals may use advanced technologies to automate and streamline healthcare tasks. Update hospitals' engagement programs,
a.	Health workers, like nurses, opted to seek employment and move abroad for better opportunities;		promote diversity and inclusion and offer support to health workers to ensure their retention.
b. c.	Compensation and opportunities abroad are more lucrative than local offers; Some health workers prefer part-time work in	3.	Investments in career development and career pathing would ensure health workers acquire the necessary competencies to respond to
	the BPO industry and offshore medical services for extra income, which is part of the popular "gig economy" or professional moonlighting activities; and	4.	future demands. Universities must be able to provide appropriate education to prepare health workers to deliver quality service in the future.
d.	Younger generation of health workers tends to tire easily, and have low motivation and resilience at work.	5.	Foster internship programs between hospitals and academe to recruit and nurture new health workers and encourage them to pursue local
2.	Hospitals must compete in hiring new and additional nurses to work in their facilities due to low passing rates in the licensure exams.	6.	employment. Analyze data and look into the history and global trends to inform projections of future
3.	Many nursing students pursue their degrees motivated by the goal of working abroad and earning higher incomes than getting local employment.	7.	needs and solutions in HRH. Explore opening schools and hospitals to foreign students and health practitioners to increase the supply of health workers and
4.	Younger generations have different work expectations and demand alignment with their job description.		generate revenue for the country.
5.	Nurses are overburdened with administrative tasks in addition to their regular functions.		
6.	Hiring additional healthcare staff to ease the workload of nurses will incur additional expenses to hospitals that will increase healthcare costs.		

L1. Insights from the First Series, Horizons of Healthcare (Multi-stakeholder Forum - April 23, 2024)

Name and Affiliation	Quote	
Dr. Kenneth Hartigan Go, HSSC Project	On the urgency to champion HRH in a collaborative manner: "Our assessment of the literature search shows that we did have fragmented healthcare. While there are some government mandates that tell us how to work together, the question now is who is going to champion and lead this integration?"	
Dr. Jethri Cruz, DOH-HHRDB	On the ongoing efforts of the DOH to implement the HRH Master Plan: "This master plan is also a living document, and we hope that through the engagement with Unilab Foundation, through the Health Sector Skills Council, as well as all of you in the private sector, in the public sector We hope that you can also provide very substantial input on how we might address the very wicked problem of ensuring the adequacy of healthcare workers so that we may deliver universal healthcare for all Filipinos."	
Mr. Einstein Rojas, Philippine Alliance of Patient Organizations	On an inclusive and collaborative model across all sectors for enhanced health outcomes: "A co-creation model of all stakeholders: government, academe, private, and of course the public. If we are able to combine all of this, we might be able to create a more definite future and more definite positive health outcomes."	

L2. Insights from the Second Series, Horizons of Healthcare (Multi-stakeholder Forum - April 23, 2024)

Name and Affiliation	Quote
Dr. Manuel Dayrit, Former Secretary of the DOH	On the intersectionality of the healthcare sector to align with determinants of health: "Healthcare is intersectional. The health sector cannot work on its own. It has to work with the agriculture sector. It has to work with the water sector. It has to work with the education sector. We must not forget that."
Dr. Ma. Dominga "Minguita" Padilla, Health Reform Advocate	On the urgent need to invest in the healthcare workforce: "Our HRH should be considered like soldiers in a battle for Universal Healthcare. The battle is real and will get worse We need to build our cadre of skilled working soldiers and reservists and develop weapons of education, technology, automation, and integration, and we have to do this now."
Dr. Edwin Mercado, DMMC Institute of Health Sciences (currently President of the Philippine Health Insurance Corporation or PhilHealth)	On strategies to unburden the healthcare workforce: "Offloading them of day-to-day work will provide them more time for engagement, more time to align with the mission and vision of the organization, and therefore, prevent burnout."

Mr. Edmun Liu, LH Paragon	The reactor of the series, on creating an ecosystem that fosters a caring environment for the healthcare workforce: "If we could somehow provide the environment, the education, and the economic resources to put these all ecosystems together, we will be able to provide access to affordable and quality healthcare to every Filipino"
Dr. Eugene Ramos, The Medical City	Reactor of the series, on operationalizing an ecosystem for the healthcare workforce that rapidly evolves and changes over time: "The entire healthcare ecosystem is more than the sum of its parts. As we approach the horizon, we see many moving parts interacting with one another, while some parts are still evolving and adapting to the rapidly changing terrain. If Philippine healthcare takes to the challenges too long, we will not accomplish much, always playing catch-up."

L3. Insights from the Third Series, Horizons of Healthcare (Multi-stakeholder Forum - April 24, 2024)

Name and Affiliation	Quote
Dr. Jeremy Lim, Public Health Specialist	On integrating determinants and using solutions from outside healthcare to achieve desired health outcomes:
(Singapore)	"The majority of health outcomes are determined by non-medical factors, and more importantly, the sectors outside health contribute more to population health than what we do inside the health sector. We, as the health sector, need to be much more involved and impact much more what's in the traditional non-health sector."
Mr. Galileo Destura, Philips Asia Pacific Region	On the role of technology as a powerful ally in simplifying the tasks of health professionals and better preparing them for future challenges in healthcare: "Al is actually not our enemy; it is our friend. It removes the mundane tasks that we do every day and moves them in such a way that we become more productive. Being able to use that same technology to help us would make us better prepared in the future if we can also start training the future health professionals in this manner."
Dr. David Hansen, Commonwealth Scientific and Industrial Research Organisation (Australia)	On the readiness of the Philippines for digital health: "You'll never have one group or one technology provider in the healthcare system, you'll always have lots of them providing different solutions to different areas of the health system. So a strong control over those interoperability standards is going to be really important."
Dr. Rebecca Haddock, Australian Healthcare & Hospitals Association	On providing a case for a jobs and skills council for health from the Australian experience: "Without coordinated leadership, the collective progress in tackling health crises will remain unsolved The isolation of health from other crucial sectors also hampers collaboration and inhibits the spread of innovation, best practice, and solutions."

Mr. Guy Barnard,	On collaborative workforce planning between industry and government: "There
Aspen Medical	is another piece to this puzzle which actually forms within the first step of the
Australia	Human Capital Management Framework, being workforce planning The
	challenges associated with workforce management across the healthcare sector
	will remain for the near future. There is much to do, and there is certainly much
	that can be done with governments and industries around the world to support
	sustainable healthcare systems."

L4. Results from the rapid questionnaire for participants via Slido, Horizons of Healthcare (Multi-stakeholder Forum - April 23-24, 2024)

Questions	Top 3 Responses
1. What is the main issue in Philippine Human Resources for	54 respondents
Health (HRH) that must be resolved immediately?	1. Low salary, lack of benefits (5 votes)
	2. Welfare of workforce (3 votes)
	3. Inequitable distribution (3 votes)
2. How would you envision the future of Philippine Human	20 respondents:
Resources for Health (HRH)?	1. Functional (2 responses)
	- Efficient and responsive (1 response)
	- Collaborative (1 response)
	- Lesser draining workload (1 response)
3. What are the possible innovations you could share for us to	22 respondents:
prepare for the future of our HRH?	1. Telemedicine (4 responses)
	- Simulation-based learning (2 responses)
	- Al integration to health (2 responses)

M1. Group Output - on Production/Education+Upskilling+Retooling (HRH Masterclass and Workshop – August 13, 2024)

Members: Ipsos Strategy, Optum Philippines, Brex Pharmacy Review Center, DOH-HHRDB, DOLE-Region XII, Valenzuela City Health Office, TESDA

Output:

1. Beneficiaries not included in HRH Conversation	2. Services Lacking
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1(a)

- Students of K to 12.
- Baccalaureate and Technical-Vocational Students (Undergraduate, Graduating, and Post-graduate)
- Faculty and Administrators of Colleges/Universities

1(b)

- Employers of any nature but related to healthcare
- LGUs

For students

- Social and Behavioral Change to bring about passion and commitment to healthcare (Schools, Colleges, Learning Institutions)
- Tailor-fit curriculum aligned with future jobs (DepEd, CHED)
- Orientation to different career pathways (corporate, public health, administrative) (DepEd, CHED)
- Structured career progression (DOLE, CSC)

For faculty and Administrators of Colleges/ Universities

- Flexibility in modifying curriculum in government learning institutions
- Cultural Sensitivity Training
- Training to enable readiness for advancing technology (telemed, e-health)

3. Services that Need Improvement

Infrastructure (connectivity, devices, etc.) (LGU, National agencies)

- Public-private partnerships for scholarships and training (LGUs, Private Sector)
- Healthcare industry immersions and internships (Universities and Colleges Associations, Industries, Hospitals)
- Collaboration between academia and the healthcare industry (CHED, DOH, Employers)
- Healthcare Worker Welfare Programs (DOH)
- CPD Training should be monitored for quality, made affordable, if not free, and accessible (PRC, Training Institutions)

4. Services that Need to be removed

- Some regulatory policies should be reviewed for possible amendments.
- Redundant and outdated training programs.
- Bureaucratic scholarship processes (i.e. stringent requirements for students)

Proposed Project:

A Design Proposal: Platform entitled "Careerpath.PH"

A mobile application offering diverse career pathways and opportunities for health workers. It has the following features:

- 1. Career profiling;
- 2. Opportunities for further education through e-learning, with TESDA as an existing facility; and
- 3. Opportunities for work, augmenting existing government platforms in CSC and in the private sector such as PhilJobsNet.

This design project will need other players (DICT), Data privacy (National Privacy Commission or NPC), regular updating (DOLE, TESDA, CHED, and academic institutions), use and dissemination (DOLE, TESDA, and LGUs), and for sustainability through public-private partnerships.

M2. Group Output - on Licensing (HRH Masterclass and Workshop – August 13, 2024)

Members: De La Salle – Medical and Health Sciences Institute, Brex Pharmacy Review DMW-Pre-Employment and Government Placement Bureau, PRC-Board of Medicine

Output:

1. Beneficiaries not included in HRH Conversation		2. Services Lacking		
•		•		
Barangay/Community Health Workers (BHWs),		Integra	Integration of Guidance Counselor's Office into a Job	
•	Traditional Healthcare Providers (i.e.	Placen	Placement/Career Pathing and Guidance Counselor's	
Hea	alers, Hilot Practitioners, Acupuncturists)	Office	Office (JPCPGC)	
•	Public Health System Managers (i.e.	•	Career Progression and Specialization Program	
Hea	althcare Architects)	and Cr	edit Accumulation and Transfer Program	
•	Medical Transcriptionist and other	•	No Reciprocity Agreement between the	
administrative work in		Philipp	Philippines and the receiving countries	
•	the healthcare industry	•	Mutual recognition of the licenses of the	
		Philipp	Philippines and the receiving countries	
edu	ıcation	•	Standard salary wage, compensation, and	
•	Contractual, freelance (gig), and other	benefit	ts package across healthcare providers	
woı	rkers with no	•	Formal and mandatory implementation of Labor	
•	formal employee-employer relationship	and Ed	ucation for Graduating Students	
3. S	ervices that Need Improvement	4. Serv	rices that Need to be removed	
•		•		
Table of Specifications as part of the Quality		Amend	lment of policies and laws	
Assurance Mechanisms		•	Impact of Mandanas-Garcia Ruling on the Local	
•	Computer-based licensure administration,	Govern	nment Healthcare Sector	
process, and examination		•	Un-devolved functions and policies of the	
Data sharing pathways/collaboration		nation	al and local government	

Proposed Projects:

- 1. Policy Revision
- 2. Interconnection of National Agencies
- 3. Employ a whole-of-society approach involving the government, civil society organizations, industry stakeholders, non-government organizations, and grassroots communities

M3. Group Output - on Employment and Entrepreneurship (HRH Masterclass and Workshop – August 13, 2024)

Members: DOH-HHRDB, DOLE-Bureau of Labor Relations, DOLE-Region XII, DMW-National Reintegration Center for OFWs, Pulse63, Metro Pacific Health, Ayala Health, JobStreet by SEEK, Mount Grace Hospitals, Inc., Pasig City Health Office

Output:

1. Beneficiaries not included in HRH Conversation	2. Services Lacking	
•	•	
Decision makers of hospitals	Awareness of opportunities for solutions available	
 Local Policymakers – CSC, DBM 	 Business Acumen 	
 Policymakers across all levels – LGU, 	 Partnership with a learning institution 	
Congress, Senate	 Ease of reintegration of migrant workers for 	
 Associations – rep of Labor Sector, rep 	employment	
Employer Sector, Industry Tripartite Council		
3. Services that Need Improvement	4. Services that Need to be removed	
Flexibility of Regulation	 Regulatory burdens – We should have ease of 	
Policy Update	doing business	
 One-Stop-Shop services – Agencies in one 	Waive expensive PMA fees	
place + healthcare people		

Proposed Projects:

- 1. Wholistic Massive Awareness Healthcare Campaign
- "Shape the Future of Healthcare" a platform where you can find healthcare schools, jobs, etc.
- School Partnerships Career Guidance about healthcare
- Job Fair for Healthcare Workers by DOLE
- Healthcare Jobs Platform by JobStreet (Better matches powered by AI)
- Placement program of OFW healthcare workers by DMW
- 2. Healthcare Job Banking DMW, DOLE, JobStreet by SEEK, Association of Healthcare Professionals

M4. Group Output - on Migration and Re-entry/Reintegration (HRH Masterclass and Workshop – August 13, 2024)

Members: DMW-Management Information Technology Service, PRC-Board of Nursing, GIZ Philippines, Metro Pacific Health, DOH-HHRDB

Output:

1. Beneficiaries not included in HRH Conversation	2. Services Lacking	
Other professionals working in the health	Skills matching	
field (i.e. sanitary engineers)		
Other personnel working in the health field		
(i.e. janitors, BHWs, administrative clerks, orderlies)		
3. Services that Need Improvement	4. Services that Need to be removed	

- Communication between NGAs and partner organizations and groups for BETTER INFORMATION DISSEMINATION (ie. amendments of new policies)
- Interagency collaboration (through adequate Data Sharing Agreements)
- Suggest to establish a Communication and Information Dissemination Council
- Suggest for better lobbying of the interests of HRH
- No services should be scrapped; more of enhancement of existing services (ie. ease of access, reintegration support)
- Sustainability of Programs and Initiatives (ie. changes in leadership, changes in mandates and prioritizations)
 - Upscaling of services

Proposed Projects:

- 1. For Filipino nurses practicing abroad and who would want to return to the Philippines but cannot practice without a license: Initiative for reentry and reintegration. The current laws prescribe that only those who hold PRC Licenses are allowed to practice the profession in the Philippines. What can be considered:
- Policy reform
- Revisit and review the current laws; and
- Apply credentialing as evidence of the competencies of returning nurses
- 2. For Nurses migrating out of the country: What can be considered:
- Adjusting the salaries to match foreign compensation
- Study the applicability of a Return Service Agreement
- 3. Different policies per country in relation to bilateral agreements: Establish a unified policy for bilateral agreements of HRH

Chapter 5: Monitoring and Evaluation Support for Healthcare Jobs and Skills Programs

N. Risk Mapping: PESTLE Approach to Prospective HRH Development Programs

Innovation	Risks	Sample Mitigation Measures
Innovation Private-public sector HRH coordination mechanism	Political – Turnover of private and public sector officials Economic – Lower investments in health Social – Public awareness and acceptance of HRH Technological – Evolution of existing technology and information systems Legal – Alignment with laws pertaining to private sector participation such as the PQF Act and the EBET Act	Sample Mitigation Measures Political – Ensure continuity of efforts through memorandum of agreements Economic – Access incentives from government, especially with the passage of the EBET and ETEEAP laws Social – Target family-based orientation on health literacy and community-based health campaigns Technological – Develop institutional memory on current technologies to be resilient in technology disruptions
	Environmental – Collective ability of private and public sectors to prevent environmental threats to health	Legal – Gather support for joint reviews not only with the private sector but also with the academe and professional organizations Environmental – Utilize research and development to find historical information on similar instances to address these threats

Data visualization	Political – Support for inter-agency data utilization Economic – Determining the share of resources to build digital infrastructure (e.g. bigger share, smaller share) Social – Data science knowledge and management	Political and Legal – Advocate for data sharing agreements among government agencies Economic – Include economic impacts of upskilling which include savings to hospital operations, better patient satisfaction or shorter waiting times for
	Technological – Rapid obsolescence of existing software systems Legal – Data sharing and security safeguards in accordance with the Data Privacy Act Environmental – Lowering carbon footprints to manage data (e.g. shift from paper-based processes to digital processes)	healthcare access Technological – Create analog backups to allow more options for historical data collection Environmental – Shift data gathering to more environmentally-friendly methodologies (i.e. digital collections, reuse of printed materials, or the like)
Policy reform package	Political – New priorities of the DOH as the lead implementer Economic – Determining priorities to address imbalanced supply and demand Social – Public awareness and acceptance of HRH Technological – Adjusting and adapting to digitalization thrust (in PDP 2023-2028) Legal – Alignment with all education and professional regulatory laws Environmental – Ability to address impacts on the environment due to jobs and skills mismatches (i.e. energy costs, waste disposal, food security, etc.)	Political – Strategically engage with career officials in the national government Economic – Establish referrals for student and professional demand in areas with HRH development needs Social – Engage with local health boards to identify targeted groups in communities Legal – Provide a comparison of all local education and employment laws Environmental – Upskill stakeholders on the green and blue economy and inclusion of priority areas (i.e. lower power costs and emissions)
Private sector consortium for healthcare education and employment	Political – Government acceptance based on mandate Economic – Availability and accessibility of financial, manpower, and technical resources Social – Collective acceptance of the healthcare professions Technological – Learning curve from new training on updated methods and processes facilitated by technology (i.e. Al integration or automation) Legal – None Environmental – Ensuring activities aligned with Environmental, social and governance (ESG) goals of the private sector	Political – Engage with local chief executives to establish acceptance of private sector participation in healthcare upskilling Economic – Open opportunities for volunteers, civic groups, and advocates who can share their non-material and non-financial resources Social – Focus on consolidating specific local chapters, which can start with primary care providers Enviromental – Establish joint ESG goals which can mutually benefit companies (e.g. lower emissions, lower worker complaints can improve waste management in healthcare facilities)