





POLICY BRIEF

Enhancing Health Workforce Distribution and Retention to Improve Access to Health Care Services

Statement of the Issue

The shortage and inequitable distribution of human resources for health (HRH) remains a critical problem in the Philippines. It affects the performance of the health system, restricting its ability to provide basic health services to communities. Various factors such as international migration, limited local investment in HRH, resulting in non-competitive salaries and benefits, better income opportunities in other sectors, and inadequate HRH information, and many other factors continue to influence the domestic HRH supply and distribution, especially in geographically isolated and disadvantaged areas (GIDA). With the recent passage of the Universal Health Care (UHC) Law, the need to ensure equitable access for all Filipinos to quality and affordable health care service and protection against financial risk is vital. The law mandates the Department of Health (DOH) to expand scholarship and training programs, develop a national health workforce support system, and establish a national Return Service Agreement (RSA) program that requires recipients of government-funded scholarships to commit three years of service after graduation to priority areas in public health. This policy brief analyzes what can be done to address the persistent issue of inadequate and inequitable distribution of HRH.

Background

The mere presence of health workers is not enough to transform HRH coverage into effective service coverage.² The ability of a primary care facility to deliver health services to communities is dependent on the skills, knowledge, and motivation of the HRH delivering them. Health workers would need to be equitably distributed and accessible to the population, possess the required competencies, be motivated and empowered to deliver quality care services that are acceptable to the community, and also supported by the health system to ensure that they can deliver effective health services.³

The variation in size, distribution, and composition of HRH is known to have an influence on the quality of health care services delivered and affect the effectiveness of the health care system. Globally, although improvements have been made in health workforce availability, shortages, skill-mix imbalances, maldistribution, poor working conditions, and limited availability of health workforce data still persists.⁴ In 2013, the World Health Organization (WHO) observed an estimated needs-based shortage of HRH of about 17.4 million, of which almost 2.6 million were doctors and over 9 million were nurses and midwives.⁵ The largest needs-based shortages are in the countries of South East Asia and African Region.

Magnitude of the problem

The Philippine situation mirrors the global HRH situation, where there remains a critical domestic shortage of some professions or absence of HRH in GIDA.⁶ In 2017, the Philippines Health System Review⁷ indicated that for every 10,000 people, the Philippines had 3.9 doctors, 8.6 nurses, 4.1 midwives, and 1.3 medical technologists working in health facilities. Among the four cadres, the highest density of HRH was found in National Capital Region and the lowest density of HRH was in Bangsamoro Region of Muslim Mindanao. Variances in HRH to population ratios were also noted from the different regions. Annex I presents the total HRH densities to population ratios and the regional distribution of HRH in institutions per 10,000 population.

In comparison to other Southeast Asian countries, the Philippines' density is lower than Thailand and Indonesia, but higher than other neighboring countries such as Vietnam, and Cambodia (See Table I). Comparing the Philippine ratios to the WHO threshold of 44.5 HRH per 10,000 population,⁸ the Philippines falls short on the number of HRH needed to achieve its health targets as the country only has 33 HRH per 10,000 population. Based on the WHO 2011 report, places with low densities of physicians, nurses and midwives failed to reach a target 80 percent coverage rate for skilled birth attendance and child immunization.⁹

Table	I HRH	densities	in	Southeast	Acian	countries
Table I	ı. nnn	delisides	ш	Southeast	ASIUII	countries

Country	Year	Physician Density	Nurse and Midwife	
		(per 10,000	Densities	
		population)	(per 10,000 population)	
Vietnam	2016	14	8	
Thailand	2017	30	8	
Philippines	2015 & 2010	20	13	
Indonesia	2017	21	4	
Cambodia	2014	10	2	

The Philippine Health System Review also indicated that the top four cadres working in health institutions were nurses (90,308), doctors (40,775), midwives (43,044) and medical technologist (13,413). Half of the institution-based doctors worked in public health and the other half worked in private institutions. Majority of the nurses (61%), midwives (91%) and medical technologists (53%) worked in public institutions. Distribution in terms of place of work indicated that majority of the health workers, especially doctors (91%) and nurses (74%), were hospital-based. Midwives on the other hand, were equally distributed between hospital and primary care facilities. Eighty-three percent of medical technologists worked in hospitals while only 17 percent worked at primary level rural health units.

Some of the reasons cited for inequities in HRH distribution and retention in the Philippines, especially among primary care facilities, are: (a) international migration, (b) low investments of Local Government Units (LGUs) on HRH; and (c) lack of information on staffing needs and vacancies to inform HRH

deployment and distribution. Other factors cited also include inadequacies in health sector recruitment, deployment, and retention strategies.¹⁰

Out of 9.4 million Filipinos working abroad, 4.3 million (46%) are working under temporary, work-related residence programs.¹¹ Health professionals are among those who live outside of the country for work-related purposes. Majority of the health professionals deployed abroad are nurses. The highest destination country for temporary residents of health professionals is the Middle East, while the highest destination country for permanent residents is the USA. In 2012, the Philippines accounted for 57.3% inflow of foreign population to the USA.¹²

Despite the local autonomy mandated by law to LGUs through Republic Act 7160, or the Local Government Code of the Philippines, 13 many of the LGUs are unable to cope with the responsibilities of providing for basic health services. Since Internal Revenue Allocation (IRA) is dependent on the income classification of the LGU, lower income LGUs (4th to 6th class) receive lesser budget allocations from the national government than higher income LGUs (1st – 3rd class). Thus, many LGUs have under invested in health due to lack of funds, resulting in inadequate numbers and capacities of providers at primary care levels. Moreover, the Local Government Code also limits the Personnel Services (PS) allocation of LGUs to 45 percent of their IRA, which prevents them from hiring additional health workers for primary care facilities.

At the primary care facilities, several health information systems exist, such as Field Health Service Information System (FHSIS), which collects data on public health service accomplishments and tracks facility-based deliveries and implementation of other health programs in the health centers. However, the system does not include collection of information on HRH and facility level activities to guide HRH deployment. The *iclinicsys* also guides the primary care level in submitting information on health care services for reimbursement from the Philippine Health Insurance Corporation (PHIC). However, this system includes only very minimal information on HRH on the status of licensed health care professionals for eligibility to reimburse their services through the PHIC.

Difficulties in the recruitment of health workers may also affect distribution, especially in GIDA where there are often no applicants, even if *plantilla* positions are available. Unclear methods of deployment that can be influenced by political choices¹⁴ also make it difficult for deployment programs to work and achieve its objectives. Similarly, the absence of clear retention policies and strategies make it difficult to ensure the continuity of services by deployed HRH. Lack of a good incentive system also influences retention.

Existing Policies

The DOH has instituted several policies to address the country's maldistribution of HRH. These policies aim to attract and retain health workers to serve in public health through the provision of scholarships in pre-service and in-service programs to increase the number of health professionals; deployment of health workers especially in GIDA; and in-service trainings and provision of incentives to retain health workers through several incentives and career development plans.

Scholarships. The Department of Health (DOH) offered several scholarships to facilitate the production of HRH. In 1991, through the Integrated Community Health Systems Project (ICHSP), the DOH formulated three strategies to facilitate HRH production at the community level. These strategies were undertaken in partnership with academic institutions and LGUs: (a) *Innovative Health Sciences Education Partnership Program (IHSEPP)*, which constituted the Step-ladder Curriculum to remodel health education in rural

areas into "innovative, community-based and problem based curriculum" and inculcate service commitment, values re-orientation, and community relevance; (b) Barangay Health Workers Scholarship Program, which granted scholarships on Midwifery courses under the IHSEPP; and the (c) Local Scholarship Program, which granted in-service scholarships, training or fellowship to LGU personnel and staff.

From 2006 to 2010, the DOH also provided in-service scholarships to physicians such as the *Pinoy* MD Program, the First Gentlemen scholarships (*Bagong Doktor Para sa Bayan* and *Bagong Espesyalistang Doktor para sa Bayan*). These scholarships adopted the scholarship-to-deployment scheme where graduates of the scholarship programs automatically entered the DOH deployment program where they rendered return service.

Since 2017, the DOH has offered only pre-service scholarships to students taking courses in medicine and midwifery, as mandated under Republic Act 10687 or the "Unified Student Financial Assistance System for Tertiary Education (UniFAST) Act," which allows access to quality tertiary education, especially the poor. The DOH scholarship program aims to encourage enrollment in health science courses to increase the availability of physicians and other priority health professionals to serve in GIDA. The Midwifery Scholarship Program provides educational assistance to volunteer health workers in exchange for serving in priority areas for four years after their professional license had been obtained. Deployment programs of the DOH were also used as a venue for their scholars to provide return service. A total of 3,645 students were supported by these scholarships. Annex 2 presents the number of accepted scholars by the DOH from 2006 – 2019.¹⁵

Deployment. The DOH crafted and implemented several deployment policies from 1976 to the present. These policies aimed to supplement the lack of HRH especially in primary care facilities at GIDA. These programs included the following: Rural Health Practice Program (1976), a compulsory program aimed to augment health care delivery in rural areas. The Residency Training Program (1978), which provided an opportunity for doctors to serve in DOH teaching and training hospitals as part of their specialty training. The Field Epidemiologist Training Program (1987) which trained government health care professional in outbreak investigations, disease surveillance reporting and analysis and use of epidemiologic information for decision-making. After training, FETP fellows returned to their respective institutions to apply their knowledge and skills. In 2002, the DOH created the Comprehensive Nursing Specialty Program (2002) and the Residency Dispersal Program with similarity to the Residency Training Program, was revitalized to strengthen local health systems and improve public health programs. Annex 3 presents the timeline of implementation of the various service programs in the country. In the country. In the country. In the country of the program in the country. In the country of the program in the country. In the country of the program in the country. In the country of the program in the country. In the country of the program in the country. In the country of the program is the country. In the country of the program is the country. In the country of the program is the country. In the country of the program is the country. In the country of the program is the country. In the country of the program is the country. In the program is the country of the program is the country. In the program is the country of the program is the country. In the program is the program is the country of the program is the program in the country. In the program is the program is the program is the program in the program is the program is the p

DOH also recognized the limitations of LGUs in hiring and retaining HRH, thus they deployed health professionals to support local health system development.¹⁷ Standard operations procedures and guidelines of the deployment program were included in **Administrative Order 2014 – 0025 entitled: Guidelines on the Deployment of Human Resources for Health.**¹⁸ The DOH Regional Health Offices implement the program in their respective areas with recipient hospitals and LGUs receive deployed health professionals.

In 2015 and 2016, the DOH also included in their pool, deployment of medical and nursing school graduates who did not pass licensure examinations. These HRH were deployed as Universal Health Care implementers and Public Health Associates. These deployed HRH were tasked to improve program management, governance and health information management. In 2017, adopting the same approach,

Family Health Associates (FHA) were hired to support the implementation of the Responsible Parenthood and Reproductive Health Law.

From 2011 – 2017, the DOH deployed a total of 767 doctors in hospitals, 2,241 doctors in rural health units, 111,668 nurses, 420 dentists, 20,730 midwives and 1,001 medical technologists.¹⁹ With approximately 20,000 HRH deployed each year, only about 50% of the GIDA are covered. Annex 4 presents the number of health workers deployed by the DOH.

In service-trainings. The DOH conducts in-service trainings for its health staff to ensure that the health workforce has the necessary knowledge and skills to provide essential health care services to their respective communities. A total of 6,304 trainings from 2016 – 2019 (1st semester) were conducted at central, regional and hospital offices. These trainings were attended by a total of 220,191 participants and consumed a total of 23,041 days of training. Annex 5 presents the trainings conducted by the DOH Central Office, Regional Office and Hospitals from 2016 – 2019.

The trainings include various courses on health programs such as communicable and non-communicable diseases, family health, environmental health, emergencies, information system, HRH, health facilities, regulations and local health systems development. Most of the training cost include registration fees, accommodations, honorarium for resource person venue and bus rental as necessary. Per diem, travel expenses are usually shouldered by the sending agency.

Return Service Agreements. Compulsory service policies for HRH has been one of the strategies implemented by various countries, such as Thailand and Indonesia, to address inequitable distribution of health professionals, especially in rural areas. Although the WHO supports the adoption of compulsory service, it cautions that this should be supported by appropriate incentives and enablers.²¹ Although empirical studies of the impact of compulsory service was inadequate, case studies and country experiences have shown that this is a promising solution to address HRH challenges.

Policies on RSA have also been implemented in the Philippines. Some of the forerunners in the implementation of this policy are the University of the Philippines Manila, the UP School of Health Sciences in Palo, Leyte and the *Pamantasan ng Lungsod ng Maynila*. Brief descriptions of their return service policies are presented in Annex 6.

Interest in the formulation of a public policy supporting the retention of a competent workforce who will serve as a major implementer of reforms in primary health care and UHC is more urgent today. Through Republic Act I 1223, also known as "An Act Instituting Universal Health Care for All Filipinos, Prescribing Reforms in the Health Care System and Appropriating Funds Thereof,"²² the Philippines currently endeavors to establish UHC in the country with the objective to "progressively realize UHC through a systematic approach and clear delineation of roles of key agencies and stakeholders towards better performance in the health system and ensure that all Filipinos are guaranteed equitable access to quality and affordable health care goods and services and protected against financial risks." Chapter 6 Human Resources for Health, Section 24: National Health Workforce Support System, provides support to local public health systems in addressing their human resource needs with GIDA as a priority for deployment. Section 25: Scholarship and Training Program aims to expand existing and new government scholarships for allied and health-related degree and training programs. Section 26: Return Service Agreement stipulates that graduates of these allied and health related courses who are recipients of the government-funded scholarships are required to serve for at least three years, with

compensation in priority areas of the public sector, under the supervision of the DOH. Return service may be extended for another two years with additional incentives.

Given these provisions under the UHC, current policies on scholarships, deployment and retention are given a fresh mandate to improve and strengthen the implementation of these HRH policies. The UHC Implementing Rules and Regulations (IRR) ²³ indicate that graduates doing RSA are given priority for government employment including medical residency and sub-specialty training and specialization tracks for allied health professions. They are entitled to receive standard compensation and benefits based on prevailing national rates for civil servants.

Implementing arrangements under the law also provide the necessary structure to coordinate these policies with other government agencies for a more coordinated approach. Implementation of the RSA is conferred by law to the DOH and the Commission on Higher Education (CHED).²⁴ They are responsible for establishing a monitoring system that will track compliance of graduates to the RSA and evaluate its effectiveness; sourcing and administering funds for compensation, benefits, and incentives of graduates doing RSA; and issuing operational guidelines for return service monitoring, employment, and incentives. Both DOH and CHED are also responsible for consulting with academic institutions to formulate mechanisms that will encourage graduates to serve in priority areas of the public sector. The DOH, CHED, and PRC are also mandated to develop guidelines and mechanisms to define sanctions for non-compliance of graduates to the return service policy.

Policy Goals

To achieve UHC, the government of the Philippines must improve **equity** in the distribution and retention of health workers so that more communities have access to quality and affordable health care goods and services. To further support achievement of this goal, it will be essential to strengthen HRH systems of granting scholarships, deployment, and retention of the health workforce through an integrated approach that links pre-service, in-service, and retention stages of health workforce development and results in efficient distribution and retention of the health workforce.

While the Masterplan will not directly address health issues, the role of health workers in improving health outcomes has been clearly established.²⁵ ²⁶ Hence, **safety** or the satisfaction of minimum human needs, which in this case relates to health, is a clear policy goal of the Masterplan.

Even as the Masterplan aims to improve retention of health workers in the Philippine health sector, particularly in underserved areas, the Masterplan cannot intervene in the choice of health workers i.e. **liberty**, with regards employment and how to improve their professional and personal lives, which can mean working in other local industries or abroad.

Policy Options

Three policy options are considered to improve retention and address the inequitable distribution of health workers in the Philippine health sector. Note that fiscal incentives are not considered in the three policy options since the UHC law already requires competitive salaries and incentives as further detailed in its IRR (p29, section 23.3) and its implementation is currently being explored. Good remuneration has been found the most influential factor for retaining health workers.²⁷ Each policy alternative is evaluated based on a set of criteria comprising of equity, effectiveness, technical feasibility, financial feasibility, and political acceptability in the following sections.

Equity is the distributive capacity of the policy option to address variations in the numbers or locations of health workers, especially GIDA. The goal is to provide health facilities with the necessary number and type of cadre to effectively deliver health care services and continue to make this service available at the primary care level. Effectiveness is defined as the ability to successfully achieve the policy goal improve equity in the distribution and retention of health workers so that more communities have access to quality and affordable health care goods and services.

Technical feasibility is the system's technical capability to implement the policy. Financial feasibility is defined as the viability of the cost to government and long-term financial sustainability. Political feasibility refers to the expected level of acceptance of the policy option by decision-makers.

Option I. Continue implementation of the DOH Deployment Program

The DOH Deployment Program is currently funded through the approved General Appropriations Act (GAA) budget with allocations given to the Regional Offices. Based on a centrally formulated policy guideline (AO 2014 – 0042: Guidelines on the Deployment of Human Resources for Health),²⁸ the Regional Offices manage, coordinate, and implement the policy in GIDA through its Office and technical coordinators. The Regional Offices engage the LGUs in the implementation of the deployment program through its Provincial DOH Officers who represent the DOH at the local levels. Report on the progress of implementation are submitted by the Regional Offices to the DOH Central Office and periodic monitoring is conducted by the Health Human Resources Development Bureau to review and improve implementation of the program.

The DOH will enhance policy implementation of the deployment program, through the following activities: (a) map HRH staffing needs through the Workload Indicators for Staffing Needs (WISN), (b) update deployment guidelines with standard tools and instruments, policy implementation protocols, systems and procedures; (c) clarify/ strengthen regional management procedures/implementation through a training, orientation and designation of a regional inter-agency committee; (d) include community-oriented leadership and management modules, and local health systems development in training deployed HRH; (e) develop retention guidelines and capacitate LGUs to retain HRH, and (f) explore linkages with Civil Service Commission (CSC), Department of Interior and Local Government (DILG) or Department of Budget and Management (DBM) to improve human resource management and development (HRMD) systems for LGUs.

Equity. Under this option, equity may be achieved with the deployment of health workers to GIDA and other underserved areas where they are inadequate. This policy may be effective in addressing HRH shortages and maldistribution by providing temporary deployment of health care professionals to populations of need. With deployment, areas without HRH or inadequate HRH will be provided with the needed health care services.

<u>Effectiveness.</u> The existing practice of deployment has been successful in that health workers are sent to areas in the country that need them. However, the overall retention of health workers where they have been assigned continue to be low, effectively making the deployment a stopgap measure that needs to be continued in order for the health sector to respond to individual and population health needs especially outside urban areas.

Technical and financial feasibility, and political acceptability. The Deployment Program of the DOH in its various forms has been around since 1976. LGUs identify and propose GIDA to the DOH where health workers may be deployed. Final selection of areas is based on the DOH priority list of GIDA. In partnership with the LGUs, the Deployment Program delivers health care services to the assigned priority communities. This option is also financially feasible since the outreach activities may be supported with funding grants from the National Health Workforce Support System or Special Health Funds, which are already in place under the UHC. The LGUs, under the UHC, will have to establish Health Care Providers' Network (HCPN) for which the deployed HRH can take part to deliver health care services. The option may also be politically feasible since it will ensure deployment of a health care team to provide essential health services to communities of LGUs who lack the necessary HRH and funds to address health needs of their constituent populations.

Option 2. Provide non-fiscal incentives

By providing non-fiscal incentives that complement the competitive salaries and benefits provided for in the UHC law, health workers will feel that they are valued and necessary in the Philippine health sector. These incentives can include career paths, housing, non-taxable allowances, holidays, flexible working hours, access to training opportunities, sabbatical/study leave, planned career breaks, occupational health counselling, recreational facilities, and improved management and systems and communication. The key is in the implementation and that no cadre is left out, including community health workers, in the roll out of non-fiscal incentives.²⁹

<u>Equity.</u> In this option, equitable distribution of health workers can be improved by pairing non-fiscal incentives with competitive salaries and benefits, particularly in GIDA where health services are impacted by inadequate numbers and cadre of health workers. By keeping health workers in their places of assignment, equity of access among users of the local health systems can be improved since more health services are expected to be provided.

<u>Effectiveness.</u> The provision of non-fiscal incentives has been found to be a factor in improving motivation, and for health workers feeling valued,³⁰ increasing the likelihood of health workers staying.

<u>Technical feasibility</u>. This option is technically feasible as there are many examples of the same or similar in-kind benefits being provided by other agencies and organizations in health and non-health sectors in the Philippines that can be replicated for health workers.

<u>Financial feasibility.</u> While there is no direct cost of non-fiscal incentives, there are indirect costs to be considered such as the cost of holidays, career breaks, and/or sabbatical leaves; developing and implementing training and career programs; provision of housing; installing recreational facilities, and many other in-kind incentives. The upside is that not all will need to be introduced such as training programs, which the DOH and possibly other government agencies already have. Career planning is also available with the DOH.

<u>Political acceptability.</u> This option would be politically acceptable cost-wise since there are no huge costs involved upfront. However, the implications of holidays, planned breaks and/or sabbaticals/study leaves would need to be addressed well since this means that there will be no health workers in the area.

Option 3. Ensure appropriate implementation of production strategies

These strategies include a) targeted admissions b) educating and training in/near places of origin, c) providing scholarships with return service agreements (RSAs). The evidence on improving retention in the Philippines and in other countries shows that retention processes should start during the training and education of future health workers. A rural background and/or exposure to rural health topics improves the likelihood of medical practice in rural settings.^{31 32 33 34 35} There is evidence that upon completion of their program of study, students usually work in the same area where they graduated. Similarly, the experience of some countries such as Thailand that implement RSA programs improve retention. As part of this option, it is suggested that most of the scholarships for health science courses be directed towards provinces with the greatest need for health workers.

<u>Equity.</u> Based on the experience of other countries, steps to ensure the equitable distribution of health workers can be taken prior to entry of workers into the health sector. Targeting students with rural backgrounds, educating and training them near their places of origin, and engaging them through a return service agreement will lead to better retention of health workers in their places of work. Improved retention will ensure the provision of health services in rural and underserved areas.

<u>Effectiveness.</u> Enhancing policies on scholarship-based RSA may improve effectiveness in the equitable distribution and retention of HRH in GIDA. Scholarship-based RSA and regionally managed deployment program may be expanded to scale up production of needed HRH and deploy the required numbers of HRH in GIDA, reducing disparities in HRH distribution. Through an improved system of identifying, recruiting, and deploying scholars from GIDA, the appropriate number and type of cadre needed in priority areas may be produced and deployed to provide health care services in their respective communities after graduation.

Thailand is also one of the countries beset with problems of HRH shortage and maldistribution. Return service in this country was made a compulsory service. The Thai government adopted three models of return service.³⁶ The first model is the conventional medical training, referred to as the "normal track." This program is run by the Ministry of Education, where secondary school students are recruited to one of the medical schools based on their academic aptitude from a national entrance exam. Return service is taken at the place of the individual's choice.

The second model is a government-funded initiative called Collaborative Project to Increase Production of Rural Doctors (CPIRD) aimed at increasing the production of doctors to work for the MOPH and serve the Thai population. Students are recruited from secondary schools from provincial areas. Regulation on job placement, duration of mandatory service and penalty for non-adherence are applied. The third model is the One District One Doctor (ODOD) model where students are recruited from more targeted and remote rural areas. The ODOD also has penalties for non-adherence. Under the ODOD, the students are given full government scholarships for the 6-year course on medicine and prespecified job placements in their hometowns.

Several studies had attested to the successful retention of doctors to serve in rural areas from the CPRID and ODOD programs, less probability of leaving the mandatory service and with higher clinical competencies.³⁷ ³⁸ ³⁹ ⁴⁰

<u>Technical feasibility.</u> To implement the scholarship-based RSA, the DOH and partners can disseminate standards and improved systems and tools to various universities and regional offices of the DOH. A national technical working group may be organized at the central DOH to improve policy guidelines for implementation of the program and oversee its operation. In addition, regional units of the DOH can be oriented and trained on the new guidelines to ensure that the policy is well disseminated, and that technical assistance is provided to the LGUs. Regional DOH offices can organize committees to implement the revised policies and ensure that there are assigned DOH staff to manage and coordinate scholarship-based RSA with state universities located in the regions.

The new guidelines will include mobilization of funding sources to support the expansion and nationwide implementation of the scholarship-based RSA. During this period, in partnership with other agencies, the DOH will commence to harmonize the RSA and towards building an integrated system that will effectively address HRH retention and maldistribution issues in GIDA.

<u>Financial feasibility.</u> The policy option is financially feasible since funding mechanisms are currently in place and additional funding are expected to be available under the UHC for the expansion of scholarship-based RSA program. The CHED, DOH and universities implementing return service agreements have funding mechanisms that support these programs. It is also expected that under the UHC, financing mechanisms and contracting instruments will be formulated through the National Health Workforce Support System and the Special Health Fund to facilitate implementation at GIDA and high burden areas through the Health Care Provider Networks at the provincial level.

<u>Political acceptability.</u> The option will be politically feasible since participation of LGUs will be enhanced through the improved systems of the programs and likewise be recipients of the service. LGUs will welcome the additional scholarship grants that is to be made available for their constituents and deployment of HRH for their communities.

Rating the policy options

To determine the most effective and feasible policy option that will enhance health workforce distribution and retention, each policy alternative is evaluated based on a set of criteria aimed to meet policy goals. Policy options are scored on each criterion and assigned a score between I-3. The score of "1" means that the policy alternative is least likely to achieve the policy goals. The score of "2" means that the policy alternative is likely to achieve the policy goals, but some factors may inhibit its achievement. The score of "3" means that the policy option will most likely achieve the policy goals. Table 2 below presents the evaluation of the policy alternatives based on equity, effectiveness, feasibility, acceptability.

		Policy Options					
Criteria/ Goal	Definition	Deployment Program (Option I)	Provide non- fiscal incentives (Option 2)	Implementation of production strategies (Option 3)			
Equity	Ability to address variations in the distribution and retention of HRH	I	3	3			
Effectiveness	Ability to successfully achieve policy goals with available resources	I	2	3			
Technical feasibility	Capacity of the agency to implement the policy	3	2	2			
Financial feasibility	Least cost to government and long-term financial sustainability	2	2	3			
Political feasibility	Acceptability to the decision-maker	3	2	3			
	TOTAL	10	11	14			

Option I. Continue implementation of the DOH Deployment Program. Continuing the DOH Deployment Program has the advantage of the program already in place. This means that there is already dedicated funding, people, policies, and processes that support the program. It is politically acceptable since little is required from LGUs, particularly in terms of financial support. The option may effectively address gaps on a temporary basis. Its main disadvantage is that it is a stopgap measure that does not resolve the underlying causes of poor retention of HRH.

Option 2. Provide non-fiscal incentives. Providing non-fiscal incentives will encourage health workers to stick to their place of work and not consider employment in other industries/sectors or even leave for abroad reducing the issue of inequitable distribution of health workers. However, the option might require additional resources to provide the in-kind incentives, which might make this slightly less than politically acceptable to LGUs. Its implementation will also require collaboration among the DOH, LGUs, the private sector, and potentially CSC and DBM.

Option 3. Ensure appropriate implementation of production strategies. This option proposes to address HRH maldistribution and retention issues from the pre-service phase. The option is technically feasible since it builds on existing programs and additionally requires adjusting admission guidelines and directing where training and education should take place. Moreover, return service programs which are tied to scholarships, can reinforce retention. To be effective, it is necessary for agencies in education and training, health, and labor to collaborate through a multi-sectoral structure. Financial investment will be needed initially to establish the governance structure and set up the integrated systems, as well as the additional allocations for government scholarships. However, shared resources among agencies from both national and local levels may contribute to the long-term financial sustainability of the program. The expansion of scholarships with RSAs means that there is additional funding for production strategies. This option may also be politically feasible to LGUs and other stakeholders because of the broader support they will receive for their HRH needs, though a strong political will is critical to start up convergence among key agencies and willingness to pool their resources.

Conclusion

From the evaluation of the policy options, the implementation of the production strategies is the best course of action. The combination of strategies together with the financial and policy support mandated by the UHC law will effectively improve retention of HRH, reducing inequitable distribution, and providing more health services in local areas. However, this option has a time element that need to be considered. Producing 'new' health workers will require anywhere from 4 to 12 years.

In the interim, the existing Deployment Program of the DOH should be continued while guidelines, standards, and procedures are put in place to implement the production strategies and for the eventual absorption of new workers in the health sector.

ANNEXES

Annex I: Health Workers in Institutions per 10,000 population, 2017

Group of islands	Region	1	Doctors	Nurses	Midwives	Med Techs
NCR	I	NCR	10.6	12.6	3.3	3.2
The rest of Luzon	2	CAR	6.4	15.8	9.9	2.2
	3	llocos (I)	4.0	11.2	5.6	1.4
	4	Cagayan Valley (II)	3.4	12.1	6.9	1.4
	5	Central Luzon (III)	3.6	7.5	3.3	1.2
	6	CALABARZON (IV-A)	2.8	6.5	2.3	0.6
	7	Mimaropa (IV-B)	1.9	5.8	5.2	0.6
	8	Bicol (V)	2.5	7.8	5.1	0.9
Visayas	9	Western Visayas (VI)	3.1	7.2	4.9	1.0
	10	Central Visayas (VII)	3.1	10.4	4.3	1.3
	П	Eastern Visayas (VIII)	2.6	7.0	4.7	1.3
Mindanao	12	Zamboanga Peninsula (IX)	2.6	9.5	4.8	1.1
	13	Northern Mindanao (X)	2.9	9.3	5.2	0.9
	14	Davao Region (XI)	3.0	7.1	3.0	1.0
	15	Soccksargen (XII)	2.3	7.6	4.8	1.0
	16	Caraga (XIII)	2.1	7.9	5.3	1.1
	17	ARMM	0.9	4.2	2.6	0.3
Philippines		<u> </u>	3.9	8.6	4.1	1.3

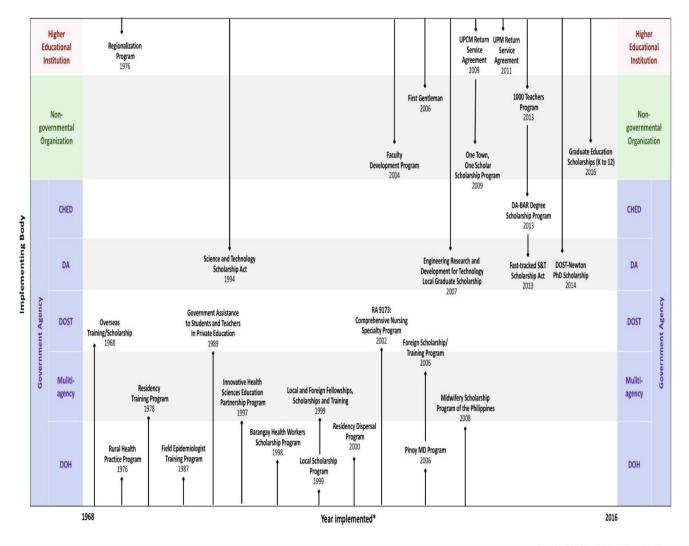
Source: calculated by the authors from HHRDB, FHSIS & deployment program reports. The Philippines Health Systems Review

Annex 2: Department of Health's Scholarship Programs

PARTICUL ARS	NO. of ACCEPTED SCHOLARS per SCHOOL YEAR										TOTAL				
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Pinoy MD Scholarship Program	52	82	100	100	103	0	0	0	0	0	0	0	0	0	437
Midwifery Scholarship of the Philippines	0	0	17	51	28	48	102	0	22	98	81	0	0	0	447
Medical Scholarship Program	0	0	0	0	0	0	0	0	0	0	59	0	0	0	59
PRE-SERVICE	SCHOL	ARSHIP F	ROGRAM	M (PSSP)											
Medicine	0	0	0	0	0	0	0	0	0	0	0	457	407	381	1,245
Midwifery	0	0	0	0	0	0	0	0	0	0	0	270	619	388	1,277
Total:	52	82	117	151	131	48	102	0	22	98	140	727	1,206	769	3,645

Source: HHRDB, DOH

Annex 3: Historical Timeline of Compulsory Service Programs and Policies



Programs/policies with no specified year first implemented:

*Note: Interval between the years are not to scale

- Government Agency
 - o DOST-PCIEERD Human Resources Development Program
- Higher Educational Institution
 - o Bicol University Human Resource Development Program
 - o Cagayan State University Institutional Medical Scholarship Program
 - o Caraga State University Fellowship
 - o UP Diliman Local Faculty Fellowship / Study Leave Agreement
 - o De La Salle Health Sciences Institute: Scholarship Programs
- Non-governmental Organization
 - o Plant Science Scholarship Program

Source: Department of Health. (2018). "Feasibility of a Return Service Agreement for Selected Human Resource for Health in the Philippines."

Annex 4: Number of Health Workers Deployed by DOH

Category	2011	2012	2013	2014	2015	2016	2017	Total	Averag e per year
Doctor in hospital	164	158	161	138	111	35	-	767	135
Doctor in rural health unit	139	235	276	320	348	407	516	2 241	320
Nurse	20 801	10 000	21 929	11 326	13 371	16 703	17 538	111 668	15 953
Dentist	-	-	-	-	218	202	-	420	210
Midwife	I 127	2 391	2 738	2 700	3 020	4 205	4 549	20 730	2 961
Medical technologist	-	-	-	-	165	267	569	1 001	337

Source: World Health Organization. (2018). "The Philippines Health Systems Review." Health Systems in Transition, vol. 8 no. 2. New Delhi: WHO Regional Office, Regional Office for South-East Asia.

Annex 5: Trainings Conducted by the DOH Central Office, Regional Office and Hospitals

Year	Office	No. of trainings	No of Pax	No of Days
2019 (Ist sem)	Central Office	63	2609	1207
	Regional Office	248	8805	702
	Hospital	1021	38476	2545
	TOTAL	1332	49890	4454
2018	Central Office	222	10118	921
	Regional Office	458	17538	1539
	Hospital	2368	77184	6871
	TOTAL	3048	104840	9331
2017	Central Office	192	10064	676
	Regional Office	215	9927	777
	Hospital	837	22989	5387
	TOTAL	1244	42980	6840
2016	Central Office	157	6112	607
	Regional Office	216	9085	772
	Hospital	3307	7284	1037
	TOTAL	680	22481	2416
	GRAND TOTAL	6,304	220,191	23,041

Source: Health Human Resource Development Bureau (HHRDB), DOH

Annex 6: Brief Descriptions of Return Service Agreements Implemented by Selected Universities

The University of the Philippines College of Medicine required their students, upon entering the college, to sign a contract that they agreed to serve in the country for three years within five years after their graduation.⁴¹ This policy was started in 2009 and was later adopted by the College of Nursing, College of Dentistry, College of Pharmacy, College of Allied Medical Professions and the College of Public Health.

Return Service Agreement was made as an absolute admission prerequisite signed by the Chancellor of UP Manila, to prospective student and parents.⁴² The form of Return Service was an employment with government agencies/institutions, underserved towns/provinces, non-government organizations or cause-oriented organizations. Failure to render return service within five years penalizes the scholar with double the cost of education at prevailing rate from time of entry plus interest less the total amount of tuition fee paid. The cost of education was based on the subsidy of UP/government and donation made to specific colleges that enhanced the student's education. Enrollment in a second-degree course was not considered as a return service. Employment at the UP-Philippine General Hospital and UP System prioritized graduates who were undertaking RSA. The Office of Alumni Relations and Placement was made as the implementing office of the program.

The UP School of Health Sciences in Palo, Leyte offered a competency-based and community based step-ladder curriculum that integrated the training of a broad range of health human resources from midwives, nurses and doctors into a single sequential and continuous curriculum.⁴³ The program included service leaves in between program levels (CHW & Nursing, Nursing & Medicine) where students practiced what they learned from school in their respective communities. This was an integral part of the step-ladder program.

The program required the endorsement of the LGU for the scholar's admission and progress to higher levels. Through the School's democratized admissions policy scholarships were offered to deserving high school students from GIDAs or marginalized urban communities. Selection of scholars were conducted in partnership with the community and nominated by them. Scholars were bounded by a contract and committed to return to their communities to serve after completion of the program. Table I below indicated high completion rates of graduates, most of whom passed the licensure examinations.

Table I: Completion and Licensure Rates of UPSHS Scholars

Program	Admitted	Completed	Completion Rate	Licensed	Licensure Rate
Medicine	197	181	91.87	149	75.63
Nursing	356	351	98.59	323	90.73

Program	Admitted	Completed	Completion Rate	Licensed	Licensure Rate
Midwifery	1968	1710	86.89	1550	78.76

Note: UPHSHS, Data only includes up to MD14th Batch, BSN 35th Batch, and CHW 37th Batch since later batches are still either currently enrolled, on Service Leave or preparing for the Board Exams. (1976 – July 2018)

Pamanatasan ng Lungsod ng Maynila (PLM). The College of Medicine of PLM was established by the Philippine Congress in 1983, with financial support to the University coming from the Local Government of Manila. The University is classified under Local Universities and Colleges (LUCs) and has a community-oriented curriculum. Since tuition fee is subsidized by the local government, all students enrolled in the University are considered as local government scholars and required to provide return service.

The PLM has stringent selection processes where the student undergoes an interview, admission test and grades at 4th year are reviewed prior to the first semester of the pre-med course. It receives approximately 600 applicants a year, with some applicants coming from nearby cities. However, only 150 applicants are accepted by the University.

At the onset of enrollment, the University classifies students according to five categories, with Categories I & 2 requiring community service, through which return service to the University is undertaken:

- Category I Manila voter, 6 weeks of community service & more than 50% subsidy in tuition fee
- Category 2 Manila voter, 4 weeks of community service & more than 50% subsidy in tuition fee
- Category 3 no community service, 50% subsidy in tuition fee
- Category 4 summa and magna cum laude, more than 50% subsidy in tuition fee
- Category 5 cum laude

The PLM conducts a freshman orientation which includes the return service agreement (RSA) program but only students under Categories I & 2 are asked to undertake a return service agreement. This agreement is signed by the College Dean, College Secretary, student and their parents. During the Dean's hour, obligations of the students under the RSA is reiterated and concerns and issues are discussed.

Medical students under Categories I & 2 are required to maintain a grade of 2.5 or better. Students are moved down to Category 3 when they are unable to maintain the required grades. Students under this category only get 50% subsidy for tuition fee payments and lose their full scholarship. The students are required to maintain high grades until graduation to stay at Category I and continue full scholarships.

Return service is undertaken by the student in the second and third year, by rendering community service in selected health care facilities of the City of Manila. The University has a dedicated faculty in charge of the community program and who manages service activities of the students. On the last year, the students are only deployed in hospitals of Manila to render return service. This also forms part of their internship and after the last year, students are considered to have fully completed their return service. After

graduation, the University has no hold over the student and are free to select where they will work as medical doctors.

The PLM used to have a joint undertaking with the DOH as recipient of government scholarships under the *Pinoy* MD program, with allocations for deployment in the Doctors to the Barrios (DTTB) program. However, this arrangement ceased when the *Pinoy* MD program was discontinued by the DOH. Some students, however, continued to apply for deployment through the DTTB program after graduation.

Other government agencies also instituted return service agreements. Under Executive Order 129, s. 1968,⁴⁴ entitled: "Providing Rules and Regulations Governing Official Travel Abroad of Officials and Employees of the Government, both National and Local, including Government-owned or Controlled Corporations, and Prescribing Rates of Allowances and Other Expenses Therefor," officials and employees of government, government-owned or controlled corporations were entitled to continuing professional education abroad. In return for this education, officials and employees were to return service to their respective agencies. The program known as the Foreign Scholarship/Training Program (NEDA, 2012), requires two years of service for every year of education. The official or employee is required to pay the total cost of the scholarship if he/she fails to render return service. Sanctions, however, could not be applied especially to officers and employees who do not return to the country.

Return service agreements are also implemented by other national government agencies, but discussion of these policies is not included in this brief.

End Notes

_

¹ Republic Act 11223. (2018). "An Act Instituting Universal Health Care for All Filipinos, Prescribing Reforms in the Health Care System and Appropriating Funds Therefor."

² World Health Organization (2016) "Global Strategy on Human Resources for Health: Workforce 2030." Geneva, Switzerland

³ Ibid

⁴ Ibid

⁵ World Health Organization. (2016). "Health Workforce Requirements for Universal Health Coverage and the Sustainable Development Goals." *Human Resources for Health Observer* Series No. 17. Geneva, Switzerland.

⁶ Antonio, C., Guevarra, J., Medina, P. (2018). Feasibility of a Return Service Agreement for Selected Human Resources for Health in the Philippines. Report prepared for the Department of Health, Manila, Philippines.

⁷ Dayrit M.M., Lagrada L.P., Picazo Ö.F., Pons M.C., Villaverde, M.C. (2018). "The Philippines Health System Review." Health Systems in Transition Vol. 8 No. 2. New Delhi: World Health Organization, Regional Office for South- East Asia.

⁸ World Health Organization. (2018). Decade for Health Workforce Strengthening in the South-East Asia Region 2015 – 2024: Second Review of Progress, 2018. New Delhi: Regional Office for South-East Asia

World Health Organization. (2011). World Health Statistics. Retrieved from https://www.who.int/whosis/whostat/EN_WHS2011_Full.pdf?ua=1

¹⁰ Dayrit M.M., Lagrada L.P., Picazo O.F., Pons M.C., Villaverde, M.C. (2018). "The Philippines Health System Review." Health Systems in Transition Vol. 8 No. 2. New Delhi: World Health Organization, Regional Office for South- East Asia.

¹¹ Ibid

¹² Organization for Economic Cooperation and Development. (2014). "Special Focus: Mobilizing Migrants' Skills for Economic Success." *International Migration Outlook 2014*. Philippines.

¹³ Republic Act 7160. (1999). "Local Government Code of the Philippines."

¹⁴ USAID HRH2030 Program. (2019). "Final Report on the Review of the DOH Deployment Program for Doctors, Nurses, Medical Technologists and Midwives in Service Delivery Networks in Nine Selected Regions." (Cooperation Agreement No. AID-OAA-A-15-00046).

¹⁵ Department of Health. (2019). List of Accepted Scholars per School Year, CY 2006 – 2019. Philippines.

¹⁶ Antonio, C., Guevarra, J., Medina, P. (2018). Feasibility of a Return Service Agreement for Selected Human Resources for Health in the Philippines. Report prepared for the Department of Health, Manila, Philippines.

¹⁷ Dayrit M.M., Lagrada L.P., Picazo O.F., Pons M.C., Villaverde, M.C. (2018). "The Philippines Health System Review." Health Systems in Transition Vol. 8 No. 2. New Delhi: World Health Organization, Regional Office for South- East Asia

¹⁸ Department of Health. (2014). "Administrative Order No. 2014-0025 Guidelines on the Deployment of Human Resources for Health (HRH)."

¹⁹ Ibid

²⁰ Department of Health. (2019). Trainings conducted by the DOH Central Office, Regional Office and Hospitals. Data obtained from the HHRDB.

²¹ World Health Organization (2016) "Global Strategy on Human Resources for Health: Workforce 2030." Geneva, Switzerland

²² Republic Act 11223. (2019). "An Act Instituting Universal Health Care for All Filipinos, Prescribing Reforms in the Health Care System and Appropriating Funds Thereof." Manila, Philippines.

²³ Department of Health. (2019). "Implementing Rules and Regulations of the Universal Health Care Act (Republic Act No. 11223)."

²⁴ Ibid

²⁵ WHO (2006) Working together for health. The World Health Report 2006. Geneva, Switzerland

²⁶ World Health Organization (2010). Increasing access to health workers in remote and rural areas through improved retention. Global policy recommendations. The World Health Report 2010. Geneva, Switzerland

²⁷ Dovlo and Martineu (2004) as cited in lipinge et al 2009

²⁸ Department of Health. (2014). "Administrative Order No. 2014 – 0025: Guidelines on the Deployment of Human Resources for Health." Manila, Philippines.

²⁹ lipinge, Scholastika, Dambisya, Yoswa M, Lowenson, Rene, Chimbari, Moses, Ndetei, David, Munga, Michael, Sibandze, Sibusiso, Lugina, Helen (2009). Policies and incentives for health worker retention in east and southern Africa: Learning from country research. Discussion paper 78. October 2009.

30 Ibid

³¹ Woloschuk W, Tarrant M. Do students from rural backgrounds engage in rural family practice more than their urban-raised peers? *Medical Education*, 2004, 38:259–261

³² Laven G, Wilkinson D. (2003). Rural doctors and rural back- grounds: How strong is the evidence? A systematic review. Australian Journal of Rural Health, 2003, 11:277–284

³³ De Vries E, Reid S. (2003). Do South African medical students of rural origin return to rural practice? South African Medical Journal, 2003, 93(10)

³⁴ Rabinowitz HK et al. (2005). Long-term retention of graduates from a program to increase the supply of rural family physicians. *Academic Medicine*, 2005, 80:728–732

³⁵ Grobler L et al. Interventions for increasing the proportion of health professionals practising in rural and other underserved areas (Review). The Cochrane Library, 2009, Issue I

³⁶ R Arora, P Chamnan, A Nitiapinyasakul. (2016). "Impact of a 20-year collaborative approach to increasing the production of rural doctors in Thailand." *International Journal of Medical Education*. 7:414-416.

³⁷ R Arora, P Chamnan, A Nitiapinyasakul, S Lertsukprasert. (2017). "Retention of doctors in rural services in Thailand: impact of a national collaborative approach." *The International Electronic Journal of Rural and Remote Health Research, Education, Practice and Policy.* 17:4344. Accessed through http://www.rrh.org.au.

³⁸ Pagaiya N., Kongkam L., Sriratana S. (2015). "Rural retention of doctors graduating from the rural medical education project to increase rural doctors in Thailand: a cohort study." *Human Resources for Health*. 13:10.

³⁹ Putthasri, W., Suphanchaimat, R., Topothai, T., Wisaiijohn, T., Thammatachari, M., Tangcharoensathien, V. (2013). "Thailand Special Recruitment track of medical students: a series of cross-sectional surveys on the new graduates between 2010 and 2012." *Human Resource for Health* 11:47. Accessed through http://www.human-resources-health.com./content/11/1/47.

⁴⁰ Techakehakij W., and Arora R. (2017). "Rural retention of new medical graduates from the Collaborative Project to Increase Production of Doctors (CPRID): a 12-year retrospective study." Health Policy and Planning. 32:809-815. Oxford University Press.

⁴¹ University of the Philippines. (2012). School of Health Sciences Handbook on Return Service Agreement Implementing Rules and Regulations (Approved). Manila, Philippines. Accessed through http://shs.upm.edu.ph/sites/default/files/SHS%20Approved%20Return%20Service%20Agreement%20IRR.pdf

42 Ibid.

⁴³ University of the Philippines School of Health Sciences. (2016). University of Manila – School of Health Sciences Step Ladder Curriculum. Accessed through website: http://shs.upm.edu.ph/

⁴⁴ Executive Order 129. (1968). "Providing Rules and Regulations Governing Official Travel Abroad of Officials and Employees of the Government, both National and Local, including Government-owned or Controlled Corporations, and Prescribing Rates of Allowances and Other Expenses Therefor." Manila, Philippines.