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UP CIDS DISCUSSION PAPER 2019-07

Valorizing Research and Evidence for Social Inclusion in the Philippines:

A Situational Analysis of Selected Programs Addressing the Shortage of Primary Care Workforce within the Primary Health Care Approach

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Valorizing Research and Evidence for Social Inclusion in the Philippines:

A Situational Analysis of Selected Programs Addressing the Shortage of Primary Care Workforce within the Primary Health Care Approach

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Introduction

In August 2017, the University of the Philippines Center for Integrative and Development Studies (UP CIDS) embarked on a partnership with the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Office in Jakarta, Indonesia for a six-month research project on *Valorizing Research and Evidence for Social Inclusion*. As one of the members of UNESCO's multi-country initiative, the Philippine Project aimed to address pressing policy agenda towards the attainment of the Sustainable Development Goals (SDGs) identified in the UN 2030 Agenda. The project specifically made use of the primary health care (PHC) approach and looked into the shortage of primary care workforce in the country.

The UP CIDS–UNESCO joint project on *Valorizing Research and Evidence for Social Inclusion* established the following approaches in project implementation:

- (1) Organizing a national working group composed of national government agencies (NGAs), civil society organizations (CSOs), and academic/research institutions, which met monthly and served as a steering committee and sounding board of the project;
- (2) Conducting a stakeholder mapping of policies, programs, and research institutions dealing with the project's focus;
- (3) Undertaking a situational analysis by way of qualitative research on selected programs addressing the shortage of primary care workforce within the primary healthcare approach;
- (4) Developing actionable recommendations via operational protocols to boost valorization of knowledge and evidence on the shortage of primary care workers within the primary healthcare approach; and
- (5) Organizing the Management of Social Transformations (MOST) Academy.

The Philippine Project culminated with the Management of Social Transformations (MOST) Academy, a two-day training workshop which incorporated inputs from various stakeholders and policy experts. In its wider context, the MOST Academy serves as a bridge between policymaking and social inclusion, providing a space for dialogue between relevant stakeholders and policymakers.

MOST acknowledges the complexity of the problem at hand—that social inclusion cannot be achieved by looking at only one particular policy area. In solving the reality of the health sector, MOST aimed to forge linkages along various policy areas to achieve the vision of social inclusion. It makes use of the quadruple helix paradigm, which brings together the four important segments of the community: business, government, the scientific community, and community members. MOST answers the twin question of what policymakers want from researchers and what researchers think they should provide to policymakers.

Primary care and primary health care

Historically, primary health care practitioners base their understanding of the concept on the Alma-Ata Declaration, articulated and agreed upon in the International Conference on Primary Health Care held at Alma-Ata, Kazakhstan on 6–12 September 1978. This declaration was signed by health ministers and secretaries of 134 nations.

Three ideas led to the Declaration of Alma-Ata: China's barefoot doctors, South America's liberation theology, and the community-based health programs in several countries, including the Philippines, which tried to address the health problems of people in communities. These inspirations for the primary health care movement was also connected to the larger movement for social justice.

By the 1970s, there was a growing dissatisfaction with the biomedical approach to health, which had its initial success in the 1950s with the eradication of smallpox and the "eradication" of malaria. But billions of the world's population were not benefitting from these biomedical advances. In 1978, the Alma-Ata Declaration asserted that the world had enough resources to achieve health for all by the year 2000. However, a considerable part of these resources are used for armaments, military conflicts, and other expenditures that do not benefit people. The two-page declaration captured and synthesized the global health situation, its flaws, and how to ensure health for all.

The Declaration begins with a reiteration of the definition of health in the Constitution of the World Health Organization (WHO) not just as the absence of disease, but as the state of complete physical, mental, and social well-being. In addition, health is a fundamental human right that must be provided at the highest possible level for everyone. Therefore, economic and social development is key for the attainment of health for all, and people have the right and duty to participate in the planning and implementation of their health care. Further, since health is a human right, it is the responsibility of governments to deliver an acceptable level of health for all. Better utilization of the world's resources is also necessary for the equal and proper distribution of health care services.

Now what is primary care and how is it different from primary health care? The recently passed Philippine Universal Health Care Act (Republic Act No. 11223) (2019, 5) defines primary care as “initial-contact, accessible, continuous, comprehensive and coordinated care that is accessible at the time of need.” This level of care is generally provided by clinics and health centers, which could then “coordinate referrals to other health care providers in the health care delivery system[] when necessary” (ibid.). These providers correspond to the secondary (e.g., community and district hospitals) and tertiary (e.g., provincial, regional, and specialty hospitals) levels of health care.

In this regard, the philosophy and approach of primary health care actually contains the idea of primary care. The Alma-Ata Declaration might also have added to the confusion when it sometimes uses the term ‘primary health care’ to describe the first level of contact with the health system—bringing health services as close to the people as possible. The components of PHC is outlined in the acronym ELEMENTS: E for education on health problems; L for locally endemic diseases and their prevention and control; E for expanded program for immunization against major infectious diseases; M for maternal and child care; E for essential drugs; N for nutrition and proper food supply; T for treatment of common diseases and injuries; and S for safe water and sanitation. This mnemonic more or less enumerates the services that are ideally supposed to be primary care services, but the philosophy behind these is what is called ‘primary health care.’

Shortly after the 1978 Alma-Ata Declaration, the debate between comprehensive and selective primary health care arose. The Declaration was approved by almost all ministers and secretaries of health of the world, but within a few years in its aftermath, global financial institutions began to recognize its revolutionary content. The Alma-Ata Declaration was criticized for being too ambitious and for having no clear indicators of successful implementation.

The Johns Hopkins School of Public Health came out with what was a less ambitious and temporary solution through a set of specific health interventions termed as ‘selective primary health care.’ It did

not push for health as a right, the unacceptability of inequities, or economic and social development based on the new international economic order as a necessity in achieving health for all. On its part, the UN recommended growth monitoring, oral rehydration, breast feeding, immunization, and family planning as specific health interventions. These could bring improvements in people's health status without necessarily changing the political and economic arrangements of a given country. Health indeed improved in countries that were not implementing the suggested interventions from Alma-Ata. However, this only reached a certain point, as improvements began to taper off.

The Pan American Health Organization (PAHO 2007) also came out with a document that called for the need to “renew primary health care in the Americas.” In 2008, the WHO released a report entitled *Primary Health Care: Now More than Ever*, because it sees that there was no global improvement of health inequities, which were inevitably rooted in social inequities. The social disparity among nations widened, and the disparities in health among nations ran parallel to this. This reflected that the problem was not just within nations, but among nations. The 2008 WHO document recognized “that left to their own devices, health systems do not gravitate naturally towards the goals of health for all” (WHO 2008, 7). It also noted that health systems tend to “focus disproportionately on a narrow offer of specialized curative care,” use “a command and control approach to disease control, focused on short-term results, [which] is fragmenting service delivery,” and employ “a hands-off or laissez-faire approach to governance [that] has allowed unregulated commercialization of health to flourish” (WHO 2008, 7).

As of 2012, the Bill and Melinda Gates Foundation and the World Bank are the major movers in global health policy, with the WHO assuming a supporting role. This begs the question of who really are the major global health policy formulators?

The World Bank came out with the Primary Health Care Performance Initiative (PHCPI), which considers the scope of PHC as those activities required for preventive, promotive, curative,

and rehabilitative care for chronic and accurate conditions that take place in an ambulatory setting. The World Bank recognizes that environmental and social determinants also influence health outcomes, but in order to accelerate performance improvement, the focus of its initiative will be on activities within the control of the health system. The World Bank defines primary care in this initiative as the provision of universally accepted, integrated, person-centered, and comprehensive health and community services provided by a team of health professionals accountable for addressing a large majority of personal health needs. So while recognizing the social determinants of health, the World Bank's advice is to actually concentrate on fixing the health system. Essentially, the World Bank calls it a primary health care initiative, but what it's asking for is the improvement of primary care services. This is a manifestation of selective primary health care.

According to Egner et al. (2017), clinical services only account for ten to twenty percent of a population's health. Fifty to seventy percent will come from social and economic factors: education, employment, income, family and social support, and community safety. However, institutions like the World Bank insist on concentrating on clinical care.

From Millennium Development Goals to Sustainable Development Goals

The Alma-Ata Declaration calling for a new international economic order also precedes the UN's Millennium Development Goals (MDGs). The MDGs aim the eradication of extreme poverty and hunger, achievement of universal primary education, promotion of gender equality and women empowerment, reduction of child mortality, improvement of maternal health, combatting HIV/AIDS, malaria, and other diseases, ensuring of environmental sustainability, and, fostering a global partnership for development. In 2015, members of the UN replaced the MDGs with the Sustainable Development Goals (SDGs) to address inequalities and social exclusion by 2030. Several parts of the UN Sustainable Development Goals are directly related to

social inclusion. To achieve these SDGs, four (4) basic conditions must be met:

- (1) *Equity-weighted.* This refers to the collection and use of evidence sensitive to the needs of the most excluded sectors in society. Very often, regular data-collection methodologies (i.e., national statistics or censuses) do not capture the realities experienced by the voiceless and the most vulnerable in society.
- (2) *Integrated.* Evidence on performance of policies and social services, even if often available, are not collected and compiled in a coherent manner.
- (3) *Relevant to early-stage and preventive action.* Sometimes, the data are existent but are not timely, for by the time that these data (i.e., censuses) are acquired, changes and developments have already occurred and the data may not be useful anymore.
- (4) *Generated in an inclusive manner.* Data collection methodologies must be participatory—a direction currently taken in universal health care—making sure that the communities are involved.

Inclusive and sustainable healthcare is the third among the seventeen (17) SDGs, making it one of the core goals of UN member states. Universal health care means that everyone—regardless of social, economic, and cultural standing—is able to access quality health care that is appropriate to their needs based on their gender, age, culture, or different ways of life and abilities. It has to be available, ethical, and respectful to the dignity of all. Within this notion, a crucial component to achieving universal health care is its workforce. Evidence across the globe has shown that “health and social workforce is the largest sub-component of resources needed... to achieve the health-related SDGs in low middle-income countries” (WHO 2017, xii).

However, even the replacement of the MDGs with the SDGs has failed to address increasing social inequities among nations and global

institutions such as the UN and WHO lack responses to growing economic, social, and health disparities.

The main thrust of globalization is trickle-down development. But until 1999, wealth has been concentrated among a small minority. The global non-government organization (NGO) Oxfam (2016, 2) reported that “[i]n 2015, [...] 62 individuals had the same wealth as 3.6 billion people” and that “the poorest half of the world’s population has received just 1% of the total increase in global wealth, while half of that increase has gone to the top 1%.”

Are globalization and the MDGs/SGDs addressing the inequities among nations? Or do the MDGs/SDGs decide to address only inequities *within* nations and not the increasing gap in wealth *among* nations?

Primary health care and the Filipino

Despite being a public good and human right, millions of Filipinos—especially the poor and other socially excluded groups—remain deprived of health care services. This is largely due to the nature of the Philippine health care system as being fragmented and inequitable, which are equally rooted in social and economic injustices. Growth has never been the Philippines’s problem; the problem is achieving inclusive growth. In 2011, the Asian Development Bank (ADB) pointed out that the because country’s growth comes from the service sector—mainly from call centers and service professions—and the contributions of the industrial and agricultural sectors are decreasing. Instead of “leapfrogging” over industrialization, the Philippines needs to “walk on two legs, to develop both industry and services” (Usui 2011, v). However, it may be difficult to achieve inclusive growth if the Philippines has been prevented from industrializing under globalization.

Eight out of ten Filipinos have reported never undergoing a physical examination or medical check-up. The shortage of medical and health care professionals in the country has further aggravated the situation. Of the roughly 42,000 barangays or villages in the

Philippines, only 24,000 have a health professional, with one permanent midwife assigned for every three to five villages in rural areas (Galvez 2018).

In 2016, the numbers showed that the Philippines produces only 2,600 doctors a year. In public health facilities, there is one doctor per 32,644 people, while the ratio for nurses is 1:17,259, and for midwives, 1:6,030 (DOH 2016). These numbers are three times below the WHO standard of one doctor per 10,000 people. In addition, 70% of health professionals who do remain in the Philippines prefer to practice in private hospitals. Meanwhile, those designated to geographically isolated locations are susceptible to challenging working conditions.

The poor performance of health workers in isolated areas has been traditionally considered a result of lack of formal training and skills. However, while the majority of interventions on worker performance have focused on education, training, and information dissemination—which are critical to creating and sustaining a well-functioning health workforce—what must be worked on are processes to effectively implement initiatives on quality and performance improvement (Valles 2018).

The need to solve these existing health care issues has not gone unheeded by the Philippine government. Under the Philippine Development Plan (PDP) 2017–2022, health is a priority in the pillars of *pagbabago* (inequality-reducing transformation) and *patuloy na pag-unlad* (increasing potential growth) (NEDA 2017). In line with this, the National Economic Development Authority (NEDA) also launched a long-term vision towards achieving *Ambisyon 2040*, which visualizes the Philippines as a middle-income economy by the year 2040. The accomplishment of this goal includes eradicating all forms of inequality and improving access to basic social services for all families. Its three main pillars include *malasakit* (enhancing the social public), *pagbabago* (inequality-reducing transformation), and *patuloy na pag-unlad* (increasing potential growth), under the premise of inclusive development. To add to these initiatives, under former Department of Health (DOH) Secretary Paulyn Ubial, the Philippine Health Agenda (PHA) made use of the “all of government”

approach, which mobilizes government agencies to address the health implications within each agency's scope of responsibility and function.

The Philippine Health Agenda 2016–2022 guarantees the following: prenatal care; newborn screening; neonatal care; under-five care; exclusive breastfeeding; complementary feeding; food and micronutrient supplementation; maternal, newborn, and child health and nutrition (MNCHN); integrated management of childhood illnesses (IMCI); adolescent health; immunization; health screening; and promotion and information. It also aims to address the triple burden of disease, which encompasses (1) communicable diseases such as HIV/AIDS, tuberculosis, malaria, diseases for elimination, and other emerging infections such as dengue, leptospirosis, Ebola, and Zika; (2) non-communicable diseases like cancer, diabetes, heart disease, and their risk factors (e.g., obesity, smoking, diet, sedentary lifestyle), and malnutrition; and (3) diseases of rapid urbanization and industrialization, namely injuries, substance abuse, mental illness, pandemics, and the health consequences of climate change and disasters (DOH n.d.).

The PHA also guarantees redefining service delivery networks through the primary care network (not the primary health care network), composed of the barangay health stations, rural health units (RHU), outpatient clinics, and Level 1 or Level 2 hospitals.

Despite this, there must be a guarantee that the Philippine Health Agenda makes primary care services available to all Filipinos from womb to tomb. It must also address the triple burden of disease. To further differentiate primary care from primary health care, it must be acknowledged that the former talks about health service, while the latter pertains to health systems. According to the WHO (2010), the six building blocks of health systems are (1) service delivery; (2) the health workforce; (3) health information systems; (4) access to essential medicines and technologies; (5) health financing; and (6) leadership and governance. The Philippine Health Agenda must encapsulate the primary health care framework—"all for health towards health for all." "All for health" refers to all of the health system, all of government, and all of society working towards health for all.

Under the proposed idea of “all of government” in the Philippine Health Agenda, the social determinants of health must be addressed. On the other hand, talking about “all of society” must enable people to participate in defining what they are entitled to receive, how they should be treated, and their roles within the health system. Given this, it is clear that inclusive growth and addressing the social determinants of health are necessary in achieving health for all, in a way that provides the state of complete well-being and not just the absence of disease.

Valorizing research and evidence for social inclusion

The Philippine project on *Valorizing Research and Evidence on Inclusive Social Development to Achieve the SDGs* zeroed in on three programs that address the shortage of primary health care workforce in the country: (1) the University of the Philippines Manila School of Health Sciences (UPM SHS), with an emphasis on its step-ladder curriculum and its contribution to the production of health workers; (2) the Sorsogon Floating and Mobile Clinic (SFMC), a program established by a government unit; and (3) the Alaga Ka Program, which was initiated by a civil society organization.

All programs involved multiple stakeholders, with the DOH and local government units (LGUs) playing significant roles and highlighting the importance of committed leadership. Their common challenges included financial resources and security concerns. Local politics likewise posed a threat for these programs. The SFMC, for instance, is vulnerable to changes in political leadership, while Alaga Ka staffing is affected when barangay health workers (BHWs) are not employed by the LGU (as employment in LGUs are often subject to patronage politics). Similarly, even with LGU support, some scholars of the UPM SHS are remiss with their return service due to a lack of policies that ensure community service as part of their education.

Initiatives by other countries have also gone through similar processes. In the case of Malaysia, the project aimed to support the implementation of the five-year 11th Malaysian Plan. During the

MOST Academy workshop, Malaysian professors Sity Daud and Fadillah Puteh presented projects which were observed to understand inclusive policy valorization: (1) the Family and Community Empowerment (FACE) Program and (2) the Senior Citizens Activity Center or *Pusat Aktiviti Warga Emas* (PAWE), which are care facilities for the country's elderly. The preliminary findings revealed that while the FACE and PAWE were government-supported programs, both also relied on external funding for further activities. Opportunities which arose from the findings include viewing PAWE activities not only as learning and upskilling opportunities, but also as a socializing platform for senior citizens. However, staffing and funding continue to pose as challenges in its implementation.

The following discussion centers on (1) the situational analysis of selective inclusive programs and policies implemented in the Philippines, and (2) the operational protocols that identify actionable recommendations to boost valorization of knowledge in programs and policies featured in the situational analysis.

The Philippine health care system: A brief overview

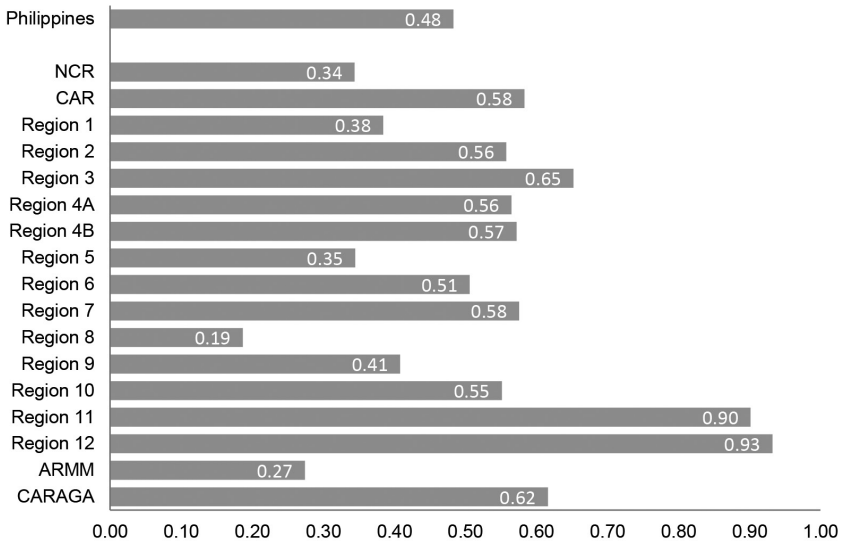
Since decentralization of governance took place in the early 1990s, the Philippine health care system has been organized at three different levels: national, provincial, and at municipalities or cities. At the national level, the Department of Health (DOH) governs the overall public health system and the achievement of national health outcomes. It also manages regional and tertiary level hospitals. At the subnational level, local governments (provinces, cities, and towns) are granted autonomy and responsibility to provide direct health services upon the guidance of the DOH. Secondary hospital care is under the purview of provincial governments. Meanwhile, primary care, including maternal and child care, nutrition services, and management of rural health units and barangay health stations, is the responsibility of municipal and city governments.

Health care in the Philippines is provided by both the public and private sectors. In 2016, only 34.2% of the country's total health

expenditure was paid for by the government, while out-of-pocket payments by households grew by 54.2% (Ordinario 2017). From 2010 to 2014, the country spent around 4.2% to 4.6% of its gross domestic product (GDP) for health expenditures. In 2016, the country's total health expenditure from the GDP was at 4.5%, which is still less than the 5% standard set by the WHO (ibid.).

The small share of the government in the country's health expenditure means that half of the Filipino population do not have access to quality health care. According to data from the DOH's Field Health Service Information System (FHSIS) (2016), majority of the rural population have limited access to healthcare services, if at all, with only half of the 42,000 barangays of the country having health stations.

FIGURE 1 Ratio of barangay health stations to barangays per region, 2016



Source: Department of Health. 2016. *Field Health Service Information System 2016 Annual Report*. Manila: Public Health Surveillance and Informatics Division, Epidemiology Bureau, Department of Health.

Such health inequities stem from the pervading problem in the country's health care system, which is based on the "differences in health status or in the distribution of health resources between

different population groups, arising from the social conditions in which people are born, grow, live, work and age” (Cabral 2016, 3).

TABLE 1 Inequities in health access and health outcomes from womb to tomb

Stage of Life	Inequity in Healthcare Access	Inequity in Health Outcomes
Pregnancy	Higher incidence of unattended births in the poorest quintile (58%) compared to the richest (4%)	Higher neonatal mortality rates in the poorest quintile (19 per 1000 live births (LB))
Childhood	Higher rate of complete vaccination in the NCR (79.5%) compared to poorer regions (29.4% in ARMM and 54.7% in Cagayan Valley)	Higher infant mortality rates in the poorest quintile (36 per 1000 LB) compared to the richest (13 per 1000 LB), with higher under-5 mortality rates (52 in the poorest quintile compared to 17 per 1000 children surviving to 12 months of age in the richest quintile)
Adult Life	44% lower hypertension treatment rate in elementary school graduates compared to college graduates. Higher rate of current smoking in the poorest quintile (33%) compared to the richest (18%).	40% higher risk of heart attack among the poor compared to the rich. 65.8% of deaths are without medical attendance.*

* Medical attendance refers to the cases given medical care at any point in time during the course of the illness, which directly caused death. Medical care may either be provided directly by a medical doctor or indirectly by allied healthcare providers, i.e., nurses and midwives who are under the direct supervision of a medical doctor. Otherwise, case is categorized as “death unattended.”

Source: Coalition for Primary Care & Universal Healthcare Study Group. 2015. *Evolving into a Universal Primary Care System*. Unpublished document.

To be sure, the Philippines is experiencing both shortage and misdistribution of health workers. In 2016, former DOH Secretary Ubial stated that the country was short of 15,000 doctors to be able to attend to the yearly health needs of Filipinos. The country

produces only 2,600 doctors a year. Data from the Philippine Medical Association shows that there are 130,000 licensed physicians in the country, but only 70,000 are active in the profession as of 2016 (Sandoval 2016). Of the total number of healthcare professionals registered with the Professional Regulation Commission (PRC), only 3,000 doctors (or 4.5% of the 66,000 registered), 5,000 nurses (or 1% of the 500,000 registered), and 17,000 midwives (or 22.9% of the

TABLE 2 Health workforce deficit in the Philippines, 2016*

	Doctors	Nurses	Midwives
Total number (DOH)**	40,788	89,477	42,700
Public sector			
Target density	1:1000	2:1000	2:1000
Target number ^a	63,000	126,000	126,000
Actual number	20,201***	46,207***	38,794***
Actual density	0.32:1000	0.73:1000	0.62:1000
Deficit ^b	42,799	79,793	87,206
Private sector			
Target density	1:1000	2:1000	2:1000
Target number ^c	33,000	66,000	66,000
Actual number ^d	20,589***	35,369***	3,906***
Actual density	0.62:1000	1.07:1000	0.12:1000
Deficit ^e	12,411	30,631	62,094
Total deficit^f	55,210	110,424	149,300

* Updated version of the matrix/analysis adopted from Coalition for Primary Care & Universal Healthcare Study Group, *Evolving into a Universal Primary Care System* (2015) (unpublished document).

** Data on health professionals in the private sector is based on the DOH's 2016 National Database of Human Resources for Health Information System (NDHRHIS). Note that this only captures data by private healthcare facilities that reported to the DOH, hence it is most likely that the data is underreported.

*** Authors' calculations are based on data from the 2016 NDHRHIS, 2016 Field Health Service Information System (FHSIS), and number of deployed health professionals based on the 2016 DOH Annual Report.

a Assuming 63 million users in the public sector

b Target number in public sector – actual number in public sector

c Assuming 33 million users in private sector

d Assuming non-government healthcare workers are all in private practice

e Target number in private sector – actual number in private sector

f Deficit in public sector + deficit in private sector

74,000 registered) work in a public health facility. This means that there are only 0.2 physicians, 0.4 nurses, and 1.7 midwives per 10,000 populations or less than three (3) healthcare workers per 10,000 populations (Cabral 2016).

The numbers reveal that the shortage of the country's health workforce is coupled with the misdistribution of the health workforce, which exacerbates social exclusion. In addition, due to the prohibitive cost of healthcare in the country, majority (66%) of Filipinos go to public health care facilities. This is especially true for the lowest wealth quintiles among families, where 82.4% and 89.6%, respectively, seek medical care from public health facilities.

TABLE 3 Utilization of health care facilities by income quintile, 2013

Income	Public Facility (%)	Private Facility (%)
Poorest	89.6	10.4
Poor	82.4	17.6
Middle	70.7	29.3
Rich	50.0	50.0
Richest	25.8	74.2
Total	66.3	33.7

Source: Philippine Statistics Authority. 2013. *Philippines National Demographic and Health Survey 2013*. Manila: Philippine Statistics Authority.

However, the utilization profile of public health care facilities is inverse to the number of the health workforce in the public setting. Of the total number of healthcare professionals recorded in the DOH database, only 20,201 (49.53%) doctors, 46,207 (51.64%) nurses, and 38,794 (90.85%) midwives work in a public facility. The implications of this health workforce crisis are alarming. It is estimated that more than half (58.1%) of reported deaths in the country are due to the inattention of medical professionals (Cabral 2016; DOH 2013).

According to statistics, there are more healthcare workers in urban areas than in rural areas, where the poorest are located. The

country only has three (3) doctors for every 100,000 patients in a rural public healthcare setting. The preference of health professionals to work in urban areas is fuelled by interrelated factors, including more lucrative opportunities to recoup the high cost of medical and health science education; poor work environment in rural areas and better technology in urban areas; and perceived deterioration of political and security situations in the countryside (Rabe, cited by Geronimo 2014; Leachon, quoted in “Matching System” 2014; Cabral 2016).

Overseas migration of health professionals (i.e., ‘brain drain’) also adversely affects the stock of healthcare workforce in the country. Annually, there are 17,000 to 22,000 health professionals who leave the country. This makes the Philippines the world’s leading exporter of health professionals, next to India (“Status of the Philippine Healthcare System” 2016).

Various bills have been initiated in the current Congress to address the shortage of health workers. There are also various efforts from the DOH to augment the shortage of health workers especially in rural areas. For instance, the DOH Deployment Program have merged the Doctors to the Barrios (DTTB) and the Registered Nurses for Health Enhancement and Local Service (RN HEALS) and Nurses Assigned in Rural Service (NARS) programs. However, the work of health workers deployed in rural areas are only transient in nature. Between 1993 and 2011, only 18% of DTTBs chose to remain in their rural posts and get absorbed by local government units (LGUs) (Leonardia et al. 2012).

At the policy level, the DOH organized the Human Resources for Health Network (HRHN), a multi-stakeholder policy advisory body aimed at further developing and regulating health care workers in the country (Dimaya et. al. 2012).¹ Since 2016, the DOH’s effort is to beef up data content through the HRHN. However, the data is not yet

¹ The HRHN was established in 2006 and is composed of public and private agencies, including professional associations, associations of medical and nursing schools, professional regulatory bodies, the Commission on Higher Education (CHED), and the Commission on Overseas Filipinos, among others.

complete. There are different sources of data and there are variations in the quality of data that these various sources collect.

Within the DOH, there are two sources of data on health human resources: the National Database on Human Resources for Health Information System (NDHRHIS), and the Field Health Information System (FHSIS).² Except for the year 1999, complete FHSIS annual reports from 1995 to 2016 are accessible through the DOH website. The publicly-accessible NDHRHIS statistical reports cover the years 2010 to 2017.

Once data is collected, the Philippine National Health Accounts is released only after a year. In the country, communicating research results or program studies to a wider audience is generally limited. For instance, CSOs usually share their studies or insights through publications and in their own communities. Academic researches on health workforce are often not widely disseminated. True to all stakeholders, there is also no systematic way to convey research results or program studies to non-traditional partners (i.e., dissemination in confined within own network).

There is a gap in data collection between government and private health human resource data. The DOH FHSIS database contains data only from the government side (i.e., public health facilities) and captures only those occupying plantilla positions. There is a need for close coordination and collaboration among LGUs, the DOH, and the Department of Budget and Management (DBM) in creating plantilla positions for health workers in municipalities and barangays and in defining the national policy regarding health care plantilla items. On the other hand, while the NDHRHIS captures both public and private health human resources, the data from this database is limited.

In addition to this, issues in coordination arise as numerous LGUs do not report health and health human resource data to the DOH.

² The NDHRHIS is accessible through <http://www.ndhrhis.com> (log-in credentials required), while the FHSIS is accessible through <http://www.doh.gov.ph/publications/serials> (open access) and <http://uhmis2.doh.gov.ph/efhsis/login.php> (log-in credentials required).

The gap in inter-governmental coordination (national–local) is due to the fragmented nature of health policies and administration brought about by the devolution of health services. There are also issues in the interface between NGAs, LGUs, and CSOs, which is actually a typical scenario even outside the health sector. Coordination and collaboration among various stakeholders is also limited. Beyond the issue of coordination, policy- or lawmaking is at times determined by political or electoral exigencies, and research is sometimes utilized by corporate agenda or corporate lobby.

With regard the comprehensiveness of data, there is no available consolidated national data on the distribution of health workforce in geographically isolated and disadvantaged areas (GIDAs) or indigenous peoples' (IP) areas. The current database is categorized according to the country's administrative and political divisions. The FHSIS statistical reports are disaggregated by regions, cities, and provinces; there are no data from the municipality or town level. The NDHRHIS statistical reports are disaggregated from the regional to the municipal level. While disaggregation according to administrative-political units is useful in terms of service delivery, data on GIDAs and IP areas would be helpful in designing programs and policies for social inclusion.

Consolidated national data on the distribution of health workforce need to be updated in terms of ethnicity, urban versus rural areas, and locally-based versus overseas-based Filipino health workers. These also sorely need the distribution of physicians according to the type of specialization or base of work (e.g., public health or hospital-based). There are also no available data on the background (e.g., motives and socio-economic status) of health professional graduates and their eventual career paths.

There is likewise a weak practice in translating research findings and insights into usable policy for next administrations. For instance, lessons and recommendations of some studies on health financing and insurance services of the Philippine Health Insurance Corporation (PhilHealth) are seldom used to inform the policies of the next administrations. A case in point is the raising of Philhealth's

in-patient benefit ceiling in 2009 under a new administration, but it was later found out that the increase in benefit ceiling was captured by private health care providers. Private providers increase their hospital charges to actually gain from PhilHealth reimbursements, which deprived or reduced the financial protection intended for the members—a conclusion already established six years earlier by a 2002 study.

Further research using the existing data may be helpful, as at the moment, there are no updated data or studies identifying the academic courses or programs and outcomes of health professions that are more applicable/relevant to the country's needs. There is also a lack of studies on program costs and budget sources over time, and their comparison to in terms of the value of impact and social benefits.

Addressing the workforce problem

According to CHED, after five years of medical education, most graduates tend to pursue private medical practice. With this in mind, the proposal is for the graduate of the medical curriculum to be either a primary health care or a primary care practitioner. A primary care practitioner should be content to go into a health center or clinic and be also competent to provide guarantees for the basic aspects of the Philippine Health Agenda, which is addressing the triple burden of disease.

Meanwhile, a primary health care graduate or practitioner should be able to work with the LGUs, communities, and schools. They must also have clinical competency and are able to work within and strengthen health systems. They should also be able to engage the government agencies at the municipal and community level to address the social determinants affecting the health of the people. Thus, they must be competent and comfortable to pursue an “All of Government” approach. The current Doctors to the Barrios (DTTB) Program has somehow relied on political savvy as an essential skill in dealing with local government officials and in getting health budgets approved.

For the “All of Society” approach, the graduate should be familiar with community organizing and in building community participation. Primary care providers are currently being looked down on and their compensation is low. Current PHC efforts fail to take into account these aspects of compensation and discrimination.

The Universal Health Care Act accords “[e]very Filipino [...] immediate eligibility and access to preventive, promotive, curative, rehabilitative, and palliative care for medical, dental, mental and emergency health services” (2019, 6). However, this definition resembles more with primary care rather than with PHC. A more agreeable definition would be to ensure all Filipinos healthy living, working, and schooling conditions, which is actually an articulation of Ambisyon 2040 that should ideally lead to social inclusion.

At the same time, addressing the workforce problem is a holistic action that requires changing the way we conduct research and store data on health systems. It necessitates the integration of all stakeholders and making them active players in working towards health for all.

It is suggested to require the DOH to produce data reports from its regulatory bureaus and from its hospitals. In addition, LGUs must also be required by law to report health human resources data to the DOH, including data on salaries, employment status, and selection and promotion criteria and processes. Health accounts and data on health human resources must also be part of the crafting of municipal health development plans. Alternatively, incentives for LGUs to submit health human resources data to the DOH (such as qualification to the Department of the Interior and Local Government (DILG)’s Seal of Good Local Governance or PhilHealth accreditation of RHUs) can be established.

Because the DOH’s Nurse Deployment Program (NDP) is able to collect data, the deployed nurses could be tasked to determine the number of health workers in the areas where they are deployed. Apart from assisting the doctors, they can be assigned to collect relevant health data.

However, the burden of collecting data should not just fall on LGUs. There is a need to consolidate and reconcile data on health professionals from CHED, the Philippine Statistics Authority (PSA), the DOH, the Professional Regulation Commission (PRC), and Philippine Overseas Employment Agency (POEA) with those gathered at the local level. These agencies also need assistance in terms of beefing up data collection and improving the generation of statistics on the country's health sector.

In order to get a more accurate overview of the country's health system, private clinics and hospitals are also encouraged to report their health workforce as part of their PhilHealth accreditation. Health science and medical schools should likewise document the background of their students (e.g., motives, socio-economic status, and career paths) alongside entrance requirements.

Even when the necessary data has been gathered and collected, approaching the issue of health care workforce in the Philippines should go beyond the health sector itself. Other factors, which most doctors and health professionals may not be readily equipped to know and answer, should also be considered. Multidisciplinary or cross-disciplinary studies (e.g., organizational development, social marketing, economics, sociology, and political science) on primary health care, translated into diverse formats, must be gathered and organized. There is also a need to include innovative academic institutions in formulating policies and programs addressing health workforce shortage.

The monitoring and evaluation of policies and programs must address issues beyond cost-effectiveness and conventional indicators and include measures of social impact and benefit. Furthermore, it cannot be denied that compensation is a key factor in developing capable health workers. It is therefore necessary to review the salaries of health workforce in communities and craft policy recommendations to further improve incentives for health workers working in GIDAs and in underserved areas. One concrete action would be to come up with a monitoring report mapping the utilization of health-related academic researches. Flexibility in policies, rules, and laws governing

academic institutions and promoting social accountability must be established in this way.

The Local Government Code should be improved to clarify inter-governmental relations and roles on health development. Political decisions on local health human resources must also be removed. In relation to this, a transparent review of the law and of its gaps should be conducted and inform better human resources for health (HRH) policies.

On the part of stakeholders and other actors actively working in health-related issues, the enhancement of data literacy is necessary to avoid misuse and misinterpretation of statistics. A multidisciplinary and inter-professional approach and encouragement for CSO participation in crafting HRH programs must be employed. Open lines of communication among stakeholders are crucial and it is ideal to establish a sustainable network of knowledge-sharing where stakeholders can engage in the production of data on the health workforce and in the crafting of relevant policies and programs. Developing policy research products, such as policy briefs, are key to reaching legislators. In this regard, more venues and more support from the government and from donors are needed to enable CSOs to share their knowledge with a broader audience.

Initiatives that link CSOs and other relevant stakeholders to policymakers should be at the core of health policy. For instance, policy- and program-related dialogues between the DOH and other stakeholders should be continued. Regular interactions through forums shall be conducted between national government agencies, NGOs, and other sectors to level-off and cross-validate generated data. Researchers should be proactive in initiating institutional collaborations with policymakers, program directors, and other relevant actors on the conduct and dissemination of their researches.

Modern avenues—like websites and social media—are convenient in broadening the reach and usability of available data and research. Creating a social media group or similar online platforms where technical working group (TWG) members and stakeholders can share relevant information related to primary health care can raise

awareness among a wide audience. A webpage where best HRH practices and contact information of relevant agencies and experts will be equally helpful.

In terms of dispersing knowledge, academic researches should be made available online and be listed under the DOH. Research results could serve as inputs in the preparation of position papers for proposed bills and programs. Good practices generated from these studies could be utilized and piloted by the DOH in other areas and be eventually developed into a full government program if found to be feasible. It will be beneficial to create a universal network to facilitate coordination and sharing among experts and stakeholders (e.g., establishing a Health Promotion Institute).

Research findings in regular LGU or community-based meetings and symposia are also necessary. Health professionals and experts are also advised to maximize and increase regular congress-based knowledge-sharing forums as a venue for discussion between researchers and policymakers.

Fundamentally, there should be a levelling off on the framework, perspective, and objectives of the health care system. It is suggested that the primary health care principle be adopted as its foundation. This similarly signifies the upholding and defending public health as a national priority against the threats of privatization, free trade agreements, and commercialization. The integration of such health initiatives and frameworks should also penetrate educational institutions. The creation of more schools such as that of the University of the Philippines Manila's School of Health Sciences (which will be discussed in the next section) across the country, along with other efforts such as regionalization and de-concentration of socially-accountable schools, may better foster the primary health care approach among young graduates.

Case studies on valorizing evidence-based research

The following situational analysis looks at examples of programs addressing the shortage of primary health care workers in the

country. The University of the Philippines Manila’s School of Health Sciences, the Sorsogon Floating and Mobile Clinic, and the Alaga Ka Program were identified by the UNESCO Philippine Working Group after a stakeholder mapping of policies and programs. The study is anchored on a conceptual proposition that good practices in the production and usage of evidence and knowledge, otherwise known as valorization, would lead to better policies and programs for social inclusion. The situational analysis explores valorization practices of the three identified programs relating to the production and usage of knowledge and evidence for inclusive policymaking.

This qualitative study was carried out for forty (40) working days. Primary data was gathered through face-to-face interviews with key informants. These were supplemented by secondary data sources and a literature review. The interviews were conducted from 4 December to 13 December 2017. The initial results of the situational analysis were discussed and validated in a workshop held on 19 January 2018, which was attended by members of the UNESCO Philippine Working Group and the key informants of the study. Follow-up interviews and additional data-gathering were undertaken from February to March 2018, before the finalization of the report.

University of the Philippines Manila School of Health Sciences (UPM SHS)

Program overview

The School of Health Sciences (SHS) is a unit of the University of the Philippines Manila (UPM), the constituent university of the University of the Philippines (UP) System offering education in the health sciences. Its main campus in Palo, Leyte was established in 1976. There are also two extension campuses—one in Baler, Aurora, and another in Koronadal, South Cotabato. UPM SHS is a unique school created to respond to the clamor to make medical education more relevant to the health needs of the country. It has a “socially accountable educational approach focused on underserved population groups intended to involve the people and healthcare providers in

relevant, quality, equitable and cost-effective healthcare using the primary healthcare approach” (Arcadio 2011, x).

The objectives of the school are “to produce a broad range of health manpower that will serve depressed and other underserved communities; and [] to design and test program models for health manpower development that would be replicable in various parts of the country and, hopefully, in other countries similarly situated as the Philippines” (Borrinaga et. al. 2011, 93).

The founding of UPM SHS was grounded on an analysis of the health situation in the countryside, which was beset with the twin problems of brain drain and maldistribution of health professionals, particularly of physicians. This pertains to the exodus of Filipino doctors to other countries and the tendency of those who remain in the country to practice in urban areas. The school’s ideals were influenced by the country’s prevailing post-colonial nationalist and student movement in the late 1960s and by the growing global primary health care movement that culminated in the 1978 Alma-Ata Declaration.

The school’s impetus was the so-called ‘Nemenzo Letter’ written in 1971 by Francisco Nemenzo, former Dean of the UP Diliman College of Arts and Sciences, which criticized the UP College of Medicine’s admission policy. The letter said that “the fierce competition for admission to the College of Medicine was breeding a generation of individualistic, self-centered, grade-conscious arts and science students who cared not for knowledge and how it could help serve their people but only for the good grades that would help them enter the College of Medicine” (Romualdez 2011a, 11).

The letter prompted former UP College of Medicine Dean Florentino Herrera to convene the “Extraordinary Curriculum Committee of the College of Medicine,” which was tasked to design a radical medical curriculum that “would ensure that graduates [are] socially conscious, community-oriented, and firmly committed to the service of the people” (Romualdez 2011a, 11). Thus, the innovative step-ladder curriculum (SLC) for health science education was born and became the defining feature of the UPM SHS.

The step-ladder curriculum (SLC)

The “first innovative curriculum in the country and in the world” (Arcadio 2011, xiii), the step-ladder curriculum (SLC) of UPM SHS is a community-based and competency-based curriculum consisting of a single and sequential path of obtaining health profession degrees, namely (1) Certificate in Community Health Work (CHW) (Midwifery), (2) Bachelor of Science in Nursing (BSN), and (3) Doctor of Medicine (MD). Hence, a student who completes the whole program in less than 10 years can become a midwife, nurse, or doctor. In between completing each step of the curriculum, students are required to go back to their communities for ‘service leaves’ to render health and other development services (Siega-Sur 2015, 28).

Students of the program do not apply on their own but are nominated or endorsed by their respective communities. These communities are mostly in GIDAs which are in need of health workers (S. Destura, personal communication, 11 December 2017).

Unlike the rest of the UP schools and colleges, student applicants of UPM SHS are exempted from taking the UP College Admission Test (UPCAT). This is because of the school’s adherence to ‘universal educability,’ or the recognition of the cost of poverty to educational achievement and the quality of public schools in rural areas. Because of this perspective, UPM SHS believes in the ability of every individual to learn. Hence, in its early years, the school has students with National College Entrance Examination (NCEE)³ scores as high as 90 and as low as 9. Students who would like to pursue the final ladder—the Doctor of Medicine degree—were required to take the National Medical Admission Test (NMAT) as required by CHED Memorandum No. 10 (S. Destura, personal communication, 11 December 2017). The incumbent UPM SHS Dean Dr. Salvador Destura (personal communication, 11 December 2017) explains succinctly:

“Sa amin, hindi criteria ‘yung UPCAT at maganda ang high school academic records para tanggapin lang ang isang

³ The NCEE was abolished in 1994.

estudyante habang sa school. Kung hindi, unang-una ‘yung community need, and then, health manpower willingness from the scholar to serve to his/her education. And dahil diyan, marami kaming galing sa barangay high school na mag-aaral dito. Meron kaming extreme conditions or situations na ang estudyante ay minsan hindi marunong mag-spelling, merong hindi marunong magbasa ng English. Pero take note, kapag board exam, pumapasa, nagta-top pa sa board[s]. Sabi nga namin, milagro ‘yan, kasi pagpasok niya, meron nga ‘yung hindi niya alam ‘yung English ng ganitong bagay na ito. Pero nandu’n, magaling mag-serve sa community, magagaling maggamot, magaling magpa-anak. So in a way, ‘yun ‘yung principle naming ‘universal educability,’ ... tatanggapin ka namin basta willing ka mag-serve pabalik at kailangan ng community health worker na ‘yan. Titiyagaan ka namin.”

(“For us, passing the UPCAT and good high school academic records are not criteria for admission, but instead we look at the community need, health manpower, and of course, the willingness of the scholar to serve after his/her graduation. Because of that admission policy, we have lots of students from barangay high schools. We even have extreme conditions or situations wherein the students do not know how to spell words or could not read in English. But take note that these students have passed the licensure examinations, and some even came out on top of the board exam passers. We think of that as a miracle because when they entered the school, they do not know the English words of some things, but they are very good in serving their communities; they are very good in treating patients, in birth delivery. In a way that is our principle of universal educability—we will admit you to the school as long as you are willing to serve back to your community and the community needs a community health worker. We will persevere in you”).

Because of this principle of universal educability, UPM SHS does not give numerical grades to its students and there are no failing

marks. There are only two grading marks: “Pass” and “Needs Tutorial” (S. Destura, personal communication, 11 December 2017). Below is a table presenting in detail the step-ladder curriculum:

TABLE 4 UPM SHS’ Step-Ladder Curriculum

Degree/Certificate	Duration	Skills Learned and Components
Certificate in Community Health Work (CHW) (Midwifery)	7 quarters (77 weeks or two years) of academic studies plus service leave (community service)	<ul style="list-style-type: none"> • Care of mothers and children • Networking and community organizing/ community development • Community-based planning (i.e., community health development program (CHDP)) • Management of the barangay health station/ center (BHS/BHC) • Research (i.e., data collection of vital statistics, survey) • Health promotion/ education to individuals and families
Bachelor of Science in Nursing (BSN)	5 quarters (55 weeks) of academic studies plus service leaves or community service*	<ul style="list-style-type: none"> • Nursing care of clients with medical-surgical (M/S), maternal and child health (MCH), psychological or other health issues • Management/ supervision of the nursing component of the municipal health development program (MHDP), programs, and personnel • Disease surveillance and epidemiological investigation • Community organizing/ community development • Training • Research

Degree/Certificate	Duration	Skills Learned and Components
Doctor of Medicine (MD)	5 years (yearly interval of didactics, clinical/hospital internship, and community service)	<ul style="list-style-type: none"> • Clinician • Preparation and implementation of the MHDP, project development • Management and supervision of programs and personnel • Staff development, intersectoral trainings • Community organizing, community development • Research

* In 3.5 years, a UPM SHS graduate could become a nurse and a midwife. To earn a BS Nursing degree in traditional schools takes four years, inclusive of summer classes (C. Firmo, personal communication, 11 December 2017).

Sources: Siega-Sur 2015; Destura, personal communication, 11 December 2017; UP Manila n.d.; UP Manila School of Health Sciences n.d.

Community service is an integral part of the students' training. Students are required to render services to their community for five months before they are qualified to take the licensure examination and move to the next degree (L. Salvatierra, personal communication, 11 December 2017). The students are also required to render return service of one year for every two years of schooling. Dr. Leah Brun-Salvatierra, head of UPM SHS' Return Service Committee, estimates that those who become medical doctors render sixteen (16) to seventeen (17) years of return service (L. Salvatierra, personal communication, 11 December 2017). Yet for most of the graduates of UPM SHS, serving in the country became a lifetime commitment. As Dr. Salvatierra (personal communication, 11 December 2017) notes, "*Ayoko ng one-is-to-two [return service policy]. Basta SHS graduate ka...nag-enroll ka sa SHS, pwede kang mag-abroad pero babalik ka pa rin to serve. Bakasyon ka lang doon.* (I don't agree with the one-is-to-two [return service policy]. If you enrolled and graduated from SHS, you could still go abroad but only for vacation. You need to come back to serve.)"

At present, only the main campus in Palo, Leyte offers the complete program (midwifery to MD program). The extension campuses in Koronadal and Baler could only offer the midwifery and nursing programs. Thus, students who qualify to take the MD program have to study in the main campus in Palo.

There are three reasons for this. First, the Koronadal campus is newly established. In fact, it was only in 2014 that the campus offered the nursing program after its first batch of midwives finished the first step of the ladderized curriculum (“UP-Manila’s SHS Extension” 2014). Second, the requirements and resources needed for setting up a quality MD program make it challenging for the school. Foremost is having a tertiary-level base hospital (i.e., training hospital), which the province of Aurora could not afford at present. Third, the UPM SHS main campus has only fourteen (14) faculty members, two of which are on study leave, and the other two currently teaching in the Koronadal extension campus.

Because of its unique philosophy and curriculum, the school ensures that the teachers are also role models, possessing the qualities of a “five-star” health worker and leader, which are also expected of its graduates. To do this, the faculty members, especially those who came from traditional medical schools, are also trained to be “all-in-one” (C. Firmo, personal communication, 11 December 2017). Apart from training faculty, another strategy that the school employed was to recruit its graduates to become faculty and administrators. That way, the school is assured that its teachers share their philosophy and orientation (S. Destura, personal communication, 11 December 2017).

Multi-stakeholder collaboration

While the concept of the school and the step-ladder curriculum was initiated by UP Manila, UPM SHS would not have materialized without the participation of the community (barangay), the local governments (towns and provinces), the Department of the Interior and Local Government (DILG), and the DOH.

The hands-on role of the DOH tapered off due to institutional (i.e., the reorganization of UP Manila and the SHS) and political

(i.e., devolution) changes starting in the mid-1980s. Nonetheless, the DOH still provides vital support to the school by allowing DOH-run hospitals as training grounds and by sending MD scholars to the school for its previous Pinoy MD scholarship program. Currently, the DOH signified its intent to resume sending MD scholars to UPM SHS via lateral transfer, but this plan is yet to materialize (S. Destura, personal communication, 11 December 2017).

Valorizing knowledge: UPM SHS's institutional practices in producing and using research evidence

Research is mainstreamed in the entire operations of UPM SHS. In the admission of students, the school coordinates with the DOH annually to determine which underserved areas to prioritize. These are mainly GIDAs based on the poverty statistics produced by the Philippine Statistics Authority (PSA). The school also conducts its own research and identifies which areas are in the most need of health workers. These data become the basis when prioritizing admissions to the school (S. Destura, personal communication, 11 December 2017).

During community service, UPM SHS students conduct community surveys, which collect demographic, socio-economic, and health- and environment-related data. These surveys are turned into community profiles which are presented to community leaders and members. These community profiles then become the basis for community action plans (S. Destura, personal communication, 20 February 2018). In terms of curriculum development and pedagogy, UPM SHS conducts assessments, and changes or adjustments are made based on what were observed during community work and on feedback from partner institutions. For instance, as the school subscribes to a 'felt-need' approach, the instruction is focused on prevailing health conditions of underserved areas (e.g., major diseases, public health), which makes it relevant to the needs of the communities, but at times is not "board exam-friendly" (S. Destura, personal communication, 11 December 2017).

Changes in the UPM SHS curriculum were also made based on changes in the policy framework and in standards set by the country's

regulatory boards. For instance, the nursing program was originally the Community Health Nursing program, but it was later converted into a BSN program because the regulatory board would not allow non-BSN graduates to take the nursing licensure examination (L. Salvatierra, personal communication, 11 December 2017).

In terms of exchanging information and experiences, researches on the UPM SHS experience and its step-ladder curriculum have been shared in numerous learning visits, conferences, and workshops. Some were even published in newspapers, books, and journals.

Strengths and challenges

The UPM SHS and its innovative step-ladder curriculum have been proven to be an effective strategy to address the shortage of primary healthcare workers in the country. The SLC allowed for multiple exits and returns to the community as a functional and professional health worker. Moreover, more than 90% of UPM SHS graduates are serving or practicing their profession in the country (Barua 2011, 261). A recent study on the impact of the UPM SHS in the health human resources of the country has shown that UPM SHS MD graduates are “more likely to be working in remote villages and small rural towns, and to undertake primary care disciplines like Family Medicine/General Practice and Public Health at graduation” (Siega-Sur et al. 2017, 1087).

While UPM SHS graduates clearly create positive impacts in the communities where they serve, the number of SHS graduates are currently too few⁴ to make an impact in the health care and health workforce situation of the entire country. Through the DOH-initiated Health Science Program, UPM SHS was able to share its experiences and train the faculty of other colleges and universities, such as the University of Northern Philippines, Ago Medical School,

⁴ UPM SHS has produced more than 2,200 graduates, of which 76% are midwives, 10% are nurses, and 45% are medical doctors (S. Destura, research validation workshop, 19 January 2018).

Davao Medical School Foundation, San Pedro College, Brokenshire School of Nursing, Western Mindanao State University, and Ateneo de Zamboanga University. Although the step-ladder curriculum was not entirely adopted by these schools, the UPM SHS model influenced them to offer innovative community-based health science education programs.

Opportunities for replicating the UPM SHS model are existing, in an effort to address the urgent demand for PHC workers. However, the challenges are also daunting. For one, running a medical school requires enormous resources. With no prospects of budget increase from UP Manila, the only source of financial support for the school is the LGUs. Yet, according to UPM SHS' internal study, only 40% of LGUs fulfill their commitment to support their scholars (S. Destura, pers. comm.). There are a number of reasons for this situation. First, LGUs that have the greatest need of healthcare workers lack financial resources. Second, providing health services is not a priority for most LGUs or local politicians. Third, patronage politics often play in LGU employment, thus commitment to employ UPM SHS graduates in the LGUs may be difficult to secure.

The other challenge is the clash between the orientation of the regulatory boards and existing licensing regulations and the orientation of UPM SHS' step-ladder curriculum. But perhaps the biggest challenge is changing the mindset of families and medical students, whose usual trajectory is to become specialists, and combatting the culture that sees general practitioner doctors as second-class physicians.

Sorsogon Floating and Mobile Clinic (SFMC) Program

Program overview

The Sorsogon Floating Clinic Program was launched in 1998 through the efforts of then Governor Raul Lee. From 1998 to 2007, the program remained a floating clinic primarily geared to cater to the health and social needs of those residing in the coastal areas of the province. But

in 2015, the program was re-launched as the Sorsogon Floating and Mobile Clinic (SFMC) and is now being implemented across the entire province (Espineda Jr. 2015). As a mobile clinic, it has extended its reach to more people due to its newly-acquired capacity to reach land-based interiors (P. Dechavez, personal communication, 7 December 2017). To date, however, the SFMC Program is only practiced within the province and is yet to be replicated in other places across the country.

The provincial government of Sorsogon, in particular the Office of the Governor, plays a central role in the development and success of the Sorsogon Floating and Mobile Clinic Program, given that it has chosen health and social services as its utmost priority. Among its thirty-three (33) staff members, two (2) are doctors, four (4) are dentists, four (4) are nurses, and one (1) is a pharmacist. The remaining members include support staff and volunteers. While it is true that expertise and knowledge in the field of health is a necessary requirement in the implementation of this program and in hiring its staff, commitment and dedication to serve the constituents of Sorsogon is given more importance (P. Dechavez, pers. comm.).

Program objectives

The Sorsogon Floating and Mobile Clinic was established based on observations and inquiries on the immediate needs of the people. During its inception in 1998, the floating clinic originally had other components such as the Walking Blood Bank and Botika ng Bayan (People's Pharmacy). However, through time, these components have become regular programs implemented by the barangays and, as such, have ceased to be part of the services offered by the floating clinic. In this light, it can be seen how the needs of the people evolve and change as time passes. Nevertheless, what remained to be vital parts of the program are its medical and dental consultation services (P. Dechavez, personal communication, 7 December 2017).

The Sorsogon Floating and Mobile Clinic program sets the following as its long-term goals:

- Provide comprehensive and integrated health and medical services to isolated coastal and interior barangays;
- Establish and implement a cohesive and functional network with different humanitarian agencies;
- Empower the economically depressed barangays and enable them to plan and manage their own health program and other related projects;
- Foster self-reliance and self-determination on health and other related issues and concerns;
- Integrate the expertise and resources of government agencies and NGOs in order to provide for the community health needs;
- Set up structures that would finance, operate and manage health development programs or render sustained technical, organizational, and material support to community-planned health projects intended to improve health security;
- Set up a radio communication network linking the barangays to the PFC radio communication center; and
- Contribute to the DOH's rich experiences in managing community health programs and its commitment to the use of partnership in improving people's health (DELGOSEA 2016).

Program beneficiaries

The dental services offered by the project cater to children from twelve (12) months old to nine (9) years old. The intent is to focus on children in order to pursue oral preventive health by engaging in efforts that would lessen their chances of experiencing future oral health complications. In every medical mission, the team holds an information campaign in order to raise awareness on the different healthcare programs of the government that can be availed by the people (P. Dechavez, personal communication, 7 December 2017).

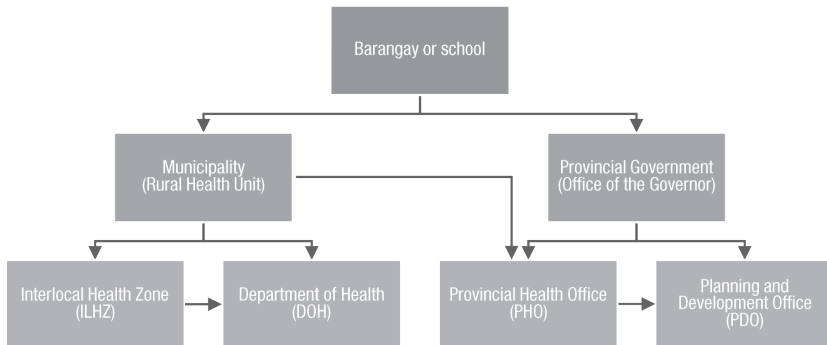
Valorizing knowledge: Data and knowledge production and utilization

In the process of reviving the program, project staff and other officers of the provincial government had to review the successful and unsuccessful components and aspects of the Sorsogon Floating Clinic project during its first implementation. They had to re-assess the needs of the people and incorporate changes to the services that they offer (P. Dechavez, personal communication, 7 December 2017).

Essential to the program is the creation of a service delivery network (SDN), or “the network of health facilities and providers within the province- or city-wide health system, offering core packages of health care services in an integrated and coordinated manner” (DOH 2016). The SFMC Program makes use of the SDN to be able to keep in touch and exchange data with other local and national health facilities. The SDN makes it possible for the provincial government of Sorsogon to be able to match their programs with that of DOH.

The flow of data collection and reports can be seen in Figure 2 below:

FIGURE 2 Sorsogon Floating and Mobile Clinic (SFMC) data reporting flow



Although the Walking Blood Bank and Botika sa Barangay have been institutionalized and are now being provided by the municipalities, they know that not all services can be provided by municipalities. In this sense, they also make an effort to create

programs that can help augment the services provided to people in the barangays.

The staff provide reports to the SDN within the Rural Health Unit (RHU) by filling out forms which show the progress of the program. These are submitted to the RHU together with progress reports from other projects. These documents are then passed on to the Inter-Local Health Zones (ILHZs) across the province to exchange information with each other. From the ILHZs, these reports are submitted to the DOH.

Reports from the SFMC are also submitted directly to the Office of the Governor (i.e., to the Governor, the Provincial Health Office, and the Provincial Planning and Development Office) (P. Dechavez, personal communication, 7 December 2017).

Apart from the training that the permanent staff are receiving from DOH, two members of the current team for the Sorsogon Floating and Mobile Clinic also took a short course on public health at the University of the Philippines Manila in 2015. The course was meant to be completed in two months. While taking the course, they learned that 9 out of 10 children in the Philippines have dental caries. By applying what they learned there, they introduced interventions to the dental component of the SFMC.

The dental component of the program was then redesigned to become a comprehensive oral health program. Unlike conventional oral healthcare which only looks at the decayed, missing, or filled teeth (DMFT) records, the SFMC dentists expressed the importance of practicing preventive oral health as this is now the new trend in dental health (P. Dechavez, pers. comm.). Hence, preventive oral healthcare (e.g. fluoride application) is part of the staff's performance indicators. Dr. Dechavez also shared that one sign of diligent work is going to the barrios (neighborhoods) and linking the people to the government.

Strengths and challenges

What can probably be considered the strength of the Sorsogon Floating and Mobile Clinic Program lies in its political context.

However, one of the challenges being faced by the program are the brunt of bureaucratic procedures. Although the budget that the program receives is ample, the staff finds that, for instance, the procurement process for depleted supplies, particularly through the Philippine Government Electronic Procurement System (PhilGEPS), is very tedious. Due to the very slow process, they have to find alternative avenues in order to have their supplies replenished and continue bringing services to the people.

An additional challenge that the staff encounters is the insurgency occurring in Sorsogon. In fact, the staff experienced complications twice because of attacks which occurred in remote areas where they were supposed to conduct medical missions. In the end, they had to postpone the missions for their safety. Security concerns also cause the delays in the delivery of service in some remote areas in the province.

Threats and opportunities

It has been highlighted how the cooperation of the past and present local chief executives in the province of Sorsogon were vital in the continuous promotion and delivery of quality health and social services to the people. However, politics can also be a major threat to the program. Unforeseen or sudden changes in the political landscape in the province could likely lead to a drastic shift in the provincial government's development goals.

The large budget allocation for the DOH, on the other hand, is considered as an opportunity for the health sector. Another opportunity, though more challenging, is the institutionalization of the Sorsogon Floating and Mobile Clinic Program. Since its inception up to present, the program still remains a special project of the provincial government. This has resulted in a number of management-related problems such as the difficulty in requesting for permanent staff positions and standardizing the salaries of and providing proper compensation to its staff (P. Dechavez, personal communication, 7 December 2017). In an interview, incumbent governor Robert Lee-Rodrigueza disclosed that efforts are now being made to

institutionalize the program through the Sangguniang Panlalawigan (Provincial Council).

Health Futures Foundation's Alaga Ka Program

Program overview

Alaga Ka stands for Alay sa Ginhawa at Kalusugan and is the banner project of Health Futures Foundation, Inc. (HFFI), a non-stock, non-profit, and non-government organization by Dr. Jaime Z. Galvez Tan that focuses on the implementation and management of community-based health and social development programs for marginalized communities in the Philippines. Established in 2010, the program aims to widen the reach of the Philippine health system by constructing fully-equipped barangay health stations in the poorest communities nationwide.

The program's entry point is the barangay health stations because it is seen as the first line of access to healthcare for low-income rural communities, who are the program's primary beneficiaries. The program's 60-square meter facilities are equipped to provide the basic primary healthcare needs, while the 90-square meter health stations also serve as birthing clinics in an effort to curb the increase in maternal deaths in marginalized communities.

Beyond providing the infrastructure, Alaga Ka also integrated in its community-based approach other components, such as the empowerment of communities through preventive and promotive health mobilizations, organization of wellness cluster groups and training of cluster leaders and barangay health workers (BHWs) in the community, provision of nursing and midwifery scholarships to indigenous peoples, and establishing community medicinal and food gardens.

Program implementation

Selection of the potential implementation sites of the program is based on the priority and needs of the community, the cooperation of local

government units, and donor preferences. Currently, the program's priority areas include Eastern Samar, MIMAROPA,⁵ and the Autonomous Region in Muslim Mindanao (ARMM). The structure of the Alaga Ka barangay health stations varies, depending on the area. As a vital component of its community-based approach, Health Futures underscores the need to empower barangay health workers to become better teachers, leaders, and health workers.

The organization employs a nurse or a midwife to manage the Alaga Ka barangay health station for eighteen (18) months and to train the barangay health workers. This involves capacity-building measures through trainings on vital signs and blood pressure monitoring, non-communicable diseases, maternal and child health care, and non-pharmacological interventions, among others. The organization also forms wellness cluster groups where cluster leaders are also trained along with the barangay health workers on community organization and on preventive and promotive healthcare.

After the period, Health Futures coordinates with the DOH to absorb the nurse or midwife in the health workforce at the barangay level. A memorandum of agreement with the local government unit ensures that the latter would provide for the maintenance of the facility and its services once Health Futures turns over the barangay health station to the local government. The initiatives to train the barangay health workers and cluster leaders as "Wellness Heroes" and to involve local government agencies in the process are intended to serve two purposes: (1) to help mitigate the health human resource shortage at the community level, and (2) to ensure the sustainability of access to health services in the long run.

As part of Alaga Ka capacity building, Health Futures also provides the barangay health workers and cluster leaders with Alaga Kits composed of a blood pressure apparatus, a thermometer, and other equipment used to conduct an initial health assessment for patients. These kits are provided once they have completed all the

⁵ Mindoro (Occidental and Oriental), Marinduque, Romblon, and Palawan

necessary trainings and pass a skills assessment conducted by the organization.

The Alaga Ka Barangay Health Station in Tagalag, Eastern Samar

One of the Alaga Ka barangay health stations can be found in the remote town of Tagalag in Marabut, Eastern Samar. According to Tagalag barangay captain Manuel Lledo, while access to basic healthcare services was already a problem in itself, resources for transportation of patients to the nearest rural health center was also another burden that the people needed to deal with. As such, childbirth at home became a common practice because families could not afford the costs of giving birth in a hospital.

The establishment of the Alaga Ka Program of Health Futures Foundation helped facilitate the improvements needed to make their barangay health station more capable of addressing such concerns. One year after its inauguration, the residents of Tagalag noted the progress in terms of having direct access to some of the community's basic healthcare needs.

Recipients of the Pantawid Pamilyang Pilipino Program (4Ps)⁶ of the Department of Social Welfare and Development (DSWD) are also among those who frequent the health station. These household-beneficiaries of the 4Ps are required to meet a number of health-related requirements to receive the cash grants: pregnant women must avail pre- and post-natal care, and be attended during childbirth by a trained professional; parents or guardians must attend the family development sessions, which include topics on responsible parenting, health, and nutrition; children aged 0–5 must receive regular preventive health check-ups and vaccines; and children aged 6–14 must receive deworming pills twice a year (Republic of the Philippines n.d.).

⁶ Also known as the conditional cash transfer (CCT) program patterned after similar initiatives in Brazil and Mexico.

Apart from facilitating access to basic primary healthcare services, the staff also provides services outside the health station such as Operation Timbang and feeding programs for children from 0 to 71 months and home visitation for persons with disabilities across town. Joining them in these efforts is an assigned nurse from the DOH's Nurse Deployment Program. A permanent midwife and a doctor from the Rural Health Unit also visits Tagalag once a week and twice a month, respectively.

Since launching the program in 2010, Health Futures emphasizes that their role is to complement the efforts of DOH in solving such forms of inequities in the Philippine health system. The Philippine Health Agenda for 2016 to 2022 has underscored the need to “expand and upgrade public health facilities to levels appropriate for the provision of necessary quality health services nationwide” (Cabral 2016, 4).

The Agenda also points out that a “severe maldistribution” of health care providers exacerbate the increasingly dire conditions of Philippine healthcare especially in rural and depressed communities. Data cited by Cabral (2016) from the DOH indicate that in 2015, some 398 physicians from the Doctors to the Barrios program, 13,500 nurses from the nurses in the Nurses Deployment Program, and 1,120 medical technologists were deployed in public health facilities across the country. Around 40,851 Community Health Teams (CHT) were also trained and deployed in various barangays to “deliver [...] key health messages and basic preventive health care” (Cabral 2016, 4). However, it remains to be identified “what orientation and training these health professionals underwent, what capabilities they possess and what their functions are in their areas of deployment” (Cabral 2016, 4). The CHT was also defunded in 2016 with their functions reverted to the barangay health workers (Cabral 2016).

Institutional practices in valorizing knowledge and evidence in community-based health care interventions

The collection and use of data are integral in the entire process of the implementation of the Alaga Ka Program. In its selection of

potential areas, Health Futures conducts a survey of marginalized rural areas in the country. Among the criteria for selection of potential areas include the class of municipality (which should at least be at the fourth income level), location (the town has to be in a catchment area), and recommendation by the DOH and the LGU.

Health Futures also conducts a needs assessment through key informant interviews and/or focus group discussions to determine the other needs of the community. Data from the PSA, such as surveys on family income and expenditure, family health, national demographics and health, maternal and child health, and family planning, are also used in the initial assessment reports of Health Futures.

For monitoring purposes, the Health Futures staff in the barangay health station is in charge of compiling various reports. In the case of the Alaga Ka Barangay Health Station, Melchie Echaque, midwife at Tagalag Health Station, submits four types of reports to the Health Futures Headquarters: a narrative report, a data collection report, the health station utilization report, and the health station services report.

A satisfaction survey is also provided to the patients to assess the performance of all staff members in the health station. These reports are submitted to Health Futures while the barangay and the rural health unit are also provided with copies for their respective databases. Evaluations are conducted on a bi-annual, yearly, or quarterly basis, depending on the type of Health Futures Program currently in place.

Monitoring the effectiveness of the trainings under the Alaga Ka Program primarily involves measuring the extent of transfer of knowledge to the community. This includes key informant interviews and focus group discussions to look into the effectiveness of the programs and the implications of their capacity-building initiatives for the health workers and members of the community. The overall impact of the programs on the community will be assessed every five years.

In terms of improving the implementation of the Alaga Ka Program, Health Futures acknowledges the need for additional skills training for staff members to gain more expertise, especially

in terms of catering to more socially-excluded groups. This includes community organization skills, development of training modules, and other skills related to program planning, development, management, and evaluation.

Strengths, challenges, and opportunities

Health Futures considers its strong community orientation and efforts in promoting community participation in the program as its major strengths. These encompass not just the provision of infrastructure to facilitate access of communities to primary healthcare services, but also the empowerment of the people and local health workers with the skills and capacity to do their own share in improving health outcomes in their respective communities.

A number of challenges, however, still needs to be addressed, such as sourcing funds to build more barangay health stations, logistical concerns (i.e. transportation for health workers who conduct home visitation and feeding programs in their areas), difficulty in hiring health professionals to work in the communities, and ensuring that the local governments do their part in helping maintain and provide for the basic needs of the barangay health stations. Moreover, the DOH's assignment of health personnel is now dependent on the PhilHealth accreditation of the barangay health stations.

Variables such as security concerns, poor communication lines, and distance of beneficiaries also hinder the efforts to expand the reach of the Alaga Ka Program to other GIDAs across the country.

Despite these barriers, the opportunity for growth remains promising as Health Futures puts communities at the core of the Alaga Ka Program. Providing community health workers with additional trainings on community organization, social mobilization, development of health education modules, and program development, implementation, and evaluation would help facilitate better healthcare services and pave the way for improved health-related outcomes on the ground.

Synthesis

The examples of existing programs addressing the crisis in the health workforce are relevant and effective not just in addressing the shortage in health workers, but also in mitigating the inequities in the country's healthcare system. While the programs were initiated by different sectors—the academe, LGUs, and NGOs—they have certain commonalities that might hold the key to their relative successes in terms of effectiveness and valorization of knowledge.

First, these programs are demand-driven or community-driven. The design and operations of these programs are based on actual needs and demands of the communities they intend to serve. For example, admission to UPM School of Health Sciences is based on community endorsements, which presupposes community healthcare needs. Similarly, Health Futures' choice of areas to be provided with barangay health centers is based on the needs of the communities. Meanwhile, the Sorgoson Floating and Mobile Clinic's medical missions are often based on requests from communities or schools in the province.

Because these programs are demand- or community-driven, needs analysis is embedded in their inception and design. All the programs have used data or employed research (in varying degrees of rigor) in designing their plans and interventions. A research process is also undertaken to modify and improve their existing strategies and interventions. However, with the exception of the UPM SHS, there is not much space for these programs to share their experiences and research outputs to and gain insights from other groups and institutions (e.g., comparing and learning from the experiences of other programs and/or countries).

Second, these programs involve multiple stakeholders and the DOH plays a significant role in these collaborations. All of the three programs coordinate with the DOH in their programmatic decision-making. The support of LGUs also play an important role in the sustainability of these programs. In the case of HFFI's barangay health centers, the LGUs commit to shoulder the maintenance of the health facilities. In UPM SHS' case, the LGUs support the students and

even helped in the expansion of UPM SHS to Koronadal and Baler. Interestingly, there is a linkage between the UPM SHS and HFFI's Alaga Ka program. For instance, the midwife in the HFFI-provided barangay health station in Tagalag is a graduate of UPM SHS, and HFFI also sends their indigenous peoples (IP) scholars to UPM SHS.

Third, these programs have committed leaders and administrators who have a strong will to serve. The graduates of UPM SHS who have been molded into the ideology of service to the underserved and the nation are now the current administrators of the school. Dr. Jaime Galvez Tan, who served as a doctor in the remote areas of Samar for years, brings into Health Futures the ethos of community-based work. Incumbent Sorsogon Governor Lee-Rodrigueza, who is committed to prioritize health in his governance agenda, made it possible for the Sorsogon Floating and Mobile Clinic to renew its operations. Dr. Philip Dechavez, SFMC coordinator, brings into the program the principle and dedication of “service to the people” which he got from his student activism days.

In terms of challenges, these programs also face common difficulties. Foremost is insufficient financial resources. Local politics also figure in as a major threat in the sustainability and replicability of these programs. For instance, the Sorsogon Floating and Mobile Clinic is vulnerable to changes in the political leadership since it is not yet institutionalized. HFFI health workers are also not guaranteed to be employed by LGUs once their contracts with HFI ends because employment in LGUs is often subject to patronage politics. The same insecurity is experienced by HFI-trained barangay health workers, as partisan politics can inform the choice and tenure of BHWs. Likewise, UPM SHS scholars, who are dependent on LGU support for allowances and postgraduate employment, are also vulnerable to changes in the political landscape. Insurgency and volatile security situation in the countryside are also factors that affect replicability of these programs.

National poverty statistics, which all three programs relied on, are held every three years and the level of disaggregation is only up to the provincial level. There are poverty estimates up to the

city or municipality level, which has no fixed time of release (e.g., two or three years). There might be variations within province or within municipalities that should feed into the program design and implementation. Additionally, there was no data identifying the health issues in GIDAs disaggregated by age group, population group, by type of disease (i.e., communicable, non-communicable, injuries). There was also no data on the knowledge, attitude, practices (or health-seeking behavior) of the beneficiaries (i.e. people in GIDAs, poor population). It might help in designing services if these variables are known.

Evidently, the gap lies in the overall situation and picture of the problem of health human resources, including the system and levels of decision-making when crafting the interventions, programs, and policies. Thus, various stakeholders have thought of numerous solutions to address the issue of shortage without understanding completely what the situation and problem is.

The case studies featured in the situational analysis were attempts to address the issue of primary health care worker shortage. The UPM School of Health Sciences is the academe's response to a gap in primary care providers, but it is limited and not a mainstream response of academic institutions. Alaga Ka is a health NGO's response with private partnership input, but it is a small response as compared to the whole health system. The Sorsogon Floating and Mobile Clinic is partly a DOH and an LGU response, but a question can be raised on its contribution to strengthening the health system.

On a positive note, good local governance and the prioritization of health as a community concern are critical aspects for the success of these programs. What must be further highlighted are the effective implementation of initiatives that have already been started and how they could be further optimized to reach their full operational potential. This may better address not only the performance of health workers, but also the underlying health issues in the Philippines in general.

References

- Arcadio, Ramon. 2011. "Introduction: Humanity and Community Orientation in Medical Education." In *Bringing Health to Rural Communities: Innovations of the U.P. Manila School of Health Sciences*, edited by Josefina G. Tayag and Leothiny Clavel, x–xiv. Manila: University of the Philippines Manila.
- Barua, Sumana. 2011. "Reviewing My Identity as a Graduate of SHS." In *Bringing Health to Rural Communities: Innovations of the U.P. Manila School of Health Sciences*, edited by Josefina G. Tayag and Leothiny Clavel, 259–63. Manila: University of the Philippines Manila.
- Borrinaga, Rolando O., Isabel Tantuico-Koh, and Perla D. Santos Ocampo. 2011. "The SHS in Leyte: Response for Social Accountability." In *Bringing Health to Rural Communities: Innovations of the U.P. Manila School of Health Sciences*, edited by J. Tayag and L. Clavel, 92–95. Manila: University of the Philippines Manila.
- Cabral, Esperanza. 2016. "The Philippine Health Agenda for 2016 to 2022." *Philippine Journal of Internal Medicine* 54, no. 2: 1–11. [https://www.pcp.org.ph/files/PJIM%20Vol54%20No2/The Philippine Health Agenda 2016 to 2022.pdf](https://www.pcp.org.ph/files/PJIM%20Vol54%20No2/The%20Philippine%20Health%20Agenda%202016%20to%202022.pdf).
- Coalition for Primary Care and Universal Healthcare Study Group. 2015. *Evolving into a Universal Primary Care System*. Unpublished document.
- Department of Health. n.d. *All for Health Towards Health for All: Philippine Health Agenda 2016–2022*. Manila: Department of Health. [https://www.doh.gov.ph/sites/default/files/basic-page/Philippine%20Health%20Agenda Dec1 1.pdf](https://www.doh.gov.ph/sites/default/files/basic-page/Philippine%20Health%20Agenda%20Dec1%201.pdf).
- . 2013. *The 2013 Philippine Health Statistics*. Manila: Epidemiology Bureau, Department of Health. https://www.doh.gov.ph/sites/default/files/publications/2013PHScompressed_0.pdf.

- . 2016. *Field Health Service Information System 2016 Annual Report*. Manila: Public Health Surveillance and Informatics Division, Epidemiology Bureau, Department of Health. <https://www.doh.gov.ph/sites/default/files/publications/FHSIS2016.pdf>.
- Dimaya, Roland M., Mary K. McEwen, Leslie A. Curry, and Elizabeth H. Bradley. “Managing Health Worker Migration: A Qualitative Study of the Philippine Response to Nurse Brain Drain.” *Human Resources for Health* 10, no. 47. <https://doi.org/10.1186/1478-4491-10-47>.
- Egener, Barry E., Diana J. Mason, Walter J. McDonald, Sally Okun, Martha E. Gaines, David A. Fleming, Bernie M. Rosof, David Gullen, and May-Lynn Andresen. 2017. “The Charter on Professionalism for Health Care Organizations.” *Academic Medicine* 92, no. 8: 1091–99. <https://doi.org/10.1097/ACM.0000000000001561>.
- Espineda, Jr., Felix. 2015. “Sorsogon Province Re-Launches Mobile Floating Clinic and Ambulance.” *Bicol Today*, March 8, 2015. <http://bicoltoday.com/2015/03/18/sorsogon-province-re-launches-mobile-floating-clinic-and-ambulance/> (inaccessible as of July 2019).
- Galvez Tan, Jaime. 2018. “The Shortage of Primary Care Workforce and the Country’s Health Objectives.” In *Proceedings of the MOST Academy on Inclusive Policy and Valorization of Knowledge Training Workshop*, unpublished document.
- Geronimo, Jee Y. 2014. “Where Are the Health Workers?” *Rappler*, February 12, 2014. <http://www.rappler.com/nation/50267-health-workforce-crisis>.
- Leonardia, Juan Alfonso, Helen Prytherch, Kenneth Ronquillo, Rodol Nodora, and Andreas Ruppel. 2012. “Assessment of Factors Influencing Retention in the Philippine National Rural Physician Deployment Program.” *BMC Health Services Research* 12 (411): 1–11. <https://doi.org/10.1186/1472-6963-12-411>.

- “Matching System to Correct Doctor Shortage.” 2014. *Manila Times*, March 29, 2014. <http://www.manilatimes.net/matching-system-to-correct-doctor-shortage/86185/>.
- National Economic and Development Authority. 2017. *Philippine Development Plan 2017–2022*. Pasig City: Philippines: National Economic and Development Authority.
- Noll, Heinz-Herbert. 2013. “Social Indicators and Quality of Life Research: Background, Achievements and Current Trends.” In *Advances in Sociological Knowledge: Over Half a Century*, edited by Nicolai Genov. Wiesbaden: VS Verlag für Sozialwissenschaften/GWV Fachverlage GmbH.
- Ordinario, Cai. 2017. “Health out-of-pocket spending grew by 54.2% in 2016–PSA.” *Business Mirror*, November 6, 2017. <https://businessmirror.com.ph/2017/11/06/health-out-of-pocket-spending-grew-by-54-2-in-2016-psa/>.
- Oxfam International. 2016. “An Economy for the 1%: How Privilege and Power in the Economy Drive Extreme Inequality and How This Can Be Stopped.” Oxfam Briefing Paper 210, January 18, 2016. https://www-cdn.oxfam.org/s3fs-public/file_attachments/bp210-economy-one-percent-tax-havens-180116-en_0.pdf.
- Pan American Health Organization. 2007. *Renewing Primary Health Care in the Americas: A Position Paper of the Pan American Health Organization/World Health Organization (PAHO/WHO)*. Washington, D.C.: Pan American Health Organization.
- Philippine Statistics Authority. 2013. *Philippines National Demographic and Health Survey 2013*. Manila: Philippine Statistics Authority.
- Republic Act No. 11223. 2019. “An Act Instituting Universal Health Care for All Filipinos, Prescribing Reforms in the Health Care System, and Appropriating Funds Therefor (Universal Health Care Act).” Enacted February 20, 2019.

- Republic of the Philippines. n.d. “Pantawid Pamilyang Pilipino Program.” *Official Gazette*. <https://www.officialgazette.gov.ph/programs/conditional-cash-transfer/>.
- Romualdez, Alberto G. Jr. 2011a. “How the SHS Came About.” In *Bringing Health to Rural Communities: Innovations of the U.P. Manila School of Health Sciences*, edited by Josefina G. Tayag and Leothiny Clavel, 11–14. Manila: University of the Philippines Manila.
- Sandoval, Elma. 2016. “Doctor shortage in the Philippines: An analysis.” *MIMS Today*, November 16, 2016. <https://today.mims.com/doctor-shortage-in-the-philippines--an-analysis>.
- Siega-Sur, Jusie Lydia. 2011. “University of the Philippines, Manila School of Health Sciences.” In *Building Health Workforce Capacity Through Community-Based Health Professional Education: Workshop Summary*, Institute of Medicine of the National Academies, 27–35. Washington, D.C.: National Academic Press.
- Siega-Sur, Jusie Lydia, Woolley Torres, Simone Ross, Carol Reeve, and Andre-Jacques Neusy. 2017. “The Impact of Socially-Accountable, Community-Engaged Medical Education on Graduates in the Central Philippines: Implications for the Global Rural Medical Workforce.” *Medical Teacher* 39, no. 10: 1084–91. <https://doi.org/10.1080/0142159X.2017.1354126>.
- “Status of the Philippine Healthcare System.” 2016. *HealthTech.ph*, April 21, 2016. <http://www.healthtech.ph/2016/04/status-of-philippine-healthcare-system.html>.
- University of the Philippines Manila. n.d. “UP-SHS (Palo, Leyte)” University of the Philippines Manila. <https://www.upm.edu.ph/node/28>.
- UP Manila School of Health Sciences. n.d. “Academics.” UP Manila School of Health Sciences. <http://shs.upm.edu.ph/academics>.

- “UP-Manila’s SHS Extension in SouthCot to Offer Nursing Program.” 2014. *MindaNews*, June 19, 2014. <https://www.mindanews.com/top-stories/2014/06/up-manilas-shs-extension-in-southcot-to-offer-nursing-program/>.
- Usui, Norio. 2011. “Transforming the Philippine Economy: ‘Walking on Two Legs.’” ADB Economics Working Paper Series 252. Mandaluyong: Asian Development Bank. <https://www.adb.org/sites/default/files/publication/28754/economics-wp252.pdf>.
- Valles, Marivil. 2018. “Message from the Department of Foreign Affairs.” In *Proceedings of the MOST Academy on Inclusive Policy and Valorization of Knowledge Training Workshop*, unpublished document.
- World Health Organization. 2007. *Framing the Health Workforce Agenda for the Sustainable Development Goals: Biennium Report 2016–2017, WHO Health Workforce*. Geneva: World Health Organization.
- . 2008. *The World Health Report 2008 – Primary Health Care: Now More than Ever*. Geneva: World Health Organization.
- . 2010. *Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and Their Measurement Strategies*. Geneva: World Health Organization.

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