POLICY BRIEF

Training Primary Health Care Workers: Expanding Learning and Development Opportunities for Universal Health Care

Statement of the Issue

Learning and development interventions (LDI) are necessary to ensure that the health workforce is prepared for practice in a rapidly changing health care environment. In the Philippines, most in-service training provided to health workers is through face-to-face methods. Health workers must travel long distances and attend lengthy training sessions, which increases absenteeism and incurs financial costs. Health workers from Local Government Units (LGUs) that lack funding for travel, such as from geographically isolated and disadvantaged areas (GIDA), may be unable to access critical training programs. With the expected increase in the demand to prepare more health workers to achieve universal health care (UHC) and its associated costs, the Department of Health (DOH) must consider how to maximize learning opportunities to reach a larger number of health workers from different and remote geographical locations in a timely manner and in the most cost-effective way. This policy brief explores what the DOH can do to expand learning opportunities to reach more health workers in support of UHC.

Background

The DOH is responsible for overseeing the quality and effectiveness of LDIs for health workers by identifying their training needs, implementing training programs and technical assistance activities, and monitoring and evaluating training programs.[1] According to DOH's guidelines governing the management of human resource for health (HRH) training and development programs, a comprehensive training program includes three phases: needs analysis, delivery, and post-training evaluation (PTE). PTE should be conducted to measure changes at four levels: participants' reactions, learning, and behavioral changes; and the training's impact on organizational outputs. While data is not available on the number of annual DOH-supported trainings, including PTE activities, managing and delivering LDIs is a substantial task given the size of the health workforce. Among the four main health cadres, doctors, nurses, midwives, and medical technicians, there are 187,540 registered and licensed health providers in the Philippines.[2]

[1] Executive Order 102 series of 1999 "Redirecting the Functions and Operations of the Department of Health."

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

The DOH primarily uses face-to-face methods for training the health workforce. While effective at increasing knowledge and skills, participation in lengthy face-to-face training sessions can increase health worker absenteeism.

Findings from the Workload Indicator for Staffing Needs (WISN) assessment, conducted by the USAID Human Resources for Health 2030 (HRH2030) Program in selected regions in the Philippines in 2019[3], showed that attendance of health workers at face-to-face training programs resulted in prolonged absences from health facilities – between 5-11 days per training – which can negatively affect the quality and availability of health services. The DOH Learning and Development Division reported that health workers are absent on average 32 days from clinical sites per year for training[4].

Reliance on face-to-face methods of training also raises equity concerns. According to a training expert,[5] Local Government Units (LGUs) from GIDA receive low Internal Revenue Allocations (IRA) and thus have limited resources to fully support the training of their health staff. Funds are usually unavailable to pay for the health staff to travel to the training site and for their per diem allowances. In situations where a midwife or nurse is able to attend a training, because health staff in GIDA are few, the health facility may close, making services unavailable. Thus, health facilities in GIDA must make tradeoffs in choosing between a competent workforce that is able to deliver quality health services and availability of essential services.

There are two main factors that contribute to the problem of high levels of health worker absenteeism from health facilities due to participation in training events. According to a study conducted by USAID HRH2030[6], training curriculum is not adequately tailored to the learners' needs. It does not differentiate between previous training, level of experience, cadre, or the health priorities of the communities in which the health workers serve, which means health workers repeatedly attend multi-day face-to-face training, even if it is not relevant to their profession or skill level.

Second, monitoring and evaluation practices that rely on attendance rather than achievement of competencies, combined with insufficient systems to track health workers' training needs and progress, also contribute to the problem of over training and high levels of health worker absenteeism. Due to a lack of budget and manpower[7], the DOH rarely conducts PTE that measures behavioral changes and impact, which means there is a gap in understanding how

[3] USAID's HRH2030 Philippines. (2019). "Determining Staffing Levels for Primary Care Services using Workload Indicator of Staffing Need in selected Regions of the Philippines." (Cooperative Agreement No. AID-OAA-A-15-00046).
[4] Interview with the Learning and Development Division Head, Health Human Resource Development Bureau, Philippine Department of Health.
[5] Interview with the USAID's HRH2030 Philippines Lead for TB and FP/MCH Performance Management and Development
[6] USAID's HRH2030 Philippines. (2019). "Status, Assessment and Recommendation Report on Advancing Human Resources for Health through E-learning." (Cooperative Agreement No. AID-OAA-A-15-00046)
[7] RTI International. (2018). Strengthening Training and Capacity Building: Experiences from USAID's LuzonHealth Project; DOH Regional Office 8/PHO Leyte/Ormoc CHD. 2014. Inter-Local Health Zone and City Based Supportive Supervision for BEmONC and MNCHN Strategies.

training is influencing job performance and having an impact on health service delivery. If this data were available, health managers would be able to better tailor training to meet the needs of the health workforce and eliminate participation in unnecessary or redundant training sessions.

Existing Policies

The government of the Philippines has enacted several policies to improve access to LDIs for licensed health professionals in-country. ***Republic Act 10650 (Open Distance Learning Act)***, enacted in 2014, aims to promote open distance learning to improve access to quality tertiary education. While the Open Distance Learning Act covers only educational institutions in the Philippines and does not directly apply to government agencies in the Philippines, some agencies such as the Department of Health (academy.doh.gov.ph), Department of Labor and Employment (elearning.dole.gov.ph), and Department of Finance through its Philippine Tax Academy have developed e-learning courses for government employees[8].

To fully realize its training mandate, in 2015, the DOH issued ***Administrative Order 2015-0042 (Guidelines for the Establishment of The DOH Academy)***. The DOH Academy acts as the training arm of the Department and develops learning platforms for health workers such as short courses, certificate courses, open distance learning, blended learning, face-to-face session and on-site workplace learning. Since the establishment of the DOH Academy, the DOH has adopted several initiatives to use e-learning as a training modality, such as the Adolescent Health Education and Practical Training (ADEPT) and the Data Governance courses. However, as reported by the DOH Learning and Development Division, the initiatives suffered from low enrollment and completion rates and have not been sustained due to insufficient support from DOH program managers, lack of promotion and dissemination strategies and the courses were not mandated[9]. The educational approach to adult online education was not fully utilized, including the failure to use mobile accessible and internet free usage of the online courses.

The Continuing Professional Development Act of 2016[10] requires health professionals to engage in professional development programs that will earn them a minimum of 15 CPD units to renew their licenses every 3 years (PRC Resolution No. 2019-1146)[11]. The law's implementing rules and regulations allow for the use of e-learning modalities to obtain CPD units. The Civil Service Commission (CSC) through CSC Memorandum Circular 18 series of 2018[12] allows for health workers to attend CPD-certified courses on official time. However, this circular only covers permanent or regular employees and does not include the many health workers with "job order" status or contractual arrangements. These employees are also at a disadvantage to

[8] Department of Finance. (2018). "Tax Academy to Offer Public Finance, Online Courses in 2019," accessed August 5, 2019. https://www.dof.gov.ph/index.php/tax-academy-to-offer-public-finance-online-courses-in-2019/
https://www.officialgazette.gov.ph/2015/03/19/dole-13-online-course-modules-3-online-course-projects-now-available/

[9] Interview with the Learning and Development Division IT staff, Human Resource for Health Development Bureau, Department of Health, 2019.

[10] Republic Act 10912 "Continuing Professional Development Act of 2016"

[11] Professional Regulation Commission Resolution 2019-1146

[12] CSC Memorandum Circular 18, series of 2018

attend face-to-face training since they are not eligible to have their training days paid as official time.

The government of the Philippines has also taken steps to protect individual personal information kept in the information and communications system of government and private sector through the Data Privacy Act of 2012 (Republic Act 10173) protects. The Act requires consent of the individual in processing and use of personal data. It also requires security measures to protect sensitive personal information in the system and hold agencies accountable for their compliance.

Policy Goal

To achieve UHC, the government must increase access and availability of high-quality LDIs, with equitable learning opportunities for GIDA, that result in practice improvements in health facilities. To further support these goals, it is essential for the policy makers to execute feasible and implementable government policies at the national and local levels.

Policy Alternatives

There are three proposed policy alternatives that the DOH may consider implementing in the next five years in the country.

I. Maintain Face-to-Face In-service Training as the Primary Method for Training Health Workers

Under this option, DOH's learning and development programs are primarily implemented through face-to-face methods, requiring participants to be physically present at the training venue, listen to lectures, read training materials, and take pre- and post-training examinations. Under this option, current face-to-face modalities of training are maintained. The DOH at the central and regional levels analyze training needs, develop training plans, and deliver training to health workers. LGUs decide which health workers can attend training based on the required profession or position by the DOH for the specific training program, current training needs of the health worker, eligibility for Philippine Health Insurance Corporation (PHIC) accreditation and available resources to pay for their travel to the training venue and per diem.

Face-to-face training, when implemented using multiple techniques (such as clinical simulations or practice and feedback) that encourage interaction and enable users to process and apply information can be effective in developing health worker competencies and skills[13]. Shorter training sessions that are repeated frequently can be more effective than traditional classroom-based training. In the Philippines, shortages of coaches and mentors needed to provide structured supportive supervision means that many trainees do not complete the hands-on portion of training, which could reduce the effectiveness of the current model of face-to-face training[14].

[13] Bluestone, J., Johnson, P., Fullerton, J., Carr, C., Alderman, J. and BonTempo, J. (2013). "Effective in-service training design and delivery: evidence from an integrative literature review." *Human resources for health*, 11(1).

[14] USAID's HRH2030 Philippines. (2019). "Status, Assessment and Recommendation Report on Advancing Human Resources for Health through E-learning." (Cooperative Agreement No. AID-OAA-A-15-00046)

Health workers that repeatedly attend training incur absences from the health centers, which results in decreased availability and quality of services in the health facilities. The systematic review of regulatory mechanisms on absenteeism in the health sector, conducted by Kisakye *et al* (2016), supports the premise that "absenteeism reduces the effectiveness of health care provision and compromises the quality of services because fewer workers are left on duty, resulting in work overload or interrupted service delivery."[15] Continuing to implement lengthy face-to-face training, and the resulting high levels of absenteeism, could be met by resistance from LGUs. In addition, some health workers are resistant to participate in LDIs due to negative experiences and attitudes[16].

Face-to-face training contains variable costs, such as travel expenses and meals, which would continuously rise as the number of participants increases. Expanding LDIs using face-to-face training methods to reach more health workers in support of UHC could exacerbate funding and human resource constraints due to the large number of health workers expected to be trained. Delays in completing training may cause gaps in health worker competencies and decrease the quality of health services provided to the population, with GIDA suffering disproportionately.

Although DOH training is available to all, health workers from LGUs that do not have money for travel, like in GIDA, may not be able to access the training, which could worsen health inequities across the country. It may also not serve the needs of contractual health staff who have job order status because they are not afforded training leave, and therefore cannot earn CPD units to maintain their professional licenses.

II. Use Blended Learning Approaches Linked to CPD and Licensure

Under this option, the DOH can administer an Administrative Order that will mandate DOH program owners to progressively transition training programs into e-learning and blended learning packages under one unified platform. Through phased implementation, the Department can develop basic course modules, taught online, for which public and private health workers can receive the commensurate number of CPD credits upon completion. For courses that require skills training, the programs can use a blended learning approach. Completion of e-learning modules would be a prerequisite for participation in face-to-face training, practicums, and PTE to demonstrate the acquisition of skills prior to receiving certification. The platform could track health workers' enrollment in and completion of the blended learning packages. Further application could also track completion of e-learning modules, provide a calendar and registration services for face-to-face practicums and PTE, and upon completion of the course, award certificates. The DOH could engage Centers for Health Development (CHDs) and LGUs in disseminating the blended learning approach to manage the increase in learners.

In order to demonstrate behavior change and to be consistent with CHED policy, the policy could require that the e-learning modules adopt evidence-based adult learning methodologies

[15] Kisakye, A., Tweheyo, R., Ssengooba, F., Pariyo G.W., Rutebemberwa, E., Kiwanuka, S. (2016). "Regulatory mechanisms for absenteeism in the health sector: a systematic review of strategies and their implementation." *Dove Medical Press Journal of Healthcare Leadership* 2016: 8 81-94.
[16] Ibid

and be designed to meet CPD accreditation requirements, as this will incentivize health workers to enroll and complete the programs. In addition, DOH e-learning portals may link to courses offered by other agencies and training institutions for advanced or supplementary training courses for health workers. These additional courses could also include CPD units. The policy could require that the platform ensure mobile and internet-free usage options so that health workers with limited access to computers or internet can use the system.
Evidence on the effectiveness of e-learning and blended learning interventions for health professionals found that blended courses have a consistent positive effect in comparison to no interventions for the acquisition of knowledge among health professionals.[17] Results of a systematic review on the effectiveness of blended learning in health professionals showed large consistent positive effect on knowledge acquisition compared with no interventions, which suggested that blended learning was very effective and educationally beneficial to health professions.[18] Blended learning can allow learners to download or review electronic materials as often as necessary at their own pace which enhances their learning experience. Results also showed the potential of blended learning in improving clinical competencies among medical students.

A comparative study of behavior changes from web-based versus face-to-face education found that web-based continuing professional development can produce changes in the behavior of physicians.[19] Gains in knowledge obtained from web-based approach was comparable with or superior to the knowledge obtained through live education delivery. Findings showed that web-based delivery can also produce learning outcomes equal to face-to-face education when applied to the delivery of clinical skills.[20] Similarly, studies on blended learning interventions demonstrated some evidence of improvement in the student's clinical competencies.[21]

E-learning is flexible and reduces dependence on geographical or site boundaries and is accessible, cost-effective, and time efficient[22]. With the progressive shift in the use of e-learning combined with face-to-face traditional training methodologies and PTE for skills development, the blended learning approach may increase access and availability of LDIs to a wider range of health workers than are currently reached using face-to-face learning methods. The use of e-learning platforms would reduce the time health workers spend traveling to training sites and

[17] Liu, Q., Peng, W., Zhang, F., Hu, R., Li, X., and Yan, W. (2016) "Effectiveness of Blended Learning in Health Professionals: Systematic Review and Meta-analysis*." J Med Internet Res*; 2016 Jan; 18(1): e2.
[18] Ibid
[19] Fordis M, King JE, Ballantyne CM, Jones PH, Schneider KH, Spann SJ, Greenberg SB, Greisinger AJ. (2005).
"Comparison of the instructional efficacy of Internet-based CME with live interactive CME workshops: a randomized controlled trial." J*AMA*. 2005 Sep 7;294(9):1043–51. doi: 10.1001/jama.294.9.1043. http://jama.ama-assn.org/cgi/pmidlookup?view=long&pmid=16145024.294/9/1043 [PubMed: 16145024] [CrossRef: 10.1001/jama.294.9.1043]
[20] Maloney, S., Haas, R., Keating, J.L., Molloy, E., Jolly, B., Sims, J., Morgan, P., and Haines, T. (2011). "Effectiveness of Web-Based Versus Face-To-Face Delivery of Education in Prescription of Falls-Prevention Exercise to Health Professionals: Randomized Trial." *J Med Internet Res*. 2011 Oct-Dec; 13(4): e116.
[21] Rowe, M., Bozalek, JF&V. (2012) "The role of blended learning in the clinical education of healthcare students: A systematic review." *Medical Teacher*, 34:4, e216-e221, DOI: 0.3109/0142159X.2012.642831
[22] Yusuf, N. and Al-Banawi, N. (2013). "The Impact of Changing Technology: The Case of E-Learning." C*ontemporary Issues in Education Research*, 6(2), pp.173-180;

provides an opportunity for health workers to learn at their own pace, reducing health worker absenteeism and improving availability of quality health services.

Designing and developing an e-learning platform can have substantial up-front costs. Once developed, the course would not incur great costs to the Department over the long term, however operational costs such as support services to learners, technology storage costs, and program evaluation would increase slightly as the number of learners increases.[23] A comparative cost analysis of face-to-face and distance learning modes in higher education institutions indicated that the average cost per student through distance education was lower than its counterpart face-to-face education. Thus, distance education was deemed to be more cost efficient, despite the substantial start-up or fixed cost.[24] A study on the incremental cost-effective ratio indicated that it costs 24% less to educate a student to the same level of evidence-based medicine (EBM) competency through blended learning approach.[25] Although both the face-to-face and e-learning courses have fixed development costs, the development cost of face-to-face training is much lower than that of e-learning. But because face-to-face training contains variable costs such as cost of trainers, its total cost continues to rise after development, making it more expensive than e-learning to manage. E-learning may have higher development costs at the start, but after a particular number of participants are reached, the total cost per learner decreases.[26]

In the Philippines, many stakeholders have negative perceptions of e-learning because of preference for face-to-face training or lack of confidence on e-learning as an effective modality in practice-based learning methods[27]. Lack of exposure and negative attitudes, if not adequately addressed through awareness raising or demonstrations, could negatively influence uptake and use of blended learning approaches.

While evidence shows that the use of e-learning methods can expand access of LDIs to GIDA, it does not eliminate equity concerns entirely, as there is not equitable access to computers and internet in GIDA. Thus, the e-learning strategies must be tailored to meet the needs of the Philippine health providers throughout the nation, including in the GIDA. Available technologies make possible e-Learning adapted to mobile and internet-free access the courses. While evidence exists to support the effectiveness of mobile learning to improve health workers'

[23] USAID's HRH2030 Philippines. (2019). "Status, Assessment and Recommendation Report on Advancing Human Resources for Health through E-learning." (Cooperative Agreement No. AID-OAA-A-15-00046)
[24] Sukati, C. W. S., Vilakati, N.T., Fowler, C.J.H., and Dlamini, D. F. (2014). "A Comparative Cost Analysis of Face-To-Face and Distance Learning Modes: The Case of the University of Swaziland." *Journal of Emerging Trends in Educational Research and Policy Studies* (JETERAPS) 5(5):629-636
[25] Maloney, S., Nicklen, P., Rivers G., Foo, J., Ooi, Y., Reeves, S., Walsh, K., Ilic, D. (2015) "A Cost-Effectiveness Analysis of Blended Versus Face-to-Face Delivery of Evidence-Based Medicine to Medical Students." *J Med Internet Res* 2015 July; 17(7): e182
[26] Yusuf, N., Al-Banawi, N. (2013). "The Impact of Changing Technology: The Case Of E-Learning." *Contemporary Issues In Education Research* – Second Quarter 2013 Volume 6, Number 2.
[27] USAID's HRH2030 Philippines. (2019). "Status, Assessment and Recommendation Report on Advancing Human Resources for Health through E-learning." (Cooperative Agreement No. AID-OAA-A-15-00046)

skills, there is insufficient evidence to support the effectiveness of offline learning in improving learners' skills[28].

The case of Tanzania illustrates some good practices in distance learning. To address challenges in health care training and retention especially in remote areas, the Tanzania Ministry of Health and Social Work provided upgrading programs for health care workers using distance learning linked to career development.[29] The program included the use of print and computer technology, continuing education programs that are broadcast nationally and internationally using video teleconferencing, e-learning and telemedicine. Distance learning was found to be cost effective, productive and socially effective by students since it provided them the ability to continue work in their facilities and, at the same time, provide for their families. The programs were found to limit indirect costs such as absence from the health care facility and provided an innovative solution to increase the number of health workers. A blended approach was used, especially for building clinical skills, where distance activities were combined with face-to-face sessions and a practicum. Constraints, however, were noted in using computer-based and internet-based distance learning in areas where there was poor computer access, limited computer skills, high cost and low speed internet access, inadequate infrastructure and unreliable electricity coverage.

The blended learning approach may be most beneficial to LGUs with severe staff shortages, where services will not be interrupted by lengthy absences of health workers during training. The approach could be effective in strengthening competencies of primary care workers, whose numbers are expected to increase in the implementation of Universal Health Care law.

Various approaches to blended learning are possible.
Allow use of Blended Training under Special Circumstances for Selected Areas. Online training prepared by experts can improve the quality and consistency of continuing education, especially in GIDAs. Some health workers are unable to undertake e-learning and are not funded to attend face-to-face training away from their facilities. These facilities could be exempted from online training requirements. Given these circumstances, under this option, e-Learning can be downloaded by a training center using a laptop, tablet or smart phone and can be delivered to the health workers in selected areas identified by the DOH. The DOH will set criteria for selected areas who will be eligible to train health workers using blended face-to-face methodologies. These criteria will outline conditions whereby LGUs will be allowed to use blended, face-to-face approaches supported by specific justifications and will require LGUs to fund a portion of the face-to-face training activity.

DOH may send itinerant training teams with modules prepared by experts to these areas to educate health workers or establish a pool of accredited trainers from local health facilities.

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[28] Posadzki P, et. al. (2019). "Offline Digital Education for Postregistration Health Professions: Systematic Review and Meta-Analysis by the Digital Health Education Collaboration." *J Med Internet Res* 2019;21(4): e12968
https://www.jmir.org/2019/4/e12968/ and https://www.jmir.org/2019/3/e12998/

[29] Nartker, A.J., Stevens, L., Shumays, A., Kalowela, M., Kisimbo, D., Potter, K. (2010). "Increasing health worker capacity through distance learning: a comprehensive review of programmes in Tanzania." *Human Resources for Health* 2010, 8:30. http://www.human-resources-health.com/content/8/1/30

The trainer need not have expertise in the subject matter. By providing accredited local health staff the opportunity to serve as trainers of health workers within and from adjacent areas, a local pool of trainers may be established to serve as technical training experts who will manage the LDIs at the locality. With access and availability to training through this option, health workers will be able to continue their professional development and gain CPD units for renewal of their licenses.

DOH costs for face-to-face training under this option, will be reduced since the number of areas where training will be held will be fewer than under option one (maintaining face-to-face training). A counterpart fund may also be required from LGUs in the conduct of these face-to-face training sessions, especially when venues are held in the locality. LGUs with low budgets on health will not be required to pay for staff travel and per diem when training is held in their areas.

This option may be effective in areas where the trainer will have internet access, but the learner may not have reliable use of the internet, such as areas with poor computer access, erratic internet connections, inadequate telecommunications infrastructure and unstable power sources. By ensuring that health workers are trained in these areas through blended face-to-face methodologies, the DOH will be able to ensure equitable access of health workers to LDIs. If these learners are registered by the training using the e-Learning portal, the accountability and tracking of learning in these difficult to reach areas will be increased.

III. Use of Self-study or Self-taught Approaches to Learning by Health Workers

Under this option, the learner takes responsibility for his or her own continuing professional development, without direct supervision or attendance in class. He or she is given the liberty to become an autodidact or a self-teacher.[30] However, many self-study resources are available online and those learners with unreliable internet access may also find a limited pool of local resources to support their development.

Self-study has been defined as studying without direct supervision from someone or attendance in a classroom. This type of learning is a growing popularity and a valuable way to learn. Self-study can also be used to learn or master new skills or learn new concepts such as language. Resources must be available to the learner in order to access innovative training options. The benefits one can gain from self-study would depend on his/her determination to learn.[31]

For this option, the DOH can issue a circular that allows health workers to undertake self-study for courses that are not available or accessible to them through face-to-face training or e-learning modalities. Learners may apply for CPD units directly to the PRC on courses they have taken.

However, self-study learning might not provide the right knowledge and competencies needed at work and as required by the DOH as there is no element of compulsion. Learners may choose any training or course that is related or not related to their work and profession. Thus,

[30] IvyWise Knowledge Base. (2019). Self-studying: What is the benefit and How to do it.
[31] Oxford Learning. (2015). Best Methods of Self Study for Students.

knowledge and skills learned may not be relevant to actual activities undertaken in service delivery.

This third option may not necessarily address equity goals of the policy to increase access and availability of LDIs to health workers in GIDA. Since self-study depends on resources of the individual learner and internet access, inequities may persist. GIDA areas, especially, are known to have unstable power sources and limited internet facilities, which could affect self-study of health workers. Given these conditions and with the absence of any incentives, health workers may not be motivated enough to study courses on their own. This option does not promote the specific health issues in the Philippines for which DOH sponsored training is available.

The option is technically feasible for health workers who have some knowledge in the use of computers. Self-study approach is also politically feasible since the health worker will not require travel and accommodation expenses from the LGUs, nor absence from work. It may also be taken at the learner's free time which does not interfere with work schedules.
The cost of the self-study option may also be cheaper for the LGUs since no training cost will be required. However, cost on self-study depends on the individual resources of learners and digital access to the courses. Therefore, self-study options may still result in differences in knowledge and skills of health workers because of these factors.

Discussion

To determine the most feasible policy option that will increase access and availability of training for health workers, each policy alternative is evaluated based on a set of criteria aimed to meet policy goals. Five criteria are selected, namely: equity (or equality), efficiency (or effectivity), technical feasibility, financial feasibility and political feasibility.

Equity is defined in terms of the distributive capacity of the policy option to address variations across numbers or locations of health workers, especially GIDA. The goal is to provide everyone with the education and training required to effectively carry out health care services at the primary care level. Efficiency is defined as maximizing benefits with the available resources, where the greatest number of health workers is reached at the least cost.

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

Policy options are scored on each criterion and assigned a score between 1-3. The score of "1" means that the policy alternative is least likely to achieve the policy goals. The score of "2" means that the policy alternative is likely to achieve the policy goals, but some factors may inhibit its achievement. The score of "3" means that the policy option will most likely achieve the policy goals. Table 1 below presents the evaluation of the policy alternatives based on Equity, Efficiency and Feasibility.

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Table 1. Assessment of Policy Alternatives for Equity, Efficiency and Feasibility

Criteria	Definition	Policy Alternative		
		Face to face training	Blended Learning	Self – study/ self - taught
Equity	Number of health workers covered in GIDA	2	3	1
Efficiency	Greatest number of health workers reached at least cost	2	3	1
Technical feasibility	Capacity of the agency to develop and implement	3	2	1
Financial Feasibility	Least cost to government and long-term financial sustainability	2	2	3
Political Feasibility	Acceptability to the decision-maker	1	2	3
	TOTAL SCORE	**10**	**12**	**9**

Option 1, maintaining face-to-face methodology in training health workers, is unlikely to achieve the equity and efficiency goals of the policy because courses may not be accessible and available to all health workers, especially to resource-strapped LGUs who find it difficult to finance training of their health staff. It is technically feasible since this methodology has since been used by the DOH to build competencies of health workers with limited success in reaching certain geographic areas. However, this option requires increasing allocation and investment to training over time, and would contribute to, already high, absenteeism rates. This option is likely politically unpopular with LGUs experiencing staff shortages.

Option 2, the use of blended methodologies, most able to achieve equity and efficiency goals of the policy since LDI can be made available and accessible to all health workers through e-learning, mobile and off-line options. Technical feasibility is also achieved since courses may be transformed into e-learning modules which have been shown to produce learning outcomes equal to face-to-face learning. Initial costs in building the platform and infrastructure may be high at first, but distance education is found to be more cost efficient than face-to-face education as the total cost per learner decreases and more workers avail the portal. This option is likely popular with both LGUs who want to reduce absenteeism and health workers who do not want to be away from their stations or families.

Option 3, the use of self-study, unlikely to achieve equity and efficiency goals of the policy since self-study depends on resources of the individual learner and internet access, which may not be available to health workers in GIDA. This option may not prepare workers for priority health needs in the Philippines and may not be technically feasible since the DOH will not have control of the course, the knowledge and skills learned may not be relevant. The option is financially feasible since it will not require any cost to the government, since fees are borne by the individual learners – but only those who can afford to pay and only those with an abundance of educational resources in person or via the internet.

Recommendation
As the DOH looks to ensure that the health workforce is prepared for the expansion of health services provided under UHC, the use of blended learning is the most equitable and cost-effective method because of its potential to maximize support to the most health workers across different and remote geographical locations. The blended learning option is the most efficient since health workers can be trained with the least cost and with the most flexibility.

Next Steps:
DOH can administer an Administrative Order mandating DOH program owners to transition training programs into e-learning and blended learning packages under one unified platform, this could include the following options:

1. The Department can develop basic course modules, taught online, for which public and private health workers can receive the commensurate number of CPD credits upon completion.
2. The policy could require that the platform allow mobile and internet-free usage options so that health workers with limited access to computers or internet can use the system.
3. For courses that require skills training, the programs can use a *blended learning approach.
    - Completion of e-learning modules would be a prerequisite for participation in face-to-face training, practicums, and PTE to demonstrate the acquisition of skills prior to receiving certification.
4. The platform could track health workers' enrollment in and completion of the blended learning packages.
    - The DOH's platform could track completion of e-learning modules, provide a calendar and registration services for face-to-face practicums and PTE, and upon completion of the course, award certificates.
    - Results of e-learning and blended learning is also linked to DOH career development and succession systems as part of building health worker portfolio and inform career moves,
5. The DOH could engage Centers for Health Development (CHDs) and LGUs in operationalizing the blended learning approach to manage the increase in learners.
6. The policy could require that the e-learning modules adopt evidence-based adult learning methodologies and be designed to meet CPD accreditation requirements,
7. DOH e-learning portals may link to courses offered by other agencies and training institutions for advanced or supplementary training courses for health workers, also including CPD units.
8. *Allow use of blended Face-to-Face Training under Special Circumstances for Selected Areas.*
    - The DOH can set criteria for selected areas who will be eligible to train health workers using online approved content modules and face-to-face methodologies. These criteria will outline conditions whereby LGUs will be allowed to use face-to-face approaches supported by specific justifications and will require LGUs to fund a portion of the face-to-face training activity.
9. DOH to assign a unit or contract another party who will assist/guide program managers in transitioning public health program training modules into e-learning modules; establish guidelines on how to select specific program training contents to be converted into e-learning modules and also on how to design e-learning modules.