

IMPROVEMENT STRATEGIES MODEL: AVAILABILITY OF EFFECTIVE PRIMARY HEALTH CARE SERVICES: PROVIDER AVAILABILITY

CORE PRINCIPLES OF AVAILABILITY OF EFFECTIVE PRIMARY HEALTH CARE SERVICES

The subdomain Availability of Effective PHC Services includes the presence of competent, motivated health workers at a health facility or in a community when patients seek care. Effective PHC also requires that providers and their patients build participatory relationships and a foundation of trust and respect. Health worker motivation is critical as it is associated with technical and experiential quality as well as effectiveness. Finally, effective PHC also requires safe practices routinely followed in the delivery of care.

PROVIDER AVAILABILITY

Availability is defined as the presence of a trained provider at a facility or in the community when expected and providing the services as defined by his or her job description. Availability is important because, while there are often shortages in human resources, deployed providers are frequently inappropriately absent or, when present, are not actively delivering health care because they are engaged in other duties.

PROVIDER COMPETENCE

Provider competence entails having and demonstrating the “knowledge, skills, abilities, and traits” to successfully and effectively delivery high-quality services.(1) Competency can be built during pre-service education as well as in-service education and is not limited to technical knowledge. A competent provider must also have strong empathy and communication skills, and these are considered important components of “experiential quality”, from the patient perspective.

PROVIDER MOTIVATION

“Motivation in the work context can be defined as an individual’s degree of willingness to exert and maintain an effort towards organizational goals.”(2) Motivation captures intrinsic and extrinsic characteristics that affect the behavior and performance of providers in a health system. Intrinsic motivation is the feeling of accomplishment driven by organizational goals and the impact of one’s work on patients and communities. Alternatively, extrinsic motivation is driven by monetary or non-monetary individual or environmental incentives.(2) Within motivation, the literature has a particular focus on degree of provider autonomy, degree of remunerative motivation, supportive supervision, options for professional development, and level of burnout.

PATIENT-PROVIDER RESPECT AND TRUST

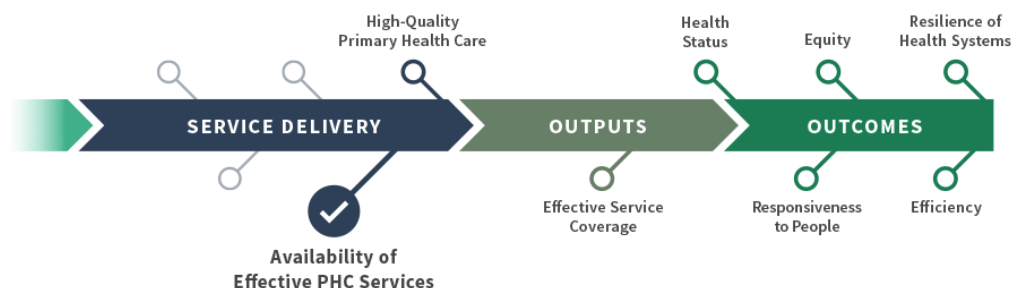
Patient-provider respect and trust refers to a relationship between patients and providers that is mutually respectful and trusting. Respect and trust between providers and patients can improve communication and provider motivation and contribute to the formation of continuous relationships over time.

SAFETY

“Patient safety is the absence of preventable harm to a patient during the process of health care and reduction of risk of unnecessary harm associated with health care to an acceptable minimum.”(3)

WHAT COULD YOUR COUNTRY ACHIEVE BY FOCUSING ON AVAILABILITY OF EFFECTIVE PHC SERVICES?

Improvements in availability of effective PHC services can lead to improvements in the following areas:



AVAILABILITY OF EFFECTIVE PHC SERVICES: WHAT ARE THE FIRST STEPS?

STEP 1: ENSURE AN ADEQUATE SUPPLY OF HEALTH WORKERS

An adequate supply of human resources for health on a national and subnational level is a foundation for implementing interventions intended to improve availability of effective PHC services. Training, recruiting, and deploying an appropriately sized and adequately trained workforce is discussed in greater detail in the Workforce module (forthcoming). However, an adequate supply of competent providers is only a first step towards achieving high-quality, available, and effective services.(4)

STEP 2: ENSURE THAT TRAINED AND COMPETENT PHC PROVIDERS ARE AVAILABLE TO PATIENTS

The presence of an appropriate number of providers is of limited benefit if providers are absent from their planned shifts or if service delivery is structured in such a way that patients are unable to access a skilled provider at convenient times. Patients can only receive high-quality care from competent providers if those providers are present in facilities or communities and trained in the relevant care. If provider absenteeism is driven by facility-level factors such as inadequate supervision, poor remuneration, a sense of ineffectiveness due to poor training or inadequate supplies, or a lack of professional development, improving provider motivation may concurrently address provider availability.

Even with the availability of large numbers of health workers, inadequately trained and skilled providers will likely not contribute to improving either individual or population-level health outcomes. Frontline primary care service delivery is a highly complex task, requiring the ability to diagnose and manage a wide range of possible illnesses in undifferentiated patients presenting at the first contact point with the health system. Additionally, providers health workers require appropriate and comprehensive training in prevention and promotion to engage with individuals and communities to promote health and wellbeing and address risk factors. Competency at these tasks requires substantial experience and training that often goes beyond typical academic degree-based educational programs, requiring post-graduate

experience and supervision. It is this comprehensive set of skills effectively applied in community settings that are likely to be responsible, at least in part, for overall improvements in morbidity and mortality.

STEP 3: ENSURE RESPECT AND SAFE PRACTICES THROUGHOUT

There are some overlaps between provider competence and patient-provider respect and trust. Experiential quality of care - measured from the patient perspective - may influence patient choice and utilization of primary care facilities. Competence and safety have similar overlaps - a system staffed with a workforce without the necessary clinical competency will most certainly perform poorly on safety. Safety includes not only provider knowledge in safe diagnostic, prescribing, and procedural practices, but also accessibility to the necessary supplies and equipment for a provider to perform his or her job.

What it is**PROVIDER AVAILABILITY**

What others have done

How to get started

How to succeed

Provider availability is defined as the presence of a trained provider at a facility or in the community when expected and providing the services as defined by his or her job description. Availability is important because, while there are often shortages in human resources, deployed providers are frequently inappropriately absent or, when present, are not actively delivering health care because they are engaged in other duties.

WHAT SHOULD I KNOW BEFORE BEGINNING IMPLEMENTATION?

There are three components of provider availability that affect how and when patients are able to receive services from competent providers:

- ▶ First, there must be an adequate supply of providers competent in comprehensive primary care who are appropriately distributed by geography, cadre, and according to demographics or social determinants as well as needs. Provider supply is most often addressed at the national or subnational level through policies and recruitment strategies as well as through decentralizing education programs and expanding rural health training.
- ▶ Second, once trained providers are present and deployed, they must show up for work when they are scheduled. Not being present during scheduled shifts is frequently referred to as absenteeism. Interventions to improve absenteeism span many levels of the health system.
- ▶ Finally, even when competent providers are present for their planned shifts, their work must be structured in such a way that they have an appropriate amount of time to spend with patients and are able to communicate with each other between shifts or during transitions. Improvements in provider consultation time are most often pursued at the facility level.

PRESENCE AND DISTRIBUTION OF PROVIDERS

In light of global attention on the achievement of Universal Health Coverage by 2030 as described in the Sustainable Development Goals (SDGs),⁽⁵⁾ many international organizations have focused on the global availability of human resources. The WHO has developed a [global strategy on human resources for health](#) for planners and policy-makers, informed by a multi-year consultation process. The document is framed around four objectives and global milestones for both 2020 and 2030 to measure progress. The global strategy provides policy options for countries in each of the four objectives.⁽⁶⁾ These global and national strategies relevant to human resources for health will be discussed in greater detail in B4. Workforce (forthcoming), though we present a few relevant considerations here.

Worldwide, nurses and midwives represent the largest proportion of the health workforce. In fact, the density of nurses, but not doctors, is found to have a significant impact on maternal mortality, and a well-regulated nursing staff has been found to improve patient satisfaction and health outcomes.⁽⁷⁾ Therefore, bolstering the nursing and midwifery workforce can have a considerable positive impact on health in certain contexts. It is important to note that the responsibilities and training for nurses and midwives as well as the definitions of the professions may differ between countries, and it is important to match their skills with other types of providers to meet population needs.⁽⁸⁾ A rapid review exploring the effectiveness and cost-effectiveness of nursing and midwifery interventions found that while some studies show positive impact, the findings across all identified studies are mixed and often there is insufficient data to draw a clear conclusion.⁽⁸⁾ Additionally, much of the identified evidence is from high-income countries and acute care rather than LMIC or PHC, respectively. A systematic review of 36 papers on nurse

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and midwifery workforce interventions found that national and state policies to strengthen the workforce have been successful in improving access and equity. These interventions were generally focused on increased education and training, deployment to underserved areas, and task shifting of services typically delivered by doctors to nurses and midwives.(7) A few tangible lessons from this review include:

What others
have done

How to get
started

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succeed

- ▶ When nurses assume new roles and responsibilities, it may be effective and necessary to also shift some of their lower-skilled responsibilities to other cadres, while ensuring adequate training and support during this transition.
- ▶ Workforce policy interventions must be supported by adequate infrastructure, training, incentives, and working conditions.
- ▶ It is important to ensure that nurses have adequate, supportive supervision. However, this should not be confused with burdensome reporting structures.
- ▶ When introducing new responsibilities and tasks, it is important that health workers receive increased incentives.
- ▶ Nurses and midwives are often most effective in their roles when they collaborate with community health workers or other such community-based cadres to better understand important community needs and cultural considerations.

Improving workforce in rural areas

Strategies to recruit, retain, and station providers - commonly called Posting and Transfer (P&T) - include:

- ▶ Expanding education and capacity targeted at specific cadres or regions in order to train and deploy more qualified providers;
- ▶ Providing core training closer to the service environment as well as greater continuing education and professional development opportunities locally;
- ▶ Strengthening primary and pre-service training programs in existing institutions in areas where there is an inadequate supply;
- ▶ Providing incentives and support for providers working in rural areas;
- ▶ Instituting mandatory civil service in rural areas; and
- ▶ Developing methods for improving provider motivation and satisfaction such as supportive supervision, access to career development and continuing education, ensuring an adequate workload, providing psychosocial support, and improving facility infrastructure so as to promote provider retention.(6,9-12)

The WHO has developed a [set of strategies](#) to improve recruitment and retention of health workers in rural areas. The document addresses: national policies to improve retention; recommendations for improving attraction, recruitment, and retention related to education, incentives, and professional support; suggestions for evaluation of rural retention; and research gaps and agendas.(13)

Workforce optimization and roles and responsibilities

The [WHO Global Strategy on Human Resources for Health: Workforce 2030](#) focuses on workforce optimization and roles and responsibilities. Often times, the skills of providers are underutilized, and access to high-quality care could be improved by better matching tasks and responsibilities to provider competencies. For instance, midwives have the potential to provide nearly 90% of care for sexual, reproductive, maternal, and newborn services, but often their scope is significantly more limited. By expanding roles

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and responsibilities with adequate training, incentives, remuneration, and supervision, facilities may be able to provide more comprehensive and available care. (6)

What others have done

A similar strategy used to strengthen the availability of competent providers is optimizing the skill-mix of providers. Often called task shifting, this entails moving responsibilities from one type of health worker to another who may have less specific training but still has the competencies to deliver the given service. (14) Often, optimizing the workforce by shifting responsibilities to cadres that are in greater supply can be an effective strategy for increasing capacity and improving provider availability, ultimately improving patient access to high-quality care. Optimizing responsibilities within an adequately staffed team can allow a team of health care workers each with an individually narrower range of skills to provide the more comprehensive approach required in primary care. Successful task shifting has been demonstrated extensively for HIV and maternal health services in low and middle-income countries, and growing evidence suggests that it may be a suitable approach for managing the growing burden of non-communicable diseases in these settings as well. (15-17)

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However, it is crucial to ensure that providers who gain responsibilities have adequate training in their new responsibilities the ensure that the health workforce is able to deliver high-quality and safe care. The following general steps should be taken to implement changing roles and responsibilities:

- ▶ Identify or inventory the existing skills within the workforce at the national, regional, district, and/or facility level.
- ▶ Identification of skills within the workforce or tasks within the facility that a certain cadre is either trained to do but not yet doing or could be trained to do.
- ▶ Conduct training to enable providers to deliver new skills.
- ▶ Support these providers with the necessary management support and infrastructure to carry out their new tasks.
- ▶ Involve communities throughout to ensure acceptability of services and providers.

A few resources from the WHO may be useful to stakeholders exploring how they can best optimize the health workforce in a given context:

- [Global Strategy on human resources for health: Workforce 2030](#) - This guideline was created through a consultative process and suggests objectives for the health workforce in the coming decades. (6)
- [WHO recommendations: Optimizing health worker roles for maternal and newborn health through task shifting](#)- Informed by a review of the relevant literature, this tool includes a matrix of provider types and potential services they could provide, with informed suggestions for how to spread these tasks across the workforce. (18)
- [WHO guideline on health policy and system support to optimize community health worker programmes](#) - while this guideline is specific to community health workers, elements are relevant to any community-based provider. The guideline is informed by systematic reviews of the literature. (19)

International recruitment

It is important to note briefly that some countries have strengthened the health workforce through targeted recruitment of international health workers. While this strategy may be effective in the short term, it may be to the detriment of developing sustainable national health workforce strategies in the long-term. The sixty-third World Health Assembly adopted the [Global Code of Practice on the International Recruitment of Health Personnel](#) to guide policy-makers considering international recruitment.

What it is**Health workers in the private sector**

What others have done

Health workers in the private sector make up a significant portion of the health workforce in many countries.(20,21) The private sector includes providers working at either “formal” and “informal” health institutions, with the former including legally recognized for-profit and not-for-profit organizations and the latter comprising non-legally recognized individuals such as informal drug sellers, shop keepers, and lay health workers.(20) The size of the private health workforce, their regulation and credentialing, and the population’s access to these providers can all affect overall provider availability. Particularly in the informal sector, there is often little quality regulation of health workers in the private sector, and private sector institutions and health workers differ significantly in training and scope between and within countries.(22) While there is increasing attention to and research on regulation of the formal private sector, there is limited literature or normative guidance on the informal sector. Often, strategies intended to improve quality or availability of primary care services focus exclusively on the public sector, overlooking a major source of care for a significant portion of the population.

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A systematic review of the literature comparing quality of care between formal public and private providers found 80 quantitative analyses and two qualitative ones, primarily from Sub-Saharan Africa and Asia and the Pacific.(22) The review found that structure, competence, and clinical practice were relatively similar between the public and private sector, and both were quite poor with a computed median quality score - a summary of structural, delivery, and technical quality - of 50/100. However, the formal private sector had slightly better drug availability, responsiveness, and effort, perhaps due to more flexible use of funds.

Often, it is the competence of both public and private providers - not availability - that prevents improvements in health status. For instance, a study in the poor, rural state of Madhya Pradesh, India, found that on average, a household had access to more than five medical providers in their village, but 67% of these had no medical training.(23) One of the goals outlined in the WHO’s Global Strategy on Human Resources for Health: Workforce 2030 is “by 2020, all countries will have a regulatory mechanism to promote patient safety and adequate oversight of the private sector,” highlighting the global importance of private sector regulation.(6) Policy options and recommendations relevant to this goal can be found in the [document](#). Thus, understanding the variation in both public and private provider availability, competence, regulation, and utilization is a crucial first step when designing interventions to strengthen the health workforce.

ABSENTEEISM

Unplanned absenteeism, defined as when providers do not show up for their scheduled shifts, is a common barrier to effective care in low and middle-income countries (LMIC). Even with an adequate national or sub-national supply and distribution of health workers, they must be present in facilities in order to improve patient health. The Service Delivery Indicators survey fielded between 2012 and 2016 found absenteeism rates of 27.5% in Kenya, 27.4% in Madagascar, 33.1% in Niger, and 14.3% in Tanzania.(24) Despite these data only being available in select countries, absenteeism is a challenge in many LMIC. Unplanned absences might be due to personal factors such as illness, unexpected lack of childcare, or challenges with transportation. However, providers may also be absent for other reasons such as a challenging work environment, lack of motivation, participation in mandatory in-service trainings, or a need to supplement insufficient income through dual employment elsewhere. These latter factors are more amenable to health system interventions.

What drives absenteeism?

Particularly in public facilities in LMIC, there are often no sanctions for providers who are absent. For some providers, this lack of accountability translates to low motivation to attend work. Providers may

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even seek dual pay by working in the private sector but receiving a paycheck for a job they do not attend or attend infrequently in the public sector.(25)

What others
have done

USAID and CapacityPlus have developed a technical brief on governance issues that affect absenteeism. They identified 10 underlying issues:

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- ▶ Standards that are not transparent
- ▶ Insufficient supervision
- ▶ Ineffective supervision
- ▶ Poor working conditions
- ▶ Inadequate financial and nonfinancial incentives
- ▶ Delayed remuneration
- ▶ Lack of performance incentives
- ▶ Limited quality of data
- ▶ Insufficient political will
- ▶ Few consequences (26)

How to
succeed

Recognizing that the issue of absenteeism is influenced by diverse stakeholder groups, the [brief](#) also includes system-wide efforts that can be undertaken to reduce absenteeism for each of these underlying issues. Some of these strategies are discussed below.

Interventions

Basic health system inputs must be in place before health system stakeholders can focus on motivational factors to reduce absenteeism. These include access to necessary functional drugs and equipment, timely payment, access to communication and transportation, and a positive work environment free of intimidation or aggression. Assuming basic inputs of pay, environment, and safety, providing greater provider incentives may further reduce absenteeism. Motivational incentives include performance-based financing (PBF), supportive supervision, appropriate autonomy, systematic recognition and increased stature for those employed in primary care, and professional development. PBF or systems to track and monitor provider absences may help prevent dual practice and absenteeism.(27) However, both require significant information system infrastructure. Additionally, it is important to note that while there are perceived benefits associated with PBF, it can also create perverse incentives. This is discussed in greater detail in the provider motivation and health financing (forthcoming) Improvement Strategy packages.

Finally, when providers seek dual pay outside of the public sector, it is likely an indication that they are not receiving appropriate remuneration from public facilities, and improved provider compensation should be prioritized to achieve greater competitiveness with salaries in the private sector. Formal recognition of primary care disciplines and qualifications similar to other medical disciplines and specialties can greatly enhance provider satisfaction, interest, and evaluation of self-worth. Supportive supervision and professional development are discussed in greater detail in [Provider Motivation](#). Other strategies for improving absenteeism include absence policies that are well distributed and communicated or mandatory interviews with providers who are frequently absent linked with organizational support and problem solving.(28)

SERVICE DELIVERY STRUCTURES AND TIMELINESS

The third component of provider availability is determined by facility structure. Timeliness is one important component of provider availability. Here, we consider timeliness to be the ability to access a competent provider for a sufficient amount of time at a time of the day and week that is convenient.

What it is

Additionally, patients should not face substantial waiting times once in the facility. A more comprehensive discussion of timeliness is in the [Access](#) module.

What others have done

Once patients are present at a facility, they may not be able to access a provider for a variety of reasons. If providers have a significant caseload, they may not be able to spend a sufficient amount of time with each patient. Part of the provider's caseload may involve burdensome administrative tasks or other duties that take time away from patient encounters. Additionally, many facilities in LMIC do not have appointment systems thus resulting in long waiting times, particularly in the morning when clinics first open.

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Timely availability of care is an important aspect of patient trust in the health system. If patients travel to a clinic and face long waiting times and short consultations, they may choose to bypass the first point of care, consult more readily available informal providers, or avoid care altogether for subsequent health needs.

Some strategies for improving timely availability of providers within a facility include:

- ▶ Adjusting responsibilities - If there is an adequate supply of human resources, moving responsibilities to different staff may help enable providers to spend more time with patients. The way in which responsibilities are divided between the health workforce depends on their training and competence and should always be done with optimization of roles in mind.(6) It is crucial to ensure that providers have the relevant competencies to carry out their responsibilities when optimizing roles and scopes of practice and that they are part of larger multidisciplinary teams that are structured to meet population health needs.
- ▶ Appointment systems - creating appointment systems can help increase clinic efficiency and reduce waiting times. However, there must be adequate communication and record keeping capacity to implement an appointment system. Different options for appointment systems are discussed in more detail in the [timeliness](#) module.
- ▶ Appropriately sized patient populations - When providers are overburdened by patient demand, they may not have adequate time to devote to each patient. This can be avoided during empanelment. When planners determine the appropriate size for each panel, provider burden and the number of available providers should be a primary consideration.
- ▶ Shared medical appointments or block appointments - shared medical appointments can decrease wait times and optimize provider time by pairing a group of patients with similar health needs with a single provider. Shared medical appointments have been used extensively for maternal and newborn health and are showing emerging evidence of success for the management of non-communicable diseases. (29,30)

A final important component of service delivery structure that influences availability to care is horizontal integration. Horizontal integration is the consolidation of multiple types of service - including promotive, preventive, rehabilitative, and even palliative - in a single facility.(31) Indeed, to effectively provide horizontally integrated services, providers must be adequately trained in a range of primary care relevant services. In LMIC, often different services are offered on separate days of the week, requiring multiple visits for patients with more than one specific health need. Through horizontal integration, facilities can minimize follow-up visits and increase efficiency and availability of providers.

What it is

WHAT HAS BEEN DONE ELSEWHERE TO IMPROVE PROVIDER AVAILABILITY?

What others have done

How to get started

How to succeed

PRESENCE AND DISTRIBUTION OF PROVIDERS - MULTIPLE COUNTRIES

Brazil

There are a variety of different strategies that can be used to promote a sufficient supply and equitable distribution of providers. Beginning in 2013, Brazil addressed geographic disparities in access to health services through a multi-faceted workforce program called *Mais Medicos* (More Doctors). Prior to *Mais Medicos*, the distribution of physicians ranged from 0.71 to 3.09 per 1000 people measured at the state level with significant disparities between states.(32) Brazil had historically experienced challenges retaining doctors due to poor infrastructure and job security as well as an absence of well-articulated career development pathways.

Brazil used a three-part approach to increase provider availability throughout the country. The first focused on increased infrastructure. Municipalities were invited to apply for funds to improve facilities or secure necessary equipment. The second and long-term strategy within the *Mais Medicos* program was the development of medical school programs in rural regions or regions with few doctors. Areas that were more than 75km from a medical school were given priority for this program. In the final component of *Mais Medicos*, Brazil increased recruitment of primary care physicians, many of whom came from Cuba where there was an overproduction of physicians specifically trained in comprehensive primary care.(32) Within two years, the government of Brazil had recruited and provided training to more than 18,000 physicians.(33) At this time, Brazil was spending approximately 9% of its GDP on health.(34) While the strategy of recruiting foreign physicians successfully improved provider availability in this context, it remains to be seen whether this strategy is sustainable over time. There are many ethical considerations when recruiting doctors internationally. More information on the ethics of international recruitment of providers can be found in [Global Code of Practice on the International Recruitment of Health Personnel](#) adopted by the sixty-third World Health Assembly.

Through these three components of *Mais Medicos*, Brazil doubled the number of municipalities with greater than one doctor for every 1000 individuals between 2013 and 2015 and increased coverage of PHC services from 77.9% to 86.3% in the same time period.(32)

Nepal

In 2006, Nepal initiated a similar rural health workforce strengthening program, instead focusing on posting of domestically-trained family physicians. This program - called the Rural Staff Support Programme - was motivated by the extremely low capacity of district hospitals to perform caesarean sections due to inadequate human resources.(35) For each participating hospital, the program recruited two post-graduate doctors who were posted for three years of service. The program provided a scholarship for the participants' three-year post-graduate program in family medicine as well as personal, professional, and management support in the hospital. Additionally, two nurse coordinators administered the program and provided support to doctors in seven hospitals. The program cost approximately \$66,000 per hospital per year. Although staff were very supportive of the program, some doctors reported personal challenges integrating in the rural hospitals, suggesting a need for greater support. Initial evaluations of the program found that participating hospitals had a higher increase in safe deliveries and were able to provide continuous emergency obstetric services.

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Cuba

Cuba's primary health care training and deployment programs are so robust that they send approximately 30,000 physicians to Latin America and Africa each year, including those who supported the *Mais Medicos* program in Brazil. Cuba achieves this supply of doctors through free, comprehensive medical education. Additionally, they mandate that all graduates work in family medicine prior to specialization. After mandatory service, 70% of providers remain practicing in primary care. As a result, Cuba has achieved a robust primary care system which accounts for 80% of all health encounters. (36) More information on Cuba's primary health care system including their community-based approach can be found [here](#).

What others have done

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Ghana

Task shifting involves careful planning, training, and supervision in order to successfully support changes in delegation of responsibilities. An qualitative evaluation in Ghana explored implementers' and health workers' views on the status and acceptability of task shifting in the rural Upper East Region. (37) Although Ghana has a number of innovative primary health care programs in place, many regions still suffer from poor health outcomes and a shortage of trained and available health personnel. The evaluation surfaced some challenges related to task shifting. Many health workers reported that they were expected to perform additional non-clinical tasks that were outside of their scope, which took time away from patient encounters, increasing their workload without appropriate incentives. Additionally, some stakeholders felt that there was not sufficient training provided to accompany task shifting. However, there were also positive findings from the evaluation; some health workers reported that their expanded scope was building their skills and capacities and contributed to their feelings of internal motivation. These findings suggest that while task shifting can be embraced by managers and health workers and contribute to more efficient service delivery, it must be implemented as part of a whole-system shift with planned and monitored training, supervision, and motivational mechanisms in place.

Kenya

As many LMIC undergo epidemiological transitions and experience a growing burden of non-communicable diseases (NCDs), countries are developing strategies to effectively integrate NCD care and management into PHC systems within the constraints of often limited inputs. This is the case in Kenya where NCDs have typically been managed in tertiary hospitals. Starting in 2009, The Ministry of Health and Medecins Sans Frontieres (MSF) collaborated on task shifting of NCD care to primary care facilities and specifically to clinical officers, one member of a care team that also comprises physician, nurses, counselors, social workers, health promoters, and laboratory staff. (17) In 2014, care for hypertension, diabetes, asthma, sickle cell, and epilepsy was further shifted to nurses to alleviate increased burden on clinical officers. Training and support were integrated into the program; each nurse received a one week training and a decision support protocol. An evaluation of the program found a 69% adherence to the protocol for routine screening questions and 81% for routine laboratory monitoring. These findings were considered to be successful and suggest that task shifting for NCDs may be achievable, effective, and efficient in low resource settings.

ABSENTEEISM - UGANDA & RWANDA

Uganda

Absenteeism in Uganda is estimated at between 37% and 48%, and although it is recognized to be a significant health system challenge and priority for improvement, there remains no clear strategy to address this barrier. (27) A qualitative study explored the reasons for absenteeism in both the public and private sector in Uganda. Public sector providers reported that a common cause for absenteeism was lack of regular and appropriate payment, which motivated them to seek dual pay elsewhere. Particularly upon

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hire, payments were often delayed for up to a year, and when providers did receive payments, they often did not receive back pay. Managers were aware of this problem, and they often did not report absent employees because they acknowledged and understood providers' need to seek supplemental income. Additionally, providers and managers noted that funds were often not well allocated to basic inputs, resulting in stock-outs and insufficient supplies for providers to carry out their duties. Providers also often missed work for personal reasons such as the expectation to care for the elderly or children or the need to attend a burial on short notice without the ability to communicate absences with their managers. Although the study did not discuss solutions or interventions, it highlights the multiple health system influences that affect health worker motivation, suggesting that solutions must be considered from a whole-system perspective. (27)

What others have done

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Rwanda

Like Uganda, Rwanda has experienced significant absenteeism among the health workforce, primarily due to a lack of financial incentives. Previously, providers in Rwanda were paid regardless of attendance and were rarely reprimanded for absenteeism. (38) In 2005, the Government of Rwanda introduced a performance-based financing scheme where health worker payment was linked to attendance, services provided, and referrals. This new scheme not only incentivized providers to be present during their scheduled shifts but it also incentivized specific services. For instance, providing a facility-based delivery was highly monetarily incentivized, and as a result providers encouraged community health workers to conduct active outreach to pregnant women in the communities and encourage them to deliver in facilities. (39) This is an example of the ways in which performance-based financing can incentivize specific behavior, and in some cases, this can result in perverse incentives or over-provision of specific services if the measured outcomes are not well designed. (40) More details on performance-based financing can be found in the [provider motivation](#) section of this module. The information systems used for the performance-based financing schemes in Rwanda enabled managers to identify and terminate workers who did not show up for their planned shifts. This intervention benefited from close coordination with the Government of Rwanda to implement changes such as those to the national payment systems.

SERVICE DELIVERY STRUCTURE AND TIMELINESS

Ghana

Shared medical appointments can be used as a strategy used to improve timeliness and availability of providers at the point of care. By grouping patients with similar needs together, facilities can increase efficiency while enabling patients to develop supportive relationships with other patients. This has been documented extensively for antenatal care (ANC) and postnatal care, where women attend group visits with women of a similar gestational age, sharing information and forming relationships within and outside of the facilitated group visit. Compared to individual visits, women are able to spend more time with providers, form relationships with providers and other mothers, and reinforce knowledge with each other. (29) A district hospital in Ghana implemented a group ANC curriculum using seven lesson modules designed by the American College of Nurse-Midwives. Each of the sessions was 60 minutes and involved story-telling, peer support, and demonstration with a focus on delivering information in a manner that was accessible for women with limited literacy. This design was compared to individual ANC with the same providers. Women who attended group ANC visits were more likely to discuss delivery arrangements and transportation with midwives, have saved money for birth, report positive exclusive breastfeeding practices, and have discussed newborn problems with midwives. Thus, group visits for ANC have the potential to contribute to facility efficiency while better equipping women with important maternal knowledge. (29) Similar positive findings from group ANC visits were observed during a [group ANC model in Nigeria and Kenya](#), implemented by Jhpiego. (41)

What it is

United States

Shared medical appointments have been used extensively for NCD management in high income countries. This model helps limit repetition of educational medical appointments and builds cohorts of patients with similar needs and concerns.(30) A study of shared medical appointments for diabetes in the United States found that the success of these programs depended on patients' motivation and willingness to learn, and they could also contribute to improved patient satisfaction and productivity.(30) While there is limited evidence of shared medical appointments for NCDs in LMICs, the success of shared appointments for ANC suggests that shared medical appointments may continue to be a strategy for improving clinic efficiency for other services as well.

Canterbury, New Zealand

A number of health system reforms have been put in place in Canterbury, New Zealand in the last few decades. These reforms related to multiple aspects of the health system, including financing, education, leadership programs, and infrastructure. A robust case study on all of these elements of Canterbury's reforms up to 2013 can be found as a [written case study](#) and a narrated [presentation](#), both from the King's Fund. As part of these reforms, provider availability was improved through a focus on education and integrated services. Although Canterbury initiated changes to the health system in the 1990s and early 2000s, a devastating earthquake struck in 2011, and as Canterbury rebuilt in the wake of the earthquake, they were able to do so with an intentional focus on integrated care.(42) Canterbury established the HealthPathways program in 2008. HealthPathways is a collaboration between multiple levels of the health system, and it established agreements on best practices for a number of health conditions, including guidance on how and when general practitioners should refer patients to higher levels of care or specialists. At the same time, the health system focused on robust reviews of waiting lists for specialists in order to identify patients whose needs could be addressed within primary care. This was coupled with reliable access to clinics with weekend and nighttime staff and strong electronic health management systems that consolidate referrals and centralize communication between levels of the health system. Taken together, these reforms clearly delineated the responsibilities of general practitioners as well as guidelines for when referral is necessary, increased physical access to care, and improved efficiency in referrals.(42) As a result, these reforms have shifted a number of services previously provided in hospitals to primary care clinics, improving comprehensiveness of care and availability of primary care services.

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WHAT QUESTIONS SHOULD BE CONSIDERED TO BEGIN IMPROVEMENTS?

The questions below may be a useful starting place for stakeholders assessing if provider availability is a challenge in their context and what strategies may be appropriate. The questions are not intended to be diagnostic, but instead illustrative of the types of questions stakeholders may ask to evaluate their context.

WHERE ARE THERE GAPS IN PROVIDER AVAILABILITY? ARE THERE ANY PERSISTANT IMBALANCES BETWEEN URBAN AND RURAL LOCATIONS OR DIFFERENT LEVELS OF CARE?

An overarching system-level assessment of the landscape of provider availability in a country is an important first step for developing context-specific solutions. This involves looking at existing staffing and ratios as well as full-time equivalent posts compared to service demand.

ARE EXISTING PROVIDERS AND OTHER AVAILABLE MEMBERS OF THE HEALTH CARE WORKFORCE SUFFICIENTLY TRAINED AND COMPETENT IN THE PROVISION OF COMPREHENSIVE PRIMARY CARE?

If providers are insufficiently trained in the complexity of comprehensive primary care, a greater focus on training and ensuring task competency may be necessary before turning to issues of workforce presence, distribution, and deployment. If the workforce does not possess the skills and competencies to meet population health needs, dedicated in-service training can be valuable in extending competencies and building a minimum foundation for the workforce. Once a cadre of workers with primary care-specific training and proven competency are available, stakeholders will then be best equipped to begin dealing with issues of availability and be more likely to achieve the highest yields possible from these interventions.

HOW IS THE HEALTH WORKFORCE DISTRIBUTED BY SPECIALTY, GEOGRAPHY, AND CADRE?

Understanding the composition and distribution of the workforce can help inform targeted strategies to bolster human resources such as mandates for rural practice or practice in family medicine, increased training in rural areas, and/or changes to medical curricula or medical school recruitment.

IF A SIGNIFICANT NUMBER OF PROVIDERS ARE NOT SHOWING UP DURING SCHEDULED SHIFTS, WHAT ARE THEIR REASONS FOR DOING SO?

There are many reasons why providers might not show up for work including illness, family obligations, lack of motivation, seeking dual pay elsewhere, challenges getting to work, or unsafe work environments. Additionally, absenteeism may be driven by too few resources or an inability to attract and retain staff in specific locations. Responses and interventions to address absenteeism will be different depending on the context-specific drivers of provider absenteeism. Thus, exploratory, qualitative research with diverse, relevant stakeholders to understand this dynamic can help inform more effective and context-specific strategies.

WHAT ARE THE VARIOUS TASKS PERFORMED IN FACILITIES AND WHICH REQUIRE SPECIFIC MEDICAL TRAINING? HOW CAN ROLES BE OPTIMIZED TO IMPROVE EFFICIENCY? WHAT SORT OF TRAINING WOULD BE NEEDED TO DO SO?

It may be a useful practice for facility managers to enumerate the day-to-day tasks within the facility and understand how optimization of roles and responsibilities would alter service delivery. Other inputs such as training time and appropriate supervision should also be considered.

ARE THERE ANY COMMON SERVICES PROVIDED IN THE FACILITY THAT COULD BE DELIVERED IN A GROUP SETTING? FOR WHICH PATIENTS HAVE RELATIVELY STANDARDIZED NEEDS AND/OR THEY REQUIRE SIGNIFICANT EDUCATION?

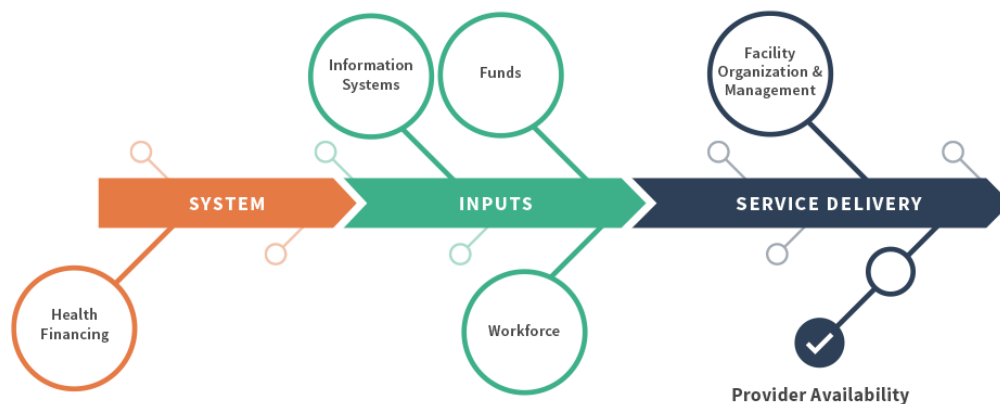
Shared medical appointments may be a useful tool for optimizing staff time. Services such as antenatal care or other education-based appointments may be particularly effective in group settings. Shared medical appointments have the additional benefit of enabling patients to form relationships with other patients which can increase social support and potentially health outcomes. (29)

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WHAT ELEMENTS SHOULD BE IN PLACE TO SUPPORT EFFECTIVE IMPROVEMENTS?

In order for interventions aimed at improving provider availability to be most successful, the following elements of the PHCPI Conceptual Framework should be in place or pursued simultaneously:



B4. WORKFORCE

In order to promote provider availability, there must be a sufficiently sized, well-trained, and equitably distributed health workforce. Some strategies to improve the health workforce are discussed in “what it is” and more can be found within the forthcoming Workforce Improvement Strategies module and in the [WHO global strategy on human resources for health](#).

C2.A TEAM-BASED CARE ORGANIZATION

When providers are organized in a multidisciplinary team structure, determining optimal responsibilities for individuals may be easier and more effective because of pre-existing roles and responsibilities and communication mechanisms between providers. It is important to note that team-based care is more than just co-located providers of different cadres sharing patients. There must also be corresponding efforts to create a culture of teamwork and collaboration. Clearly defined and functional care teams may make it easier to inventory tasks and predict how task-shifting will change service delivery.

C2.B FACILITY MANAGEMENT CAPABILITY AND LEADERSHIP

Many elements of provider availability can be addressed by facility leaders, particularly issues related to absenteeism. Facility leaders can: track provider absenteeism, implement provider motivation mechanisms (discussed in greater detail in [provider motivation](#)), determine appropriate task shifting responsibilities, and rearrange facility flow to be more efficient. Effective and respected facility leadership can help improve facility-based provider availability.

A2.A & B5. PAYMENT SYSTEMS & FUNDS

Each of the many methods for provider payment incentivize different actions related to provision of care. These are discussed in greater detail in [provider motivation](#). Payment mechanisms such as performance-based-financing may have the potential to improve provider availability if providers are absent due to a lack of financial incentives. Changes to payment systems may have to be initiated on the regional or national level and should be supported by strong monitoring systems. Additionally, health workers may

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seek dual employment if they do not receive regular or sufficient compensation or if their compensation is substantially delayed and there are no sanctions for missing work. Therefore, it is important to ensure that systems for regular, sufficient, and reliable provider compensation are in place as a strategy to retain health workers.

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B3. INFORMATION SYSTEMS

Many of the interventions intended to improve provider availability may require robust information systems and sufficient staff capacity to use these systems. For instance, a system to record and track provider absences may help managers plan active outreach and initiate problem-solving with frequently absent providers. Additionally, appointment systems in facilities may help improve efficiency and reduce waiting times for patients, improving provider availability to consult with patients at the point of care. Implementing these systems involves first the appropriate process to be developed, then identification of the right electronic or paper-based systems to be implemented in facilities, and finally, staff training and expectations for use of information systems. In order to maintain sufficient and timely access, successful appointment systems also require close attention to tracking and matching patient demand and provider availability. Should this balance shift substantially towards insufficient provider availability due to absenteeism or other causes, wait times for care will certainly increase.

Suggested citation: “Availability of Effective PHC Services: Provider Availability.” *Improvement Strategies*. Primary Health Care Performance Initiative, 2018, <https://improvingphc.org/provider-availability>. Accessed [insert date].

REFERENCES - AVAILABILITY OF EFFECTIVE PHC SERVICES: PROVIDER AVAILABILITY

1. Kak N, Burkhalter B, Cooper M. Measuring the Competence of Healthcare Providers. *Qual Assur*. 2001;2(1):1-28.
2. Franco LM, Bennett S, Kanfer R. Health sector reform and public sector health worker motivation: a conceptual framework. *Soc Sci Med*. 2002;54(8):1255-66.
3. Patient safety. World Health Organization.
4. Cometto G, Witter S. Tackling health workforce challenges to universal health coverage: setting targets and measuring progress. *Bull World Health Organ*. 2013 Nov;91(11):881-5.
5. Sustainable Development Goals: Goal 3 Ensure healthy lives and promote well-being for all at all ages [Internet]. The United Nations. 2015 [cited 2017 Sep 26]. Available from: <http://www.un.org/sustainabledevelopment/health/>
6. WHO. Global strategy on human resources for health: Workforce 2030. 2010;48. Available from: http://www.who.int/hrh/resources/global_strategy_workforce2030_14_print.pdf?ua=1%0Ahttp://who.int/hrh/resources/globstrathrh-2030/en/
7. Dawson AJ, Nkowane AM, Whelan A. Approaches to improving the contribution of the nursing and midwifery workforce to increasing universal access to primary health care for vulnerable populations: a systematic review. *Hum Resour Health* [Internet]. 2015;13:97. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26684471%0Ahttp://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC4683743>
8. Buchan J, Dhillon I, Campbell J. Health Employment and Economic Growth: An evidence base. World Health Organization. 2017.
9. Pereira LL, Santos LMP, Santos W, Oliveira A, Rattner D. Mais Medicos program: provision of medical doctors in rural, remote and socially vulnerable areas of Brazil, 2013-2014. *Rural Remote Health*. 2016;16(1):3616.
10. Karunathilake IM. Health changes in Sri Lanka: benefits of primary health care and public health. *Asia-Pacific J public Heal*. 2012 Jul;24(4):663-71.
11. Dordagva J, Batbaatar E, Svensson M, Dorjsuren B, Batmunkh B, kauhanen J. Free and universal, but unequal utilization of primary health care in rural and urban areas of Mongolia. *Int J Equity Health*. 2017;16:73:1-9.
12. Zimmerman M, Shakya R, Pokhrel BM, Eyal N, Rijal BP, Shrestha RN, et al. Medical students' characteristics as predictors of career practice location: Retrospective cohort study tracking graduates of Nepal's first medical college. *BMJ*. 2012;345(7873):1-10.
13. WHO. Increasing access to health workers in remote and rural areas through improved retention. *Sci York* [Internet]. 2010;23(February):3-69. Available from: http://www.who.int/entity/hrh/migration/hmr_expert_meeting_dolea.pdf
14. World Health Organization. HIV Prevention, Diagnosis, Treatment and Care for Key Populations (2016 Update). *World Heal Organ*. 2016;155.
15. Joshi R, Alim M, Kengne AP, Jan S, Maulik PK, Peiris D, et al. Task shifting for non-communicable disease management in low and middle income countries--a systematic review. *PLoS One*. 2014;9(8):e103754.
16. Seidman G, Atun R. Does task shifting yield cost savings and improve efficiency for health systems? A systematic review of evidence from low-income and middle-income countries. *Hum Resour Health*

AVAILABILITY OF EFFECTIVE PHC SERVICES > REFERENCES

- [Internet]. 2017;15(1):29. Available from: <http://human-resources-health.biomedcentral.com/articles/10.1186/s12960-017-0200-9>
17. Some D, Edwards JK, Reid T, Van Den Bergh R, Kosgei RJ, Wilkinson E, et al. Task shifting the management of non-communicable diseases to nurses in Kibera, Kenya: Does it work? *PLoS One*. 2016;11(1):1-9.
 18. WHO recommendations: optimizing health worker roles for maternal and newborn health through task shifting.
 19. WHO guideline on health policy and system support to optimize community health worker programmes. World Health Organization. Geneva, Switzerland; 2018.
 20. Berendes S, Heywood P, Oliver S, Garner P. Quality of private and public ambulatory health care in low and middle income countries: systematic review of comparative studies. *PLoS Med* [Internet]. 2011 Apr 12 [cited 2015 Sep 20];8(4):e1000433. Available from: <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000433>
 21. Morgan R, Ensor T, Waters H. Performance of private sector health care: implications for universal health coverage. *Lancet* [Internet]. 2016;388(10044):606-12. Available from: [http://dx.doi.org/10.1016/S0140-6736\(16\)00343-3](http://dx.doi.org/10.1016/S0140-6736(16)00343-3)
 22. Berendes S, Heywood P, Oliver S, Garner P. Quality of private and public ambulatory health care in low and middle income countries: systematic review of comparative studies. *PLoS Med* [Internet]. 2011 Apr 12 [cited 2015 Sep 20];8(4):e1000433. Available from: <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000433>
 23. Das J, Holla A, Das V, Mohanan M, Tabak D, Chan B. In urban and rural India, a standardized patient study showed low levels of provider training and huge quality gaps. *Heal Aff*. 2012 Dec;31(12):2774-84.
 24. Service Delivery Indicators: Countries.
 25. Hongoro, Charles; Normand C. Health Workers: Building and Motivating the Workforce. In: *Disease Control Priorities in Developing Countries*, 2nd Edition. 2006.
 26. Deussen R, Jaskiewicz W, Dwyer S, Tulenko K, International I. Holding Health Workers Accountable: Governance Approaches to Reducing Absenteeism. 2012.
 27. Tweheyo R, Daker-White G, Reed C, Davies L, Kiwanuka S, Campbell S. 'Nobody is after you; it is your initiative to start work': a qualitative study of health workforce absenteeism in rural Uganda. *BMJ Glob Heal* [Internet]. 2017;2(4):e000455. Available from: <http://gh.bmj.com/lookup/doi/10.1136/bmjgh-2017-000455>
 28. Kiwanuka S, Nalwadda C, Pariyo G, Ssengooba F, Rutebemberwa E. Interventions for managing absenteeism among health workers (Protocol). *Cochrane Libr*. 2011;(7).
 29. Lori JR, Ofosu-Darkwah H, Boyd CJ, Banerjee T, Adanu RMK. Improving health literacy through group antenatal care: a prospective cohort study. *BMC Pregnancy Childbirth* [Internet]. 2017;17(1):228. Available from: <http://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-017-1414-5>
 30. Sanchez I. Implementation of a Diabetes Self-management Education Program in Primary Care for Adults Using Shared Medical Appointments. *Diabetes Educ* [Internet]. 2011;37(3):381-91. Available from: <http://journals.sagepub.com/doi/10.1177/0145721711401667>
 31. Bitton A, Pesec M, Benotti E, Ratcliffe H, Lewis T, Hirschhorn L, et al. Shaping tiered health care delivery system in accordance with People-Centered Integrated Care Model. In: *Deepening Health Reform in China : Building High-Quality and Value-Based Service Delivery*. World Bank Group; 2016.
 32. Santos LMP, Oliveira A, Trindade JS, Barreto IC, Palmeira PA, Comes Y, et al. Implementation research: towards universal health coverage with more doctors in Brazil. *Bull World Health Organ*. 2017 Feb;95(2):103-12.
 33. Campos GW de S, Pereira NJ. Primary care in Brazil, and the Mais Medicos (More Doctors) Program in the Unified Health System: achievements and limits. *Cien Saude Colet*. 2016 Sep;21(9):2655-63.
 34. Macinko J, Harris MJ. Brazil's family health strategy--delivering community-based primary care in a universal health system. *N Engl J Med*. 2015 Jun;372(23):2177-81.

AVAILABILITY OF EFFECTIVE PHC SERVICES > REFERENCES

35. Zimmerman M, Shah S, Shakya R, Chansi BS, Shah K, Munday D, et al. A staff support programme for rural hospitals in Nepal. *World Heal Organ Bull World Heal Organ* [Internet]. 2016;94(1):65-70. Available from: https://www.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com/docview/1755443916?accountid=15115%5Cnhttp://vr2pk9sx9w.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&fr_id=info:sid/ProQ%3Anursing&rft_val_fmt=info:
36. Cuba: Emphasis on community-based primary care in a tiered system improves outcomes. Primary Health Care Performance Initiative.
37. Okyere E, Mwanri L, Ward P. Is task-shifting a solution to the health workers' shortage in Northern Ghana? *PLoS One*. 2017;12(3):1-22.
38. Scheffler RM. The labour market for human resources for health in low- and middle-income countries WHO Library Cataloguing-in-Publication Data. Hum Resour Heal Obs IBruckner, Tim IISpetz, Joanne III World Heal Organ IVTitle VSeries ISBN [Internet]. 2012;978:92-4. Available from: http://www.who.int/about/licensing/copyright_form/en/index.html
39. Basinga P, Gertler PJ, Vermeersch CMJ. Paying Primary Health Care Centers for Performance in Rwanda. *World* [Internet]. 2010;1(January):1-29. Available from: <http://www.ingentaconnect.com/content/wb/wps4301/2010/00000001/00000001/art05190>
40. Paul E, Albert L, Bisala BN, Bodson O, Bonnet E, Bossyns P, et al. Performance-based financing in low-income and middle-income countries: isn't it time for a rethink? *BMJ Glob Heal* [Internet]. 2018;3(1):e000664. Available from: <http://gh.bmj.com/lookup/doi/10.1136/bmjgh-2017-000664>
41. Grenier L, Bingham C. Expecting mothers form strong bonds through Jhpiego program in Nigeria and Kenya [Internet]. John Hopkins University Hub. Available from: <https://hub.jhu.edu/2017/08/16/jhpiego-nigerian-newborn-health-program/>
42. Timmins N, Ham C. The quest for integrated health and social care: A case study in Canterbury, New Zealand. *King's Fund*. 2013;1-62.