Validated Document in the Andean Subregion

REGIONAL GOALS FOR HUMAN RESOURCES FOR HEALTH INDICATORS 2007-2015

HANDBOOK FOR BASELINE STUDIES

Revised version, after its validation in February, 2010

This document is the result of a work and validation process carried out under the coordination of Dr. Mónica Padilla. The technical design, systematization and documented edition was developed by Margarita Velasco and Alexandra Escobar[1]; with the participation of Andean country members and PAHO consultants from HSS, as well as Human Resources (Miriam Gamboa, Hugo Rivera; Luis Carlos Ortiz, Hernando Cubides, Gerardo Alfaro; Verónica Bustos, Jaques Girard; Eduardo Puente, Jorge Alban, Cristina Merino; Betsy Moscoso, Giovanni Escalante and Marco Ramírez, with the support of Dr. Félix Rigoli and Allison Foster from the PAHO/WHO Regional Office.

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Regional Goals for Human Resources for Health Indicators 2007-2015

Handbook for Baseline Studies

Purpose

The purpose of the handbook is to provide a standardized reference document for countries of the Region that clarifies the terms and parameters of each of the twenty goals of PAHO's Resolution #CSP27/10, "Regional Goals for Human Resources for Health (HRH) 2007-2015," in order that they may be consistently understood, applied, measured and monitored.

As a self-contained technical instruction manual, the handbook is intended to provide a practical tool to guide the identification and definition of initial baseline data to be collected in order to provide a descriptive profile of countries' human resources for health to facilitate monitoring their progress towards achieving their HRH goals over time.

CHALLENGE 1

Build long-range policies and plans to adapt the work force to the changes in the health system and develop institutional capacity in order to apply them in practice and for their periodical review

GOAL 1:

All countries of the Region will have achieved a human resources density ratio level of 25 professionals per 10,000 inhabitants.

Rationale

The *purpose of this goal* is to illustrate the relation between the population in a country and the number of human resources for health with the goal of calling attention to the possible deficits or over-production of these resources. It is the result of global studies that have found that few countries reach the minimum health goals of the Millennium Development Goals with fewer than 25 professionals per 10,000 inhabitants.

Key terms

Human Resources for Health: For international comparative purposes and given the disparity of available data for many professions, we use the definition of WHO,

that adds the physicians, nurses and mid-wives. Without detriment to this, the countries are encouraged to collect information about all of the professions that are relevant to the healthcare team.

- Physicians graduated from Universities
- Nurses with university training or at least 3 years of formal training. Auxiliary nurses or personnel that carry out their duties under supervision are excluded from this definition.
- Midwives and obstetricians: it refers to the personnel with university training or from technical institutes. Empirical or community trained midwives are excluded from this definition.

Long term professionals in the country, such as contributors from Cuba, the United Nations or migrants that are in the system as professionals should be included in all cases.

Proposed indicator:

Health Human resources density ratio per 10,000 inhabitants.

Formula:

$$\frac{\text{No. of physicians + nurses + midwives in the year t}}{\text{Total population in a country in year t}} \text{ x every 10,000 inhabitants}$$

Definition of the indicator

Number of health personnel (physicians, nurses and midwives) that are employed full-time in a given year in public or private health establishments expressed in a density per 10,000 inhabitants.

The demographic rate expresses the frequency of cases (human resources) for a certain number of inhabitants. It is calculated by dividing the number of human resources counted for a certain year for the existing population in that same period.

The number of people used as a reference in a density is conventional and depends on the obtained figures: it can vary from 1 inhabitant (per cápita) and 100,000. In this case, it was defined by multiplying by 10,000.

The year t refers to the year where the human resources data is collected and should coincide with the population compared.

Required data:

Total number of physicians, nurses and midwives employed full-time in an institution in the private or public sector.

The total population in a certain year corresponds to the projections developed from the population census or the results of the census if it was carried out in the year when the data were taken.

Methodological guidelines

1. If the midwife, matron or obstetrician is at the same time a nurse, the individual should be counted as one person.
2. If information about midwives is not available in the country, this should be included as a footnote.
3. The indicator is aggregate for international comparability between the Regions. However, it will be necessary to have separate indicators for the rates of physicians, nurses and midwives.
4. If the information system of your country allows you to do further subdivisions, you may do so for the specificities of your country but not for the international comparability we require.

Data Sources

The total number of health personnel is taken from administrative registries of each of the private and public health institutions in the country. The administrative records related with health personnel statistics are usually compiled and ordered by the national statistical and census institutes, therefore, we recommend carrying out an initial inquiry at these institutes to obtain the necessary data.

This data registers the number of health personnel employed full-time. In the case of non-existing or very fragmented data, we recommend using the registries from Schools, Professional Councils or another mandatory registry organism (licensing) or another source that counts persons. In the case of the existence of a number of registered physicians/nurses/midwives that you are uncertain if they still work in the country, it is best not to use the data.

By taking the data of employed personnel, you avoid the complications that would emerge if you take the records of those graduated from universities given that 1) it can be personnel that do not work or that changed their profession or occupation 2) it can be migrating personnel.

The countries count with total population numbers from population or housing census and its' forecasts for the year of creation of the suggested indicator.

<u>GOAL 2:</u>

The regional and sub-regional proportions of primary health care physicians will exceed 40% of the total medical workforce.

Rationale

To improve population health, many countries are focusing on reformed primary health care delivery systems and on strengthening the overall public health infrastructure. The key feature of primary health care reform is a shift from individual, hospital-centered practice to teams of community-based professionals, who are accountable for providing comprehensive, coordinated health services to their patients. As such, it is critical that the workforce be adequately prepared to meet expected changes in the health system and to support primary health care delivery. As primary health care physicians generally represent only about 25 percent of the Region's total medical workforce, it will be necessary to significantly increase physician numbers within the primary health care team. Strengthening the physician component enhances the primary health care teams' overall capacity for collaborative development, innovative deployment and shared leadership, and provides a broader, more flexible and effective response to the full range of community health needs and priorities.

Key Terms

Primary health care focuses on the provision of community-based, first-contact health services delivery. It emphasizes health promotion, disease prevention and the diagnosis and treatment of illness and injury. Primary health care is provided by a multi-disciplinary team working collaboratively to ensure the ongoing integration and coordination of the delivery of quality patient care.

A **primary healthcare physician** refers to a licensed medical professional person, who is actively involved in the provision of public and/or private primary health care services, in units without hospital internment, locations other than acute care or long-stay hospitals. This definition does not exclusively refer to Primary Care/Community Medicine graduates or specialists.

While the model of primary health care may vary from community to community, primary health care services often include but are not limited to:

- prevention and treatment of diseases
- first contact emergency services, including patient stabilization and referral
- continuity of care and coordination with other kinds and levels of care (such as hospitals and specialist services)
- mental health care
- palliative and end-of-life care
- health promotion
- healthy child development
- maternity care
- rehabilitation services

Proposed Indicator

Number of primary health care physicians as a percentage of the total medical workforce

$$\frac{\text{Total number of primary care physicians}}{\text{Total number of licensed physicians in the country}} \times 100$$

Required data

The total number of licensed physicians and the total number of licensed primary health care physicians employed full-time in the public and private sectors will be collected for each country, utilizing the most recent, comparable data available

Methodological Guidelines

1. In order to avoid double-counting of health professionals, persons not posts should be counted.
2. If possible, all employment sectors should be counted.
3. The health care settings in which primary health care is delivered should be clearly described as it varies considerably among countries.
4. The definition of full-time physician (where available) should indicate the total number of hours worked (in clinical practice) as it also varies considerably across the countries of the Region.
5. All physicians in the country should be counted, including those on temporary employment contracts from other countries (e.g. Cuban physicians).

Data Sources

The total number of medical personnel would be determined from the administrative registries of the profession. If not available, data would be supplemented, by Ministry of Health, health regions, administrative registries of public institutions and professional schools, and others available.

GOAL 3:

All countries will have developed primary health care teams with a broad range of competencies that systematically include community health workers to improve access, reach out to vulnerable groups, and mobilize community networks.

Rationale

The Primary Health Care Team refers to groups of professionals who deliver health services in the community at “primary” or first points of contact between the patient and the health delivery system. The membership of the primary health care teams can vary widely and generally reflects the particular health needs of the local community which it serves. The effectiveness of the team is related to its ability to

carry out its work and to manage itself as an independent, coordinated, collaborative, self-sufficient health care delivery group.

The Community Health Worker, as a key member of the Primary Health Care Team generally has a familiarity with the population he or she serves, and thus provides a more direct linkage between the health delivery system and the identified health care needs of the community.

Key Terms

A *Primary Health Care* team *may* broadly include any of the following professional groups, with the first three categories of health professions generally representing the minimum core of the PHC team.

- primary care physicians
- nurses
- midwives
- community health workers
- nursing assistants
- physician assistants
- physiotherapists
- occupational therapists
- social workers
- psychologists
- dieticians
- pharmacists
- dentists
- front-line managers and administrators

The **functions of the PHC team** may include, but not be limited to:

- The diagnosis and management of acute and chronic conditions and treatment in emergencies – and when necessary, in the patient's home
- Antenatal and postnatal care
- Prevention of disease and disability
- Follow-up and continuing care of chronic and recurring disease
- Rehabilitation after illness
- Care during terminal illness
- Coordination of services for those at risk, including children, the mentally ill, the bereaved, the elderly, the handicapped and those who care for them
- Helping patients and their relatives to make appropriate use of other agencies for care and support including hospital-based specialists

Community Health Care Workers provide outreach, education, referral and follow-up, case management and home visiting services to vulnerable groups.

Services are generally provided by paraprofessionals who live in or are familiar with the community. They are trained to provide basic health education and referrals to families and communities for a wide range of services and to provide support and assistance in navigating health and community service systems.
A **vulnerable group** refers specifically to sectors of the population with special needs and limited capacities, such as high-risk pregnant women, children, the elderly, the handicapped and the mentally ill. In the broadest sense, it can also refer to those groups with limited access to health care services due to ethnic, religious, cultural or socio-economic factors.
A **community network** refers to a system of inter-related, informed, coordinated, self-supporting community-based groups and contacts that are linked to community issues, resources and services. The network is useful for providing a supportive framework to promote communication and the most effective delivery of primary health care services.

Proposed Indicators

The proposed indicator will measure the degree to which primary health care teams have been developed in countries throughout the Region.

Each of the questions below on primary health care service delivery will be awarded between 0 and 10 points depending on level of country team development and the range of services provided. The scores for each question will be totaled to provide an overall country indicator. Country scores for the seven questions will range from a low of 0, with no primary health care services, to a maximum score of 72, representing a comprehensive range of services.

Manners of collecting information from key informants and scores:

We are aware that country records on this indicator generally do not exist; therefore, we suggest collecting the information from focal groups with key informants at the highest level. The answers will be the result of reaching consensus in the groups. The questions are the following:

QUESTIONS	YES	NO	PARTIAL
1. Is there a national program (Ministry of Health) on primary health care teams?	(10) 10	(0)	(0.10-9-9)
2. If yes, what percent of the country's total population is covered by the primary health care teams?	< 20% – 2 points 20 a 39% – 4 points 40 a 59% – 6 points 60 a 79% – 8 points >80% – 10 points 6 points		
3. Does the primary health care	YES	NO	

QUESTIONS	YES	NO	PARTIAL
program utilize community networks?	(10) 10	(0)	
4. Does the program cover vulnerable populations?	Yes (10)	No (0)	
5. Which of the following populations are covered by the primary health care program teams? - High-risk pregnant women - Ethnic groups - Children - Religious groups - Elderly - Cultural groups - Handicapped - Impoverished - Mentally ill - Language	(One point each; maximum score 10 points)		
6. Which professional groups are generally included in the primary health care teams?	(Two points each; maximum score 10 points) - *Profession* - Physicians - Nurses and/or obstetricians - Health inspector - Community health workers - Nursing Assistants 10		
7. What broad competencies are currently required of the primary health care teams? *Competencies:* - Diagnosis and Management of acute and chronic conditions - Antenatal and postnatal care - Prevention of disease and disability - Growth and development - Rehabilitation after illness (follow-up) - Coordination of healthcare services for populations at high risk (e.g. children, mentally ill, elderly and the handicapped)	(Two points each; maximum score 10 points)		
TOTAL / 72			

Additional required data if the existing information system allows for it:

Information is required on: i) vulnerable populations covered by primary health care teams; ii) professionals currently represented on primary health care teams; and, iii) current broad competencies of primary health care teams.

Supplementary data collected by each country would include: i) total number of primary health care teams; ii) total number of health care workers employed in primary health care teams by professional group, including community health workers; and, iii) total country population plus the population of each identified vulnerable group.

Methodological Guidelines

1. The information to build this indicator is to be gathered through surveys and interviews with key informants within the health care system. We recommend they are assembled in a focal group.

2. Information gathered would: i) identify whether there is a national, state-managed program of primary health care teams; ii) determine the broad range of competencies possessed by team members and whether they work with vulnerable groups (according to the previously mentioned criteria); iii) determine how many primary health care teams there are; and, iv) identify how many health care professionals are working in primary health care teams.

3. If local information is available, calculate the percentage of the population that are considered vulnerable populations and the percent of these populations that have adequate access to health care services.

Data Sources

- Data on primary health care programs and teams, employment data and information on vulnerable groups would be obtained from the Ministry of Health and health regions.
- The range of primary health care competencies may be obtained from the Manuals describing the position of the health team in the primary health care programs deployed, or through the evaluation of the training/educational foci – academic curriculum, in-service training, as well as through position descriptions/job requirements.
- All data sources are to be duly noted (Use footnotes as appropriate).

GOAL 4:

The ratio of qualified nurses to physicians will reach at least 1:1 in all countries of the Region.

Rationale

The *purpose of this goal* is to show the imbalance that exists in the production of the medical and nursing personnel that could affect the composition of the competencies of the health care team. For some countries it is expected that for every physician there will be at least four nurses, but the minimum goal in this case has been referred to as 1 physician and one nurse. The goal expects to call attention to the deficits or overproduction of these resources.

Key terms

Physicians and Nurses: Physicians graduated from Universities/ Nurses with at least three years of formal training. We exclude from this definition nurse auxiliaries or personnel that carry out their duties under supervision.

Proposed indicator:
Ratio of doctors with respect to nurses

Formula:

$$\frac{\text{No. of Doctors}}{\text{No. of Nurses}}$$

Number of Physicians that work in the country in a certain year; related to the number of nurses in the same conditions.

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Data Sources

- The total number of health personnel is available through the administrative registries of each of the public and private health institutions in the country. The administrative records are generally compiled and ordered by the national statistics and census institutes; therefore, we recommend you carry out an initial inquiry in these institutes in order to obtain the necessary data.

Methodological Notes:

- If the information system of your country allows you to perform further divisions, such as the ratio of nurses/doctors in hospitals or other specific studies, you may do so for the purposes of your country, but not for the international comparability we require.
- Consider the personnel described in goal 1 as nurses.

- Professionals that are working on a long-term basis in the country should be included in all cases, such as contributors from Cuba, the United Nations or migrants that are integrated into the system as professionals.

GOAL 5:

All countries of the Region will have established a unit of human resources for health responsible for the development of human resources policies and plans, the definition of the strategic directions and the negotiation with other sectors.

Rationale

The *purpose of this goal* is to call attention to the importance the decision makers at the highest levels assign to the human resource in health. This commitment is grounded on the existence of a specific human resources institutional unit that leads the strategic direction of the issue for the entire health sector and that has transformed its role of administrator of personnel to that of human resources policy manager.

Key Terms

Human Resources for Health Unit: This unit (also called Office or Secretary) for human resources (it may have other names, such as Work, Talent or Personnel Management) should be located at a high level of command in the Ministry of Public Health so they can exercise power on their decisions or its advice to the national health authority. This unit must have the capacity to:

1. Develop specific human resources for health policies
2. Count with a human resources for health planning unit.
3. Carry out the strategic direction of the human resource in health
4. Have the capacity for inter-sectoral negotiation with the training entities as employers of human resources and unions.
5. Count with a national information system.
6. Location of the human resources unit at the direction level of the organizational structure.

Proposed Indicator:

Development level of the Human resources for health unit, with management and strategic direction characteristics.

This is an indicator of process, which is why it will be measured through a focal group that will be assembled with key informants from the highest level, or if this is not possible, through a range of interviews from these key informants, which may be determined according to the following qualities:

Does a unit for human resources exist?
YES
NO

If the answer is yes, assign a 10 and then classify the characteristics of the human resources unit as manager and leader with a score that ranges from 0 to 6, as shown in the definition of the indicator. 6 corresponds to the highest score that means it is at a level of excellence. From 0-10 means it does not exist or it is highly incipient. 4 and 5 means with good development possibilities.

Definition of the indicator

We propose that at least 3 key informants score the characteristics of the human resources for health unit using the checklist below. 1 is assigned when the answer is yes and 0 when it is no. The partial scores are added and a score of over 6 points is obtained for each interview. The criteria from the key informants are averaged and a single score over 6 is obtained.

Characteristic	YES 1	NO 0	Partially
1. Hierarchy level in the Ministerial organization: beside the Minister of Health, in advisory roles, or as a part of the Leadership team or part of the national direction levels			
2. Develops human resources for health policies for the whole healthcare system.			
3. Plans the number and type of required human resources in the healthcare system			
4. Strategic direction of the management of human resources for health, in-service training and the approach towards problems and determinants for the healthcare system			
5. Counts with an updated information system that includes an inventory of human resources for health, number, type, location and educational levels			
6. Utilizes negotiation for the inter-sectoral relationships with the education, employee and unionized sectors.			
TOTAL	**6**		
INDICATOR TOTAL 10 + 6 = 16 REPRESENTS 100% goal			

Required data:

- The data are explained in the definition of the indicator.

Methodological Guidelines:

- This investigation should be carried out among three authorities in the matter, which can be: a high level health authority, expert in Human Resources from the Pan American Health Office in your country and director of the unit of Human Resources for Health. Include the names of the interviewees in the footnotes.

- Add the partial results from each interviewer and calculate a simple average of each score resulting from each of the interviews. This average should be placed as a score of the strategic functions of the Human Resources unit.

Data Sources:

- Data are collected through personal interviews or focal groups with three or more high level Ministry of Health key informants in each country, described in the clarifying note above.
- Use the items from 1 to 6 of the checklist to make the questions.

CHALLENGE 2

Put the right people in the right places, achieving an equitable distribution according to the health needs of the population

GOAL 6:

The gap in the distribution of health personnel between urban and rural areas will have been reduced by half in 2015.

Rationale

Over the past twenty years the rate of population growth for many urban areas in the Region has been double those of rural areas. Similarly, the growth in the number of health care professionals has been concentrated in urban areas, contributing to a continued imbalance in the urban-rural distribution of the health workforce. While physician to population ratios within the Region may be up to four times greater in urban areas than for countries as a whole, the urban physician-to-population ratios may be more than eight times greater than the physician supply in some rural areas. As a result, rural communities continue to have very limited access to required health care services compared to their urban counterparts.

Achieving a more equitable geographic distribution of health professionals throughout the Region – particularly within the context of expanded community-based primary health care teams – would greatly enhance community access to health care services and contribute to the improvement in health outcomes and overall community health status.

Key Terms

Currently there is no common, standardized definition of “urban” and “rural” among the countries of the Region. As such, each country will be expected to provide their measure of urban and rural and how it is defined within their own jurisdictions. Most important is for this concept of rural and urban be useful to compare the volume of population living in each of these areas and from there determine the number of human resources for health that exist in this geographical jurisdiction.

Proposed Indicators

Percentage of human resources working in the rural areas of the country.

Density of Human Resources[2] (total number of physicians, nurses and midwives per 10,000 inhabitants) for rural areas of the country

[2] Using Goal 1

Density of Human Resources[2] (total number of physicians, nurses and midwives per 10,000 inhabitants) for the urban areas of the country

Alternatively, this indicator may be expressed as:

Density of Human Resources[2] for the cluster of Geographic units with the lowest ratio

Density of Human Resources[2] for the cluster of Geographic units with the highest ratio

Required Data

- Population data for each country in the urban and rural areas, for the most current year available
- Professional data on physicians, nurses and midwives for the same time period and using the same Geographic units that were used to collect population data

Methodological Guidelines

1. Gather information that reflects the urban-rural distribution of the population according to the country definitions
2. Take note of the definition that the country – The Institute of Statistics and Census – uses to denote urban and rural.
3. Determine the existing density of health professionals per 10,000 population for the two subdivisions for urban and rural
4. Healthcare personnel are those professionals defined in goals 1 and 2 as such (physicians, nurses and midwives or professional obstetricians)
5. The measure of urban-rural is not important per se, the difference between urban and rural is the gap between the two and this is the key indicator. For this we subtract the total number of health personnel in the rural areas from the total number working in the urban areas.

Data Sources

- Statistics and Census Institutes
- Ministries of Health
- Specific Studies in the Human Resources Observatories

GOAL 7:

At least 70% of the primary health care workers will have demonstrable public health and intercultural competencies.

Rationale

The effectiveness of the Primary Health Care Team is contingent upon members having the requisite clinical skills, public health knowledge and intercultural competencies to diagnose patients, administer treatment and monitor outcomes, that are appropriate to and reflective of the health care needs of the diverse (ethnic, linguistic, religious, socio-economic, etc.) communities that they serve.

Broad-based public health competencies may enhance the capacity of health professionals to provide comprehensive, community-based patient care that is more responsive to the full range of population health needs. These competencies include skills involved in preventing disease, prolonging life and promoting and maintaining health through population surveillance and the promotion of healthy behaviors.

In order to be most relevant and effective, public health strategies must be sensitive to the cultural contexts in which they are being administered. In addition to increasing the size of the health workforce, enhancing the intercultural competencies of those health workers who will be providing the services will improve the access for diverse cultural groups to needed health services.

Key Terms

Public health competencies may include, but are not restricted to, any combination of the following: ability to develop strategies for health promotion, surveillance of risk factors and epidemiological conditions, education and preventative care to prevent disease and injury, knowledge of the public health interaction with health services at the local level, able to apply evidence in decision-making, policy and program development, and practice, capacity to conduct research, as well as planning and evaluating processes and impacts.

Intercultural competencies include interactive and communication skills that acknowledge and highlight the different cognitive, emotive and discourse awareness that must be taken into account when providing health care services to diverse ethnic, linguistic, religious and socio-economic groups.

Proposed Indicator

Percentage of primary health workers with a public health interest and intercultural competencies.

$$\frac{\text{Total number of PHC workers with public health/intercultural competencies}}{\text{Total number of PHC care workers in the country}} \times 100$$

To develop this indicator a list of public health competencies and a list of primary health care worker intercultural competencies are needed, following the checklist below:

Public Health Competencies	YES 1	NO 0	Partially
Ability to develop health promotion strategies	1		
Risk factor and epidemiological condition surveillance	1		
Education and preventative treatment to prevent disease and lesions	1		
Knowledge of the interaction of public health with health services at the local level	1		
Capacity to use evidence in health decision-making, policies, management (planning, execution and evaluation) and the development of programs and practices			0.2
Capacity to carry out research -			0.2
Promote partnerships, collaboration and advocacy	1		
Capacity to continue and promoting the wellbeing and facing health inequities			0.2
Intercultural competencies : Interactive abilities and communication that recognize and enhance the cognitive, emotional and exchange capacities that should be taken into account when health services are provided to diverse ethnic, linguistic, religious and socio-economic groups.	1		
TOTAL 9 = 100%	**/9**		

Required data

- Total number of primary health care workers in the country
- Number of primary health care workers with public health competencies
- Number of public health workers with intercultural competencies
- Total number of primary health care workers with public health and intercultural competencies

Methodological Guidelines

1. Given the current lack of information on this issue, the team of experts that created this guide proposed a list of intercultural and public health competencies required by the primary health care workers and approximate measures were placed to achieve a value that would signal the degree of fulfillment of the goal. As the development of the HRH themselves produce information systems that allows for the systematic generation of data, we expect that we will:
    1.1. Determine the total number of primary health care workers with this level of training.
    1.2. Determine whether the university curriculum includes these areas of training.
    1.3. Determine whether in-service training provides this level of skills upgrade for primary health care workers.
    1.4. Determine how many primary health care workers are acquiring these skills through formal educational programs and through in-service training.
2. The countries will define their own requirements for the intercultural competencies and will list the relevant changes that have been implemented in training and at the same time, under these criteria, they could determine which primary health care workers require this type of training.
3. Measuring possible primary health care capabilities and competencies according to the professional training curriculum, and not by the evaluation of worker performance.

Data Sources

- It is possible to review the performance profiles or the terms of reference of the Ministry of Health to recruit personnel or describe the activities and roles of the personnel at the first level of care, in charge of primary health care. Review and compare the competencies suggested with these descriptions.
- Ask the health authority or entity responsible for Human Resources in the Ministry the number of PHC workers recruited with this purpose
- Find out if the Ministry has implemented an education program at work so the personnel can obtain these competencies
- Training program curricula
- The best road to achieve the development of these indicators is a specific investigation that considers the formerly mentioned requirements, on the contrary, a focal group with experts and individuals responsible for training and entities employing the health personnel can provide approaches to the problem.

GOAL 8:

Seventy percent of nurses, nursing auxiliaries and health technicians including community health workers, will have upgraded their skills and competencies appropriate to the complexities of their functions.

Rationale

In addition to providing the first point of entry to the health system and providing a coordinating function for other health and community services, primary health care recognizes the broader determinants of health. This includes coordinating, integrating and expanding health systems and services to improve population health, to prevent sickness, and to promote health. It encourages the best use of all health providers, through expanding scopes of practice, evolving working relationships and potential new roles within multi-disciplinary teams, in order to maximize the potential of all health resources.

It is important for all members of the primary health care team to have the appropriate skills and to work at their full competency levels within multi-disciplinary environments in order to best meet the needs of communities and the technical requirements of evolving health care delivery systems.

Key Terms

Nurse (as defined in Goal 1 and 2).

Nurse auxiliaries refer to those workers with less than three years formal training and carry out their duties under supervision of a Nurse.

Health technicians refer to health staff with formal technical institute training that provide diagnostic and therapeutic services at the direction of the primary health care team.

Community health workers – as defined in Goal 3 above.

Competencies appropriate to the "complexities of their function" refers to the growing list of skill sets required to perform the full list of duties and broad functions required under the broad rubric of public health and primary health care service delivery.

Proposed Indicators

Percentage of training programs for the designated professional groups in the indicator (nurses, nursing auxiliaries, health technicians and community health workers) directed towards perfecting the aptitudes and competencies according to the complexity of their current roles.

Total number of in-service education and training programs offered for this type of personnel: nurses, nurse auxiliaries, health technicians and community health workers.

Total number of in-service training programs offered to any type of personnel.

Number of personnel (nurses, nurse auxiliaries, health technicians and community workers) that attended in-service training programs.

Total number of personnel (nurses, nurse auxiliaries, health technicians and existing community health workers)

Required Data

Characteristic	YES	NO
1. Does an in-service training program exist? (INCLUDING university or INSTITUTE programs) TO PERFECT THE INITIAL TRAINING of: Nurses…….. …….. Auxiliary Nurses…… Health technicians …….. Community health workers ……	**…….** **…….** **…….** **…….**	
2. Number of courses of this type offered by the institution or number of courses that enable access from outside the institution		
3.Total number of courses offered by the in-service training program (for all types of personnel)		
4. NÚMBER OF PEOPLE nurses, nurse auxiliaries, health technicians and community health workers who have carried out additional training (university, in-service or work) to improve their abilities in the last 3 years.		
5. Total number of health personnel (according to the groups mentioned above) that are a part of the total workforce		

Methodological Guidelines

1. As no primary data is currently available with regard to current worker skills and competencies, except through job descriptions and training curricula, a research survey , employing a sample or key informants, may need to be undertaken to supplement available data sources

Data Sources

- Ministry of Health and/or Health Region: HRH Office or Unit and/or Training or Continuing Education office
- Training and in-service program curricula
- People registered in in-service training programs
- Interviewing key informants
- Survey personnel defined in the goal as a study population

GOAL 9:

Thirty percent of health workers in primary health care settings will have been recruited from their own communities

Rationale

Historically, the growth in the number of health care professionals has been concentrated in urban areas, contributing to a continued imbalance in the geographic distribution of the health workforce as seen in Goal #6. The urban physician-to-population ratios for some countries of the Region are more than eight times greater than the physician supply in rural areas. Many countries have adopted incentives to attract health care professionals to rural areas, but most have only achieved modest, short-term success. While appropriate salaries and stable, safe working environments are key considerations in attracting health care workers to rural areas, matching the right individual to the right job in the right place appears to be equally important. Health care workers who are recruited from their own communities are more likely to return and remain in their communities to work after completing their training than are those who have been recruited externally. Local recruitment further enhances the strength of the primary health care team by enlisting those individuals that already possess the requisite cultural sensitivities and knowledge of community networks, contacts and needs.

Key Terms

- Definitions with respect to **primary health care**, **primary health care worker** and **primary health care teams** are detailed in Goals 2 and 3 above.
- **"Own communities"** is defined as the geographic location (city/town and country) that the primary health care worker identifies as their place of birth.

Proposed Indicator

Best alternative:
Percentage of health workers whose current primary health care practice setting is the same geographic location as their own community.

$$\frac{\text{Total number of PHC workers practicing in their own community}}{\text{Total number of PHC workers currently employed in the country}} \times 100$$

Required Data

- Place of birth (town/city and country) of primary health care workers.

- Place of employment (town/city and country) of primary health care workers.

1. Match place of birth with place of work from most recent census data for primary health care workers. OR
2. Match place of birth with place of employment from professional registration data. OR
3. Match place of birth with place of employment from primary health care employment applications. OR
4. Match place of birth with place of employment from union records.
5. If above information is not available from any of the above sources, a sample survey (contingent to available resources) may need to be conducted of employee records of primary health care employers to determine their place of birth and whether primary health care professionals are working in the communities in which they were born.
6. While "own communities" can be interpreted broadly on the basis of language, ethnicity, religious and socio-economic factors, this measure is to be based primarily on geographic location.
7. In case this information is not available:

- Is there any program to select doctors or nurses to practice in their own communities? Yes/No
- Extension of these program/s in case they exist

Data Sources

- Census records
- Professional schools applicant records
- Professional registries
- Union data
- Ministry of Health/Health Regions employee records
- Sample survey of employee records of key employers

CHALLENGE 3:
Promote national and international initiatives for countries affected by migration to retain their health workers and avoid personnel deficits

The purpose of the three goals of this challenge is to recognize the double problematic that the countries face towards the international migration in human resources for health. This is the reason the goals seek to: 1) ensure access of populations to health services and 2) Ensure the right to freedom of movement.

GOAL 10:

All countries of the Region will have adopted a global code of practice or developed ethical norms on the international recruitment of health care workers.

Rationale

In light of the global shortage of health care workers that currently exists in thirty percent of all countries, substantial increases in the demand for health workers are forecast in higher income countries in the near future. Given that increasingly competitive health worker migration worldwide will have a significant impact on the workforce of lower income countries, the World Health Organization advocates for a global code of practice for the international recruitment and management of health personnel. Developed countries are being encouraged to adopt binding codes of conduct governing ethical recruitment practices, to compensate countries from which health professionals are being recruited and to commit to official policies of health workforce self-sufficiency at the country level.

In summary, the adoption of a code of practice would: i) support a global approach to the issue; ii) recognize the rights of individuals to freedom of movement; iii) recognize the needs of developing nations; iv) exclude active recruitment from nations of highest need and with the greatest disadvantages if it occurs; v) establish bilateral agreement principles between identified developing nations; and, vi) act consistently with and in broad support of the goals of the selected developing nations.

The emigration of health professionals in the Americas is expected to remain a serious concern for many of the countries of the Region. Inequities in the supply of human resources for health not only vary greatly across the Region, but the gap between countries with high and low densities of health workers continue to grow. The adoption of a code of ethics regarding the international recruitment of health workers would be an important first step in developing broad, collaborative workforce policies to better stabilize and manage the health workforce of the Region.

Key Terms

References to **ethical norms** and a **global code of practice** with respect to the international recruitment of health care workers are described in the Rationale section above.

A **global code of practice** refers to an international agreement on ways and means to ethically recruit and manage skilled health workers. The code focuses on three broad themes: protecting individual migrant workers from unscrupulous recruiters and employers; ensuring that individuals are properly prepared for and supported by their places of employment; and, ensuring that flows of migrant health workers does not unduly disrupt the health services of the source countries.

Ethical norms refers to formal standards to guide countries in the international recruitment of health workers, based on the principles of transparency, fairness

and mutual benefit between source countries, destination countries, institutions, recruiting agencies and migrant health workers.

Proposed Indicators

Percentage of countries that have adopted a global code of practice
Percentage of countries that have established ethical norms for international recruitment

Country

Has adopted a code of practice. Yes or No.
Has established ethical norms for international recruitment. Yes or No.

Regional[3]

$$\frac{\text{Total number of countries in the Region who have adopted a global code of practice for the international recruitment of health care workers}}{\text{Total number of countries in the Region}} \times 100$$

$$\frac{\text{Total number of countries in the Region that have established ethical norms with respect to the international recruitment of health workers}}{\text{Total number of countries in the Region}} \times 100$$

Required Data

Country has adopted a global code of practice on the international recruitment of health care workers. Yes or No.

Country has established ethical norms with respect to international recruitment. Yes or No.

If yes, which of the following apply?

- Limit recruitment from countries with clear staffing shortages
- Pay some sort of compensation to source countries
- Enter into bilateral agreements to better manage migrant flows
- Assist source countries with strategies to retain health workers
- Respect Immigrant workers' rights and ensure appropriate laws are in place for their protection.

[3] This percentage will be calculated by PAHO.

Methodological Guidelines

1. Determine whether a code of practice for the ethical recruitment of international health care workers has been adopted in your country.
2. List any memoranda of agreement with other countries regarding immigrant health care workers.
3. List any specific country and ethical norms related to international recruitment.
4. Supplementary information could include:
5. A list of any specific country policies designed to meet its own needs with respect to human resources for health.
6. A list of any policies to reduce reliance on foreign workers.
7. Indicate the extent to which the policy is being implemented.
8. Countries will apply own definition and develop their own baseline of needs for human resources for health.
9. It is noted that countries would benefit from a unique identifier and a monitoring system to track these changes over time.

Data Sources

- Ministry of Health
- International Office
- PAHO office in the country

GOAL 11:
All countries of the Region will have a policy regarding self-sufficiency to meet its needs in human resources for health.

Rationale

It is generally agreed that any long-term sustainable human resources strategy requires a significant investment in national *self-sufficiency* in human resources for health for both developing (source) and developed (destination) countries.

Developing countries will need to work - with the policy and fiscal support of other nations - to reduce the *push* factors with respect to emigration of health care workers, while developed countries will need to reduce incentives and increase barriers to lower the *pull* factors that attract migrant health workers. A commitment to becoming more self-sufficient requires developed nations to train and retain more health professionals in line with their identified needs, while placing particular emphasis on meeting population requirements through appropriate incentives programs.

It is recognized that self-sufficiency is a long-term goal for most countries. Self-sufficiency *as a policy of first response* in human resources for health planning, however, would help to stabilize country health workforces by encouraging

investment in the health workforce infrastructure and utilizing migrant workers as a demand buffer rather than as a primary source of health care workers.

Key Terms

Self-sufficiency in human resources for health emphasizes strategic investment in country infrastructure development to enhance its overall capacity to achieve a more optimal, stable and appropriately distributed health workforce through more effective recruitment and retention policies and programs.

A comprehensive approach to self-sufficiency in human resources for health involves a three-pronged approach:

- Source countries reduce the *push* factor with respect to health worker out-migration by: i) identifying the political, economic, social and professional reasons behind the decision to emigrate; ii) restructure training programs to reflect the knowledge, skills and attitudes that are most appropriate to better support national development; iii) involve local and rural communities in the process of student selection and scholarship awards for entry into health professional training programs; iv) invest in improving the working conditions of health professionals; and, vi) entry into bilateral agreements with destination countries in an attempt to control the flow and derive some compensation for the loss of health professionals.

- Destination countries take greater responsibilities for both reducing the *pull* factors and for assisting developing countries by: i) developing a country code of practice of conduct for ethical recruitment; ii) taking unilateral action to limit recruitment from countries with very clear staffing shortages; iii) issuing non-extendable visas, specially geared to the acquisition of skills for the benefit of the source country; iv) paying some sort of compensation to source countries through bilateral arrangements; v) implementing policies that facilitate re-entry of skilled professionals into the host country after a period of stay in their countries of origin; and, vi) making a genuine commitment to becoming more self-sufficient by training and retaining more health professionals with particular emphasis on meeting rural requirements through appropriate incentives.

- The international community supporting a global Code of Practice for ethical recruitment based on the principles of transparency, fairness and mutuality of benefits for all nations (see Goal #.10)

Proposed Indicator

Percentage of countries with a HRH self-sufficiency policy.

Country

A policy on self-sufficiency in human resources for health exists. Yes or No.

Regional[4]

What percentage of countries in the Region has a policy regarding self-sufficiency?

$$\frac{\text{Total number of countries in the Region with a policy on self-sufficiency}}{\text{Total number of countries in the Region}} \times 100$$

Required Data

The country has a policy of self-sufficiency regarding human resources for health. Yes or No.

If yes, list the self-sufficiency policies currently in place

- A commitment to train more health professionals to meet local needs.
- A recruitment program that emphasizes the special needs of rural communities.
- A retention strategy that considers worker compensation, working conditions and safety, professional roles and deployment and communication with and participation in management decisions.

Methodological Guidelines

1. Determine whether there is an actual national policy that explicitly aims to achieve self-sufficiency.
2. Determine whether the policy includes producing and retaining sufficient numbers of health workers to meet country needs?
3. Determine whether the policy includes the specific recruitment of foreign workers to meet local health service delivery needs.
4. Determine whether the policy is tied to a country or international Code of Practice with respect to the recruitment of international health workers.
5. Determine whether health professional training programs have sufficient enrollments to meet the forecasted future needs of the population and the demands on the health care delivery system.
6. Determine what steps are being taken to obtain better measures of the in and out-migration of the health workforce.
7. Indicate what tools you have to measure population health workforce needs at the country level. Identify any plans to further refine estimates of current and future requirements for health workers.

[4] Este porcentaje será calculado por OPS

Data Sources

- Ministry of Health and Health Regions: Key Informant
- Professional Licensing Boards: Second Key Informant
- Immigrant Authorities or Subsecretaries or Ministries of Migration as well as Ministries of Foreign Affairs

GOAL 12:

All sub-regions will have developed mechanisms for the recognition of foreign-trained professionals.

Rationale

It is important to deepen the pool of the Region's talent and skills by ensuring more successful integration of new immigrants into the economy and into communities. The introduction of common guidelines and mechanisms for the assessment of credentials and competencies of foreign health workers seeking licensure would ensure the speedier recognition of foreign credentials and prior work experience and facilitate the assimilation of immigrant health workers into the workforce. This approach would strengthen the human resource capacity of health delivery system by ensuring that migrant workers are accepted into the workforce as early as possible and by allowing them to work at their full competency levels. A standardized approach that supports the recognition of foreign credentials helps stabilize the workforce by improving the deployment and long-term retention of immigrant health workers.

Key Terms

Foreign trained professionals are those health care workers who have received their formal health professional training and/or professional licensure in a country other than the one in which they currently work and/or reside

Mechanisms for the recognition of foreign trained professionals include formal assessment and evaluation tools and techniques to determine the adequacy and equivalency of the credentials and experience of foreign trained health workers to ensure that their skills align with the licensure requirements of their destination country.

Proposed Indicators

Percentage of countries with formal mechanisms for the recognition of foreign-trained professionals.

Country

The country has a formal mechanism for the recognition of foreign trained professionals. Yes or No.

YES: 100% GOAL FULFILLMENT
NO: 0%

Regional[5]

$$\frac{\text{Total number of countries in the Region with mechanisms the recognition of foreign health professionals' credentials}}{\text{Total number of countries in the Region}} \times 100$$

Required Data

- Determine whether the country has mechanisms for the recognition of foreign trained professionals.
- Provide a list of current mechanisms and standards in place to facilitate the recognition of foreign trained professionals.
- List provisions in Sub Regional pacts (NAFTA, CARICOM, etc.) that have special agreements to facilitate the interchange of health professionals.

Methodological Guidelines

1. Determine whether mechanisms for credential recognition of foreign trained professionals currently exist.
2. If they do, identify the assessment mechanisms that are currently being utilized.
3. Identify differences in licensing requirements for health professionals within the Region.
4. Identify language and cultural training programs to assist the adaption of foreign professionals.
5. Identify countries whose credentials are not recognized intra-Regionally.

Data Sources

- National Commission on Accreditation
- Subregional bodies for Accreditation/Licensing
- Subregional Agreements (NAFTA-MERCOSUR-CARICOM-ANDEAN COMMUNITY) that specify conditions for movement of professionals among Member States
- Ministry of Health
- Professional licensing bodies

[5] This percentage will be calculated by PAHO

CHALLENGE 4:

Achieve healthy workplaces and promote a commitment of the health work force with the mission to providing quality services to the whole population

GOAL 13:

The proportion of precarious, unprotected employment for health service providers will have been reduced by half in all countries.

Rationale

An effectively functioning health delivery system is one of the many factors determining the health of a population. As such, promoting safe and healthy working conditions for all healthcare providers is an important strategy for improving population health. Precariously employed workers, such as temporary employees, part-time workers and people working in low-wage positions with uncertain prospects for the future, face high levels of job insecurity and frequent short-term employment. Unsafe working conditions with risk of physical injury, work overload and workplace stress are also common across many sectors of the health care delivery system.

The reduction of precarious, unprotected employment for health service providers will enhance the long-term success of health workforce recruitment and retention strategies and increase the overall stability, manageability and effectiveness of the health workforce.

Key Terms

Precarious and unprotected employment for health care providers differs from one country to the other, but for the purposes of this indicator, it is considered as employment that does not include as a minimum, health insurance, pension and sick leave/maternity leave.

Proposed Indicator

$$\frac{\text{Percentage of precarious and/or without social protection health care positions}}{\text{Total number of health employment positions in the country}}$$

Required Data

- Total number of employment positions in the health sector in the country

- Total number of employment positions in the health sector in the country that are considered as precarious or unprotected.

Methodological Guidelines

1. Indicators of stable, protected employment in the health sector can include employment positions with: employment insurance, retirement and pension plans, accident insurance, health services insurance, sick leave/pregnancy leave, disability coverage, safe working conditions, limited job outsourcing, established bargaining mechanisms and most jobs with contracts or defined working conditions.
2. Statistics are currently available from labor studies that describe social protection status by occupational categories.
3. Studies of the Observatories of Human Resources can provide some of this baseline data.
4. Data from the Ministry of Health indicates how many workers are non-tenured or contracted.
5. The national employment survey generated by the Institute of Statistics and Census is the best source of information
6. Include as footnotes which benefits are included under social security in your country.

Data Sources

- Statistics and Census Institute: Yearly employment surveys
- National Social Security Statistics
- Public Administration Statistics
- Ministry of Health and Health Regions
- Union Reports

GOAL 14:

Eighty percent of the countries of the Region will have in place a policy of health and safety for the health workers, including the support of programs to reduce work-related diseases and injuries.

Rationale

Employee health and safety programs, policies and legislation need to be developed and implemented to provide formal guarantees of consistent, long-term employment protection for all health care workers with respect to general working conditions and workplace safety. Health and safety programs need to be tailored to the specific demands of individual workplaces. Formal programs will enhance workplace security, resulting in improved worker job satisfaction, better workplace performance and greater stability through lower rates of worker absenteeism, turnover, sick leave and general attrition.

Key Terms

Health and safety policies for health care workers includes any measures that are provided to ensure the quality and safety of the health services workplace, such as; up to date and repaired equipment, clean environments, structurally safe work areas, the provision of safety training, health insurance coverage and the provision of health care services.

Proposed Indicators

Percentage of workers in the health sectors covered by health and safety measures

Country

$$\frac{\text{Total number of jobs in the health sector covered by health and safety measures}}{\text{Total number of jobs in the health sector}} \times 100$$

Region

$$\frac{\text{Total number of countries in the Region with health and safety policies in place}}{\text{Total number of countries in the Region}} \times 100$$

Required Data

- Complete the following checklist to build the indicator:

Issues to investigate	YES 10	NO	In process
1. The Ministry of Health has a national health and safety policy			
2. The policy covers: updated and repaired equipment			
3. Healthy, risk-free environments			
4. Structurally safe workplaces			
5. Safety training			
6. Provision of health services and health insurance			
Total : 60/60 is 100% of the goal	60		

Methodological Guidelines

1. Ask the Ministry of Health with the help of the checklist. Or on the contrary, conduct a focal group with key informants that include employers as well as employees to reach consensus on the checklist.
2. If possible, design and conduct a survey to employers and employees to verify if these policies have been implemented
3. Individual country research teams can define the reach of these health and safety programs.
4. A simple of key informants may be carried out to calculate the number of workers with health and safety protection in their place of work.

Data Sources

- Ministry of Health, HRH Unit and/or Department of Health
- Health Regions
- Unions
- Labor Legislation
- Labor risks Department at the Social Security Institute or Ministry of Labor

GOAL 15:

At least 60% of the health services and program managers will fulfill specific requirements for public health and management competencies, including ethics.

Rationale

The purpose of the goal is to **professionalize** the leadership of health services with the view of achieving greater efficiency in management along with a high capacity of commitment for work. We hope to illustrate how many managers count with a formal certification (certificates, specialization courses, masters or doctorates) whether from it is from a university or in-service training that accredits their professionalization. Professionalize is not synonymous of a university title but is understood as training in service.

Key Terms

Health services and program managers are understood as any professional that has been chosen to lead health institutions with and without internment.

Specific requirements for public health and management competencies, including ethics the requirements are guaranteed through the certification in public health and management whether it is through a university course or training in service. The contents of these courses develop public health and management

competencies, and comprehend ethics principles for the performance of those functions.

Proposed Indicator

Percentage of health services and program managers certified in health management courses.

$$\frac{\text{Number of managers with health management courses}}{\text{Total number of managers leading health units and programs}} \times 100$$

If data does not exist:

Existence of public health or management certification requirements for those who will lead health services and programs present in the calls for posts or in the requirement descriptions. Translated as:

Percentage of leadership positions that have requirements:

Required data if no information is available:

Complete the following checklist to build the indicator:

Issues to investigate	YES	NO	In process
1. Do management certification requirements exist or not for those who lead health services programs? / 4			
2. Do records of the number of personnel with these training specifications currently exist?/2			
3. Does the state have permanent programs in management training for the personnel in leadership positions?/ 4			
TOTAL 10/10 100% GOAL	10		

Methodological Guidelines:

1. Managers that are employed are considered.
2. In case of not finding information and opting to interview key informants, we suggest forming focal groups with: (1) a high level health authority, (2) Expert in Human Resources from the Pan American Health Office in your country and (3) the director of the Human Resources for Health Unit. Include the names of the interviewees in the footnote.
3. In large countries (where the number of health units exceeds the thousands), we suggest taking the data of the managers that are employed at middle level direction posts in the state sector (Regions, provinces) and high (central level of the Ministry of Health).

4. If the country counts with a training system for the position and performance evaluation, further studies can be carried out, even if this investigation is not useful for international comparability.

Data Sources

- The Ministry of Health may have a registry of personnel employed in their units and programs, as well as of their training which allows us to obtain the data required to build the indicator.

GOAL 16:

One hundred percent of the countries of the Region will have in place effective negotiation mechanisms and legislation to prevent, mitigate or resolve labor conflicts and ensure essential services if they happen.

Rationale

The provision of essential health services must be considered an essential service to the public. As such, effective legislation and labor negotiation mechanisms must be put in place to resolve labor disputes to ensure that there is no disruption to those health services that are considered necessary to sustain life. The thrust of this initiative is not to minimize labor concerns but to ensure that the improved dialogue with the workers' organizations allow the delivery of essential health services as may be required while labor disputes are being settled. This mechanism would protect both the rights of employees, consistent with local labor codes and union practices, and guarantee patient access to critical health care services. Dispute mechanisms must be designed, including the option for binding arbitration that balances the competing interests of management and labor while meeting critical patient health care needs.

Key Terms and Definitions

Essential Services are defined as those critical, non-elective health care services whose provision is required to save or sustain human life.

Proposed Indicators
Percentage of countries that have formal mechanisms to solve labor conflicts.

Percentage of countries with essential services legislation

Country

Is legislation currently in place to avoid the disruption of essential health services – Yes or No.

Do formal negotiation mechanisms currently exist – Yes or No.

Regional

$$\frac{\text{Total number of countries in the Region with formal mechanisms in place to resolve labor conflicts}}{\text{Total number of countries in the Region}} \times 100$$

$$\frac{\text{Total number of countries in the Region with essential services legislation}}{\text{Total number of countries in the Region}} \times 100$$

Required Data

Complete the following checklist to build the indicator:

Country

Issues to investigate	SI 50	NO	In process
1. Is national legislation currently in place that penalizes the suspension of health personnel activities in essential health services?			
2. Are formal negotiation mechanisms in place to prevent, mitigate or resolve labor conflicts?			
TOTAL: 100/ 100% fulfillment of the goal			

Regional

Total number of countries with essential services legislation.
Total number of countries with formal labor dispute mechanisms in place.
Total number of countries in the Region.

Methodological Guidelines

1. Identify any legislation that is currently in place to ensure the provision of essential services.
2. List formal negotiating mechanisms that are currently in force to avert potential strike action.
3. If mechanisms exist, provide a definition and list of those essential services that would be provided.
4. If mechanisms exist, indicated whether the jurisdiction is national, regional or provincial.

Data Sources

- Labor statistics and studies about labor disputes
- Interviews with managers in health services affected by labor disputes
- Ministry of Health
- Ministry of Labor
- Union Representatives

CHALLENGE 5

Develop mechanisms of cooperation between training institutions and health services institutions to produce sensitive and qualified health professionals

GOAL 17:

80% of clinical health sciences schools will have reoriented their education towards primary health care and community health needs and adopted interprofessional training strategies.

Rationale

This goal is inserted in the reformed concept of primary healthcare that calls attention towards strengthening society's role in reducing health inequalities. Therefore, it parts from the concept of health as a human right and highlights the need to face the social and political determinants of health. The full development of PHC requires paying special attention to the role of human resources for health in this change and the reaffirmation of the paradigms they play[6] . Consequently, training of personnel in university environments with this focus takes a new and important dimension.

Key Terms

Clinical Health Services Schools. Refers to all university, educational and technical institutions that train health personnel: physicians, nurses and midwives.

Reorientating their training towards primary health care and community health needs: Curricular reforms have been carried out in the last twenty years to include the reformed concept of primary health care and community health contents with the purpose of providing comprehensive and appropriate health care, starting from the families and the community as the basis for planning and action.

Primary health care must constitute not only a conceptual and reflective module but must also contemplate a specific practice within the training, through prolonged stays in communities or primary health care centers, for example.

Primary Health Care (verify with the other goals) is defined in the Declaration of Alma Ata as essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to

[6] OPS. *La renovación de la atención primaria de salud en las Américas.* OPS-OMS,2007

individuals and families in the community, through their full participation and at a cost that the community and country can afford. As the fundamental part of the national health system, it is the gateway and the place where continuity of care is made possible for the majority of the population. The PHC reform also comprehends the concept of health as a human right and the need to face the social and political health[7].

Interprofessional training: Comprehensive training of students from different health professions. In some countries, this includes a basic common curriculum for the health team starting in their undergraduate training. It entails budgetary challenges but it also saves in costs. The medical, nursing, obstetrics and dental students share primary health care courses in common in the curricula and they then complement this training with joint internships in the community. In other contexts interprofessional training refers to training at the graduate level.

Proposed Indicators:

Percentage of Universities that have included PHC in the curriculum contents.

Percentage of Universities that have included PHC in the practical section of the curriculum.

Percentage of Universities that have interprofessional training strategies in their clinical health sciences schools.

Percentage of Universities that have financial support for interprofessional training

You may understand the degree in which the country fulfills this goal with the following proposed checklist:

Characteristics	YES	NO
1. Does the Clinical Health Sciences school center training of professionals around the biomedical model[8]*: Physicians…… Nurses…….. Obstetricians…….. Others, specify……..	 ….. ….. ….. …..	 …… … …….. ……. …….
Include PHC contents in the curriculum**		
Changed the curriculum and reorientated it towards PHC***		

[7] OPS. *La renovación de la atención primaria de salud en las Américas.* OPS-OMS,2007., p. 4

[8] The biomedical model centers the training of human resources on the biological paradigm of the health-disease process. Therefore the focus is on the disease and its treatment and the basic science courses, neglecting or annulling the social focus of the processes, and therefore, minimizing or eliminating social material that allow a view from health and not disease.

Existence of interprofessional training strategies***		
Existence of financial support for interprofessional training***		
TOTAL	**/13**	
TOTAL: 13/13= 100% GOAL		

***Score one point if NO** and 0 when YES
** In this case, score with 1 point when YES
***Score 3 points when YES

Data Sources:

1. We recommend collecting information from all of the universities, if possible; on the contrary, carry out a biased sample of the universities.
2. Locate the three or four Public Universities with Schools of Clinical Health Sciences that are the most prominent, important and with the greatest demand for training in human resources in the country and use them as a sample of what is occurring in the country. You can request these criteria from the Associations of Colleges and Schools of Health Sciences that exist in many countries.
3. Perform an interview of the main officers to collect the required information or if possible, conduct a focal group.

Methodological Guidelines:

1. It is possible to carry out an in-depth study looking at the hourly burdens of PHC vs. the biomedical contents and applying them to the Nursing and Medical careers.
2. The countries that are able to do so may carry out a study about the whole universe of Universities and Medical Science Schools or they may take a representative and unbiased sample as proposed.
3. For the biased sample, include the criteria used for the selection of the sample as a footnote.

GOAL 18:

80% of clinical health science schools will have adopted specific programs to recruit and train students from underserved populations with, when appropriate, a special emphasis on indigenous or First Nations, communities.

Rationale

This goal seeks to inquire if the Colleges and Schools in Clinical Health Sciences have extended their educational offer to other areas with populations who traditionally have not had access to social services, among them the possibility to study a career within the health sciences. The reformed concept of primary health care is inserted in a philosophical dimension that parts from the concept of human rights and therefore, the conditions that reduce the possibilities to guarantee these rights are a subject of concern in order to solve these exclusions.

Key Terms

Clinical Health Sciences Schools, refer to all the university and technical education institutions that train health personnel: doctors, nurses and midwives.

Specific programs to recruit and train students from underserved populations. Programs that have a specific curricular design and mode of execution of plans of study that brings the universities closer to traditionally excluded populations. They especially refer to exclusions due to ethnicity, socio-economic factors and geographical distance and inaccessibility.

Proposed indicator:

- Percentage of universities with specific programs to attract students from underserved populations
- Percentage of training programs for students from indigenous populations, or with low resources or living in inaccessible geographical distances.

Required data:

- Number of universities with specific programs for students from underserved segments of the population
- Number of programs specifically tailored to train students from underserved populations
- If it is not possible to collect this data, inquire the following in a focal group or interviews to the most important University presidents in the country.

Issues to investigate	YES 100	NO 0	In process
Are programs in place to integrate students from underserved populations into clinical health sciences careers or public health schools?			
What number and percentage of the programs are directed towards recruiting students from indigenous populations, or with low resources or who live in inaccessible geographical locations[9]?			

1. Perform a biased sample, selecting the same samples described in goal 7 that are the three or four Public Universities with Schools in Clinical Health Sciences that are the most prominent, important and in demand for training of human resources for health in the country and use them as a sample of what is occurring in the country. You can request these criteria at Association of Colleges and Health Sciences Schools that exist in many countries.

2. Conduct an interview with the highest officers to complete the required information or organize a focal group.

Data Sources

- Records from the most important Universities in the country.
- Key informants, officers from these universities.

GOAL 19:

Attrition rates in schools of nursing and medicine will not exceed 20%

Rationale

This goal seeks to shed light on the degree of medical and nursing student attrition rates. This rate certainly measures the quality of the educational process and the difficulty in retaining students in health careers, faced to the costs their training entails, repetition of courses and dropout. Studies in countries in the Region of the Americas have found attrition rates that exceed 50%, which implies a high level of failure of the educational system to retain possible future health professionals, with consequences on the misuse of resources and impact on the quality of professional training.

Key Terms

[9] You may also include students with some type of handicap that does not limit the professional exercise in a health science career.

Attrition rates: It refers to students from medical and nursing careers that discontinue their studies, repeat years and do not culminate their professions.

Rates should be relative to the population; in this case, the rate is really a percent.

Proposed Indicator:

Percentage of medical and nursing students that abandon the career.

Formula:

$$\frac{\text{Number of medical students that enrolled in year t Minus (-) number of medical students that graduated in year T}}{\text{Total number of enrollees}} \times 100$$

$$\frac{\text{Number of nursing students that enrolled in year t Minus (-) Number of nursing students that graduated in year T}}{\text{Total number of enrollees}} \times 100$$

Required Data:

- Total number of medical and nursing students enrolled in a certain year (t).
- The same cohort of students is followed for the number of years in the career (x) and the number of graduates is counted. Alternatively, you may calculate the number of graduates in the year in a simple manner (t-x).

Methodological Guidelines:

1. The duration (number of years) of the medical and nursing careers in each country should be defined in the footnote.
2. In the case of the nurses, differentiate, when appropriate, the different personnel categories according to training: university or technical institute. Clarify these differences in the footnote.
3. Identify the career that is being presented or measured in the indicator. If it only includes doctors, clarify this particularity in the footnotes.
4. We consider the cohort that graduate after 2000 in this baseline and add, if the data allows this, two additional cohorts.

Additionally: times series.

$$\frac{\text{Number of medical students that enrolled in the year 1998, 1999, 2000 Minus (-) Number of medical students that graduated in each of those years}}{\text{Total number of enrollees}} \times 100$$

$$\frac{\text{Number of nursing students that enrolled in the year 1998, 1999, 2000 Minus (-) Number of nursing students that graduated in year T}}{\text{Total number of enrollees}} \times 100$$

By adding more years to the equation you avoid mistakes due to exceptional years.

If countries have the resources available, they may carry out qualitative or quantitative studies on the causes of attrition.

Data Sources

- Since the registrar's offices of each of the universities have this data, we recommend carrying out a specific investigation to determine the behavior of the indicator in at least three or four of the largest state Universities in the country.
- The data of the indicators may be taken from specific studies on the subject that may already exist, in this case, specify the sources in the footnote.

GOAL 20

70% of clinical health sciences and public health schools will be accredited by a recognized accreditation body.

Rationale

This goal seeks to include the dimension of quality of education that is provided in the schools of clinical health sciences and public health and their certification on behalf of a recognized accreditation body. The direction of the services towards quality is one of the principles of the health systems based on PHC and are the basis for the health policies and training of health personnel.

Key Terms

Schools of Clinical Health Sciences and Public Health: It refers to the undergraduate and graduate training schools in clinical health sciences and specifically, in the second case, public health schools.

Accreditation: It refers to the evaluation and quality verification of the schools of clinical health sciences and public health through a pre-established process. It does not refer to a certification to authorize its operation.

Recognized accreditation body: Institution that is legally formed and recognized by the State to operate as an entity that performs the corresponding evaluation and extends the accreditation based on objective and verifiable parameters.

Proposed Indicators:

Existence of an accrediting entity Yes/No

Percent of accredited Colleges and/or Schools of Clinical Health Sciences
Percent of accredited Schools of Public Health

Number of Colleges and/or Schools of Clinical Health Sciences and Public Health Schools in the process of accreditation.

$$\frac{\text{No. of accredited Colleges and/or Schools of Clinical Health Sciences X 100}}{\text{Total No. of Colleges and/or Schools of Clinical Health Sciences}}$$

$$\frac{\text{No. of accredited Public Health Schools X 100}}{\text{Total No. of Schools of Public Health}}$$

Required Data:

- Existence of an accrediting body in the country for education in the Clinical Health Sciences and Public Health.
- Number of accredited Schools of Clinical Health Sciences, Nursing and Public Health.
- Total number of Schools of Clinical Health Sciences, Nursing and Public Health.

Methodological Guidelines

1. This indicator does not measure the accreditation of the Universities where these Schools are located, but the specific accreditation of colleges, schools or undergraduate or graduate health sciences programs.
2. The important question for the interviews to key informants is:
   - Does a recognized accreditation body for undergraduate and graduate education exist in your country?

Data Sources

1. The records of the national body responsible for accreditation of the Clinical Health Sciences programs (several may exist for different professions), if it exists in the country.
2. The records from the accrediting body that has the names and number of accredited schools and programs.