Handbook for Measurement and Monitoring

Indicators of the

Regional Goals

for Human Resources for Health

A Shared Commitment

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Contents

CHALLENGE 5
Develop mechanisms of cooperation between training institutions and the health services institutions to produce sensitive and qualified health professionals..43

Acknowledgments

The Handbook on Measurement and Monitoring of the Indicators for the Regional Goals for Human Resources for Health is a product of a Regional Task Force, organized and led by the Pan American Health Organization/World Health Organization (PAHO/WHO). This Regional Task Force was comprised of experts in data management, analysis, and Human Resources for Health policies, proceeding from various countries and organizations across the Region of the Americas. The Task Force members met in Quito, Ecuador, in 2008 and created this guideline handbook to complement Resolution CSP27/10 of the 27th Pan American Sanitary Conference, "Regional Goals for Human Resources for Health 2007-2015." The Handbook presents the rationale, clarifies the terms and defines the indicators for each goal. It is intended as a guide for the Ministries of Health, research groups, and Human Resources Observatory networks to establish the baselines indicators for the goals, and make possible the monitoring of the development in the implementation of Human Resources plans.

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
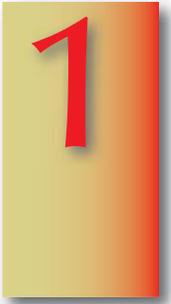
GOAL 1: All countries of the Region will have achieved a human resources density ratio level of 25 professionals per 10,000 inhabitants

RATIONALE

The **purpose of this goal** is to illustrate the relationship between the population of a country and the number of human resources for health with the aim of identifying the possible under or over-supply of these resources. I Global studies have found that few countries have been able to reach the minimum population health targets set out in the Millennium Development Goals with fewer than 25 professionals per 10,000 inhabitants.

KEY TERMS

Human Resources for Health: To facilitate international comparisons, given the disparity of available data for many professions, we will use the definition of the WHO, that adds physicians, nurses and mid-wives to represent the total human resources for health in a country. However, countries are still encouraged to collect information on all of the health professions that are relevant to the healthcare team.

Human resource for health shall include:

► Physicians who have graduated from a university-based medical training program.

► Nurses who have 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, matrons and obstetricians: it refers to the personnel with training from universities or from technical institutes. 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 employed in the system as health professionals should be included in all cases.

PROPOSED INDICATOR

► Health Human resources density ratio per 10,000 inhabitants.

$$\frac{\text{Number of physicians} + \text{nurses} + \text{midwives in year t} \times 10,000}{\text{Total population in a country in year t}} = \text{HRH per 10,000 inhabitants}$$

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 as the density per 10,000 population.

► The ratio expresses the frequency of cases (human resources) for a given number (10,000) of inhabitants. It is calculated by dividing the total number of human resources for a given year by the existing population in that same year.

► 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 capita) and 100,000. In this case, it was defined by multiplying by 10,000.

► The year "t" refers to the year when the human resources data were collected and should coincide with the year in which the population data were collected.

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 given year corresponds either to the results of the census, if it was carried out in the year when the data were taken, or to forecasts based on the population census.

METHODOLOGICAL GUIDELINES

1. If a midwife, matron or obstetrician is also a nurse, the individual should be counted as one person and listed in their primary health occupation.

2. If information about midwives is not available in the country, this should be included as a footnote.

3. The indicator is aggregated to facilitate international and inter-Regional comparability. However, it will also be necessary to have separate data and indicators for the number and population ratios of physicians, nurses and midwives.

4. If the information system in your country allows you to do further subdivisions among the health professions, you may do so for the specific requirements of your country, but it is not required for this review.

DATA SOURCES

► **Administrative registries:** The total number of health personnel is taken from administrative registries of each of the private and public health institutions in the country. 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:

- Professional schools (meaning professional training facilities);

- professional councils, and/or

- other licensing bodies that require mandatory registration at the individual level.

► In those cases where you are uncertain whether a number of registered physicians/nurses/midwives still work in the country, it is best not to use the data.

► By taking only the data of employed personnel, you avoid the complications that would emerge if you took the records of those who graduated from universities, given that (1) it may include personnel that do not work or that changed their profession or occupation, or (2) may be migrant personnel who will be leaving the country.

► **Census:** The country's total population count, taken from population or housing censuses or their forecasts, should match the year of any human resources for health indicators that are developed.

GOAL 2: THE REGIONAL AND SUB-REGIONAL PROPORTIONS OF PRIMARY HEALTH CARE PHYSICIANS WILL EXCEED **40%** OF THE TOTAL PHYSICIAN 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 care physician** refers to licensed medical professional person, usually a general practitioner or family practice physician, who is actively involved in the provision of public and/or private primary health care services, in locations other than acute care or long-stay hospitals. 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 common diseases and injuries;

- ► 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; and

- ► rehabilitation services.

PROPOSED INDICATOR

Number of primary health care physicians as a percentage of the total number of physicians

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

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. It must be remembered here that it is persons that are counted, rather than posts, so each person counted will be working the full time equivalent in hours.

5. All working physicians in the country should be counted, including those on temporary employment contracts from other countries (e.g. Cuban physicians).

6. Dentists are not to be included in the list of physicians.

7. In some countries patiens may have direct access to a specialist without referral from a general practinioner. As such, some specialists may also provide PHC services as the first contact point with patients. If the number of PHC services provided by medical specialists (e.g. psychiatrists, pediatricians, obstetricians, etc.) are significant, it should be documented/footnoted by all countries to which it applies.

DATA SOURCES

► **Administrative Registries:** The total number of medical personnel would be determined from the administrative registries of the profession, supplemented by Ministry of Health, health regions, administrative registries of public institutions and professional schools, as 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, and

► 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;

► prenatal 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, and

► 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, most often women who are at highest risk for poor birth outcomes, particularly low-birth weight and infant mortality. 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 because of ethnic, religious, cultural or socioeconomic 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 70, representing a comprehensive range of services.

1. Is there a policy or program with respect to primary health care teams? (Policy/program at national level: 10 points; policy/program at subnational levels: 5 points; and, no policy/program: 0 points).

2. What percent of the country's total population is covered by the primary health care teams?
   - < 20%: 2 points
   - 20 to 39%: 4 points
   - 40 to 59%: 6 points
   - 60 o 79%: 8 points
   - >80%: 10 points

3. Does the primary health care program utilize community networks? (Yes: 10 points; or No: 0 points).

4. Does the program cover vulnerable populations? (Yes: 10 points; or No: 0 points).

5. If yes, which of the follow populations are covered by primary health care teams? (One point each; maximum score 10 points. Note: if population groups below are ot relevant to your country, score one point for that category).

    Populations:

    - high-risk pregnant women;
    - children;
    - elderly;
    - handicapped;
    - mentally ill;
    - ethic groups;
    - religious groups;
    - cultural groups;
    - impoverished, and
    - language.

6. Which professional groups are generally included in the primary health care teams? (Two points each; maximum score: 10 points).

    Professions:

    - physicians;
    - nurses;
    - midwives;
    - community health workers, and
    - nursing assistants.

7. What broad competencies are currently required of the primary health care teams? (Two points each; maximum score: 10 points).

    Competencies:

    - diagnosis and management of acute and chronic conditions;
    - prenatal and postnatal care;
    - prevention of disease and disability;
    - rehabilitation after illness, and
    - Coordination of health care services for populations at high risk:
      - children;
      - mentally ill;
      - elderly, and
      - handicapped.

REQUIRED DATA

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

The information to build this indicator is to be gathered through surveys and interviews with key informants within the health care system.

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;

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.

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

► **Ministry of Health (federal and regional levels):** Data on primary health care programs and teams, employment data and information on vulnerable groups would be obtained from the Ministry of Health and the health regions.

► **Evaluations of Curricula:** Range of primary health care competencies through evaluation of training / educational foci - academic curricula, in-service training.

► **Job Descriptions:** A second source that will reveal the range of primary health care competencies is a review of the position descriptions and/or job requirements.

► All data sources are to be duly noted.

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 health care teams.

For some countries it is expected that for every physician there will be at least four nurses, but in other countries, particularly for some of those in the southern cone, the reverse is true. The minimum goal in this case has been identified as at least one nurse for every physician employed.

Given the scope of the activities of the PHC Team, the expanded role and credentials of nursing and the benefits of using nurses to their full competency levels (especially in a community health context), the appropriate number of adequately deployed nurses enhances health service delivery cost-effectiveness and efficiency. Note that in the primary health care context, there should be a higher ratio of nurses to doctors, but this goal defines that the very minimum is at least one to one.

KEY TERMS

Physicians and nurses: Physicians who graduated from universities, and nurses with at least three years of formal training. We exclude from this definition nurse auxiliaries or personnel that carry out their duties under the supervision of nurses.

PROPOSED INDICATOR

Ratio of nurses with respect to doctors.

$$\frac{\text{Total number of nurses}}{\text{Total number of doctors}}$$

Number of nurses that work in the country in a given year; related to the number of physicians in the same year.

METHODOLOGICAL GUIDELINES

1. If the information system of your country allows you to perform further subdivisions of the health professions, such as the ratio of nurses/doctors in hospitals or other specific studies, you may do so for the purposes of your country, but it is not required for this review.

2. Consider the definition of nursing personnel described in goal one.

3. 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 health system as employed health professionals.

GOAL 5: ALL COUNTRIES OF THE REGION WILL HAVE ESTABLISHED A UNIT OF HUMAN RESOURCES FOR HEALTH (HRH) WHICH WILL BE RESPONSIBLE FOR THE DEVELOPMENT OF HRH POLICIES AND PLANS, THE DEFINITION OF THE STRATEGIC DIRECTIONS, AND THE INTEGRATION OF HRH WITH OTHER SECTORS

RATIONALE

The purpose of this goal is to call attention to the importance that the decision makers at the highest levels of the Ministry will assign to the area of human resources in health. This commitment is evidenced by the development and support of a formal planning unit with specific responsibilities for HRH and that links to and is supportive of the strategic direction of the health care delivery sector. This function goes beyond personnel administration to that of a human resources policy and program development and management.

KEY TERMS

Human Resources for Health Unit: This unit (also called HRH Office or Secretariat) for human resources (it may have other names, such as Employment, Skills or Personnel Management) should be located at a high level of command in the Ministry of Public Health so they is able to influence the decisions of the national health authority with respect to policy on human resources for health and health services delivery. This unit must have the capacity to:

1. develop specific policies on human resources for health;

2. develop a relevant and influential human resources for health planning unit;

3. carry out the strategic direction in support of human resources in health;

4. have the capacity for inter-sectoral negotiation with the training entities as employers of human resources and unions;

5. develop a national information system, and

6. influence health policy decisions at a senior level within the organization.

PROPOSED INDICATOR

The level of development of a human resources for health unit, including its capacity for influencing organizational management and strategic direction. The HRH unit could be a "unit" of only one individual responsible for that function.

Indicate the nature of the HRH function by responding to each of the six questions in the table below which describe the characteristics of the HRH Unit. (Yes: 1 point; and No: 0 points. Maximum score is 6 points).

DEFINITION OF THE INDICATOR

At least **two key informants (and the best results will be obtained by involving three key informants)** should classify the characteristics of the unit of human resources for health from the checklist shown below. Note that a key informant, in this handbook, refers to persons with knowledge, stature, and authority within the Ministry and/or in the institutions relevant to the indicator (Note the methodological guidelines below.) The number of key informants (or "authorities") should be at least two, and recommended to be three so that the average scores of the answers recorded will provide an average that reflects a dependable assessment of the indicator. Usually the informants provide the same answers because the indicator questions are straightforward, but to provide the most thorough investigation, it is useful to confirm the responses through a wider questioning. In addition, for this indicator, as well as for other indicators that involve interviews or responses from key informants, the number of informants interviewed and their titles should be noted in the footnote of the indicator.

Award a one when the answer is affirmative and 0 when it is negative. Partial numbers are added and a score is obtained from a six point scale. The criteria of the key informants are averaged to obtain the final score. The example below shows the scoring of three key informants:

HRH Unit in the Ministry of Health	Yes	No
1. Does an HRH Unit exists?	10	0
Level of strategic function		
2. Hierarchy level in the Ministerial organization: Does the HRH unit exist within the Ministry of Health in an advisory role to the Minister, functioning as part of the leadership team, and/or providing national strategic direction?	1	0
3. Does a dedicated HRH unit or function develop HRH policies at the national level?	1	0
4. Does the HRH unit or a dedicated function plan the number and type of required human resources for the country?	1	0
5. Does the HRH unit or a dedicated function provide a strategic steering role in the management of human resources for health, the in-service training, and the approach towards problems and determinants?	1	0
6. Does a dedicated HRH unit or function track, with an updated information system, the inventory of HRH (numbers, types, locations and educational levels)?	1	0
7. Does a dedicated HRH unit or function negotiate inter-sectoral relationships with education, employee and union sectors?	1	0
TOTAL	6	0

Total score calculations:

Total score	Percentage of goal reached
0	0%
1 - 2	10%
3 - 4	25%
5 - 6	50%
11 - 12	60%
13 - 14	75%
15 - 16	100%

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;

- ► an expert in Human Resources from the PAHO office in your country, and

- ► the director of the unit of Human Resources for Health.

Include the names of the interviewees in the footnotes.

Add the partial results of each interviewer and calculate a simple average of each score resulting from each of the interviews. This average score will indicate the strategic functions of the Human Resources unit.

DATA SOURCES

- ► **Personal interviews:** Data are collected by personal interviews with high level key informants of the Ministry of Health of each country described in the clarifying note above.

- ► Use the items from 1 to 6 of the checklist to elaborate 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 major 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 its own measure of urban and rural, with a clear definition with the context of its own jurisdiction.

In order that individual country data, can be aggregated and cross-compared with other areas across the Region that are utilizing different urban-rural definitions, countries are asked to report their population data at the smallest geographic unit level (e.g. towns, cantons, parishes, counties, etc.) by which it is collected. This approach will allow for maximum flexibility in rolling up individual country population data into a Regional profile by applying a range of different assumptions and definitions of urban-rural to facilitate intra-regional comparisons.

If there is no urban/rural population in the country, it should be noted that the indicator is not applicable. Alternatively, countries may wish to consider other population disparities (e.g. re-

ligious, ethnic, socio-economic, etc.) and develop other indicators. All indicators used should be footnoted appropriately.

PROPOSED INDICATORS

This indicator is to be expressed as a fraction:

$$\frac{\text{Density of Human Resources for Rural Areas of the Country}}{\text{Density of Human Resources for Urban Areas of the Country}}$$

Alternatively, this indicator can be expressed in the equation below:

$$\frac{\text{Density of Human Resources for the cluster of geographical units with the lowest ratio}}{\text{Density of Human Resources for the cluster of geographical units with the highest ratio}}$$

Note: As in Goal 1 the density of Human Resources is the total number of physicians, nurses and midwives per 10,000 population.

REQUIRED DATA

Individual country population data at the smallest geographical unit (e.g. town, parish, etc.) by which it is collected, for the most current year available.

Professional data on numbers of physicians, nurses and midwives for the same time period and using the same geographic units that were used to collect the population data.

METHODOLOGICAL GUIDELINES

1. Tabulate population data at the smallest, practical geographic unit level at which it is currently being collected. Population units may include city, town, district, state, municipality, political boundary, county, parish, canton or health regional level, etc.

2. Roll up or group the data to reflect the urban-rural distribution of the population based on each country's definitions.

3. Provide the country definition of urban and rural and illustrate how the data was aggregated to arrive at this figure.

4. Tabulate health professional data applying the same geographical unit levels used in collection population data.

5. The density of the health professionals per 10,000 population for rural areas is divided by the density of health professionals per 10,000 population for urban areas, to provide a distribution ratio of human resources for health.

6. The health professional population ratio of urban areas to rural areas may be as high as 8 to 1 for some countries. In this instance, for example, reducing urban-rural distribution by half would produce a target of 4 to 1 by 2015.

7. Health professional data should be disaggregated as much as possible (public, private, poverty etc.).

8. Data could then be re-aggregated to provide data comparisons across the Americas using regionally standardized definitions of urban and rural.

9. Previous definitions of health personnel (doctors, nurses and midwives) should be utilized to ensure internal consistency and comparability.

10. As a minimum, doctors, nurses and midwives should be included in the analysis. Countries should include, however, as many professional groups as the integrity of their data will allow, including all active public and private providers.

11. It is not the measure of urban-rural per se that is important, but rather the gap between the two that is the key indicator.

12. Countries are encouraged to include their own discussions and interpretations of issues surrounding access to services (e.g. poverty).

DATA SOURCES

► Ministries of Health and Health Regions.

► Census Data and Household Surveys.

► Specific studies of the Observatories of Human Resources.

Note: If an indicator is considered non-applicable, it should be represented as a "gray" arm on the star that visually summarizes each country's status with respect to each of the regional goals. If the data is anavailable, or no progress has been made on a particular goal, the country score for that goal would be represented by a "0" on the star. Explanations as to how the score was determined should be footed as appropriate.

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, socioeconomic, 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 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 investigations, plan and evaluate;

- ► promotes partnerships, collaboration and advocacy, and

- ► capacity to pursue and promote well-being and to address inequities in health status.

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 socioeconomic groups.

PROPOSED INDICATOR

Percentage of primary health workers that have public health and intercultural competencies:

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

$$B = \frac{\text{Total number PHC workers with intercultural competencies}}{\text{Total number of PHC workers in the country}} \times 100$$

Calculation:

$$\frac{A + B}{2} \times 100 = \text{\% of goal reached}$$

To develop this indicator a list of public health competencies and a list of primary health care worker intercultural competencies (see Key Terms above) are needed.

REQUIRED DATA

▶ Total number of primary health care workers in the country.

▶ Number of primary health care workers with public health competencies.

▶ Number of primary health care workers with intercultural competencies.

▶ Total number of primary health care workers with public health and intercultural competencies.

METHODOLOGICAL GUIDELINES

1. List all public health and intercultural competencies required by primary health care workers.

2. Determine the total number of primary health care workers have this level of training.

3. Determine whether the university curriculum includes these areas of training.

4. Determine whether in-service training provides this level of skills upgrade for primary health care workers.

5. Determine how many primary health care workers are acquiring these skills through formal educational programs and through in-service training.

6. Countries will individually define intercultural competency requirements and will list relevant changes in training that have been implemented.

7. Determine which primary health care workers require this level of training.

8. Measure potential primary health care capacities and competencies on the basis of professional training program curriculum, not by the assessment of worker on-the-job performance.

9. Combine the primary health care goals regarding primary health care workers, teams and university programs into one survey for research teams to ensure consistent survey development and application across the Region.

DATA SOURCES

▶ Ministry of Health and Health Regions.

► Educational curriculum for training programs.

► Job Descriptions / Posted job requirements.

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 of formal training and who carry out their duties under supervision of a nurse.

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

► **Technical institute** refers to an established training institution, other than universities, that produces health professionals with a recognized credential.

► **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

Current percentage of training programs for the designated professional groups (nurses, nursing auxiliaries, health technicians and community health workers) that match or surpass the stated requirements for current employment positions.

$$A = \frac{\text{Total number of training programs that match or surpass requirements}}{\text{Total number of training programs for the designated health professions}} \times 100$$

The percentage of health care professionals, by designated professional group, who have upgraded their skills through formal and/or in-service training during the past three years:

$$B = \frac{\text{Total number of designated health professionals who have upgraded skills}}{\text{Total number of designated health professionals in the country}} \times 100$$

$$\frac{A + B}{2} \times 100 = \% \text{ of goal reached}$$

REQUIRED DATA

► Curricula of training programs for nurses, nurse auxiliaries, health technicians and community health workers as well as curricula for in-service, on-the-job training for existing health care workers.

► Current job posting descriptions

► Number of health professionals (by designated groups) in the workforce who have undertaken additional training (university, in-service, on-the-job) to upgrade their skills.

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 interviews with key informants, may need to be undertaken to supplement available data sources.

2. The survey could include several discreet components relating to the various teams and programs with careful cross-checking between them. All of the primary health care goals, for example, should be dealt with collectively in one survey.

3. Common training programs will need to be developed for those researchers conducting surveys to ensure that they have the appropriate skills required and to allow for the highest consistency in survey results.

4. Upgrading skills has the most relevance and impact when it's referenced in licensing requirements, job descriptions and performance evaluations.

DATA SOURCES

► **Job descriptions for each profession:** Ministry of Health and Health Region job postings and descriptions.

► **Curriculum outlines:** Curriculum from educational training programs and in-service training registrants from in-service training programs.

► **Interviews/surveys:** Research survey of key informants.

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**, **health workers**, and **primary health care teams** are detailed in Goals 2 and 3 above.

► **"Their own communities"** is defined as the geographic location (city/town and country) that the primary health care worker identifies as his or her place of birth.

PROPOSED INDICATOR

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.

METHODOLOGICAL GUIDELINES

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 socioeconomic 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 or No).
   Extension of these programs 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 dual problem that the countries face regarding the international migration of human resources for health. This problem is the reason the goals seek to: (1) ensure access of populations to health services and (2) ensure the right of health workers 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 view of the fact that a global shortage of health care workers 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 and that increasingly competitive health worker migration worldwide will have a significant impact on the workforces 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 of achieving them;

v)   establish bilateral agreement principles between identified developing nations, and

vi) act consistently with and in broad support of the broad goals of select developing nations.

The migration 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 mutuality of benefit with respect to source countries, destination countries, institutions, recruiting agencies and migrant health workers.

PROPOSED INDICATORS

Country Level:

► Has adopted a global code of practice? (Yes: 50% or No: 0).

► Has established ethical norms for international recruitment? (Yes: 50% or No: 0).

Total score is 0 to 100% with respect to the regional goal.

Regional Level:[1]

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

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

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1. This percentage will be calculated by PAHO.

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.

METHODOLOGICAL GUIDELINES

1. Determine whether a code of practice for the ethical recruitment of international health care workers has been adopted.

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:
   - A list of any specific country policies designed to meet its own needs with respect to human resources for health.
   - A list of any policies to reduce reliance on foreign workers.
   - Indicate the extent to which the policy is being implemented.

5. Countries will apply own definition and develop their own baseline of needs for human resources for health.

6. 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: Each country 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. This principle applies to both developing countries who are the primary source of new immigrants, and developed countries which are generally the destination for migrant health workers.

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 be an important strategic approach to help stabilize the Region of the America's health workforce by encouraging greater investment in the health workforce capacity and infrastructure development. Utilizing migrant health workers as a demand "buffer" rather than as an ongoing primary source of health care workers, would be a key component of this approach.

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:

1. 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) restructuring training programs to reflect the knowledge, skills and attitudes that are most appropriate to better support national development;

    iii) involving local and rural communities in the process of student selection and scholarship awards for entry into health professional training programs;

    iv) investing in improving the working conditions of health professionals; and,

v) Entering into bilateral agreements with destination countries in an attempt to control the flow and derive some compensation for the loss of health professionals.

2. Destination countries take greater responsibilities for both **reducing the *pull* factor** 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.

3. 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 INDICATORS

Country Level:

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

Regional Level:[2]

▶ What percentage of countries in the Region have 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

▶ Does the country have a policy of self-sufficiency regarding human resources for health? (Yes or No).

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2. This percentage will be calculated by PAHO.

If yes, list the self-sufficiency policies currently in effect:

- 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.

8. If there is no medical school in the country but the government has a policy reflecting bursaries/scholarships for nationals to attend medical schools outside the Region, this should be recognized as a policy for meeting self-sufficiency.

DATA SOURCES

▶ Ministry of Health and Health Regions.

▶ Professional Licensing Boards.

▶ Immigration Authorities.

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

Country Level:

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

Regional Level:[3]

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

---

3. This percentage will be calculated by PAHO.

REQUIRED DATA

Determine whether the country has **mechanisms for the recognition of foreign trained professionals?** The mechanisms would refer to official means by which health professionals are officially tested or qualified, as well as standard guidelines and processes through which a professional is recognized and authorized to practice.

Provide a list of **current mechanisms and standards** that are 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.

- ► Sub-regional bodies for Accreditation/Licensing.

- ► Sub-regional Agreements (NAFTA-MERCOSUR-CARICOM-COMUNIDAD ANDINA) that specify conditions for movement of professionals among Member States.

- ► Ministry of Health.

- ► Professional licensing Bodies.

Challenge 4

Achieve healthy workplaces and promote a commitment of the health work force with the mission of 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 that determines 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. 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

Social protection from precarious, unprotected employment for health service providers differs from country to country, but is considered to include, as a minimum, health insurance, pension and sick leave/maternity leave.

PROPOSED INDICATORS

$$\frac{\text{The total number of health service employment positions in the country that are in precarious and/or are without social protection}}{\text{The total number of health employment positions in the country}}$$

Note: this indicator may also be calculated individually for selective professions (e.g.: number of nurses in precarious employment prositions, number of doctors in precarious employement positions, etc.).

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 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. Data from the Ministry of Health indicates how many workers are non-tenured or contracted.

4. A national employment or labor survey of some of the largest employers—employing international definitions—could be conducted if primary data is not available.

5. Given that the information being gathered is on employment positions, the unit to measure is jobs not people.

DATA SOURCES

► Labor or Economic Statistics.

► Social Security Statistics of the country.

► 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

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. 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

Country Level:

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

Region Level:

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

REQUIRED DATA

► The country has a policy to cover the health and safety of health workers. (Yes or No).

METHODOLOGICAL GUIDELINES

1. Ask the Ministry of Health as to whether there is national policy on health and safety.

2. Determine if there are policies to cover: up to date and repaired equipment, clean environments, structurally safe work areas, safety training, and, the provision of health services and health insurance coverage.

3. Survey a random sample of employers and/or employees as to whether or not the policies have been implemented.

4. Individual country research teams can define the scope of health and safety programs

5. A sample of key employers could be taken to estimate the number that might have health and safety protection for their workforce.

DATA SOURCES

► Department of Health.

► Health Regions.

► Unions.

► Labor legislation.

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 leadership and administration of health services delivery with the view of achieving greater efficiency in management and a greater capacity and commitment for work. The proportion of managers who have formal certification from a university or through an accredited in-service training program is an indicator of progress with respect to this goal.

KEY TERMS

Health services and program managers are understood to be any professional that has been chosen to lead a health care institution.

Specific requirements for public health and management competencies: The requirements, which include ethics training, require certification in public health and management whether through a university course or in-service training. The content of these courses de-

velop public health and management competencies, and greater comprehension of ethical principles necessary for the effective performance of those management functions.

PROPOSED INDICATOR

Percent of health services and program managers that are 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 the 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 job descriptions. Translated as: Percent of director posts that have requirements.

METHODOLOGICAL GUIDELINES

1. All Managers that are employed are to be considered. Note that the definition of "manager" will differ from institution to institution and from country to country. The definition here should remain flexible; however, the investigation team will note the general or loose parameters that are identified in their investigation to define a "manager."

2. In the case of not finding information and opting to interview key informants instead, the interviewees should be: (1) a high level health authority, (2) expert in Human Resources from the PAHO office in your country, and (3) the Director of the Human Resources for Health Unit. Note the names of the interviewees in the footnote. (Please see the data sources list for outline of key informant questions, and number of informants needed for adequate data collection.

3. In large countries (where the number of health units is very large), 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 has a training system for the post and performance evaluation, further studies can be carried out, even if this investigation is not useful for international comparability.

DATA SOURCES

► **Registry of Personnel and Training Requirements:** The Ministry of Public Health may have a registry of personnel that are employed in their units and programs, as well as their training, which will allow us to obtain the data that is required to build the indicator.

- **Tally of Questionnaires/Interviews:** If this information is not available, perform interviews of key informants with the following questions:

  - Do certification requirements in management exist for those that lead health services programs?

  - Are there records of the number of personnel with these training specifications?

  - What are the level of these personnel: national, Regional, provincial, cantonal or departmental?

  - Does the state have a permanent training program in management for their directors?

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 save or sustain life. The thrust of this initiative is not to minimize the importance of labor concerns or to defer ongoing labor negotiations. The thrust of this initiative is not to minimize the importance of labor concerns or to defer ongoing labor negotiations. Its purpose is to establish a formal mechanism to maintain dialogue with workers' labor organizations that allows for the continuing delivery of essential health services while labor disputes are being settled. This mechanism would protect the rights of employees, consistent with local labor codes and union practices, and facilitate patient access to critical health care services.

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

Country Level:

- Essential services legislation currently exists. (Yes or No).

- Formal negotiation mechanisms currently exist. (Yes or No).

Regional Level:

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

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

REQUIRED DATA

Country Level:

► Indicate whether essential services legislation exists.

► Indicate whether formal labor dispute mechanisms exist.

Regional Level:

► 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 the health services institutions to produce sensitive and qualified health professionals

GOAL 17: Eighty percent of schools of clinical health sciences will have reoriented their education towards primary health care and community health needs and adopted interprofessional training strategies

RATIONALE

This goal is included in the reformed concept of primary healthcare that calls attention towards strengthening society's role in reducing health inequalities. As, it departs 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 part they play[4] in the new models of health care delivery.

The goal of community health care is to provide comprehensive and appropriate health care starting with the families and the community as the basis for planning and action.

For the PHC team to be effective, the must work together as a team, share common values and approaches, not just with regards to medical issues but social and environmental issues and strategies as well. It is also important within a team environment that staff are deployed effectively, are utilized to their full levels of competence and understand and respect each team member's role. This allows the team to be as effective and efficient as possible.

In order for this collegial culture to develop at the workplace, shared courses and common curricula need to promoted and developed with respect to inter-professional student training.

KEY TERMS

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

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4.   PAHO. La renovación de la atención primaria de salud en las Américas. PAHO-WHO, 2007, i), iii).

"Reoriented their education towards primary health care and community health needs." Curricular reforms that have been carried out in the last years to include the reformed concept of primary health care and community health contents with the purpose of providing comprehensive and appropriate health care, parting from the families and the community as the basis for planning and action. Primary health care must constitute not only a conceptual and reflection module but must also contemplate a specific practice within the training, through clinical experience in community or primary healthcare centers for example.

Primary health care 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 individuals and families in the community through their full participation and at a cost that the community and country can afford. As a 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 determinants.[5]

Interprofessional training: Comprehensive training of students from different health professions. This includes a basic common curriculum for the health team starting in their undergraduate training. It entails budgetary challenges but reduces overall educational 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 occurs at the graduate level.

PROPOSED INDICATORS

► Inclusion of PHC contents in the curriculum.

► Inclusion of PHC practices in the curriculum.

► Existence of inter-professional training strategies in the schools of clinical health sciences.

► Existence of financial support for inter-professional training.

► The level of achievement of each goal is calculated from the checklist proposed in below.

► Each of the characteristics listed below is to be rated on a scale from 0 to 3 to indicate the degree to which each one has been achieved. The total maximum score for the five idicators is 15.

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5.   Ibid, p.4.

Characteristic	Yes	No
1. The Schools of Clinical Health Sciences do not center the training of the professionals on the biomedical model:[a] ▪ Physicians ▪ Nurses ▪ Midwives	0-3	
2. Include PHC contents in the curriculum	0-3	
3. Changed the curricular model and reoriented it towards PHC	0-3	
4. Have inter-professional training strategies	0-3	
5. Existence of financial support for inter-professional training	0-3	
TOTAL	0-15	

Note:

[a] 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.

DATA SOURCES

► Universities: We recommend collecting information from all of the universities, if possible; or alternatively to carry out a sample of the universities (preferably all major universities should be represented in the sample if possible.

► Associations of Colleges and Schools of Health Sciences: Locate the three or four Public Universities with Schools of Clinical Health Sciences that are the most prominent, 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.

► Interviews with Main Officers: Perform an interview of the main officers to collect the required information.

METHODOLOGICAL GUIDELINES

1. It is possible to carry out an in-depth study looking at the training in a primary health care model and working in inter-professional teams vs. the training through the strictly medical model in terms of professional roles and working relationships and applying them to the Nursing and Medical careers.

2. The countries that are able to do so may carry out a study that includes all 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: Eighty percent of schools in clinical health sciences 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 health services. It is expected that health care providers who are recruited from rural areas and from minority populations are more likely to return there to practice. Furthermore, they are more likely to have the social and cultural sensitivities and the language skills needed in primary health care settings with rural and ethnic communities

KEY TERMS

Schools in Clinical Health Sciences, It refers 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.

Traditionally excluded populations refers to those groups defined by religion, ethnic group, sexual preference, economic level, geographical location, language who, because of these factors may have less access to health services and to other public services or benefits.

PROPOSED INDICATOR

► Existence of enrollment programs (selective candidate recruitment, affirmative action) in the Schools of Clinical Health Sciences to include students from underserved populations.

► Percent of specific training programs for students from indigenous populations, or with a low socioeconomic status or that live in geographically inaccessible areas.[6]

REQUIRED DATA

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

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6. You could also include students with some type of disability that does not impede the professional exercise of careers in health sciences.

request these criteria at Association of Colleges and Health Sciences Schools that exist in many countries.

2. Perform an interview with the highest officers to complete the required information.

DATA SOURCES

Ask the key informants the following questions:

▶ Do university outreach programs that target underserved populations to train them in health science careers or in schools of public health exist?

▶ Where are these programs located?

▶ Which programs are there? (List them).

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

Attrition Rates: It refers to students from medical and nursing careers that discontinue their studies and do not complete their training in their chosen professions.

The **percentage rate** is expressed as the percentage of enrollees in health professional training programs who graduate with a credential in that profession.

PROPOSED INDICATOR

Percent of medical and nursing students that discontinue training.

$$\frac{\text{Number of medical students that enrolled in year t}}{\text{Number of medical students that graduated in year t} + x} \times 100$$

$$\frac{\text{Number of nursing students that enrolled in year t}}{\text{Number of nursing students that graduated in year t + x}} \times 100$$

It refers to the difference between the number of enrollees and graduates in a cohort of students allowing for the differences in the duration of the respective career/program of study.

REQUIRED DATA

► Total number of medical and nursing students that were 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 can 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.

Example:

Minimum required:

$$\frac{\text{Number of nursing students that enrolled in the year 1998}}{\begin{array}{c}\text{Number of nursing students that graduated in the year 2001}\\ \text{(in the case that in this country the nursing program}\\ \text{of studies lasts three years)}\end{array}} \times 100$$

Additionally:

$$\frac{\text{Number of nursing students that enrolled in the year 1998, 1999, 2000}}{\text{Number of nursing students that graduated in the year 2001, 2002, 2003}} \times 100$$

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

If possible, the countries can carry out qualitative or quantitative studies on the causes of attrition.

DATA SOURCES

► University Registrar Offices: 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: SEVENTY PERCENT OF SCHOOLS OF CLINICAL HEALTH SCIENCES AND PUBLIC HEALTH WILL BE ACCREDITED BY A RECOGNIZED ACCREDITATION BODY

RATIONALE

This goal seeks to enhance the quality, consistency and relevance 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 emphasis on service quality is a fundamental principle of the reformed PHC system and is the basis for ongoing changes to health policies and the training of health personnel. Reaffirming and standardizing training through formal program accreditation will improve the capacity of health professionals to meet population health needs and better support the changing models of health care delivery,

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 the 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.

$$\frac{\text{Number of accredited colleges and/or schools of clinical health sciences}}{\text{Total number of colleges and/or schools of clinical health sciences}} \times 100$$

$$\frac{\text{Number of accredited schools of public health}}{\text{Total number of schools of public health}} \times 100$$

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

This indicator is not measured by the accreditation of the Universities where these Schools are located, but the specific accreditation of colleges, schools or undergraduate or graduate health sciences programs.

The important question for the interviews to key informants is:

► Does a recognized accreditation body for undergraduate and graduate education exist in your country?

If the school has provisional accreditation, then the scoring should reflect full marks for accreditation.

DATA SOURCES

► 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.

► The registries of the accrediting body that has the names and number of accredited schools and programs.