

The Strategic Importance of National Investment in Nursing Professionals in the Region of the Americas

Policy Brief





The Strategic Importance of National Investment in Nursing Professionals in the Region of the Americas

Policy Brief

Washington, D.C., 2022



The Strategic Importance of National Investment in Nursing Professionals in the Region of the Americas PAHO/HSS/HR/22-0012

© Pan American Health Organization, 2022

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO license (CC BY-NC-SA 3.0 IGO); https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this license, this work may be copied, redistributed, and adapted for non-commercial purposes, provided the new work is issued using the same or equivalent Creative Commons license and it is appropriately cited. In any use of this work, there should be no suggestion that the Pan American Health Organization (PAHO) endorses any specific organization, product, or service. Use of the PAHO logo is not permitted.

All reasonable precautions have been taken by PAHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall PAHO be liable for damages arising from its use.

CONTENTS

Ackno	owledgments	iv
List of	f Acronyms and Abbreviations	v
Execu	tive Summary	vi
Part 1	Overview	1
	1.1 Aim and methods	1
	1.2 Nursing and the SDGs: What the evidence tells us	1
	1.3 The case for action: Investment in the nursing profession	2
Part 2	. Key Objectives and Actions	3
:	2.1 Introduction and summary policy priorities	3
i	2.2 Education	5
	2.3 Jobs	. 13
:	2.4 Leadership	. 18
	2.5 Service Delivery	. 22
Defer	ences	26

Figures

Figure 1. Density of nursing professionals and associates per 10,000 in the Region	4
Figure 2. Summary of policy priorities	5
Figure 3. Baccalaureate nursing programs per million people by country (2016-2018)*	8
Figure 4. Distribution of doctoral nursing programs in LAC by country (2017)	11
Figure 5 Number of nursing professionals and associates in the Region	14
Figure 6. Countries in the Region with government chief nursing officers or national	
focal points for nursing.	

Tables

Table 1. Summary of regulatory systems in four key areas in the Region	
--	--

Boxes

Box 1. Priority areas for nursing curricula	9
Box 2. Education: summary of recommendations	13
Box 3. Jobs: summary of recommendations	18
Box 4. Leadership: summary of recommendations	21
Box 5. Service delivery: summary of recommendations	25

ACKNOWLEDGMENTS

Pan American Health Organization/World Health Organization thanks the following personnel for their contributions to the development and technical review of this document:

Coordinator

Silvia Cassiani, Regional Advisor on Nursing and Allied Health Personnel (PAHO/WHO)

Other contributors and reviewers

Nancy R. Reynolds, Angela Chang Chiu, Jared Sheppard, Rachel Storms, and Haley Kartchner Williams, Johns Hopkins University School of Nursing PAHO/WHO Collaborating Center for Nursing Knowledge, Information Management and Sharing and Benjamin Puertas, and Claudia Pescetto and Bruna Moreno Dias from PAHO/WHO.

LIST OF ACRONYMS AND ABBREVIATIONS

APN	advanced practice nursing
CNO	chief nursing officer
GDP	gross domestic product
LAC	Latin America and the Caribbean
РАНО	Pan American Health Organization
PHE	public health expenditure
SDG	Sustainable Development Goal
SDNM	WHO Global Strategic Directions for Nursing and Midwifery
WHA	World Health Assembly
WHO	World Health Organization

EXECUTIVE SUMMARY

Human resources for health have gained visibility and prominence due to their importance and contributions to maintaining the health of the population, ensuring that countries achieve access to health services, universal health coverage, and the Sustainable Development Goals and, more recently, that they are able to cope with the COVID-19 pandemic. The World Health Organization designated 2020 as the International Year of the Nurse and the Midwife and 2021 as the International Year of Health and Care Workers. The recently released WHO Global Strategic Directions for Nursing and Midwifery 2021-2025 focuses on strengthening the workforce in nursing and midwifery and proposes the adoption of political priorities focused on investment in education, jobs, leadership, and maximizing the contributions of nurses in the workplace (1).

In the Region of the Americas, there are approximately 9 million nursing professionals, representing more than 56% of the health workforce (2). Beyond the important role they play in the health services and on the front lines of the pandemic, their activities can be expanded through adequate education, regulation, and interprofessional work to advance universal health and achievement of the Sustainable Development Goals.

This document addresses key policy questions relating to policy priorities for investment in the nursing workforce and calls on Member States to strengthen nursing within the context of their own country efforts through a host of measures such as engaging the expertise of nurses and including them in the development of human resources for health policies as directed by World Health Assembly resolution WHA64.7 (*3*), Strategic Directions for Nursing and Midwifery 2021-2025 (*1*), and the State of the World Report (*4*).

This document highlights key action points for targeted investment in the nursing workforce. Suggestions for action and strategies for strengthening the nursing workforce in primary health care services through investment in education, jobs, leadership, and service delivery are provided. The document provides information for country stakeholders with a strategic role in addressing health access barriers and attending to the health needs of the population, especially groups living in conditions of vulnerability, in rural and remote communities, and in places with a low density of other health professionals.

PART 1 **OVERVIEW**

1.1 Aim and methods

The objective of this document is to facilitate the efforts of country stakeholders in implementing resources required to help countries in the Region of the Americas advance universal health and achievement of the Sustainable Development Goals (SDGs) by advancing nursing workforce capacity. This includes governments and policymakers as well as academic institutions and educators; nursing professionals; nursing unions, councils, and professional associations; and regulatory bodies.

This policy brief was developed by the Pan American Health Organization (PAHO) and World Health Organization (WHO) through new analyses, expert consensus, and reference to existing WHO guidance and literature on investments in the nursing workforce in the Region of the Americas. In the current context of a global shortage of nurses and midwives, WHO and PAHO/WHO have developed strategies to close global health workforce gaps through advocating for, strengthening, and increasing the global nursing and midwifery workforce to contribute to the achievement of universal health and the SDGs (*4, 5*). Toward this end, several PAHO/WHO collaborating centers in nursing and midwifery have been designated to undertake activities in support of strategic priorities related to time, expertise, and funding. There are currently 15 collaborating centers specializing in nursing and midwifery in the Region (*6*). The Johns Hopkins University School of Nursing PAHO/WHO Collaborating Center contributed to the development of this document.

1.2 Nursing and the SDGs: What the evidence tells us

The 2030 Agenda for Sustainable Development was adopted unanimously by all United Nations Member States in 2015. It outlines a strategic blueprint for global action across all countries through 17 Sustainable Development Goals. Providing an ambitious framework for economic, environmental, and social improvements, the SDGs are designed to eradicate poverty and improve human lives by 2030 (7). Human health has been identified as a contributing factor to all 17 SDGs, and the nursing workforce is central to the improvement and delivery of health care throughout the world (8).

The contribution of nursing to SDG 3 (Good Health and Well-Being) is clear and well documented (8). The State of the World's Nursing Report highlights how investment in the nursing profession also drives progress toward non-health-related targets, notably SDG 4 (Quality Education), SDG 5 (Gender Equality), and SDG 8 (Decent Work and Economic Growth) (4). In addition, nurses are uniquely positioned for mitigating the environmental and health-related effects of climate change (SDG 13: Climate Action), particularly through involvement in policy, advocacy, research, and community health approaches to practice (8, 9). If the SDGs

are to translate into practice in the Region of the Americas, the nursing workforce must be strengthened through high-quality education and equitable distribution to empower countries to address social determinants of health at the community level (8). This process will also require adequate support from stakeholders including governments, policymakers, and organizations. This document provides support for these critical decision-making bodies with current evidence to guide policy and investment actions.

1.3 The case for action: Investment in the nursing profession

Evidence shows that nurses play an essential role in the achievement of all 17 SDGs because of their expertise, global presence, and reach to remote areas, vulnerable populations, and minority groups (*8, 10*). Yet, to enable the full contribution of the nursing workforce toward the success of the SDGs and the achievement of universal health, there must be a strong, sustainable increase in investment in the nursing profession. Nursing has been overlooked and undervalued in the past. Directing resources to strengthen the nursing workforce will have a ripple effect in improving health and non-health-related targets including gender equality and support of economic growth globally (*4, 8, 11*). Nurses currently playing leading roles in the management of nurses into real-time organizational and governmental support, increasing the potential for measurable and improved health outcomes (*1*). This document emphasizes a call to action for governments and policymakers, international organizations, academic institutions, and all stakeholders in the Region to collectively reexamine and improve their commitment to investing in the nursing profession.

Global Strategic Directions for Nursing and Midwifery 2021-2025

Endorsed at the 74th World Health Assembly (WHA) on 1 June 2021, the WHO Global Strategic Directions for Nursing and Midwifery (SDNM) 2021-2025 sets out policy priorities that help countries maximize the effectiveness of their nurses and midwives as they contribute to the achievement of universal health and population health goals (*12*).

The SDNM has cross-cutting themes that focus on the following policy areas: education, jobs, leadership, and service delivery. Each focus area has a "strategic direction" articulating a goal for the five-year period and two to four policy priorities that, if enacted and sustained, could help a country advance along that strategic direction. The intended impact of the SDNM is for countries to fully enable the contributions of midwives and nurses toward common goals: promoting primary health care for universal health, strengthening governance and leadership in human resources for health, managing the COVID-19 pandemic, mitigating the health effects of climate change, managing international migration, and ensuring access in rural and remote areas and developing states (1, 13). This document focuses on recommendations and policy options pertinent to the Region of the Americas.

PART 2. KEY OBJECTIVES AND ACTIONS

2.1 Introduction and summary policy priorities

Nurses are key players in health promotion and disease prevention and the backbone of health care systems worldwide. Nurses work on the front lines of disease prevention, health promotion, and health management and are often the unsung heroes in health care facilities and emergency response. Despite the critical role they play in health care, there is a nursing shortage across the world that will affect the delivery of competent nursing care. Nursing is the largest occupational group in the health sector, accounting for approximately 59% of the health profession (4). Nurses also represent 50% of the global shortage of health workers, estimated at 4 million (14). Of the current 43.5 million health workers in the world, 20.7 million are nurses and midwives; however, more than 65% of WHO Member States reported having less than 50 nursing and midwifery personnel per 10,000 population as of 2020 (15). This inequity in availability of and access to nursing professionals is prevalent in the Region of Americas, particularly in Latin America, where a few large countries have high densities of nursing professionals and most other countries have low densities (Figure 1).

In the Region of the Americas, there are approximately 9 million nursing professionals, representing more than 56% of the health workforce, yet 87% of the nurses in the Region are in Brazil, Canada, and the United States (4). Furthermore, the Region remains one of the most inequitable globally, with millions of people lacking access to comprehensive health services (e.g., preventive and palliative care), 29% of the population in Latin America and the Caribbean (LAC) living below the poverty line, and 40% of the poorest population receiving less than 15% of the total income (*16*).



Figure 1. Density of nursing professionals and associates per 10,000 in the Region

Source: World Health Organization.State of the World's Nursing Report – 2020.Geneva; WHO; 2020.Available from: <u>https://www.who.int/publications/i/item/9789240003279</u>

As health care services expand in low- and middle-income countries, there is an increased need for qualified and trained nurses. Every country needs a competent, motivated, well-distributed, and well-supported health workforce as part of the global drive for universal health. Nurses are central to these efforts. As noted, in addition to the important role they play in the health services and on the front lines of the pandemic, their activities can be expanded in primary health care and achievement of universal health and the SDGs (*5*, *16*). Adequate investment in nursing education, jobs, service delivery, and leadership roles is needed to achieve better health for all (*8*, *9*). This section investigates the unique challenges that have affected the ability of nurses to achieve their full potential in the Region of the Americas and offers policy options and key actions to address these challenges in the short and longer term. Informed by the available evidence and guidelines, the policy priorities summarized in Figure 2 will be key to investment in nursing in the Region. The following subsections address each of these policy priorities in turn.

Figure 2. Summary of policy priorities

Goal	To increase t	he glob	al nursing work	force in the Rec	gion of t	he Americas			
Objectives	Universal access t health and univers health coverage	al	Human ro for health polio	plans and	Sustainable Development Goals (SDGs)				
Key actions	Investing in and standardizing nursing education and competencies	p an ot sei an	reasing the roportion d authority f nurses in nior health d academic positions	Increasing availability health worl in the cont of recruitm and migrat	v of kers æxt ent	Strengthening professional regulatory systems and contributing to interdisciplinary care			
Priority areas	Education	L	.eadership	Jobs		Service delivery			



Nursing education is an essential aspect of strengthening the nursing workforce and advancing universal health in the Region. Transformative, competency-based, collaborative education programs are fundamental to qualify nurses to contribute to interprofessional teams within complex health systems, promote health and disease prevention, and address the social determinants of health. Currently, there is heterogeneity in the nursing education system in the Region, with inconsistencies across countries in program competencies and associated roles, available education programs, curriculum structures, and faculty qualifications (*17*). National and global investment in nursing education strengthens the contribution of nurses to health care priorities, assures more equitable access to care, and improves health outcomes (*18*).

This section will discuss four priority areas that have been identified in recent literature to improve educational opportunities for nurses throughout the Region, with a focus on rural and remote communities in countries with a low density of nursing professionals: aligning educational levels with optimized strategic nursing

roles, expanding programs and the number of qualified nursing graduates, updating nursing curricula, and ensuring proper qualifications for nursing faculty.

Aligning Nursing Education with Formal Roles and Population Health Needs

Currently, the initial level of education of nurses varies across the 35 countries in the Region of the Americas. The minimum duration of pre-service education ranges from three to five years, with 34% reporting a minimum education requirement of four years (*19*). Sixty-four percent of the nursing workforce in the United States is prepared at the baccalaureate level or above (*20*). About 70% of the nursing workforce in Latin America is made up of technologists, technicians, aides, or assistants. The educational preparation of these positions varies from 12 to 18 months of formal training up to three years of technical or vocational training (*13*).

Most of the countries in the Region report having accreditation mechanisms in place for educational institutions (94%) and formal standards for program duration and content (89%) (19). However, there is limited knowledge regarding the quality and effectiveness of these standards. Admission requirements, program competencies, teaching methods, and processes to evaluate quality standards vary between countries and institutions (1). These variations create difficulties in clearly defining roles and scope of practice.

Advanced practice nursing (APN) is a term that describes a variety of roles that nurses with an advanced education can fill within the health system, including nurse practitioners (NPs). The role of the advanced practice nurse has evolved informally, but there are now established master's and doctoral APN programs with defined competencies and standards for practice in some countries (21). There has been an increasing emphasis on the critical role that advanced practice nurses play in increasing access to primary health care and addressing health disparities, particularly in rural and underserved communities (4).

"In Chile and Mexico, partnerships with NP education programs at universities in the United States have stimulated the development of APN education programs. In Colombia, stakeholder engagement activities between the Ministry of Health and academic nursing and policy leaders are setting the stage for developing APN education programs."

Source: Bryant-Lukosius D, Valaitis R, Martin-Misener R, Donald F, Peña LM, Brousseau L, et al. Advanced Practice Nursing: A Strategy for Achieving Universal Health Coverage and Universal Access to Health. Rev Lat Am Enfermagem. 2017 Jan 30;25. Available from: <u>https://pubmed.ncbi.nlm.</u> nih.gov/28146177/ There are over 325,000 nurse practitioners licensed in the United States, and 70% deliver primary health care (22). In Canada, more than 6,500 nurse practitioners are licensed to practice, with 36% working in community settings (23). However, APN roles are largely in the initial phases of development in Latin America and the Caribbean (24). Throughout the LAC region, many nurses independently provide primary health care in a role similar to that of an advanced practice nurse, but they lack formal skills training and graduate education to support this level of care (17). One study noted that Colombia and Mexico are well positioned to develop APN programs from existing graduate-level programs (25).

Research has consistently demonstrated that higher levels of educational preparation among the nursing workforce lead to higher quality of care, improve patient safety, increase health equity, and save lives (*26, 27*). Government leaders, professional organizations, and academic institutions should advocate for the investment of resources toward the advancement and expansion of nursing education, with a focus on intersectoral action and improved articulation between the education and health sectors. There is a growing call to require a bachelor's degree as the global standard for the minimum educational level for practice as a nurse (*1*). While many countries in the Region have moved toward requiring an initial university-level education for nurses, countries should develop defined timelines and strategies for the implementation of gold standards for program accreditation and content (*26*).

Investment and resources should also be directed to establishing formal APN education programs in the Region, with a special focus on the LAC region. At the national level, countries should collaborate with academic institutions and international stakeholders to define specific roles, responsibilities, and scope of practice for advanced practice nurses within their existing health care systems (*21*). APN programs should be evaluated to ensure that the level of education qualifies graduates to assume greater responsibility in the workplace, to meet national and local priorities, and to practice to the full extent of their education.

Increasing Production of Qualified Nursing Graduates to Meet Growing Demand

There is currently a shortage of qualified nursing professionals in the Region, and the essential and growing demand for health services has been highlighted by the COVID-19 pandemic. This shortage is attributed to the lack of investment in the profession, an insufficient number of nursing schools to meet demand, nursing being an unattractive profession to young students, and outmigration of nursing professionals toward urban areas or higher-income countries (*15*). Although more than a quarter of the world's nursing workforce is in this Region, more than half of these nurses work in North America (*15*).

Education is vitally linked to nursing shortages, as lack of access to affordable, high-quality programs; lack of administrative infrastructure; poor-quality curricula and teaching methods; lack of competent faculty and suitable clinical sites; and insufficient government expenditures impose limits on the production of qualified graduates. An inequitable distribution of baccalaureate nursing programs exists throughout this Region (*17, 29–31*) (Figure 3).

Furthermore, countries with strong institutional capacity also face challenges in recruiting nursing students due to adverse perceptions surrounding the profession such as unfavorable working conditions, low salaries, and limited opportunities for advancement (*15*). Health labor market data from public and private institutions should be analyzed to identify priorities and policy options to address both the insufficient production and maldistribution of nursing graduates in this Region. Public and private sector investment in the expansion of nursing education should focus on meeting specific regional demands and should match the health needs of local populations. Innovative financing strategies can be adopted to recruit and increase the number of domestic graduates, improve infrastructure and faculty preparation, and incentivize graduates to practice in both primary health care settings and rural communities (*1*). Strategies should be employed to advance

the profession and improve employment conditions generally as a means of improving attraction to and retention within nursing (5).

Additionally, virtual learning should be further explored as an option for increasing educational access and opportunities for nursing students living in remote areas, especially in the LAC region and low-income countries (28). Virtual learning experiences have increased dramatically worldwide due to the COVID-19 pandemic, exposing new opportunities and challenges for systems of nursing education. In the United States, virtual learning is currently being explored as an alternative method for teaching didactic courses, practicing simulation, and facilitating clinical experiences at both the undergraduate and graduate levels (28).



Figure 3. Baccalaureate nursing programs per million people by country (2016-2018)*

*Includes countries with populations >3 million.

Sources:

Cassiani SHDB, Wilson LL, Mikael S de SE, Peña LM, Grajales RAZ, McCreary LL, et al. The situation of nursing education in Latin America and the Caribbean towards universal health. Rev Lat Am Enfermagem. 2017 May 11;25:e2913. Available from: https://doi.org/10.1590/1518-8345.2232.2913

The World Bank.Population Total: Latin America and Caribbean.Washington, D.C.; The World Bank; 2022.Available from: <u>https://data.</u> worldbank.org/indicator/SP.POP.TOTL?end=2016&locations=ZJ&start=1960

Canadian Association of Schools of Nursing.Registered nurses education in Canada Statistics 2017-2018.Retrieved from https://www.casn.ca/wp-content/uploads/2019/12/2017-2018-EN-SFS-DRAFT-REPORT-for-web.pdf

American Association of Colleges of Nursing Baccalaureate Education.Washington, D.C.; AACN; 2022.Available from: https://www.aacnnursing.org/Nursing-Education-Programs/Baccalaureate-Education

Updating Nursing Curricula to Meet Quality Standards and Focus on Primary Health Care

Health care systems worldwide are rapidly evolving and transforming due to advances in information technology and data collection, widespread globalization, and increased complexities in delivering care. However, nursing curricula and learning methods in educational institutions have not been sufficiently updated and refocused to meet these new challenges. Some schools lack formal processes for curriculum assessment, curriculum evaluation and redesign, and quality improvement initiatives (*17*).

Additionally, nursing education competencies are not adequately matched with the needs of the population. Although most programs in the Region generally include principles of universal health and primary health care in their curricula, nursing students spend more hours of clinical experience in hospital and acute care settings than in community-based primary care settings (17). One study focusing on 246 schools of nursing across the LAC region revealed that for each hour spent in acute care clinical settings, students spent only 0.63 hours in primary health care settings (17). This study also showed that only 64% of these schools reported having access to laboratories and equipment for skills training (17). Lack of "hands-on" clinical learning, simulation learning, and reliable internet access have been cited as specific challenges in the LAC region (1).

Learning methods and clinical experiences should also be designed to support students in their specific future nursing roles, which may vary from direct patient care to political advocacy, education, or systems leadership. In addition, with the recent rise of telehealth care settings due to the COVID-19 pandemic, formative training experiences should include extended capabilities preparing nurses to participate in virtual health care delivery settings. The pandemic has also underscored the necessity of resilient health care systems and ensuring that the nursing workforce is prepared to respond to public health emergencies (*32*).

Strengthening the quality of nursing curricula should be a top priority. Widespread evaluation and redesign of formal nursing curricula and learning methods should be conducted, and improvements should be evidence based and meet accepted global standards (*26*). Box 1 summarizes recommended priority areas for improvements to nursing curricula. Outcomes-based quality improvement initiatives should be undertaken by academic institutions regularly; these initiatives should include student participation and input, and their results should be shared with educational authorities and professional organizations (*17*). All nursing education programs should be required to seek accreditation to ensure that quality standards are met (*1*).

Box 1. Priority areas for nursing curricula

- **Competency based:** community-specific health issues used to determine competencies
- Focuses on evidence-based practice: content supported by current available research
- Interprofessional: prepares nurses to work in collaborative teams across health disciplines
- Focuses on health systems: prepares nurses to work, teach, and lead in complex systems
- Focuses on primary care, disease prevention, and health promotion: learning content and clinical experiences designed to meet the health needs of the population
- Transformative: learners critically evaluate their assumptions, perspectives, and practices
- Culturally sensitive: prepares nurses to work in diverse communities
- Utilizes digital technologies: prepares nurses to take advantage of available technology resources
- **Utilizes simulation:** employs interactive and hands-on teaching methods

Sources:

World Health Organization. The WHO Global Strategic Directions for Nursing and Midwifery (2021-2025). Geneva; WHO; 2021. Available from: https://www.who.int/publications/m/item/global-strategic-directions-for-nursing-and-midwifery-2021-2025

World Health Organization. State of the World's Nursing Report – 2020. Geneva; WHO; 2020. Available from: https://www.who.int/publications/i/item/9789240003279

Pan American Health Organization.Strategy for universal access to health and universal health coverage.Washington, D.C.; PAHO; 2014. Available from: <u>https://www.paho.org/en/documents/strategy-universal-access-health-and-universal-health-coverage</u> World Health Organization.Global standards for the initial education of professional nurses and midwives.Geneva; WHO; 2009. Available from: https://www.who.int/hrh/nursing_midwifery/hrh_global_standards_education.pdf

Faculty Qualification, Competency-Based Education, and Lifelong Learning

Increasing the number and qualifications of nursing graduates to address the health care priorities of the population will require a larger number of academically prepared nursing faculty. There is a widespread shortage of nursing faculty throughout the Region of the Americas, particularly in low-income countries and at the bachelor's level and above (*1*, *33*). In 2019, over 80,000 qualified applicants were denied entrance to nursing school in the United States, and the top reason cited was faculty shortages (*34*). Many nursing faculty members lack relevant expertise, clinical competence in the subject matter, demonstrated teaching capabilities, and formal graduate-level education. In one study of 5,338 full-time nursing faculty in the LAC region, 15% of faculty reported a bachelor's degree, 12% a specialty degree, 34% a master's degree, and 39% a doctoral degree as their highest level of education (*17*).

The lack of doctorally prepared faculty and the maldistribution of advanced degree programs present a significant barrier to adequately preparing the next generation of nursing faculty and advanced practice nurses to achieve universal health. In 2017, there were 51 doctoral nursing programs in Latin America and the Caribbean, as compared with 358 in the United States (*17, 35*) and 18 in Canada (*30*). There are doctoral programs in only 10 of the 33 countries in the LAC region, and over 75% of these programs are in Brazil (*17, 31, 32*) (Figure 4).



Figure 4. Distribution of doctoral nursing programs in LAC by country (2017)

Sources:

Cassiani SHDB, Wilson LL, Mikael S de SE, Peña LM, Grajales RAZ, McCreary LL, et al. The situation of nursing education in Latin America and the Caribbean towards universal health. Rev Lat Am Enfermagem. 2017 May 11;25:e2913. Available from: https://doi.org/10.1590/1518-8345.2232.2913

American Association of Colleges of Nursing Baccalaureate Education.Washington, D.C.; AACN; 2022.Available from: <u>https://www.aacnnursing.org/Nursing-Education-Programs/Baccalaureate-Education</u>

Pan American Health Organization.Strategy for building resilient health systems and post-COVID-19 pandemic recovery to sustain and protect public health gains.Washington, D.C.; PAHO; 2021.Available from: <u>https://www.paho.org/en/documents/cd5911-strategy-building-resilient-health-systems-and-post-covid-19-pandemic-recovery</u>

Evidence supports a high social rate of return when health education investment strategies center on the development of academic faculty and educators (5). In addition to academia, nurses with advanced degrees are better prepared to fill roles and execute responsibilities in health care leadership, research, and policy. Policies that support investment in faculty training and educational preparation are essential for improving nurse retention, decreasing outmigration, building the skills and competencies of the nursing workforce, and elevating the collective image and unity of the nursing profession (*36, 37*). Special attention should be given to the recruitment, retention, and long-term development of nursing faculty members, particularly in the LAC region. Faculty training should include advanced coursework in leadership, research, health systems, clinical simulation, and the use of digital technology for working with remote students. Collaborative partnerships and professional networks for nursing faculty can also be utilized to build research capacity (1).

Nursing leadership and practice regulation should create a culture of lifelong learning within the profession. Formal, continuous learning opportunities embedded into professional life have been shown to raise the quality of care, improve patient outcomes, and increase job satisfaction among nurses (*37*). Academic service partnerships that build strategic relationships between universities and clinical practice settings can strengthen the nursing workforce and should be prioritized in the LAC region (*38*). One study in Haiti showed

that involving stakeholders, targeting education to specific care areas, using participatory teaching methods, and establishing partnerships are essential components of developing continuing education programs for working nurses in low-resource settings (*37*). In addition, virtual continuing education platforms such as PAHO's Virtual Campus for Public Health can be utilized to share resources between organizations and contribute to the development of skills and competencies among nurses (*39*).

Implementation of a financial reporting and data monitoring system to support the success of these proposed improvements in nursing education in the Region is recommended. This would require detailed collection, reporting, and monitoring of important quantitative data in the following proposed areas (much of this information is not presently available):

- Number of accredited nursing programs, by country and by level and type of program (technical, associate, bachelor's, master's, and doctorate);
- Number of accredited nursing programs for advanced practice nurses, by country and by type of program (master's and doctorate);
- Number of annual nursing graduates concluding programs, by country and by level and type of program (technical, associate, bachelor's, master's, and doctorate);
- Number of clinical hours (and percentage of total clinical hours) spent in primary care settings, by program and by country;
- Number of nursing faculty members, by country and by highest level of educational preparation (bachelor's, master's, and doctorate);
- Annual public and private expenditure on nursing education (and percentage of total health expenditure), by country.

Universal health cannot be achieved without qualified nursing professionals and assistant personnel who are equipped with the education and competencies necessary to meet the complex demands of the health system. Health care is rapidly advancing and evolving worldwide, and nursing education must likewise transform to optimally achieve population health goals. Public and private investment and policies must be impactful, equitable, and focused on evidence-based priority areas.

Box 2. Education: summary of recommendations

- Resources should be invested toward the expansion of nursing programs at the baccalaureate level and above, with a focus on equitable program distribution.
- Countries should define national timelines and implementation strategies for standards of minimum educational levels and competencies for nurses.
- Countries should expand APN programs and define specific roles and responsibilities for advanced practice nurses.
- Intersectoral actions, policy options, and financial levers should be explored to address the insufficient production, outmigration, and maldistribution of nursing graduates to meet regional health demands.
- Countries should engage in widespread evaluation and redesign of formal nursing curricula and institutional learning methods.
- Resources should be invested toward the recruitment, retention, and development of nursing faculty.
- Countries should promote lifelong learning and formal continuing education programs for all nurses.
- Implementation of a financial reporting and data monitoring system in nursing education should be promoted throughout the Region.

2.3 Jobs

In the Region of the Americas, there is a critical shortage of nurses (Figure 5), with difficulties in supplying new nurses and retaining current nursing professionals (*4*, *40-42*). Unappealing and unprepared health labor markets cause many nurses to leave the profession and prevent new nursing graduates from entering the job market. Inequitable migration patterns of nurses from lower- or middle-income countries to high-income countries further exacerbate nursing shortages in lower- to middle-income countries. These shortages negatively affect health outcomes and hinder the delivery of primary health care. This section presents three priorities and strategies for improving nursing jobs in the Region: workforce planning, ensuring adequate nursing jobs for primary health care delivery, and ethically approaching nursing migration.



Figure 5 Number of nursing professionals and associates in the Region

Sources:

World Health Organization. State of the World's Nursing Report – 2020. Geneva; WHO; 2020. Available from: https://www.who.int/publications/i/ item/9789240003279

World Health Organization.National health workforce accounts data portal.Geneva; WHO; 2022.Available from: <u>https://apps.who.int/</u><u>nhwaportal/Home/Index</u>

Workforce Planning and Health Labor Market Forecasting

The Americas and the Caribbean are experiencing a critical shortage of nurses , with low retention and high turnover rates. For nurses, there is a positive correlation between turnover rate and low job satisfaction, as well as workforce shortage and nurse retention (40, 41). High turnover rates cost hospitals up to 5% of their annual operating budget and negatively affect patient care (41). Retention and recruitment of nurses tend to be lowest in poorer areas, contributing to health inequalities, lower access to care, and maldistribution of the health workforce (43, 44, 45).

Retention of nurses is a systemic and Region-wide issue. The national yearly turnover rate among registered nurses in the United States is 18.7%, with the average cost of turnover for a bedside nurse ranging from US\$ 38,000 to US\$ 61,100 (46). In the North America burnout, inability to keep up with high job demands, and unfair wages are cited as the main reasons for leaving the nursing profession, regional migration, and high turnover rates (47). In many South America and Caribbean countries, nurses frequently work under precarious and unprotected employment. Nursing employment may be temporary and contract-only or consist of short appointments. These precarious forms of employment have resulted in low job satisfaction,

burnout, undervaluing of nurses, and low retention rates (48). The COVID-19 pandemic has only served to increase burnout and decrease job satisfaction, ultimately leading to lower retention rates and an increased shortage of nurses (49).

Investments in the health system and the nursing workforce not only yield better health outcomes but also produce stronger economies (40). Studies show that returns in health care investments are about 9 to 1 (50). Nurses are less costly to employ and are trained faster than physicians (50). The cost of care provided by nurse practitioners in the United States has been found to be 11% to 29% lower depending on the setting (51).

Training more nurses will not be sufficient to meet the demand for nurses (43). In addition to educating more nurses, health labor market conditions need to be primed to accept these new graduates and resolve the mismatch between the supply of and demand for health care workers, which further depletes the supply of nurses (43).

Each country should analyze its own health labor market to understand the factors primarily affecting the supply and retention of trained nurses willing to work in the health sector (43). To increase the available supply of nurses willing to work in the health sector and to retain nurses already working in the sector, countries should invest in the working conditions, safety, career opportunities, and wages of nurses and nursing assistants (43). These efforts should be combined with those designed to train and educate nurses. Scaling up education efforts alone is not sufficient. Additionally, efforts should be directed from public entities and should be sustainable and stable throughout electoral cycles (52). They should encourage partnerships between public sectors, stimulating a multisectoral collaboration among the education, labor, finance, and health sectors at the federal, state, and district or local level (52). These strategies to increase human resources in nursing may be similar to those employed to strengthen human resources in other health care sectors (e.g., medical doctors, respiratory therapists, assistive personnel). Each country should analyze strategies used in other health care sectors to determine their applicability to efforts to increase human resources in nursing.

Additionally, investments in nursing and the nursing workforce should be monitored and reported under frameworks specific to the individual country. Investment trends and data can be used to monitor progress made toward a nursing workforce that is adequately staffed to accomplish health care across the Region. While acknowledging that investment profiles will vary substantially from country to country, the recommendation is to monitor:

- 1. Efforts to increase the salaries of nurses;
- 2. Programs aimed at increasing retention of nurses;
- 3. Investments in increasing the number of nurses working in primary health care.

Health Service Delivery in Primary Health Care

Ensuring equitable, universal access to primary and first-level health care requires a health care system well equipped with human resources (53). Motivated, trained, and competent nurses can effectively deliver primary health care (54). Public health nurses are already engaged in many health promotion, preventive, and

primary health care measures such as nursing consultations, patient education, prescription of medications and routine exams, immunizations and immunization management, and home visitations (54). Countries with a strong public health services and health systems oriented/coordinated by primary health care have a high nurse to doctor ratio, with nurses task sharing with and substituting for physicians on tasks within their scope of practice (40, 55). High degrees of interprofessional collaboration in primary health care, with nurses and physicians sharing tasks, strengthen health systems, improve health outcomes, and decrease costs (50, 56). Evidence shows that advanced practice nurses provide quality of care equivalent or superior to that provided by general practitioners (51, 54), and it may be more cost-effective to train and allow for nurses to deliver primary care (52). Because nurses are trained and primed to work in primary care, and because of the lower costs associated with training nurses, nursing may be a logical place to invest when moving toward universal, equitable health care and a health care system with a high amount of human resources (32). High-income countries have adopted advanced practice nurses into primary health care systems; however, use and acceptance of advanced practice nurses in lower- and middle-income countries have been minimal (54).

To improve health care performance and first-level care, the scope of practice of nurses should be enhanced to its fullest potential, according to its competencies (*57*). The scope of practice may be reviewed, reorganized, and rewritten to include public health and primary health care and to optimize task sharing between physicians and nurses (*40, 51*). Interprofessional education should be encouraged, as it promotes collaborative practice and ultimately strengthens health systems and primary health care outcomes (*56*). However, role distinctions should be clear in both legislation and practice. Clarifying the role of the primary health care nurse is crucial to avoid ambiguity and to promote nurses to work to the full extent of their scope of practice in the primary health care setting (*54*). These scope-of-practice laws and identified competencies of registered nurses and nurse practitioners can be used as a framework for employee recruitment and can enhance evaluation of the nursing workforce from a health labor market lens, as well as distinguish roles in the health care delivery environment (*54, 58*).

Investments should be shifted from tertiary nursing care to primary, person- and community-centered nursing care (59). Regionally, investments are disproportionally made into acute care and specializations. Investments into nurses trained in primary health care delivery and into increasing human resources in nursing will aid in first-level care delivery for an aging population with higher levels of chronic, noncommunicable disease (16). Investments should be specifically targeted toward increasing employment opportunities in first-level care and improving working conditions in these settings, as well as the suggestions made in the previous section (53).

International Recruitment and Ethical Migration

Outmigration and international recruitment of nurses have caused a shortfall of nurses in Latin America and the Caribbean. In English-speaking Caribbean countries, an average of 40% of nursing positions remain vacant due to migration and inequitable distribution of nurses (60, 61, 62). Although country-to-country migration of nurses in the Caribbean has been encouraged with the development of common education and practice standards, and through the Caribbean Single Market and Economy, continuous poaching and aggressive recruitment by high-income countries have left the Caribbean with a critical shortage of nurses (45, 60, 61). Shortages of trained nurses working in health care motivate high-income countries to aggressively recruit nurses from low-income countries, benefiting from the investments made in their

education by their home countries. Training and education are expensive; poaching of nurses from lowincome countries further strains their public finances (45). The Caribbean countries face critical challenges in health care delivery as the health care workforce migrates internationally (60, 61, 62). The loss in public investment in training nurses due to migration was estimated to be US\$ 13.5 million between 2000 and 2003 (61). While many nurses cite increased salary as a justification and reason for migrating to highincome countries, many others name high patient-nurse ratios, lack of professional development, poor work environments, and poor health systems as the primary drivers of migration (60, 61). Many programs focusing on mitigating and managing migration from the Caribbean focus on the "pull" factors to host countries (61). Programs and strategies such as the Managed Migration Program of the Caribbean, "Brain Gain," training for export, temporary migration, partnerships in training, and bonding have seen varying success and may be beneficial in some contexts (61, 62). These programs require collaboration at the regional, national, and international levels as well as collaboration between the public and private sectors. Importantly, high-income countries that recruit from and rely on the supply of nurses from low-income countries should invest in the education of those nurses. Partnerships between high-income countries and low-income countries should be created to ethically meet staffing needs in both host and home countries, with mutually agreed upon cost sharing for the education and training of nurses (45).

While programs such as these have increased international collaboration to reduce factors pulling nurses to migrate to high-income countries, few have focused on "push" factors (*61*). Wage differentials between low- and middle-income countries and high-income countries are unlikely to be reduced to a level that substantially affects emigration (*61*). In addition to implementing collaborative, international migration policies, countries should focus on reducing push factors in migration through strategies such as bettering working conditions, providing opportunities for professional and educational development, and improving health systems as a whole (*60, 61*).

Box 3. Jobs: summary of recommendations

- Health labor market conditions should be analyzed for their capacity to accept new graduate nurses and retain current nurses.
- Interprofessional and multidisciplinary collaboration between the public and private sectors should be facilitated to improve health labor market conditions.
- The nursing scope of practice should be reviewed and reorganized to optimize task sharing between physicians and nurses.
- The roles of nurses should be clearly distinguished in both legislation and practice.
- Programs that mitigate both "push" and "pull" factors affecting the migration of nurses from low- and middle-income countries to high-income countries should be implemented.
- Countries should improve working conditions, provide opportunities for professional and educational development, and improve health systems to enhance the health labor market and avoid losing nurses to migration.
- Countries should monitor investments made in increasing and retaining nurses, as well as efforts to increase the number of nurses working in primary care.
- Countries need to create and/or strengthen a functioning human resource for health national information system to respond to planning needs, monitor nursing professionals mobility, and support decision making with regard to nursing staff planning and allocation (53).
- Countries should participate in dialogue or agreements on health worker migration including the WHO Global Code of Practice on the International Recruitment of Health Personnel (*53*).

2.4 Leadership

As the world grappled with the COVID-19 pandemic, a number of the challenges within the profession were brought to light: nurses lacking adequate skills and training to care for patients during the pandemic, absence of emergency response planning to deal with the pandemic, and lack of nursing leadership at the government level to provide direction in many countries (63). Nurses are fundamental leaders in health care; they make up half of all health care professionals, play a vital role in how health actions are organized and applied at both the front-line and managerial levels, and are associated with a stronger regulatory environment for the profession (4). As key players in the development of the profession and nursing governance, nurses should be represented at all levels of decision making and have a voice in influencing key health system decisions and health policies (1, 4, 13).

Despite these benefits, nursing is the least represented health care profession at the highest level in governments and ministries of health (7). According to the 2020 State of the World's Nursing Report, only 70% of countries have a government chief nursing officer (CNO) position (4); a separate International Council of Nurses evaluation revealed that even fewer countries have nurses in positions of appropriate authority (64) or nursing development programs. In the PAHO Strategic Directions for Nursing in the Region

of the Americas report, 79% of Member States in the Region reported having CNO positions and only 46% had nursing leadership programs.

Establishing and Strengthening Senior Leadership Positions for Nursing and Midwifery Workforce Governance and Management and Input into Health Policy

Nursing leadership and governance is essential to strengthening the nursing workforce and driving health policy. Nursing must be positioned to partake in health policy formation and decision making to contribute to effective health and social care systems. If health is to be a central tenet of all policy-making, nursing leaders must take their seats at tables in every arena where health systems and health policy decisions are directed and driven (63). Government chief nursing officers can drive efforts to bolster nursing data, lead national dialogue on appropriate entry-level and specialization programs to ensure an adequate supply to meet health system demands for graduates, and head policy dialogues that result in evidence-based decision making on investment in the nursing workforce. In short, chief nursing officers play an instrumental role in driving reform, improving nurse education, and developing clinical and workforce planning (4).

Investing in Leadership Skills Development for Nurses

Senior nurses have roles as enablers of health not just in health ministries but in organizations and institutions tackling matters that affect health, including education, the environment, and the economy. If government and industry leaders are to recognize the value of nursing input across multiple sectors, nurses at all levels must continue to engage in informed dialogue and debate on a range of global challenges.

According to PAHO, the Region of the Americas houses 30% of the world's nurses and carries an average of 83.4 nurses per 100,000 population, more than twice the amount of the world average (65). To continue to promote growth and foster diversity within nursing in the Region, expansion of leadership and its tangential qualities should be prioritized to a larger extent.

The World Health Organization's "Triple Impact" highlights the importance of cultivating leadership among nurses, specifically the need to garner "[a] nursing perspective...in policy-making and decision-making" (1, 66). From governmental structures in the United States to those in Honduras, Jamaica, and across all of the Region, nurses' perspectives should be present. Policy writing tends to occur solely across political bodies—a mere representation that may not have as direct an approach as that among nurses who work within the field. Enhancing the voices of those explicitly affected by policies is imperative not just because nurses work in nursing, but the act of doing so establishes an important precedent that surpasses legislation. Leadership can be flexible, and through flexibility the world will be able to adapt to decisive rhetoric.

An evaluation of the preparation of nurses regarding promotion to positions of leadership in four Caribbean countries showed that nurses were mostly female, had 15 or more years of experience, and had at least an associate degree in nursing (67). These data are not surprising since across the Region, most nurses are female with similar experiences. However, the study focused on how nurses felt in terms of preparation for these roles. Essentially, the nurses felt prepared but stated that they did not have any form of mentorship to ease them into and prepare them for these roles (67). Nurses are performing well in leadership positions because of their personal experiences and years of on-the-job growth. Lacking is the

support and investment to give these nurses a proper transition into a position of power. Future negative implications could be quite pronounced if this trend continues. The cyclic nature of leadership promotion without any guidance will keep growth stagnant. To break this cycle, allocation and disbursement of funding on behalf of leadership training could stimulate efficiency at the top, which will trickle down to the next generation of nurse leaders.

In addition to a formal schematic, there are many informal options to improve leadership development in nursing. Nurses pre-indicated as informal leaders have higher job satisfaction and more years of experience than non-informal leaders, which could be an indication of the potential of informal training with respect to the nursing profession (*68*). Investment in these skills gives the nursing profession an opportunity to become fully realized.

Knowing that nurses excel in leadership roles, it is vital that a start is made to strengthen them. When it comes to strengthening Figure 6. Countries in the Region with government chief nursing officers or national focal points for nursing.



leadership, not only are training mechanisms important, but also increasing representation in policy settings. In July 2021, the Inter-American Health Task Force released a report detailing the need to improve health policy in response to COVID-19. One of the report's headings is titled "Inadequate Political Leadership, Coordination, and Planning" (69). This heading validates the argument for establishing and strengthening senior nursing leadership positions in governmental settings. With such disarray spanning in terms of health policy, there should be no surprise that this report heavily emphasizes the urgency of incorporating nurses into decision-making settings.

It is important to note that governmental leaders without a health background are important in policy creation; however, by incorporating a nurse's perspective coexistent with governmental staff, representation not only strengthens, but so does informed health decision making. As an example, in the United States Congress, there are three current representatives who have previously worked as nurses (*70*).

A strong background in nursing, allows the representatives to understand health reform terminology and language that are not common. This ultimately gives rise to the importance of adding qualified nurses to policy reform. Collaborating and organizing ideas and change together will foster an environment enriched with knowledge that will improve the way policy is developed initially. Although the example provided centers around the United States, the argument for increasing representation of nurses in policy spans this country. As a region, differences are quite pronounced in the way a country operates on behalf of nursing qualifications and political decision making. However, the common theme is the need for nurses in policy. Meeting this intersection gives this Region a chance to combat poor oversight and to add vital context into the health world. With a lack of presence and a lack of reporting, this space of governmental work will continue to miss the vital perspectives these nurses possess. Figure 6, compiled from PAHO's comprehensive list, portrays the availability of chief nursing officers and national focal points for nursing in the Region (71).

The decision to implement nurses into politics is one that can change the way policy is created and run, but these nurses need a strong leadership developmental process. The best way to ensure that this process can occur is by increasing funding for developing nursing leaders and facilitating an organized approach to admit them into senior positions in government, academia, and the workforce. As the world continues to throw curveballs into how health is and can be managed, the application of resources within these areas allows for protection and the skills needed to combat complex health dilemmas. The selflessness nurses exuberate is a characteristic that should be rewarded. Standardizing a process for senior nurses to achieve and obtain roles in important decision-making environments can change the world.

Box 4. Leadership: summary of recommendations

- Nurses should be leaders in the design of health care systems and their implementation/ organization, not just in delivery of care.
- Health should be understood as a positive concept considering social determinants and should be included in every government policy, with senior nurses present at the top of all health system organizations and government departments.
- Formal initiatives such as mentorship relations and committee discussions play a critical role in enhancing the growth and development of new nurses in terms of their abilities for leadership in primary health care and the value of belonging at work in this setting.
- National policy on human resources for health should be developed and implemented to strengthen governance and leadership.

2.5 Service Delivery

Universal health is the foundation of an equitable and efficient health system. Coverage is based on guaranteed access to services and implies that the mechanisms for organizing and financing health services are sufficient to provide coverage and guarantee access to quality and equitable health services for the entire population. Universal access is key to achieving universal health and ensuring that all people receive the health services they need without suffering financial hardship. Without access, universal health coverage cannot be achieved as it requires the design and implementation of policies and activities with an intersectoral approach to address the social determinants of health and promote the commitment of society. However, given the limited capacity of health systems to meet the health needs of their populations, universal access to health and -universal coverage are a goal that has yet to be achieved (72).

For example, basic primary health coverage is available in most of the LAC countries, with only Costa Rica, Mexico, and Panama reporting small percentages of uninsured residents. National health systems exist in Argentina, Belize, Canada, Panama, and Trinidad and Tobago. Voluntary health insurance coverage plays a major role in Peru, Mexico, Uruguay, and Brazil (73). In most LAC countries, primary care services are provided largely by public primary care clinics staffed by physicians and other health professionals such as nurses. In Colombia and Uruguay, these services are provided by public and private primary care clinics, whereas in Guatemala primary care services are provided by nurses in health centers (73).

Strengthening National Health Workforce Data Systems

An integrated, well-resourced, and updated health information system is fundamental to ensure universal and equitable access to care. Interoperable information systems that integrate country profiles and data on the health workforce (specifically nursing professionals), health facility capacities, supplies, and key health services play a key role in resource allocation and policy actions.

Strengthening Professional Regulatory Systems and Supporting Capacity Building of Regulators

Nurses will be key to accelerating the recovery from the pandemic, recuperating lost public health gains, and building resilient health systems that are more prepared for future health crises (*32*). Work conditions play a critical role in the recruitment and retention of nursing professionals. Personal safety, employment, and professional rights of nurses, including decent work environments, working hours, workplace safety (prevention of attacks on nurses), and marketable wages, are key aspects of regulatory provisions on working conditions (Table 1) (*4*).

Access to competent and qualified health professional is necessary for well-functioning health systems and quality service delivery. To ensure that nurses are well prepared and effectively distributed, it is important that countries provide a regulatory framework that guarantees competency, outlines scopes of practice, and promotes continued learning and professional development (*53, 74*). Similarly, transitioning toward universal health requires a series of policies, regulations, and interventions related to technical capacity, policies, regulatory systems, and strategic planning. Regulation has been defined as local and national government oversight of a professional practice to avoid the risk of harm to the public if practiced by an unprepared or incompetent person (*74, 75*). There are variations in how countries assess initial competency,

and some do not require proof of ongoing competency (such as continuing professional development) to renew credentials. In many countries, the scopes of practice do not reflect the extent of what nurses learn in their education and training programs or evidence on their effectiveness in practice settings (4).

The increased international mobility of nurses has highlighted significant delays or barriers to receiving full professional recognition when attempting to practice in another jurisdiction; barriers may also relate to communication and language skills. Delays are often related to gaps in information needed to verify credentials and assess competency to practice. Regulatory systems can facilitate the efficient recruitment of qualified nurses into the active workforce to increase access to quality health services (74, 76). Standardizing regulations across countries and establishing mutual recognition agreements within the Region can facilitate mobility across participating jurisdictions for workforce optimization. Reviews of legislation and regulations should be undertaken with consideration of the education outcomes of nurses and optimized roles in service delivery settings. Quality assurance mechanisms can help assess and monitor the performance of regulators and the efficiency and effectiveness of regulations (1, 77).

In terms of the fiscal space for health, the ability of governments to provide additional budgetary resources for the health system without affecting the financial position of the public sector or supplanting other socially necessary expenditures is important (72). Consequently, governmental commitment to advancing toward universal health requires a fiscal commitment as advancing health systems toward universal health and discussions of fiscal space for health are more the product of political decisions than technical ones (72). In fact, in countries with more developed democracies, social allocation of resources is more efficient and health is considered a priority. At the national level, public health expenditure (PHE) is critical, with multiple studies showing how investing in social capital to develop social determinants of health enables improvements in health and economic growth (72, 78).

		Regulatory Systems															
	Education (Institutions)						Practice				Working Conditions				Leadership/ Governance		
Country		Accrediation mechanism	Standards for education	Standards for IPE	Faculty quality qaulificati	Proof regulatory body	Licensing	Continuing prof development	Adv nursing roles	Regulation work hours/con	Minimum wage	Social Protection	Measures to prevent HW	Country GCNO	Leadership development	Natl Assoc for Pre-Lic Students	
Antigua and Barbuda	N	Y	Y	Ν	NR	Y	Y	Y	Y	Y	Y	Y	Ν	Y	N	Y	
Argentina	Р	Р	Y	Y	Р	N	Ν	Ν	Ν	N	Ν	Y	N	Ν	Ν	Y	
Bahamas	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	Y	Y	Y	N	Y	N	Y	
Barbados	Y	Y	Ν	Y	Р	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Belize	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	
Bolivia (Plurinational State of)	Y	Y	Y	N	NR	Y	Y	NR	NR	Y	Y	Y	N	N	N	N	
Brazil	Y	Y	Y	Y	Y	Y	Ν	Y	Ν	Y	Y	Y	Ν	Ν	Ν	Y	
Canada	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Chile	Y	Y	Ν	Ν	Ν	Y	Ν	Ν	Y	Y	Y	Y	Y	Y	Y	Y	

Table 1. Summary of regulatory systems in four key areas in the Region

	Regulatory Systems															
			lucatio titutio			Practice					Working Conditions					ip/ ice
Country		Accrediation mechanism	Standards for education	Standards for IPE	Faculty quality qaulificati	Proof regulatory body	y Licensing	Continuing prof development	Adv nursing roles	Regulation work hours/con	Minimum wage	Social Protection	Measures to prevent HW	Country GCNO	Leadership development	Natl Ass for Pre- Studen
Colombia	Y	Y	Ν	Ν	Y	Y	Ν	Ν	Y	Y	Ν	Y	Y	Y	Ν	Y
Costa Rica	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cuba	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dominica	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Ν	Y
Dominicana Republic	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	Y	Y	Y	Ν	Y	Ν	Y
Ecuador	Y	Y	Y	Y	NR	Y	Ν	Y	NR	Y	Y	Y	Υ	NR	Ν	Y
El Salvador	Y	Y	Y	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Y	Ν	Y	Ν	Y
Grenada	Ν	Y	Y	Ν	Ρ	Y	Y	Ν	Y	Y	Y	Y	Ν	Y	Ν	Y
Guatemala	Р	Ν	Р	Ν	Y	Y	Ν	Y	Ν	Y	Ν	Y	Р	Y	Ν	Y
Guyana	Ν	Y	Y	Ν	Y	Y	Y	NR	Y	Y	Y	Y	Y	Y	Y	N
Haiti	Y	Y	Y	Y	NR	Y	Ν	Y	Ν	Y	Y	Ν	Ν	Y	Ν	Y
Honduras	Y	Y	Y	Ν	NR	Ν	Ν	Ν	Ν	Y	Y	Y	Ν	Ν	Ν	Y
Jamaica	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Y	Y
Mexico	Y	Y	Y	Ν	Ρ	Y	Ν	Р	Ρ	Y	Ν	Р	Ν	Y	Y	Y
Nicaragua	Y	Y	Y	Y	Y	Р	Ν	Р	Ν	Y	Y	Y	Р	Y	Р	N
Panama	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	Y	Y	Y	Ν	Y	Y	Y
Paraguay	Y	Y	Υ	Y	Y	Y	Ν	Y	Ν	Y	Y	Y	Ν	Y	Ν	Y
Peru	Ν	Y	Y	Р	Y	Y	Ν	Y	Ν	Y	Y	Y	Ν	Ν	Ν	Y
Saint Kitts and Nevis	Y	Y	Y	Y	Y	Y	Р	Y	Y	Y	Y	Y	N	Р	Р	Y
Saint Lucia	Р	Y	Y	Ν	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Y	Y
Saint Vincent and the Grenadines	Р	Y	Y	Р	Y	Y	Y	Ρ	Y	Y	Y	Y	N	Y	Y	Y
Suriname	Y	Y	Y	Y	NR	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Trinidad and Tobago	Y	Y	Y	Р	NR	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
United States	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ρ	Y	Y
Uruguay	Y	Y	Y	Ν	Y	Y	Ν	Y	Ν	Y	Y	Y	Ν	Ν	N	Y
Venezuela (Bolivarian Republic of)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 1. Summary of regulatory systems in four key areas in the Region (continued)

Fuente: Organización Mundial de la Salud. Situación de la enfermería en el mundo- 2020. Ginebra; OMS; 2020. Disponible en: https://apps. who.int/iris/bitstream/handle/10665/331675/9789240003392-spa.pdf.

Particularly for the Region of the Americas, sustained and increased public financing in health will be required to support the transformation of health systems. Only five countries in the Region—Canada, Costa Rica, Cuba, the United States of America, and Uruguay—with a high level of progress toward universal health have a PHE of at least 6% of their gross domestic product (GDP), with the elimination of direct payments as a barrier to access. The other 30 countries fall short of the target, and the projections based on historical trends are not encouraging: 13 countries will never reach the PHE target of 6% of GDP through economic growth alone, and 10 more countries will have to wait until after 2050 (*32, 79*). Additionally, most countries in the Region have central authorities that set specific ceilings for public health spending; 13 countries have an early warning system that provides an alert when there is a health budget overrun, and 14 countries have a cost containment strategy in place for public health spending (*73*).

Box 5. Service delivery: summary of recommendations

- Countries should develop and maintain centralized health information systems containing service data to examine the density and distribution of nurse assistants and professionals. Accurate data ensure accountability and transparency at all levels and enable policy actions that impact service access and delivery.
- Countries need to invest in financing systems specifically designed to provide all people with access to needed health services (including promotion, prevention, diagnosis, treatment, and rehabilitation and social reinsertion) (80).
- Equitable access to comprehensive, quality, people- and community-centered health services should be expanded.
- Countries need to increase the proportion of the public budget allocated to human resources for health, including increases in public investment in employment opportunities for first-level nurse assistants and professionals, improvements in work conditions, and investments in economic incentive policies for hiring and retaining personnel that consider the gender perspective, with an emphasis on underserved areas (*53*).
- Member states need to implement a monitoring system that defines and standardizes roles and responsibilities for nursing professionals, regulates the profession's scope of practice, and clearly delineates the financial investments made into increasing and retaining the number of nurses working in primary care.

REFERENCES

- World Health Organization. The WHO Global Strategic Directions for Nursing and Midwifery (2021-2025). Geneva; WHO; 2021.Available from: <u>https://www.who.int/publications/m/item/global-strategic-directions-for-nursing-and-</u> midwifery-2021-2025
- Pan American Health Organization. Regional Observatory of Human Resources in Health. Washington, D.C.; PAHO; 2021. Available from: <u>https://www.observatoriorh.org/en/international-nurses-day-need-invest-nursing-lessons-learned-pandemic</u>
- World Health Organization. Sixty-Fourth World Health Assembly Agenda item 13.4: Strengthening nursing and midwifery. Geneva; WHO; 2011. Available from: https://apps.who.int/gb/ebwha/pdf_files/WHA64/A64_R7-en.pdf
- World Health Organization. State of the World's Nursing Report 2020. Geneva; WHO; 2020. Available from: <u>https://</u> www.who.int/publications/i/item/9789240003279
- 5. World Health Organization. Global strategy on human resources for health: workforce 2030. Geneva; WHO; 2022. Available from: https://apps.who.int/iris/bitstream/handle/10665/250368/9789241511131-eng.pdf
- 6. World Health Organization. WHO Collaborating Centres Global Database. Geneva; WHO; 2022. Available from: https://apps.who.int/whocc/Default.aspx
- 7. United Nations Department of Economic and Social Affairs. Sustainable development. New York; United Nations; 2021. Available from: https://sdgs.un.org/goals
- 8. Fields L, Perkiss S, Dean BA, Moroney T. Nursing and the Sustainable Development Goals: a scoping review. J Nurs Scholarsh. 2021;53:568-577.
- Lilienfeld E, Nicholas PK, Breakey S, Corless IB. Addressing climate change through a nursing lens within the framework of the United Nations Sustainable Development Goals. Nurs Outlook. 2018 Sep;66(5):482–94. Available from: <u>https://doi.org/10.1016/j.outlook.2018.06.010</u>
- 10. Benton DC, Watkins MJ, Beasley CJ, Ferguson SL, Holloway A. Evidence into action: a policy brief exemplar supporting attainment of nursing now. Int Nurs Rev. 2020;1(67):61-67.
- 11. Cassiani SHB, Fernandes MNF, Lecorps K, Silva FAM. Leadership in nursing: why should we discuss it? Rev Panam Salud Publica. 2019;43:e46. https://doi.org/10.26633/RPSP.2019.46
- 12. Ford M. World's governments urged to get behind new global nursing strategy. Nursing Times, 1 June 2021. Available from: <u>https://www.nursingtimes.net/news/workforce/worlds-governments-urged-to-get-behind-new-global-nursing-strategy-01-06-2021/</u>
- 13. Pan American Health Organization. Strategic directions for nursing in the Region of the Americas. Washington, D.C.; PAHO; 2019. Available from: <u>https://iris.paho.org/bitstream/handle/10665.2/50956/9789275120729_eng.</u> pdf?sequence=1&isAllowed=y
- 14. World Health Organization. Nursing and midwifery, key facts. Geneva: WHO; 2021 Available from: <u>https://www.who.</u> int/news-room/fact-sheets/detail/nursing-and-midwifery
- 15. World Health Organization. Global Health Workforce statistics database. Geneva: WHO; 2021. Available from: <u>https://</u>www.who.int/data/gho/data/themes/topics/health-workforce
- 16. Pan American Health Organization. Strategy for universal access to health and universal health coverage. Washington, D.C.; PAHO; 2014. Available from: <u>https://www.paho.org/en/documents/strategy-universal-access-health-and-universal-health-coverage</u>
- Cassiani SHDB, Wilson LL, Mikael S de SE, Peña LM, Grajales RAZ, McCreary LL, et al. The situation of nursing education in Latin America and the Caribbean towards universal health. Rev Lat Am Enfermagem. 2017 May 11;25:e2913. Available from: https://doi.org/10.1590/1518-8345.2232.2913

- Cassiani SHDB, Munar Jimenez EF, Umpiérrez Ferreira A, Peduzzi M, Leija Hernández C. La situación de la enfermería en el mundo y la Región de las Américas en tiempos de la pandemia de COVID-19. Rev Panam Salud Pública. 2020 May 12;44(e64):1. Available from: <u>https://iris.paho.org/handle/10665.2/52081</u>
- 19. Pan American Health Organization. Country profiles in the Americas. Washington, D.C.; PAHO; 2022. Available from: https://www.paho.org/en/key-statistics-nursing-workforce-americas-country-profiles
- 20. American Association of Colleges of Nursing. Creating a More Highly Qualified Nursing Workforce. Washington, D.C.; AACN; 2019. Available from: https://www.aacnnursing.org/news-information/fact-sheets/nursing-workforce
- 21. Pan American Health Organization. Expanding the Roles of Nurses in Primary Health Care. Washington, D.C.: PAHO; 2018. Available from: https://iris.paho.org/handle/10665.2/34958
- 22. American Association of Nurse Practitioners. About NPs and AANPs: NP Fact Sheet. Washington, D.C.; AANP; 2021. Available from: https://www.aanp.org/about/all-about-nps/np-fact-sheet
- 23. Canadian Institute for Health Information. Nurse practitioners: key findings. Ottawa; CIHI; 2021. Available from: https://www.cihi.ca/en/nurse-practitioners
- Oldenburger D, Cassiani SHDB, Bryant-Lukosius D, Valaitis RK, Baumann A, Pulcini J, et al. Implementation strategy for advanced practice nursing in primary health care in Latin America and the Caribbean. Rev Panam Salud Pública [Internet]. 2017 Apr 14 ;41:1. Available from: https://iris.paho.org/handle/10665.2/33996
- Bryant-Lukosius D, Valaitis R, Martin-Misener R, Donald F, Peña LM, Brousseau L, et al. Advanced Practice Nursing: A Strategy for Achieving Universal Health Coverage and Universal Access to Health. Rev Lat Am Enfermagem. 2017 Jan 30 ;25. Available from: https://www.scielo.br/j/rlae/a/LsdQZykj93tLMgJWnSZ9fRr/?lang=en
- 26. World Health Organization. Global standards for the initial education of professional nurses and midwives. Geneva; WHO; 2009. Available from: https://www.who.int/hrh/nursing_midwifery/hrh_global_standards_education.pdf
- 27. Markaki A, Moss J, Shorten A, Selleck C, Loan L, McLain R, et al. Strengthening universal health: development of a nursing and midwifery education quality improvement toolkit. Rev Lat Am Enfermagem. 2019;27:e3188. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6896809/
- 28. Fogg NW. Transitioning from direct care to virtual clinical experiences during the COVID-19 pandemic. J Prof Nurs. 2020;36(6):685-691.
- 29. World Bank. Population Total: Latin America and Caribbean. Washington, D.C.; The World Bank; 2022. Available from: https://data.worldbank.org/indicator/SP.POP.TOTL?end=2016&locations=ZJ&start=1960
- 30. Canadian Association of Schools of Nursing. Registered nurses education in Canada Statistics 2017-2018. Retrieved from https://www.casn.ca/wp-content/uploads/2019/12/2017-2018-EN-SFS-DRAFT-REPORT-for-web.pdf
- 31. American Association of Colleges of Nursing Baccalaureate Education. Washington, D.C.; AACN; 2022. Available from: https://www.aacnnursing.org/Nursing-Education-Programs/Baccalaureate-Education
- 32. Pan American Health Organization. Strategy for building resilient health systems and post-COVID-19 pandemic recovery to sustain and protect public health gains. Washington, D.C.; PAHO; 2021. Available from: <u>https://www.paho.</u>org/en/documents/cd5911-strategy-building-resilient-health-systems-and-post-covid-19-pandemic-recovery
- 33. Frenk JC. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. Lancet. 2010;376(9756):1923-1958.
- 34. American Association of Colleges of Nursing. Nursing faculty shortage. Washington, D.C.; AACN; 2020. Available from: https://www.aacnnursing.org/news-information/fact-sheets/nursing-faculty-shortage
- 35. McCauley LA. Doctor of nursing practice (DNP) degree in the United States: reflecting, readjusting, and getting back on track. Nurs Outlook. 2020;68(7):494-503.
- 36. Cassiani SHB, Dias BM. Expansion of nurses' roles, in the context of the SARS-CoV-2 pandemic, in primary and secondary schools. Rev Bras Enferm. 2021;74(Suppl 6):e74suppl602.doi: <u>http://dx.doi.org/10.1590/0034-7167.202174suppl602</u>
- 37. Clark M, Julmisse M, Marcelin N, Merry L, Tuck J, Gagnon A. Strengthening healthcare delivery in Haiti through nursing continuing education. Int Nurs Rev. 2015;62(1):54-63.

- 38. Visovsky CM. Bringing evidence-based practice to Latin America: Transforming nursing education and practice. J Contin Educ Nurs. 2017;48(11):512-516.
- 39. Pan American Health Organization. The virtual campus for public health. Washington, D.C.; PAHO; 2022. Available from: https://www.campusvirtualsp.org/en
- 40. High-Level Commission on Health Employment and Economic Growth. Working for health and growth: investing in the health workforce. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/250047/9789241511308-eng.pdf
- 41. Palmer S. Nurse retention and satisfaction in Ecuador: implications for nursing administration. J Nurs Manage. 2014;22(1):89-96.
- 42. World Health Organization. National health workforce accounts data portal. Geneva; WHO; 2022. Available from: https://apps.who.int/nhwaportal/Home/Index
- 43. Sousa A, Scheffler RM, Nyoni J, Boerma T. A comprehensive health labour market framework for universal health coverage. Bull World Health Organ. 2013 Nov 1; 91(11): 892–894. Available from: <u>https://www.ncbi.nlm.nih.gov/pmc/</u> articles/PMC3853957/
- 44. World Health Organization. Health labour market analysis guidebook. Geneva; WHO; 2021. Available from: <u>https://</u> apps.who.int/iris/bitstream/handle/10665/348069/9789240035546-eng.pdf
- 45. Yan J. Health services delivery: reframing policies for global nursing migration in North America—a Caribbean perspective. Policy Polit Nurs Pract. 2006;7:71-75.
- NSI Nursing Solutions. 2021 NSI National Health Care Retention & RN Staffing Report. East Petersburg; NSI Nursing Solutions; 2021. Available from: <u>https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_</u> Retention_Report.pdf
- 47. Bakhamis LP. Still an epidemic: The Burnout Syndrome in Hospital Registered Nurses. Health Care Manag (Frederick). 2019;38(1):3-10.
- 48. Carpio C, Santiago Bench N. Health workforce in Latin America and the Caribbean: an analysis of Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay. Washington, D.C.; The World Bank; 2015. Available from: <u>https://openknowledge.worldbank.org/bitstream/handle/10986/22027/9781464805943.pdf?sequence=1</u>
- 49. Buchan J, Catton H, Shaffer F. Sustain and Retain in 2022 and Beyond: The global nursing workforce and the COVID-19 pandemic. Philadelphia; ICNM; 2022. Available from: <u>https://www.icn.ch/system/files/2022-01/Sustain%20and%20</u> <u>Retain%20in%202022%20and%20Beyond-%20The%20global%20nursing%20workforce%20and%20the%20</u> COVID-19%20pandemic.pdf
- 50. Ammi MA. The influence of registered nurses and nurse practitioners on patient experience with primary care: results from the Canadian QUALICO-PC study. Health Policy. 2017;121(12):1215-1224.
- 51. Maier CB. Nurses in advanced roles in primary care: policy levers for implementation. Paris; OECD; 2022. Available from: <u>https://www.oecd-ilibrary.org/docserver/a8756593-en.</u> pdf?expires=1648651863&id=id&accname=guest&checksum=3258999052CF12FCD9DD2398EEFEDC69
- 52. Campbell J. Human resources for health and universal health coverage: fostering equity and effective coverage. Bull World Health Organ. 2013;91(11):853-863.
- 53. Pan American Health Organization. Plan of action on human resources for universal access to health and universal health coverage 2018-2023. Washington, D.C.; PAHO; 2018. Available from: <u>https://iris.paho.org/handle/10665.2/49611</u>
- 54. Zug KE, Cassiani S, Pulcini J, Garcia A, Aguirre-Boza F, Park J. Advanced practice nursing in Latin America and the Caribbean: regulation, education and practice. Rev Lat Am Enfermagem. 2016; 24: e2807. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4990050/
- 55. Pan American Health Organization. Nursing staff are vital for making progress towards universal health. Washington, D.C.; PAHO; 2019. Available from: <u>https://www3.paho.org/hq/index.php?option=com_content&view=article&id=1513</u> 8%3Anursing-staff-are-vital-for-making-progress-towards-universal-health&Itemid=1926&Iang=en
- 56. World Health Organization. Interprofessional collaborative practice in primary health care: nursing and midwifery perspectives. Geneva; WHO; 2013. Available from: https://apps.who.int/iris/handle/10665/120098

- 57. World Health Organization. CD52.R13: Human resources for health: Increasing access to qualified health workers in primary health care-based health systems. Geneva; WHO; 2013. Available from: <u>https://iris.paho.org/handle/10665.2/4441</u>
- 58. Lukewich J, Allard M, Ashley L, Aubrey-Bassler K, Bryant-Lukosius D, Klassen T, et al. National competencies for registered nurses in primary care: a Delphi study. West J Nurs Res. 2020;121(12):1078-1087.
- 59. Pan American Health Organization. The essential public health functions in the Americas: a renewal for the 21st century. Conceptual framework and description. Washington, D.C.; PAHO; 2020. Available from: https://iris.paho.org/bitstream/handle/10665.2/53124/9789275122655_eng.pdf?sequence=1&isAllowed=y
- 60. Jacobson J. The complexities of nurse migration. Am J Nurs. 2015;115(12):22-23.
- 61. Rolle Sands S, Ingraham K, Salami B. Caribbean Nurse migration—a scoping review. Hum Resour Health. 2020;18:19. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7077100/
- 62. Salmon ME. Managed migration: the Caribbean approach to addressing nursing services capacity. Health Serv Res. 2007;42(3):1354-1372.
- 63. Catton H, Iro E. How to reposition the nursing profession for a post-COVID age. BMJ. 2021;373:n1105.
- 64. International Council of Nurses. Government chief nursing officer (GCNO) positions. Geneva; ICN; 2020. Available from: https://www.icn.ch/system/files/documents/2020-01/ICN%20briefing_GCNO_ENG.pdf
- 65. Pan American Health Organization. Amid COVID-19 pandemic, new WHO report urges greater investments in the nursing workforce. Washington, D.C.: PAHO; 2020.
- 66. All-Party Parliamentary Group on Global Health. Triple impact: how developing nursing will improve health, promote gender equality and support economic growth. London: APPG; 2016. Available from: <u>https://globalhealth.inparliament.uk/files/2020-12/DIGITAL%20APPG%20Triple%20Impact%20%283%29.pdf</u>
- 67. Ocho O, Wheeler E, Sheppard C, Caesar-Greasley L, Rigby J, Murphy G. Nurses' preparation for transitioning into positions of leadership—a Caribbean perspective. J Nurs Manag. 2020;28(6):1356-1363.
- 68. Lawson D, Fleshman J. Informal leadership in health care. Clin Colon Rectal Surg. 2020;33:225-227.
- 69. Inter-American Health Task Force. Deepening cooperation and coordination on health policy in the Americas. A new approach to health emergencies. Washington, D.C.; The Dialogue; 2021. Available from: <u>https://www.thedialogue.org/</u>wp-content/uploads/2021/07/Health-Task-Force-White-Paper-Final-version.pdf
- 70. American Nurses Association. Nurses serving in Congress. Silver Spring; ANA; 2021. Available from: <u>https://www.nursingworld.org/practice-policy/advocacy/federal/nurses-serving-in-congress/</u>
- 71. Pan American Health Organization. Chief nursing officer or national focal point for nursing. Washington, D.C.; PAHO; 2021. Available from: <u>https://www.observatoriorh.org/sites/default/files/webfiles/fulltext/2021/PAHO_CHIEF_NURSING_OFFICER_aug2021.pdf</u>
- 72. Pan American Health Organization. Fiscal space for health in Latin America and the Caribbean. Washington, D.C.; PAHO; 2020. Available from: <u>https://iris.paho.org/bitstream/handle/10665.2/52410/9789275220009_eng.</u> <u>pdf?sequence=1&isAllowed=y</u>
- Lorenzoni L, Pinto D, Guanais F, Reneses T, Daniel F, Auraaen A. Health systems characteristics: a survey of 21 Latin American and Caribbean countries. Paris; OECD; 2019. Available from: <u>https://www.oecd-ilibrary.org/docserver/0e8da4bd-en.</u> pdf?expires=1648656193&id=id&accname=guest&checksum=D0DE4632892581F1E129E55BD29B52E5
- 74. Cassiani SHDB, Lecorps K, Rojas Cañaveral LK, da Silva FAM, Fitzgerald J. Regulation of nursing practice in the Region of the Americas. Rev Panam Salud Pública. 2020 Aug 15;44(e93):1. Available from: <u>https://iris.paho.org/</u> handle/10665.2/52570
- 75. Squires A, Dorsen C. Qualitative research in nursing and health. J Nurs Regulation. 2018;9(3):15-26.
- 76. Leslie K, Moore J, Robertson C, Bilton D, Hirschkorn K, Langelier MH, et al. Regulating health professional scopes of practice: comparing institutional arrangements and approaches in the US, Canada, Australia and the UK. Hum Resour Health. 2021;19(1):1-12.

- 77. Rietig V, Squires A. Building skills in North and Central America: Barriers and policy options toward harmonizing qualifications in nursing. Washington, D.C.; Migration Policy Institute; 2015. Available from: <u>https://www.migrationpolicy.org/sites/default/files/publications/RMSG-NurseQualifications.pdf</u>
- 78. Cid Pedraza C, Matus-López M, Báscolo E. Espacio fiscal para salud en las Américas: ¿es suficiente el crecimiento económico? Rev Panam Salud Publica. 2018;42:e86.
- 79. World Health Organization. Global spending on health: a world in transition. Geneva; WHO; 2019. Available from: https://www.who.int/publications/i/item/WHO-HIS-HGF-HFWorkingPaper-19.4
- 80. Pan American Health Organization. Health financing. Washington, D.C.; PAHO; 2022. Available from: <u>https://www.paho.org/en/topics/health-financing</u>

Nurses are key players in health promotion and disease prevention and the backbone of health care systems worldwide. Nurses work on the front lines of disease prevention, health promotion, and health management and are often the unsung heroes in health care facilities and emergency response. Despite the critical role they play in health care, there is a nursing shortage across the world that will affect the delivery of competent nursing care. This document highlights key action points for targeted investment in the nursing workforce and calls on Member States to strengthen nursing within the context of their own country efforts. Suggestions for action and strategies for strengthening the nursing workforce in primary health care services through investment in education, jobs, leadership, and service delivery are provided. It also provides information for country stakeholders with a strategic role in addressing health access barriers and attending to the health needs of the population, especially groups living in conditions of vulnerability, in rural and remote communities, and in places with a low density of other health professionals. The objective is to facilitate the efforts of stakeholders in implementing resources required to help countries in the Region of the Americas advance universal health and achievement of the Sustainable Development Goals (SDGs) by advancing nursing workforce capacity. This includes governments and policymakers as well as academic institutions and educators; nursing professionals; nursing unions, councils, and professional associations; and regulatory bodies. This policy brief was developed by PAHO through new analyses, expert consensus, and reference to existing PAHO and WHO guidance and literature on investments in the nursing workforce in the Region of the Americas.



World Health Organization