

**Recertification of Medical Specialties:
A report from the Latin American Medical Education Leaders Forum
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Summary

Background: Latin American is experiencing a strong increase in the growth rate of the physician workforce and medical specialists. The need to develop recertification systems to assure good quality of care has been raised by many health authorities and many countries have already developed recertification systems. The International Medical Education Leaders Forum, organized by the Pontificia Universidad Católica de Chile and the Royal College of Physicians and Surgeons of Canada, offered, for the first time, the opportunity to discuss the development of recertification systems in Latin America.

Methods: A qualitative approach using the nominal group technique was used to explore the main characteristics, challenges, and opportunities of the recertification systems in Latin America. An expert panel of 42 leaders in health policy and medical education from seven countries participated in a one-day discussion. A semi-structured questionnaire containing three main dimensions was used to guide the discussion. The information was registered through audiotape recording and filed notes.

Results: All participants highlighted the relevance reached by recertification systems at the health policy level in the region and recognized significant advances in Mexico, Argentina, Brazil, Colombia, and Chile, where a normative framework has been put in place during the last 10 years. Mexico was the country with the most developed system in the region. Governance barriers have strongly affected the implementation of recertification policies in the rest of the countries. The consistency principle, where specialty certification institutions assume the main responsibility of leading the recertification process, seems to be an important factor for achieving effective governance. The Canadian experience, based on continuing competence-based medical education rather than knowledge-based examination, emerged as a significant model to improve quality of medical care and gain social validity of recertification in the medical community. The increasing collaboration among residency-level, medical education institutions in the region was seen as an opportunity to work on common validity criteria and exchange educational programs for enhancing recertification.

Conclusions: Latin America has significantly advanced in the development of recertification systems at the policy level. Governance strategies, educational models, and regional collaboration should improve implementation of the recertification policies at the national level.

Introduction

Latin America has experienced a significant growth in the physician workforce during the last decades (World Health Organization, 2015). The region holds over 560 medical schools and is cited as having the highest density of medical schools per population worldwide (Foundation for Advancement of International Medical Education International (FAIMER), 2015). In addition, medical migration within the region has increased strongly in some countries, such as Chile and Brazil (Organization for Economic Cooperation and Development (OECD), 2017; PAHO, 2015). In addition, the rate of medical specialty training programs in Latin America has experienced a two to three fold increase in the last decade (World Health Organization, 2015).

The strong increase in the physician workforce in Latin America during the last decades has provoked an emerging demand of continuing medical education in order to maintain and update medical competencies. As a way to validate the continuing competences of physicians, a number of initiatives associated with “revalidation”, “recertification”, or “maintenance of certification” have emerged in-line with similar processes experienced in the US, Canada, and the UK several decades ago (Horsley et al., 2016; Merkur et al., 2008).

There is high variability among the models and strategies used in national programs for validating physician competences at a national level. Theoretical perspectives, terminology ambiguity, and contextual variables where some of the main factors that explained the heterogeneity in the validation models found by Horsley et al. in their scoping review of the literature (Horsley et al., 2016).

In Latin America, several countries are developing national validation systems to certify physicians' competencies as a strategy to assure quality of care in a growing and dynamic healthcare system environment. However, there is lack of information on the normative framework, implementation barriers, and outcomes of these initiatives. A scoping review on national validation systems conducted by Horsley et al. (2015) included no articles from Latin American.

The heterogeneous reality of recertification systems worldwide, the controversies around the best implementation strategies to achieve the desired outcomes (Cook et al., 2016; Teirstein, 2015), and the relevance of including feedback from the different stakeholders (Lipner et al., 2013) raise important challenges and opportunities for Latin America to develop the best possible practices. In order to improve advancements in validation systems and quality of medical care in the region, it is of great importance to understand the current state of these processes in Latin America and compare these initiatives with more established systems worldwide.

This report presents the status of the recertification system of physician competences in selected countries in Latin America and compares these systems with the Canadian model used as a reference. Barriers, facilitators, and opportunities of the different systems are identified to inform health policy makers involved in future initiatives.

Methods

A qualitative approach using the nominal group technique (Bourrée et al., 2008) was used to explore the main characteristics, challenges, opportunities, and comparisons of the recertification systems for physician competences in Latin America. The nominal group method was initially developed to explore a knowledge domain gathering information by classing a series of items or questions during a meeting conducted by a coordinator using a semi-structured questionnaire. The primary purpose of the technique is to clarify concepts, explore barriers, facilitators, and opportunities to develop action plans (Tague, 2005).

In this initiative, a panel of 42 experts from seven countries were invited to participate in the International Medical Education Leaders Forum (IMELF) – Latin America, conducted by the Pontificia Universidad Católica de Chile's School of Medicine and the Royal College of Physicians and Surgeons of Canada. The meeting was held in Santiago in May 2017. Three main criteria were used to select country representatives for the panel. First, the panel should include representatives from countries with the highest number of medical schools and physicians in Latin America, i.e. Brazil, Mexico, Colombia and Argentina. Second, participants should have a leadership position in an academic or national health agency related with professional training or certification. Third, the panel should include representatives from countries differing in their development of validation or recertification systems, i.e. countries with high (Canada), middle (Mexico) and low development (Ecuador).

Participants were distributed into seven groups and a bilingual facilitator was selected in each group. A semi-structure questionnaire was used to guide the discussion. The questionnaire explored three main dimensions. First, participants were asked to briefly describe the validation systems in place in their countries and the way they work in practice. Second, participants were asked to identify differences, strengths, and limitations of the Canadian and Mexican validation systems and compare them with their country of residence. During the Forum, three key note speakers from Canada (CC), Mexico (JV) and Chile (JV) presented updated information on the recertification systems of their own countries and the region. Third, participants reflected on the main challenges in advancing the implementation of validation systems in their countries as well as potential collaborative initiatives in the region.

The analysis of the information was based on field notes conducted in each group as well as the audio-recorded information gathered and analyzed by a qualitative research team. The information collected was summarized in a report that was distributed to each participant in order to confirm and assure accuracy of the information included.

Results

The IMELF/Latin America Panel included 42 experts from seven different countries. Canada, Mexico, and Chile were the countries with the highest number of representatives. **Table 1** presents the representative profile of participants. The Panel included two national presidents of specialty agencies, five deans and three vice-deans of medical faculties, 13 directors of medical schools or medical education agencies, 10 senior representatives of national certification agencies, and nine senior medical educators. Most Latin American experts used the term “*recertification*” in reference to a standard process aimed to verify the maintenance of knowledge and/or competences associated with a medical specialty.

Normative framework and assessment criteria

All participants highlighted the pertinence of recertification systems at the health policy level in each of their countries during the last 5–10 years. They recognized clear advances at the health policy levels in Mexico, Argentina, Brazil, Colombia, and Chile. Argentina developed the earliest legal framework for recertification of medical specialist in 1990, and Colombia has the newest framework. On the other hand, Ecuador has not yet developed a normative framework for recertification of medical specialists. **Table 2** presents a summary of the normative framework, implementation status and assessment criteria of the recertification systems in selected countries in Latin America and Canada.

There is variability regarding the governance agencies and assessment strategies in the recertification systems among Latin American countries. In Mexico, the recertification agency in charge of validating the maintenance and improvement of competencies is the National Council of Medical Specialties (Comité Normativo Nacional de Consejos de Especialidades Médicas)_ CONACEM), an autonomous agency based on specialty societies. In Argentina, the responsibility of recertification fell originally on academic institutions or scientific societies. However since 2003, the Special Commission of Medical Specialties (Comisión Especial de Evaluación de Especialidades Médicas) took over the responsibility, and is a body integrated by representatives of the ministry of Health, Medical Faculties, and the Argentinian Medical Association (Asociación Médica Argentina, AMA). In Brazil, the Brazilian Medical Association (Asociación Médica Brasileira) and the different Societies of Medical Specialties share the responsibility of certification maintenance. On the other hand, in Chile, the National Commission of Medical Specialties (CONACEM) holds the responsibility of recertification and can accredit other institutions, such as Medical Faculties, to conduct and validate the process. In all Latin American countries, the recertification system is voluntary.

The situation described for Latin American countries differs from Canada in that the validation system of medical competences is entrusted to the Royal College of Physicians and Surgeons. The Royal College is an institution governed by a Council of 24 members who are unaffiliated with the Ministry of Health, Faculties of Medicine, and other Medical Specialty Societies. The Royal College oversees postgraduate medical education, including maintenance of certification. Unlike Latin America’s experience, maintenance of certification is mandatory in Canada.

The criteria for validating professional competencies also vary among countries in Latin America. All countries consider continuing medical education as an essential requirement for certifying updated knowledge. Peer evaluation is included in the recertification criteria in all Latin American countries. However, clinical work performance is considered a basic requirement only in the framework of Argentina, Chile, and Colombia. Assessment strategies differ among countries. A formal examination is required in Colombia, but not in Argentina, Brazil, or Chile. Mexico presents an interesting model where examination is an option for those specialists who did not achieve the required formative credits for recertification after a five-year period.

The assessment strategies described for Latin American countries share some of the criteria used in the Canadian system. Emphasis in continuing medical education and peer assessment are also present in the Canadian system. However, there is a stronger trend towards shifting from updated knowledge to competence-based assessment in Canada. There is also a strong emphasis on focusing in scope-based skills rather than specialty-based abilities. Validation of scope-based skills refers to the assessment of the specific competences that the physician is applying in their real practice rather than in the wide variety of skills included in their specialty.

Implementation

In spite of the fact, that many countries in the region have a normative framework for recertification, the degree of implementation of these policies is still low or very low. Mexico appears to be the country with the highest level of implementation in the region. In most specialties, there is a clear scoring system to comply with the requirements of recertification. The system is based on self assessment and continuing medical education. However, examination is an option for those specialists who did not achieve the minimum scoring standard of the continuing medical education process. Although recertification is not mandatory in Mexico, many health care institutions, especially private organizations, are increasingly considering it as a requirement to grant clinical privileges to physicians. This scenario has created a strong incentive for medical specialists to undergo recertification.

In Argentina, the Commission for Recertification of Medical Specialties (Comité de Recertificación de la Asociación Médica Argentina, CRAMA) has proposed a number of criteria that the scientific societies can decide to fully or partially apply to their specialists. Systematic implementation has not yet started. In Brazil, implementation of the recertification process has not started yet. A number of factors have been associated with this situation. Among them, a significant change in the normative criteria occurred in 2012 that changed the status of recertification from mandatory to voluntary. Practical factors related with the availability of accessible continuing education courses and technical and human resources for complying with the assessment requirements have also been significant barriers.

In Chile, the emphasis has been to establish the specialist certification in the medical community and advance the implementation of recertification in a second phase. In 2014 the Minister of Health recognized the National Commission of Medical Specialties as the national agency for certification and recertification. The process of recertification has not started yet. A similar situation is described in Colombia. In Ecuador, there is still no normative framework and criteria for recertification of medical specialties.

In Canada, recertification or maintenance of certification (MOC) is seen as an evidence-informed educational initiative designed to support, enhance, and promote continuing professional development activities of the medical profession (Ref). All specialties are required to participate in a recognized revalidation process that has three main sections. First a group-based section that includes, among another activities, participation in accredited conferences, accredited rounds, and journal clubs. Second, a self-learning section that includes, among others, personal learning projects, journal articles review, and participation in the development of clinical practice guidelines. Third, an assessment section that includes participation in accredited self-assessment programs, simulation activities, and chart audit and feedback. Specialists are required to take a minimum number of credits from each section. The information available from 2015 shows that over 90% of specialists participate in group learning activities, about 80% in self learning, and 40% in assessment. Similar to Mexico, the validation system in Canada relies strongly on verifiable, self-reported learning and clinical activities. In 2011 the program underwent a major redesign and has started to shift from knowledge-based to a competence-based model with more emphasis on interprofessional and scope of practice skills.

Advances, challenges, and opportunities

There was consensus among participants on the relevance of having a validation system in place at a national level as a way to improve quality of medical care. There was recognition among participants on the significant advances that most countries have achieved in having a normative framework that regulates and sets essential criteria for engaged in recertification processes.

There was high agreement in the panel on the complexity of the governance of the recertification systems and that this was an area that needed to be improved. The diversity of stakeholders involved in the recertification process needs not only a normativity framework and clear validation criteria in place, but also agencies or institutional groups with strong social validity that could work together sharing and delegating responsibilities. In Chile, Medical Faculties and the National Commission of Medical Specialties (CONACEM) are both institutions entitled to certify medical specialties. On the other hand, the Minister of Health is the institution that holds the responsibility of assuring quality in medical care in the population. Medical societies and the Chilean Medical College are important players in continuing medical education and health policy making. The roles of these key players in the maintenance of certification remains overlapped and blurred. Similar situations were described in Brazil, Argentina, and to a lesser extent, in Colombia, as affecting the implementation of the recertification process.

In the Canadian model, the same institution that certifies the medical specialty (i.e. the Royal College of Physicians and Surgeons) holds the responsibility of validating the maintenance of that certification. In Mexico, the agency responsible for the certification of medical specialty (CONACEM) has set general standards and has positioned the direct responsibility of recertification in the Specialty Councils (Consejos de Especialidad) that correspond with scientific medical societies. Both models share the virtue of a consistent and clear definition of responsibilities and social validation in the medical community and among health policy makers. They represent interesting models to be taken into account by other countries in the region.

An important challenge that was underestimated when implementing recertification was the balance between the criteria set for achieving the standard required and the resources available to respond appropriately to that standard. In Brazil, the mandatory requirement for recertification had to be changed to a voluntarily one given mainly due to the lack of resources to make the norm compulsory. In the rest of the Latin American countries analyzed, the norm is still voluntary: a strategy that was appropriate given the complexity of the process and the magnitude of the target population. However, participants still recognized the lack of organizational resources to provide accessible medical education opportunities for specialties, electronic platforms for registering self-learning activities, and reasonable budget for supporting administrative staff to manage the process.

The large experience of many Medical Faculties in Latin America on virtual continuing medical education was seen as a great opportunity to advance faster and efficiently to expand opportunities of self-learning among specialists. The existing collaboration among many medical schools and the common language in the region was also seen as an opportunity for international regional training that could contribute to improve medical competencies among Latin American specialists. The Canadian experience of focusing initially on the formative process rather than in the evaluation of knowledge or competencies was strongly valued by participants as a feasible way to start the implementation of recertification. The use of a portfolio as a formative strategy for recertification was seen as a very concrete strategy to advance in the process. Finally, the scope-based approach proposed by the Royal College experts was also valued by many Latin American experts as a way to improve relevance and efficiency of the recertification process.

Discussion

This report presents an analysis of the status of recertification or maintenance of certification in Latin America, an emerging topic in the region. The diverse panel of 42 experts from seven countries that participated in the Forum assured a wide perspective of experiences and offers real opportunities for significant changes in health policies related with recertification.

The pertinence of having recertification systems in Latin America was clearly demonstrated by the existence of normative frameworks in five of the six countries represented in the panel. Together, these countries represent over 65% of the physician workforce in the region. All Latin American experts understood recertification as part of the social contract of the medical profession and a good strategy to assure quality of medical care. This perspective is similar to the one reported by Horsley et al. (2015) in a scoping review and Archer et al. (2015) in their discourse analysis from a group of 31 medical and legal policymakers in the UK. The experiences presented showed a clear gradient in the region, ranging from countries such as Mexico, a country with a clear systematic implementation that faces the challenges of making the process more efficient and effective, and Ecuador and Colombia, countries at the initial phase of designing a recertification system. In the middle of this gradient are Brazil, Argentina, and Chile, who have recertification systems in place, but have not yet started a systematic implementation.

One of the main findings of the Latin American panel was the difficulties in governing the recertification agencies in most Latin American countries. The forum showed that there are clear tensions between stakeholders, such as Medical Colleges, Medical Specialty Societies, National Certification Agencies, and Academic Institutions. Governance has been identified as a key factor to avoid resistance and increase efficiency in recertification process (Teirstein, 2015). The appropriate representation of the medical community, educational institutions, and regulatory agencies are essential factors to assure an effective process. Contextual and local factors are important to consider when designing a validation system (Horsley et al., 2016). However, the experiences of the Canadian and Mexican models show that the institution responsible for certification of medical specialties should lead the process of recertification. This principle of *institutional consistency* is a probable key factor to achieve governance in the process.

The available evidence shows that implementation strategies for recertification, their content criteria, learning methods, and financial mechanisms are significant variables related with their efficiency and effectiveness (Goulet et al., 2013; Wenghofer et al., 2014). Models that are perceived as bureaucratic, distant from clinical practice or centered on financial revenues raised resistance among the medical community (Hawkes, 2012; Teirstein, 2015). Moreover, an excessive emphasis on examination activities could affect the significance and validation by the medical community of the recertification system. On the other hand, there is also evidence that models centered on accessible and good quality continuing education strategies are associated with better quality of professional practice (Goulet et al., 2013; Tamblyn et al., 2007; Wenghofer et al., 2015). The

combination of self-learning, group learning, and assessment strategies included in the Royal College framework of continuing professional development activities appear as a feasible and integrative approach for balancing efficiency and effectiveness in the process.

The relevance of international collaboration in the recertification area has been stressed by many authors (Bresolin et al., 2008; Goulet et al., 2013; Horsley et al., 2016) (Bresolin L, 2009; Gascoin J, 2013; Horsley T, 2015). Use of similar terminology, application of consistent criteria, and promotion of exchange education initiatives are some of the potential areas for collaboration at an international level. The increasing regional migration of physicians within Latin America (Ref) raises the challenge of finding valid and common recertification systems that could be recognizable partially or totally by different national agencies. The similarities found by the panel participants in some of the governance and implementation difficulties stimulate an active interaction to apply the best practices of each country. On the other hand, the emerging collaborative initiatives in medical education in the region, such as the Latin American Conference on Residency Education (LACRE), offers a great opportunity to advance integrating regulatory criteria and expanding educational initiatives.

The Latin American Forum on recertification offered the first opportunity to share real experiences on recertification of medical specialties in the region and to compare those experiences with more consolidated experiences, such as the Canadian model, and to learn from the best available practices. The Forum offered a valuable opportunity to strengthen the Latin American network and improve medical care through collaboration in enhancing recertification systems.

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Table 1. Institutions and Panel Participants Positions

Country (N)	Institutions	Participants Positions
Chile (17)	<ul style="list-style-type: none"> Ministerio de Salud de Chile Asociación de Facultades de Medicina de Chile Agencia Acreditadora de Programas y Centros Formadores de Especialistas Médicos Corporación Nacional Autónoma de Certificación de Especialidades Médicas Asociación de Sociedades Científicas Médicas Facultades de Medicina Pontificia Universidad Católica de Chile Universidad de Chile Universidad de Valparaíso Universidad Austral de Chile Universidad Católica del Maule Universidad Católica del Norte 	<ul style="list-style-type: none"> President Asociación de Facultades de Medicina de Chile Director Continuing education and training department Ministerio de Salud de Chile Deans Faculty of Medicine Vice Dean Faculty of Medicine Directors School of Medicine Associate Director School of Medicine Postgraduate Director School of Medicine Director Medical Education Center Vice President Asociación de Sociedades Científicas Médicas de Chile Executive Secretary Agencia Acreditadora de Programas y Centros Formadores de Especialistas Médicos President Corporación Nacional Autónoma de Certificación de Especialidades Médicas Director Asociación de Sociedades Científicas Médicas
Canada (11)	<ul style="list-style-type: none"> Royal College of Physicians and Surgeons of Canada Faculty of Medicine, McGill University. Centre for Medical Education Mc Gill University 	<ul style="list-style-type: none"> President Royal College Physicians and Surgeons (RCPS) Chief Executive Officer RCPS International Regional Director RCPS Director, Continuing Professional Development Associate Director Senior Clinical Educators Director Centre for Medical Education Director Communications and Marketing Program Manager Residency Medical Education
Mexico (8)	<ul style="list-style-type: none"> Escuela de Medicina Tecnológico de Monterrey Universidad de Monterey Universidad Nacional Autónoma de México 	<ul style="list-style-type: none"> Dean School of Medicine Director of Academic Development Vice-Chancellor for Health Sciences Postgraduate director School of Medicine Doctor in Educational Innovation Head of Medical Specialties School of Medicine Program Director Internal Medicine Senior Clinical Educators
Colombia (3)	<ul style="list-style-type: none"> Universidad de los Andes Pontificia Universidad Javeriana Bogotá Universidad ICESI – Cali 	<ul style="list-style-type: none"> Dean School of Medicine Postgraduate Directors School of Medicine
Argentina (1)	<ul style="list-style-type: none"> Dirección general de docencia, investigación y desarrollo profesional. Sociedad Argentina de Pediatría 	General coordinator of pediatric residences, Ministerio de Salud, Buenos Aires, Argentina.
Brasil (1)	<ul style="list-style-type: none"> Pontificia Universidade Católica do Rio de Janeiro 	<ul style="list-style-type: none"> Senior Coordinator Medicine Department
Ecuador (1)	<ul style="list-style-type: none"> Pontificia Universidad Católica del Ecuador 	<ul style="list-style-type: none"> Vice Dean Faculty of Medicine

Table 2. Characteristics of the recertification systems in Canada and selected Latin American countries

	Canada	Mexico	Argentina	Brazil	Chile	Colombia	Ecuador
Certification of Specialists	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Legal Framework for Recertification or Maintenance of Certification (MOC)	Yes MOC Program (year 2000)	Yes General law of Health Ref/2011	Yes Law 23.873/90	Yes Res CMF 1.772/05	Yes Law 19.937/04	Yes Law 1.164/2007	No
Regulatory Status: Autonomy from Government Agencies / Minister of Health	Yes	Yes	Yes	Yes	Yes	Yes	No
Main responsible Agency /Institution (Foundation Date)	RCPS/CFP (1929)	CONACEM (1995)	CRAMA (1994)	CFM (2007)	CONACE M (1984)	CAMEC (2011)	SENESCYT (2010)
Valid Period Cicle	5 years	5 years	5 years	5 years	5 years	5 years	N/A
Mandatory Status	Yes	No	No	No	No	No	N/A
Implementation	Full	Partial	Initial	Initial	Not started	Not started	N/A
Strategies/Criteria							
Continuing Education	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Test Examination	No	Yes	No	No	No	Yes	N/A
Clinical Performance Assessment	Yes	No	Yes	No	Yes	Yes	N/A

¹RCPS: Royal College of Physicians and Surgeons, Canada

²CFP: College of Family Physicians, Canada

³CONACEM: Comité Normativo Nacional de Consejo de Especialidades Médicas, Mexico

⁴CRAMA: Comité de Recertificación de la Asociación Médica Argentina

⁵CFM: Conselho Federal de Medicina, Brazil

⁶CONACEM: Consejo Nacional de Especialidades Médicas, Chile

⁷CAMEC: Consejo colombiano de acreditación y **recertificación** médica, de especialistas y profesiones afines, Colombia

⁸SENESCYT: Secretaria de Educación Superior Tecnología Ciencia y Tecnología, Ecuador

