

2010-2017 Evaluation and Accreditation of Cardiology Residencies.

Evaluación y acreditación de residencias de cardiología. Años 2010-2017

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ABSTRACT

Background: The National Ministry of Health and Social Development implements a National System of Accreditation of Health Team Residencies. The Argentine Society of Cardiology (SAC) participates as an evaluation entity of the medical residency programs in cardiology.

Objective: The purpose of this study is to present the results of the evaluation process and accreditation of cardiology residencies.

Methods: This was a documentary review of the reports submitted by the peer reviewers appointed by SAC and the opinions of the Ministry of Health in the Official Gazette between 2010 and 2017.

Results: Thirty-seven reports prepared by peer reviewers were analyzed and strengths and weaknesses were identified. Outstanding strength: continuous supervision received by residents. Weakness: time spent on outpatient care. Twenty-eight Ministry of Health opinions were reviewed and the most frequent recommendations were analyzed: incorporation of transversal contents; regulation of number of on-call duties, their duration and the organization of the rest period after on-call shifts.

Conclusions: Although both institutions seem initially to have different criteria when accrediting a health service training program, in reality, they have complementary views which coincide in the following aspects: importance of supervision; need to systematize the evaluation of residents' performance; and need to increase the number of scientific works with resident participation. A high degree of coincidence was also obtained between SAC's suggestion and the opinion of the Ministry of Health, in relation to the category and years of accreditation that each evaluated program deserved.

Key words: Internship and Residency – Accreditation – Cardiology – Argentina

RESUMEN

Introducción: El Ministerio de Salud y Desarrollo Social de la Nación implementa un Sistema Nacional de Acreditación de Residencias del Equipo de Salud. La Sociedad Argentina de Cardiología (SAC) participa como entidad evaluadora de los programas de residencias médicas en cardiología.

Objetivo: El propósito del presente trabajo es presentar los resultados del proceso de evaluación y acreditación de residencias de Cardiología.

Material y métodos: Revisión documental de los informes elevados por los pares evaluadores designados por la SAC y de los dictámenes del Ministerio publicados en el Boletín Oficial entre 2010 y 2017.

Resultados: se revisaron 37 informes elaborados por los pares evaluadores, se identificaron fortalezas y debilidades. Fortaleza destacada: supervisión continua recibida por los residentes. Debilidad: escaso tiempo dedicado a la atención de pacientes ambulatorios. Se revisaron 28 dictámenes del Ministerio, se analizaron las recomendaciones más frecuentes: incorporación de contenidos transversales, regulación de la cantidad de guardias, de su duración y de la organización del descanso posguardia.

Conclusiones: Si bien a primera vista parece que ambas instituciones tienen distintos criterios a la hora de acreditar un programa de formación en servicio, en realidad, se trata de miradas complementarias que coinciden en los siguientes aspectos: importancia de la supervisión, necesidad de sistematizar la evaluación del desempeño de los residentes y necesidad de incrementar la producción de trabajos científicos y la participación de los residentes en aquellos. También se encontró un alto grado de coincidencia entre la sugerencia de la SAC y el dictamen del Ministerio en relación con la categoría y los años de acreditación que merecía cada programa evaluado.

Palabras Clave: Internado y residencia – Acreditación – Cardiología – Argentina

INTRODUCTION

At present, there are multiple ways to become recognized as a specialist in Cardiology. (1) In the medical community, there is a broad consensus in recognizing medical residencies as the best system for the training of specialists. There are several regulations that control the operation of residencies (Table 1).

In 1979 the purpose of a residency was defined in these terms:

- [...] it is to complement the integral education of the professional training him in the responsible, efficient and ethical performance of the corresponding disciplines through the adjudication and supervised personal execution of actions of progressive complexity and responsibility.
- The residencies will be accomplished by means of an annual scholarship with a modality and remuneration to be established by the governing body of the system, under a regime of full-time activity and with exclusive dedication.

It was not until 1990, that the article 21 of the law 17132/1969 was modified and the physician became accepted as a specialist when he has a "certificate of approval of complete professional residency (with a duration of no less than 3 years) extended by a public or private institution approved for that purpose by the enforcement authority and under the conditions that are regulated". Resolution 450/2006, which creates the National Accreditation System of Health Team Residencies, recognizes several previous attempts to regulate the operation of residencies and to install a system for their accreditation, but due to several reasons, these processes failed to be established and prosper.

The current regulation establishes the following:

- Health team residencies constitute the best system for the postgraduate training of health specialists [...] female residents can complete their training process when the extension of licenses related to pregnancy, childbirth and puerperium prevent fulfilling the academic requirements [...]. Without disregarding the emergency room as a relevant area to learn emergency management, the participation of the resident in that area must respond to training principles, limiting its number and including a rest period after on-call shifts, to prevent care errors attributable to fatigue [...]. Health team residencies will only be financed in those jurisdictions or institutions whose accreditation processes have

been duly completed or whose training programs have been approved by the National Department of Human Resources and Occupational Health.

The accreditation of residencies is a process of harmonization of minimum criteria, whose purpose is that all residencies in the country offer equivalent training opportunities. To that end, work is carried out on the development and application of standards according to the specialty and taking into account the local characteristics.

Provision 104/2015 establishes the new National Standards for the Accreditation of Health Team Residencies. The evaluation must consider the following areas: 1) pedagogical proposal (residency program with transversal contents); 2) development of the training program (rotations, number and variety of pathologies, number of on-call duties, access to inter-consultations, integration of theoretical-practical activities, development of research projects, resident performance evaluation system); 3) requirements for the operation of the residency (teaching human resources for supervision and specific equipment for the specialty).

The Ministry of Health summoned scientific societies, professional associations and universities to collaborate in the evaluation processes. (2) The Argentine Society of Cardiology (SAC) was postulated as an evaluating entity and was incorporated into the single registry in 2009. In 2016, the credentials were renewed and it is currently the evaluating entity of cardiology residencies until 2020.

In 2012, a working group in the SAC's Teaching Area drafted a preliminary document on the training of cardiologists. This document was submitted for consideration to several SAC members and later published in the Argentine Journal of Cardiology. (3) From this document, the Teaching Area elaborated a reference framework that the SAC presented to the National Department of Human Resources. The document was reviewed by representatives of professional and academic associations and submitted to the Federal Health Council (COFESA). Finally, that document was formalized as the Reference Framework for the Training of Specialists in Cardiology. (4)

The collaborative process between SAC and the Ministry of Health of the Nation implies several instances:

- a) The residency formally requests the accreditation from the Ministry of Health of the Nation. From

Law 22127/1979	Creates the National System of Health Residencies.
Ley 17132/ 1967	Regulates the practice of medicine, odontology and collaborative activities. Regulates the use of professional degrees or certificates.
Law 23873/1990	Authorizes graduates of complete residencies to use the title and advertise as specialists.
Res. 450/2006	Creates the National System of Accreditation of Health Team Residencies.
Res. 1342/2007	Regulates the National System of Accreditation of Health Team Residencies.
Res. 1993/2015	Establishes the National Regulation of Residencies.
Prov. 104/2015	Establishes the National Evaluation Instrument and the National Accreditation Standards.

Table 1. Normative basis. Residency system

the National Department of Human Resources, SAC is informed that it has to evaluate that residency.

- b) A form (known as the Evaluation Instrument) is sent from the SAC to the residency, in which the director of the residency must register a large amount of data regarding the available resources and the residency operation, together with the residency program.
- c) SAC names peer reviewers, cardiologists with a well known record, preferably from public and private areas, who, after reviewing the documentation presented by the residency, visit the institution, verifying the conditions and the teaching resources of the service to function as a training entity of physicians to become specialists in Cardiology.
- d) The visiting cardiologists write a report, in which they summarize the strengths and weaknesses of the residency program. The report ends with a proposal/suggestion of three possible categories and years of accreditation: A (4-5 years), B (3 years) and C (2 years).
- e) SAC submits all the documentation to the National Department of Human Resources: the Evaluation Instrument form, the residency program, the residents' surveys and the report of the peer reviewers. In the National Department of Human Resources, all this documentation is reviewed and an accreditation report is drawn up, which, in all cases, ends with a series of recommendations on changes needed to improve the training of specialists. Finally, the opinion is published in the Official Gazette.

The purpose of this paper is to present the results of the evaluation and accreditation process of Cardiology residencies from 2010 to the end of 2017. The results are expressed in terms of the strengths and weaknesses identified, and of recommendations for improvement.

METHODS

This study is a documentary review of the archives available in SAC's Teaching Area, on the website of the Ministry of Health and in the Official Gazette of the Argentine Republic. (www.boletinoficial.gob.ar).

The residency programs, SAC's reports prepared by the peer reviewers and the opinions of the Ministry of Health published in the Official Gazette from 2010 to 2017 were

reviewed.

Strengths and weaknesses were identified in the peer reviewers' reports and recommendations for improvement were established in the opinions published in the Official Gazette. Once the variables were identified, the frequency with which they appeared in relation to the total number of cases was determined.

The percentage of coincidences and discrepancies between the accreditation suggested by SAC and that granted by the Ministry of Health was established.

RESULTS

From 2010 to the end of 2017, SAC conducted 41 residency evaluations: 37 residencies were evaluated for the first time (only 28 of these have, to date, the Ministry of Health opinion) and 4 residencies were evaluated for the second time, since, as the initial accreditation had expired, they were submitted for reaccreditation.

The reports and opinions of the 4 reaccreditations were compared.

The following results were found in the 37 residency evaluation reports (Tables 2 and 3).

It should be noted that the low frequency of some weaknesses (for example, the lack of a rest period after on-call shifts) does not mean that the rest of the residencies did comply with this condition, but that in the reports of peer reviewers this topic was not mentioned.

The recommendations for improvement were analyzed in the accreditation reports of the Ministry of Health for the 28 residencies evaluated for the first time with the following results (Table 4).

It was found that in the second evaluation of the 4 residencies submitted for reaccreditation, they had all complied with the recommendations of the Ministry of Health and had achieved a reaccreditation in the A category for 4 years. The main changes introduced were the development of transversal contents, the production of research projects and the reduction of working hours.

Regarding the degree of overlapping between evaluation reports and opinions of the Ministry of Health, it was found that in 86% of the cases there were coincidences in the category and in the years of accreditation suggested by the peer reviewers and those assigned in the opinion of the Ministry of Health. Only in 4 cases there was discrepancy and it was minimal (approximately one year more or less).

Table 2. Strengths of the residencies mentioned in the cardiologists' reports (peer reviewers)

Strengths	Frequency (% of mentions)
Good monitoring of resident performance	56.7
Opportunities to perform high complexity procedures	43.2
Adequate teaching profile of the physicians in charge of the service.	40.5
Systematic theoretical training activities	40.5
Satisfaction of the residents with the learning contributions provided by the service.	35.1

Weaknesses	Frequency (% of mentions)
Limited time dedicated to the care of outpatients (outpatient facilities) and/or practices in the first level of care.	32.4
Limited production of scientific works	29.7
Limited systematization of the resident's performance evaluation.	27
Limited qualified staff to supervise the work of the residents	21.6
Lack of a rest period after on-call shifts	18.9

Table 3. Weaknesses of the residencies mentioned in the cardiologists' reports (peer reviewers)

Conditions/activities to be improved	Frequency (% of mentions)
Incorporate the teaching of transversal contents.	70.3
Distribute the number of on-call duties equitably and implement a rest period after on-call shifts.	58
Systematically evaluate the resident's performance.	40.5
Formalize written agreements with other institutions for external rotations.	37.8
Residents should keep a record of practices and procedures performed, with the supervisor's signature.	32.4
Adapt the working day to what is established by the current regulations	29.7
Promote the production of scientific works with resident participation.	29.7

Table 4. Conditions mentioned in the accreditation reports of the Ministry of Health

DISCUSSION

There is a coincidence between the reviewers' remarks and the Ministry of Health recommendations in the following points: importance of supervision, the need to systematize the evaluation of residents' performance and the need to increase the production of scientific works with resident participation.

The difference becomes evident in relation to teaching of transversal contents, which is the most frequent recommendation in the Ministry of Health opinions and which did not appear in any of the peer reviewers' reports in the first-time evaluations. In the four second-time evaluations -reaccreditation-, this topic does appear in the cardiologists' reports.

Another difference is the reference to the level of satisfaction of the residents: only 35% of peer reviewers' reports mention the satisfaction of the residents with the learning opportunities they have in their service, while in the Ministry of Health opinions this point is always mentioned.

Another source of information on the conditions of cardiology residencies and the quality of the training process for specialists are the opinion surveys that are periodically carried out by the National Council of Cardiology Residents (CONAREC) answered by residents from all over the country. The last survey, published in 2017 (5), was answered by 390 residents of 19 provinces. In 54.2% of cases the respondents were doing their residency in private centers. Among the residencies in public institutions, 46.9% were provincial centers, 38.4% municipal and 14.7% national hospitals. Overall, 53% of residents say they are satisfied with the training opportunities they have in the

service in which they are doing their residency.

The results of the CONAREC survey refer to:

- Educational healthcare activity: only 58% of residents completed 1 year of residency in internal medicine; 50% do not have permanent supervision; 36% do not have the possibility of consulting with a staff physician in an active or face-to-face manner.
- Academic activity: 79.1% of residents stated that their center had a residency program, but only 58.4% admitted knowing about it. More than half of the residents said that they were taking an advanced course or university degree simultaneously with the residency.
- Working conditions: 69.8% of participants worked more than 60 hours a week and 60.5% said that they had other jobs aside from the residency.

The authors of the CONAREC survey conclude that no substantial differences were observed between the characteristics of public and private institutions.

A study conducted to evaluate the educational environment in cardiology residencies (6), used the PHEEM questionnaire (Postgraduate Hospital Educational Environment Measure) developed by S. Roff, S. McAleer and A. Skinner, which is a specific instrument to evaluate the educational environment in the hospital setting. One hundred and forty-eight residents (71 residents of public institutions, 75 of private institutions) of 31 hospitals in the City of Buenos Aires and Greater Buenos Aires participated in the survey. The questionnaire has 40 statements and revealed the following:

- According to what was answered in 15 of them (37.5% of the questionnaire), there are no differ-

ences between public and private institutions in terms of tolerance, absence of discrimination by gender or race, capacity of the chief resident and older residents to act as tutors, high level of demand, poor feedback and lack of “protected” time to study within the weekly work schedule.

- According to what was answered in 25 of them (62.5% of the questionnaire), significant differences were found that indicate better conditions for learning in private residencies. The differences are related with the possibility of having a good clinical supervision at all times, with sanitation and meeting/rest room conditions for the on-call physicians, with the feeling of physical safety inside the hospital and with sufficient number of consultations and studies for learning.

The results of the CONAREC survey, the evaluation of the educational environment and the reports of the peer reviewers agree that only half of the residents have adequate supervision, which is the main teaching strategy in a service training modality.

It should be remembered that the conditions and equipment of a healthcare service contribute to the quality of care received by the patients, and that there is no good training program when the quality of care is poor.

Limitations

The diversity and the high level of subjectivity of the evaluation reports are acknowledged as a limitation of this work. The comparison was particularly difficult, since peer reviewers recorded and/or emphasized different dimensions. The limited number of public and private institutions (11 and 26, respectively) did not justify a statistical analysis of the differences between them; this study would remain pending for another opportunity, with a greater number of cases.

CONCLUSIONS

When analyzing the documents, it is noted that the conditions most frequently highlighted by the Ministry of Health are not considered in most of the peer

reviewers' reports. The Ministry of Health recommendations are aimed at preserving the resident's health and the patient's safety and also focus on the need to document practices and procedures carried out.

The observations of peer reviewers highlight the availability of resources and the supervision of the resident's activities.

Despite the different views and emphases, there is a coincidence in the category and years of accreditation suggested by SAC and granted by the Ministry of Health. The conditions “observed and recorded” by SAC and the Ministry of Health do not represent different models or alternative options, but complementary views. Both must be part of a good training program.

With the intention of overcoming the difficulties due to the subjectivity of the observers, a checklist has been drafted by SAC's Teaching Area to systematize the observation during the visit to the residencies, which will be put into practice in the next evaluations.

Conflicts of interest

None declared. (See authors' conflicts of interest forms on the website/Supplementary material).

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