

The External Evaluation Report of
University of Medicine and Pharmacy "Carol Davila" of Bucharest (**IOSUD**)

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I. Introduction¹

In this chapter, the following shall be summarized:

- the context in which this external evaluation report was drafted (**the type of evaluation, the period of the evaluation visit, the composition of the Experts Committee**, etc.);
- details about the institution organizing the doctoral studies (number of Doctoral Schools, number of students, institutional context, short history, etc.);

I was appointed as a Foreign External Evaluator for the Romanian Agency for Quality Assurance in Higher Education (ARACIS) and invited to join the evaluation team for periodical external evaluation of the University of Medicine and Pharmacy "Carol Davila" of Bucharest (UMF CD). This report is drafted based on a periodical external evaluation of the University of Medicine and Pharmacy "Carol Davila" of Bucharest organizing doctoral study programs (IOSUD). The evaluation of the institution was carried out under the terms of Article 132 para. (1) of Law No 1/2011, with subsequent amendments and additions, based on the provisions of Art. 13 let. a) - c) of the Government Emergency Ordinance No 75/2005 on the Quality Assurance of Education, approved by Law No 87/2006, with subsequent amendments and supplements.

Evaluation was carried out as a hybrid mode. The remote evaluation period of UMF CD, in which I participated as an international expert, took place from 25 to 29 October 2021. The Evaluation director was Prof. Radu Oprean from Universitatea de Medicină și Farmacie „Iuliu Hațieganu” din Cluj-Napoca. The Coordinator of the IOSUD committee was Prof. Liliana Marcela Rogozea from Universitatea „Transilvania” din Brașov. Assoc. Prof. Sergul Duygulu (me) was the international expert from Hacettepe University, Alexandra-Simona Zamfir was PhD student expert from Universitatea de Medicină și Farmacie „Grigore T. Popa” din Iași and Prof. Monica Hăncianu from Universitatea de Medicină și Farmacie „Grigore T. Popa” din Iași.

The evaluation process started on Monday at 9.00 am (25/10/2021) with a preliminary online meeting to prepare and harmonize evaluation steps, in hybrid mode, of doctoral study domains and IOSUD. I have

¹ Each time when applicable the information shall be presented genderwise

participated in all planned meetings with the team during the remote evaluation. The meetings were held with the institution's representatives and the Council for Academic Doctoral Studies (CSUD), the director of CSUD/ directors of doctoral schools, and the team who drafted the internal evaluation report, IOSUD graduates on Monday (25/10/2021). The online meetings were held with the members of the Ethics Commission, Commission for Quality Evaluation and Assurance (CEAC) members/ Quality Assurance Department, IOSUD Academic Staff, and Ph.D. Students on Tuesday (26/11/2021). On Wednesday (27/11/2021), online meetings were held with Directors/ persons in charge of the research centers/laboratories within IOSUD, Doctoral University Studies Council (CSUD), and with members Doctoral Schools Council (CSD members), and employers of doctoral graduates. A technical meeting was held to identify specific issues that need to be clarified during the on-site visit on Wednesday. On Thursday (28/11/2021), IOSUD evaluation activities continued independently. On Friday (29/11/2021), an online meeting was held for the conclusions. The last meeting was held with representatives of the institution under review to discuss the conclusions of the evaluation process and the main recommendations. The online evaluation process was finished on Friday, October 29. The evaluation team director and coordinator carried out the on-site visit of IOSUD. The evaluation process was conducted in an open and collegial manner.

Details about the institution organizing the doctoral studies (number of Doctoral Schools, number of students, institutional context, short history, etc.);

"Carol Davila" University of Medicine and Pharmacy in Bucharest is a state higher education and research institution, of public interest, with legal personality, integrated with the national higher education system, which provides university training in the field of medical and pharmaceutical sciences. The University is the oldest University of Medicine and Pharmacy in Romania. The establishment of the "National School of Medicine and Pharmacy" was approved in 1858 - on August 16, through Office no. 1092, and the Faculty of Medicine was established in 1867. In 1948, the Bucharest Institute of Medicine and Pharmacy was established. In 1991, the current title was adopted, the University of Medicine and Pharmacy "Carol Davila" Bucharest.

"Carol Davila" University of Medicine and Pharmacy in Bucharest (UMF "Carol Davila") is accredited by Law as a university with a high degree of trust, has autonomy, in accordance with the provisions of the Romanian Constitution, education legislation, and the UMF Charter "Carol Davila" and operates under Law no. 1/2011, independent of any ideological, political or religious interference.

The mission assumed by UMF "Carol Davila," under the National Education Law no. 1/2011, is advanced research and education, as well as to generate and transfer knowledge to society. The scientific research activities carried out within the UMF "Carol Davila" aim at excellence and are in a permanent dynamic, these being governed by the orientation towards ethics, performance, and quality. Currently, UMF "Carol Davila" is positioned in the top Shanghai 2021 in the range 151-200 in the field of "Clinical Medicine," the best ranking of a university in Romania, also UMF "Carol Davila" is present in the University Ranking by Academic Performance (URAP) for the year 2020-2021, on position 944, the 2nd place among all the Universities in the country and the first ranked among the profile universities at the national level.

Within the "Carol Davila" University of Medicine and Pharmacy of Bucharest, the quality assurance activity is carried out according to the legislation in force, being organized and monitored by the Quality Management Department, with two compartments: the Quality Management Office and the Academic Quality Assessment Office.

The "Carol Davila" University of Medicine and Pharmacy in Bucharest is accredited as an Organizing Institution for University Doctoral Studies (IOSUD) with three doctoral fields, Medicine, Dentistry and Pharmacy according to Government Decision no. 567/2005 regarding the organization and development of doctoral university studies, National Education Law no. 1/2011, Government Decision no. 595/2015 regarding the fields and programs of accredited master's university studies and the maximum number of



students that can be enrolled in the academic year 2015-2016, as well as the fields of doctoral university studies within the higher education institutions.

The Council for Doctoral University Studies provides the management of university studies at IOSUD. Within the IOSUD - UMF "Carol Davila" (IOSUD - UMFCD), the *UMF "Carol Davila" Doctoral School* operates, which manages the three doctoral fields. The doctoral school from IOSUD - UMFCD aims to generate and transfer knowledge to society by training for research at the performance level of the doctoral student. The objectives of the Doctoral School are focused on the development at the level of the Doctoral School of research activity with international visibility; strengthening the quality assurance system, including compliance with the principles of ethics in scientific research; increasing the degree of internationalization of the doctoral university study program; increasing the degree of digitization of activities.

Within the Doctoral School, 271 doctoral supervisors work (219 in the field of Medicine, 21 in the field of Dentistry, and 31 in the field of Pharmacy). According to an international evaluation report, in the last 5 years, 736 doctoral titles have been awarded (The field of Medicine: 633, Dental Medicine:53, Pharmacy domain:50), 1268 doctoral students have been enrolled.

II. Methods used

Evaluation methodology was based on domains, criteria, standards, and performance indicators for the periodical external evaluation of IOSUD to support the improvement of IOSUD. The used methods and tools in the external evaluation process, before and during the evaluation visit, are given below:

Before evaluation:

- The analysis of the internal evaluation report of the IOSUD and its Annexes;
- The analysis of data and information available on the IOSUD/Doctoral School(s) website

During evaluation:

- Meeting/discussions with doctoral students in the IOSUD;
- Meeting/Discussions with the graduates of the IOSUD;
- Meeting/Discussions with employers of the graduates of the IOSUD;
- Meeting/Discussions with the school officials of the IOSUD;
- Meeting/Discussions with the Doctoral advisors affiliated with the IOSUD;
- Meeting/discussions with the representatives of the various structures of the IOSUD/Doctoral School/Doctoral Schools in which the doctoral study domain under review is operating;
- The Council of the University Doctoral Studies (CSUD), The Council of the Doctoral School(s) (CSD), the Quality Assessment and Assurance Commission, the Quality Assurance Department, the Ethics Commission (including with the student representatives of these structures);

III. Analysis of ARACIS's performance indicators²

Domain A. INSTITUTIONAL CAPACITY

Under Domain A. Institutional Capacity, IOSUD's administrative structures and financial resources, research infrastructure, quality of human resources were analyzed. There were no unmet criteria and performance indicators in this domain. The institution has the necessary administrative structures, financial resources, and quality human resources to achieve its corporate vision, mission, goals, and

² Each time when applicable the information shall be presented genderwise



objectives. However, the criteria and performance indicators that are partially met in this area and the recommendations regarding the subject are explained in detail below.

Standard A.1.1. The institution organizing doctoral studies (IOSUD) has implemented the effective functioning mechanisms provided for in the specific legislation on the organization of doctoral studies.

General description of the standard analysis:

IOSUD)- has implemented the effective functioning mechanisms provided for in the specific legislation on the organization of doctoral studies. According to the internal evaluation report of the institution and the information obtained as a result of the online meetings held in the institution. A detailed analysis of these performance indicators is given below.

Performance Indicator A.1.1.1. The existence of specific regulations and their application at the level of the IOSUD, respectively at the Doctoral School(s):

(a) the internal regulations of the administrative structures (the institutional regulations for the organization and conduct of doctoral studies programs, the regulation(s) of Doctoral School(s);

(b) the Methodology for conducting elections at the level of the Council of University Doctoral Studies (CSUD), respectively at Doctoral School(s) including elections by the students of their representatives in CSUD/Council of the Doctoral School (CSD) and the evidence of their conduct;

c) the Methodologies for organizing and conducting doctoral studies for the admission of doctoral students, for the completion of doctoral studies);

d) the existence of mechanisms for recognizing the status of a Doctoral advisor and the equivalence of the doctoral degree obtained abroad;

e) functional management structures CSUD/Council of the Doctoral School with evidence of the regularity of meetings;

f) the contract for doctoral studies;

g) internal procedures for analyzing and approving proposals about doctoral study programs based on advanced academic studies.

- Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The organization and development of doctoral study programs within IOSUD UMF "Carol Davila" are regulated under "The regulation of the Doctoral School" applied in revised form in 2018.

The methodology for designating management structures and positions at CSUD and the Doctoral School is regulated by the "Methodology for appointing CSUD members." The regulation defines the appointment process of CSUD (CSUD director, CSUD members leading doctorates, faculty members,

and doctoral student) and the Doctoral School Council (CSD director, members leading doctorates, members from and outside the Doctoral School, and doctoral student). The CSUD and CSD activities are regulated by GD 681/2011 and the provisions of the Institutional Regulation.

The organization and development of doctoral studies are organized based on the Admission Methodology, with three sections: admission of Romanian candidates and citizens of the European Community, admission of EU third-country candidates, and admission of Romanian candidates everywhere. The completion of doctoral studies is organized based on the Methodology for evaluating doctoral. The Methodology for developing the interim reports is regulated by the document Guide to support the project and reports, and evaluating the doctoral thesis is regulated by order of the Minister of Education and Research no. 5229/2020.

Methodology for recognizing the quality of doctoral supervisor and doctoral recognition methodology is the mechanisms of IOSUD-UMFCD for recognizing the quality of doctoral supervisor for the equivalence of doctorate obtained in other states.

The functional management structures CSUD/Council of the Doctoral School are created based on GD 681/2011 and the provisions of the Institutional Regulation. These regulations also include regulations regarding the holding of regular meetings.

After enrollment, the doctoral student signs with the University a contract for doctoral studies. An example of this contract was given as Annex. The contract includes all the provisions of Art. 23. of GD 681/2011, doctoral university Study Code. There are internal procedures for analyzing and approving proposals about doctoral study programs based on advanced academic studies (Doctoral School Regulations - Section 4, art. 7).

The indicator is fulfilled.

Performance Indicator A.1.1.2. The doctoral school' Regulation includes mandatory criteria, procedures, and standards binding on the aspects specified in Article 17, paragraph (5) of the Government Decision No. 681/2011 on the approval of the Code of Doctoral Studies with subsequent amendments and additions.

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The institutional regulation and the regulation of the Doctoral School include criteria, procedures, and mandatory standards for the aspects specified in Art. 17 para. (5) of the Code of doctoral studies, approved by Government Decision no. 681/2011, with subsequent amendments and completions, as follows:

- acceptance of new doctoral supervisor members, as well as regulations regarding the way in which a doctoral supervisor can be withdrawn as a member of the doctoral school: Section 6. Doctoral supervisor - art. 2 and Art. 4;
- the mechanisms by which decisions are taken regarding the training program's appropriateness, structure, and content based on advanced university studies: Section 4. Regulations of the Doctoral School, Art. 7;

- the procedures for changing the doctoral supervisor of a particular doctoral student and the conflict mediation procedures: Section 6. The doctoral supervisor, art. 10, respectively section 7. The doctoral student, Art. 5;
- the conditions under which the doctoral program may be interrupted: Section 5. Organization and development of doctoral studies, Art. 18;
- ways to prevent fraud in scientific research, including plagiarism: Section 4. Regulations of the Doctoral School, Art. 10;
- ensuring access to research resources: Section 5. Organization and development of doctoral studies, Art. 11, para. (4);
- the frequency obligations of the doctoral students: Section 5. The organization and development of the doctoral university studies, Art. 6.

The indicator evaluated as fulfilled

Performance Indicator* A.1.1.3³. *Doctoral schools included in IOSUD are organized as disciplinary or interdisciplinary disciplines/thematic, according to Article 158, paragraph (7) of the Law of National Education No. 1/2011 with subsequent amendments and additions.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The doctoral school included in IOSUD is organized on disciplines or disciplinary and interdisciplinary topics, in accordance with Art. 158, para. (7) of the National Education Law no. 1/2011 with subsequent amendments and completions. The list of doctoral supervisors presented on the institution's website, including the specialty of the doctoral supervisor and the information regarding topics proposed by the doctoral supervisors, were provided.

The indicator was evaluated as fulfilled.

Standard A.1.2. The IOSUD has the logistical resources necessary to carry out the doctoral studies' mission.

According to the internal evaluation report of the institution and the information obtained as a result of the online meetings held in the institution, it was determined that the standard was met. The IOSUD has the logistical resources necessary to carry out the doctoral studies' mission. A detailed analysis of the performance indicators and related recommendation/s are given below.

Performance Indicator A.1.2.1. *The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic backgrounds.*

³ The indicators marked with an asterisk (*) hold a special status, referring exclusively to the evaluation of doctoral schools, as per Article 12 from the annex No.1 of the Order of the minister of education No. 3651/12.04.2021 approving the Methodology for evaluating university doctoral studies and the system of criteria, standards and performance indicators used in the evaluation. In case they are not fulfilled, the Agency extends a period of maximum 3 years to IOSUD to correct the respective deficiencies.

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The institution has no IT system dedicated to monitorization of the progress of doctoral students (articles developed and published in PubMed indexed journals and Web of Science Core Collection / Emerging Source Citation Index, participation in national and international conferences, mobility/internships for doctoral students, research grants in which doctoral students participate in team, etc.)

However, doctoral students' information (personal identification data, demographic data, doctoral supervisor, year of admission, form of funding, academic path - periods of interruption, extension, date of the doctoral thesis, doctoral degree confirmation order) are entered in - an EXCEL datasheet (protected by a password) and shared through the secure network of UMFCU in the Rector's Office, only for people with management positions in doctoral studies and for the staff of the secretary office. It seems that there are some measures to keep the files constantly updated and prevent data loss in case of a virus or in case of compromising one of the systems. University revealed that from the 2021-2022 academic year, they took steps to acquire a program for managing the schooling of doctoral students and a platform for enrolling students in doctoral studies.

Recommendations.

It is recommended to create a functional IT infrastructure for monitoring the doctoral students and create mechanisms for evaluating its effectiveness.

The indicator was evaluated as partly fulfilled.

Performance Indicator A.1.2.2. *The existence and use of a software program and evidence of its use to verify the percentage of similarity in all doctoral theses.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

IOSUD of UMFCU indicated that because of the Order of the Minister of National Education and Scientific Research no. 3482/2016 and the implementation of the procedure at IOSUD UMF "Carol Davila, all doctoral theses are verified with a similarity program in order to verify the originality of the paper. They use a similarity program that can be accessible at www.sistemantiplagiat.ro. The program is included in the list of programs recognized by CNATDCU according to OMEC no. 3485/2016 and in the list of programs recognized by CNATDCU according to OMEC no. 5229/2020. The program is purchased on a contract basis. All generated similarity reports are included in the doctoral file and are available on the REI platform. According to the internal evaluation report, **802** verifications were performed for the doctoral theses supported: 685 verifications for the theses in the field of Medicine, 63 verifications for the theses in the field of Dentistry, and 54 verifications for the theses in the field of Pharmacy in the period 2016-2020. Additionally, the acceptable similarity levels are determined and shared with relevant parties.

The indicator was evaluated as fulfilled.

Criterion A.2. Research infrastructure

Standard A.2.1. The IOSUD/doctoral schools have a modern research infrastructure to support the conduct of doctoral studies' specific activities.

According to the internal evaluation report of the institution and the information obtained as a result of the online meetings held in the institution, The IOSUD/doctoral schools have a modern research infrastructure to support the conduct of doctoral studies' specific activities, and it was determined that the standard was met. A detailed analysis of the performance indicators and related recommendation/s are given below.

Performance Indicator A.2.1.1. The IOSUD/the doctoral school(s) present proof of having rented adequate spaces for research activity specific to doctoral studies (laboratories, experimental fields, research stations, etc.)

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

UMFCD presents proof of possessing the necessary spaces and the material base necessary for developing the quality conditions of doctoral university studies. UMFCD has one central library, which was founded in 1857, housed in the Faculty of Medicine, and one library at the faculty of Pharmacy. UMFCD provided periodicals and books, manuals, treatises, copies of doctoral theses, and a summary of doctoral theses and audio-visual documents free of charge to its users, mainly students and teachers. Besides, libraries are organized with reading rooms, loan centers, and many branch libraries. The library also offers learning resources in electronic format, in its own databases and international databases. The library provides off-campus access.

The UMFCD benefits from "Carol Davila" University Publishing House, which successfully contributes to the editing of monographs, textbooks, and university courses. Under the auspices of the University, four journals are published, indexed in prestigious international databases: Medica - a Journal of Clinical Medicine, Romanian Journal of Ophthalmology, Journal of Surgical Sciences, Romanian Journal of Military Medicine, which include an appreciable number of published articles by Ph.D. students.

University revealed that they have 36 research infrastructures, equipped with modern equipment, which are registered in the ERRIS platform. 30 out of 36 of them are public. Ph.D. students benefit from the teaching and research infrastructure available at the university level (computers, specific software, equipment, laboratory equipment, library, access to international databases).

The indicator is fulfilled

Performance Indicator A.2.1.2. The IOSU / doctoral school(s) has/have collaboration agreements with higher education institutions, research institutes, research networks for joint partnerships, and access to

various research infrastructures; the offer for research services is presented publicly using a dedicated platform.

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

UMF "Carol Davila" revealed that UMFCDD provides hospital or other university based research facilities by partnership agreements (universitatea Politehnica din București, Institutul Național de Cercetare Dezvoltare pentru Fizică și Inginerie Nucleară „Horia Hulubei” - IFIN-HH, Academia de Studii Economice din București, Institutul Național de Cercetare Dezvoltare pentru Fizica Laserilor, Plasmei și Radiației – INFLPR, Institutul Național de Cercetare Dezvoltare în Informatică, Agenția Națională a Medicamentului și a Dispozitivelor Medicale, Universitatea din București,) to their PhD students.

The indicator is fulfilled

Performance Indicator A.2.1.3. *The IOSUD/doctoral school(s) proves that it is/are concerned with the permanent renewal of the research infrastructure to provide doctoral students access to updated research resources by applying to various funding competitions and using their own university resources for acquiring new research infrastructure.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

At IOSUD UMF "Carol Davila," great attention and concern are given to the renewal of the research infrastructure, both by applying in various competitions to finance the research infrastructure and by procurement for research infrastructure from IOSUD's revenues. It is seen that the institution also developed and implemented an institutional project to increase institutional performance and RDI competencies in the field of Health of the University of Medicine and Pharmacy "Carol Davila" Bucharest with a value of 4900000 lei, carried out between 18.10.2018 - 31.12.2020, aimed at consolidating top, emerging research directions in the field of health, training highly qualified specialists in emerging and related directions, integrating specialists in multidisciplinary research teams of excellence. The institution also highlighted that the research infrastructure and the professional development of doctoral students were researched through research internships, mobility internships, publication of research results. It was determined that acquisitions were made for the research infrastructure and from other research projects, but also the own revenues of UMF "Carol Davila." Fixed assets purchased in the last five years are highlighted in the inventory records and are given in Annexes.

The indicator is fulfilled

Criterion A.3. Quality of Human Resource

Standard A.3.1. At the level of each Doctoral School, there is sufficient qualified staff to ensure a quality educational process.

At the level of each Doctoral School, there is sufficient qualified staff to ensure a quality educational process. According to the internal evaluation report of the institution and the information obtained as a result of the online meetings held in the institution, it was determined that the standard was met. A detailed analysis of the performance indicators and related recommendation/s are given below.

Performance Indicator *A.3.1.1. *The share of Doctoral advisors coordinating simultaneously more than eight doctoral students but not more than 12 during their doctoral studies⁴ does not exceed 20%.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

At the doctoral level, it is seen that supervisors guides and evaluate the activity of the doctoral student within the doctoral studies program, according to the professional and University autonomy, following the exigencies of the doctoral studies program and respecting the professional interests of the doctoral student. At UMFC D, within the doctoral school, there are 217 doctoral supervisors working on the date of the report. 175 out of 217 (65%) meet the minimum standards for licensing provided by OMENCS no. 6129/2016. Two hundred fifty-two supervisors (93%) out of 217 presented at least five papers in journals with impact factor indexed in Web of Science, but also other achievements relevant to the field, such as patents. Within IOSUD CD currently in the medicine program, there is six Ph.D. supervisor who has 13 and more Ph.D. students in coordination (2,7%).

Recommendation:

Since the supervisors' numbers vary between and in disciplines, close attention should be given to all disciplines.

The indicator is fulfilled

Performance Indicator A.3.1.2. *At least 50% of all teaching/research staff involved in teaching/research activities related to training programs for advanced university studies or in individual research/art creation programs have a full-time employment contract for an indefinite period with the IOSUD.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

⁴ 3 years for the doctoral university studies with the duration stipulated at Article 159, paragraph (3), respectively 4 years for the doctoral university studies with the duration stipulated at Article 174, paragraph (3) of the Law of national education No.1/2011 with subsequent amendments and additions, with additional extension periods approved as per Article 39, paragraph (3) of the Code of doctoral studies approved by the GD No. 681/2011 with subsequent amendments and additions.



According to the internal evaluation report, UMFC D 217 out of 271 doctoral supervisors are holders, either with a contract of indefinite duration (148 supervisors, 55% of total supervisors) or in the extension of the activity as holders (69 supervisors). Additionally, the institution provided the list of disciplines and their managers for the last five academic years who qualify for the full position in Annex. A.3.1.2-2. However, there are fewer doctoral supervisors in pharmacy and dentistry programs compared to Medicine and a low rate of increase in the number of advisors yearly base.

Recommendation

Increasing the number of supervisors in the pharmacy and dentistry programs is recommended.

The indicator is partly fulfilled

Domain B. EDUCATIONAL EFFECTIVENESS

Under Domain B. Educational Effectiveness; The number, quality, and diversity of candidates enrolled for the admission contest, the content of doctoral programs, the results of doctoral studies and procedures for their evaluation, quality of doctoral theses were analyzed through the internal evaluation report and external evaluation via remote meetings. There were no unmet criteria and performance indicators in this domain. However, the criteria and performance indicators that are partially met in this domain and the recommendations regarding the subject are explained in detail below.

Criterion B.1. The number, quality, and diversity of candidates enrolled for the admission contest

Standard B.1.1. Candidates admitted to doctoral studies demonstrate academic, research, and professional performance and are diversified as social representation and by gender.

According to the internal evaluation report of the institution and the information obtained from the online meetings held in the institution, it was determined that candidates admitted to doctoral studies demonstrate academic, research, and professional performance and are diversified as social representation and by gender and, the standard was met. A detailed analysis of the performance indicators is given below.

Performance Indicator *B.1.1.1. *Admission to doctoral study programs is based on selection criteria including previous academic, research, and professional performance, their interest in science or arts/sports research, publications in the domain, and a proposal for a research subject. Interviewing the candidate is compulsory as part of the admission procedure.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The doctoral admission and selection process has been renewed in the last five academic years. The admission process depends on candidates' registration place. Candidates from places financed from the

state budget go through a written and an interview test, whereas candidates from paid places took only an interview test. Candidates are expected to score a minimum grade of 7 in a written test; and present scientific background, research skills on a chosen research topic, distinguish the knowledge, the analysis & synthesis capacity of some results, and argue personal opinion on their respective field in an interview. The admission colloquium analyzes the mentioned aspects in the interview and also the publishing capacity (list of published papers in WoS/international databases, presentations in national&international conferences) of the candidate. The interview is concluded with a decision "admitted or rejected."

The indicator is fulfilled.

Performance Indicator B.1.1.2. *The IOSUD/doctoral school(s) have a policy for stimulating enrollment of doctoral students coming from disadvantaged social environments by allocating reserved positions in the admission procedure and/or granting special scholarships and organizing support programs to prevent drop-outs.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

UMFCD stated that three groups of candidates are listed to benefit from registration facilities. The candidates from disadvantaged social backgrounds are allocated in unique places, children of teaching staff are exempted from payment, and the fee is reduced for UMF "Carol Davila" teachers. The school supports the students with a fee regime who face financial difficulties by staggering the payment of installments or granting study fee reductions, with the approval of the Board of Directors. The process explained in the report was confirmed during the interviews. The institution also confirmed the information given above with explanations on the subject in the additional documents requested. According to UMFCD's additional documents, in the last five academic years, there have been no places with particular destinations, and there have been no requests in this regard. For this year's admission, UMFCD had allocated three places for Roma candidates, places for which there were no candidates. There were 6 Ph.D. students who benefited from accommodation on campus. There were also 9 Ph.D. students who benefited from financial support.

The indicator is fulfilled.

Criterion B.2. The content of doctoral programs

Standard B.2.1. The training program based on advanced university studies is appropriate to improve doctoral students' research skills and to strengthen ethical behavior in science.

The training program based on advanced university studies is appropriate for improving doctoral students' research skills and strengthening ethical behavior in science. Considering the internal evaluation report of the IOSUD and the opinions of the teaching staff, students, graduates, it was decided that the standard was met. A detailed analysis of the performance indicators is given below.

Performance Indicator B.2.1.1. *The training program based on advanced academic studies includes at least three disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to study in-depth the research methodology and/or the statistical data processing.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The training program based on advanced university studies includes disciplines that contribute to the development of professional skills within the meaning of Art. 58, para. (1) of GD 681/2011 (Code of doctoral studies) relevant for the training in scientific research of doctoral students. Academic studies including the disciplines are listed as; scientific research methodology and research project management (a discipline transformed from the 2018-2019 academic year into three disciplines: scientific research methodology, scientific project management, and clinical epidemiology), bioethics of research, and ethics of scientific publication, biostatistics, research ethics on laboratory animals, intellectual property. In addition to the disciplines that contribute to the development of professional competencies, the curriculum also includes disciplines that contribute to the development of transversal competencies: Legislation of scientific research in Romania and Pedagogy. The list of disciplines and responsible teaching staff are given in the appendices.

The indicator is fulfilled.

Performance Indicator B.2.1.2. *At least one discipline is dedicated to Ethics and Intellectual Property in scientific research, or there are well-defined topics on these subjects within a discipline taught in the doctoral program.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The training program based on advanced university studies includes four disciplines that contribute to the acquisition of ethical criteria in scientific research and intellectual property. These disciplines are listed as; "ethics and academic integrity, legislation of scientific research, bioethics of scientific research on the human subject" and optional courses "research ethics on laboratory animals, intellectual property, writing the doctoral thesis." This was confirmed in the interviews with faculty, doctoral students, graduates, and the institution's administrators.

The indicator is fulfilled.

Performance Indicator B.2.1.3. *The IOSUD has mechanisms to ensure that the academic training program based on advanced university studies addresses "the learning outcomes," specifying the knowledge, skills, responsibility, and autonomy that doctoral students should acquire after completing each discipline or through the research activities⁵.*

⁵ Or by what the graduate should know, understand and to be able to do, according to the provisions of the Methodology regarding inscription and registration of higher education qualifications in the the National

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The UMFCD specified the contribution of the discipline of professional and transversal competencies in an internal evaluation report. The specific learning objectives, acquired competencies, the way of evaluating the competencies for each study discipline are presented in the disciplines' sheets from the training program through advanced university studies (PPUA). It can be seen in the sheet provided that "the learning outcomes" specify the knowledge, skills, responsibility, and autonomy that doctoral students should acquire after completing each discipline or through the research activities.

The indicator is fulfilled.

Criterion B.3. The results of doctoral studies and procedures for their evaluation

Standard B.3.1. Doctoral students capitalize on the research through presentations at scientific conferences, scientific publications, technological transfer, patents, products, and service orders.

IOUSUD's doctoral students capitalize on the research through presentations at scientific conferences, scientific publications, technological transfer, patents, products, and service orders. Considering the internal evaluation report of the IOSUD and the opinions of the teaching staff, students, graduates, it was decided that the standard was met.

Performance Indicator B.3.1.1. *For the doctoral school, there are in place mechanisms for verification of the results of doctoral studies in accordance with the specificity of the particular domain (i.e., technological transfer, products, patents in the case of exact sciences; products and services for social sciences and humanities; festivals, contests, recitals, sports competitions; cultural-arts orders in the vocational domain; presentations at national and international conferences, publication of research results in national and international publications, engaging doctoral students in writing research-development projects, etc.)*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The school uses publications as a verification mechanism. Students are encouraged to publish through the doctoral study contract. The contract requires mandatory two articles in ISI ve BDI indexed journals before and after graduation. The school also tracks patent applications, international congress presentations, and research project involvement. In the last five years, there have been 12 patent applications of Ph.D. students, and some of them obtained awards at invention saloons. Doctoral students have presented 1339 papers at prestigious international events held abroad.

Recommendation:

Although there are in place mechanisms for verification of the results of doctoral studies by the specificity of the particular domain, it has not established an electronic-based monitoring system. Therefore, it is recommended to establish an electronic system that facilitates monitoring.

The indicator is fulfilled.

Criterion B.4. Quality of doctoral theses

Standard B.4.1. Doctoral theses fulfill high-quality standards

IOSUD's doctoral theses fulfill high-quality standards. Considering the internal evaluation report of the IOSUD and the opinions of the teaching staff, students, graduates, it was decided that the standard was met. A detailed analysis of the performance indicator is given below.

Performance Indicator B.4.1.1. *At the level of IOSUD, the percentage of theses non-validated, at the level of General Counsel of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNADTCU), without the right of further amendments and re-organizing the process of public defending, is not exceeding 5% in the last five years.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

IOSUD The University of Medicine and Pharmacy "Carol Davila" has no invalidated doctoral theses registration in the last five years without the right of further amendments and re-organizing the process of public defending at CNATDCU General Council level.

The indicator is fulfilled.

Domain C. QUALITY MANAGEMENT

Under the Domain C. Quality Management; Existence and periodic implementation of the internal quality assurance system, transparency of information and accessibility of learning resources, internationalization and system for assurance of ethical and academic integrity, were analyzed considering the internal evaluation report and the results from meetings during the remote external evaluation of the UMF "Carol Davila" from Bucharest. There was one indicator that was not met, which is the indicator *C.3.1.3. "At least 10% of the doctoral theses of every doctoral school of the IOSUD are drafted and/or submitted in an international foreign language or are organized in international co-tutelage.". However, this indicator is not mandatory. There were no other unmet criteria and performance indicators in this domain too. However, the criteria and performance indicators that are partially met in this area and the recommendations regarding the subject are explained in detail below.

Criterion C.1. Existence and periodic implementation of the internal quality assurance system

Standard C.1.1. There are an institutional framework and procedures in place and relevant internal quality assurance policies applied for monitoring the internal quality assurance.

There is an institutional framework and procedures to monitor internal quality assurance and relevant internal quality assurance policies. As a result of the analyzes made from the assessed institution's documents and the evaluation visit itself, it was decided that the standard was met. A detailed analysis of the performance indicators and related recommendation/s are given below.

Performance Indicator C.1.1.1. *The IOSUD shall demonstrate the continuous development of the evaluation process and its internal quality assurance following a procedure developed and applied at the level of the doctoral school(s), the following assessed criteria being mandatory:*

- (a) the scientific work of Doctoral advisors;*
- (b) the infrastructure and logistics necessary to carry out the research activity;*
- (c) the procedures and subsequent rules based on which doctoral studies are organized;*
- d) the academic and social services (including participation in various events, publication of papers, etc.) and counseling made available to doctoral students.*
 - *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
 - *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

UMF "Carol Davila" from Bucharest stated on the internal evaluation report that the development of doctoral studies is regulated internally by an operational procedure, which is periodically reviewed. The procedure was given in annexes. The procedure included the regulations and methodologies applied in doctoral studies. Additionally, The risk register is drawn up annually to identify the risks, the causes of risks, the strategy adopted to eliminate or reduce the risk. UMFCF is certified SR EN ISO 9001: 2015/ ISO 9001: 2015 for University higher education activities, including doctoral and postgraduate, as well as for university scientific research activities.

The scientific activity of the doctoral supervisors is evaluated annually, based on a performance grid, constituting the criterion for allocating vacancies for doctoral students. The criteria in the evaluation grid are periodically reviewed by the CSUD, taking into account the feedback of the doctoral supervisors. The self-evaluation grid of the activity of the doctoral supervisors was given for the years 2017, 2018, and 2019.

The infrastructure and logistics necessary to carry out the research activity are evaluated based on the information provided by the Department of Grants and Scientific Research and the Financial-Accounting Service, which communicates the changes in the research infrastructures described in the ERRIS platform.

The regulations and the procedures based on which doctoral studies are organized are periodically reviewed, taking into account changes in legislation, institutional strategy, as well as the feedback of doctoral supervisors and doctoral students. Revised forms are subject to the approval of the management structures (CSUD, Board of Directors, Senate). Among the revised methodologies and regulations are the admission methodology and the Methodology for public defense of the doctoral thesis. The study contract is also periodically reviewed.

The scientific activity of doctoral students is evaluated annually by the doctoral supervisor and the guidance committee, on the occasion of supporting the research project at the end of the first year of studies, of the scientific reports of years II and III, and the submission of the doctoral thesis. In order to award scholarships or performance awards, an evaluation grid for the activity of doctoral students is applied.

There are regulations for **the academic and social services and counseling made available to doctoral students** at UMFCF. This information also was confirmed by the Ph.D. student and graduates during online interviews. IOSUD UMFCF from Bucharest has developed policies to support the participation of doctoral students in scientific events or internships and the publication of articles. Starting with 01.10.2016, within UMF "Carol Davila" from Bucharest, the Career Counseling and Guidance Center of UMFCF operates, which offers students psychological, educational, and career/professional counseling and other services such as workshops, working groups, information. It is seen that the measurement of the degree of satisfaction of the doctoral students towards the quality of the organization and development of the doctoral program is made based on evaluation mechanisms.

The indicator is fulfilled

Performance Indicator C.1.1.2. *Students' associations and, according to the case, representatives of students organize elections in the community of doctoral students, for positions in the CSUD, by universal vote, direct and secret, all doctoral students having the right of electing or being elected.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

Doctoral students organized elections to appoint their representative at the level of the Council for Doctoral Studies (CSUD) of IOSUD UMF "Carol Davila" from Bucharest, based on a regulation approved by the Senate and the electoral process being carried out without the involvement of the academic management of the University or teachers. This was also confirmed during online meetings.

The indicator is fulfilled

Performance Indicator C.1.1.3. *Students' associations and, according to the case, representatives of students organize elections in the community of doctoral students at the level of each doctoral school, for positions in the councils of doctoral schools, by universal vote, direct and secret, all doctoral students having the right of electing or being elected.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

According to the evaluation report and meeting held with students and staff of IOSUD, doctoral students organized elections to appoint their representative at the level of the Doctoral School Council (CSD) UMF "Carol Davila" from Bucharest, in compliance with the regulation approved by Senate.

The indicator is fulfilled.

Performance Indicator *C.1.1.4. *Following the internal evaluation, IOSUD and the doctoral schools draft strategies and policies aiming to eliminate the identified deficiencies and stimulate the scientific and academic performance of IOSUD.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

It has been stated in the evaluation report that following the internal evaluations, CSUD develops strategies and action policies in order to improve the reported deficiencies and to stimulate the scientific and academic performance of IOSUD. However, internal analysis reports results (including the deficiencies) and processes of eliminating the deficiencies and concrete improvements made in line with these results were not provided.

Recommendations:

It is recommended to complete the elimination processes of deficiencies (closing PDCA cycles) defined in line with the evaluation reports and to share the improvement results with the stakeholders.

The indicator is partially fulfilled

Criterion C.2. Transparency of information and accessibility of learning resources

Standard C.2.1. Information of interest to doctoral students, future candidates, and public interest information is available for electronic format consultation.

The information of interest to doctoral students, future candidates, and public interest is electronic via the website. The standard was met, and the detailed analysis of the performance indicator is given below.

Performance Indicator C.2.1.1. The IOSUD publishes on the website of the organizing institution, in compliance with the general regulations on data protection, information such as:

- (a) the IOSUD/Doctoral School regulation;*
- (b) the admission regulation;*
- (c) the doctoral studies contract;*
- (d) the study completion regulation including the procedure for the public presentation of the thesis;*
- (e) the content of the training study program based on advanced academic studies;*
- (f) the academic and scientific profile, thematic areas/research themes of the Doctoral advisors within the domain, as well as their institutional contact data;*
- (g) the list of doctoral students within the domain with necessary information (year of registration; Advisor);*
- (h) information on the standards for developing the doctoral thesis;*
- (i) information on the opportunities for doctoral students aiming to attend conferences, publish articles, award scholarships, etc.*
- (j) links to the doctoral theses' summaries to be publicly presented and the date, time, place where they will be presented; this information will be communicated at least twenty days before the presentation.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The school pays special attention to disseminating information of interest to doctoral students and future candidates, respectively, information of public interest. The information is available on the universities website.

The indicator is fulfilled.

Standard C.2.2. The IOSUD/The Doctoral School provides doctoral students with access to the resources needed for conducting doctoral studies.

The UMF "Carol Davila" doctoral students have access to the resources needed for conducting doctoral studies as a library, databases, and research infrastructure, whereas the electronic verification system can be expanded. A detailed analysis of the performance indicators and related recommendation/s are given below.

Performance Indicator C.2.2.1. *All doctoral students have free access to one platform providing academic databases relevant to the doctoral studies domain of their thesis.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

All doctoral students have access to a platform providing academic databases relevant to the doctoral studies domain of their thesis. The platform has databases from publishers like Science Direct, Oxford and indexes like WoS, Scopus, BMJ. The platform is accessible from University and outside campus via the virtual library platform.

The indicator is fulfilled.

Performance Indicator C.2.2.2. *Each doctoral student shall have access, upon request, to an electronic system for verifying the degree of similarity with other existing scientific or artistic works.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

All doctoral students have access, upon request, to an electronic system (www.sistemantiplagiat.ro) for verifying the degree of similarity with their Ph.D. thesis. In the internal evaluation report, the process of verifying other work of students was not transparent. In online interviews, it was determined that the similarity program was mainly used for doctoral theses.

Recommendations:

It should be recommended to encourage students to use the system for other existing scientific or artistic works.

The indicator is partially fulfilled.

Performance Indicator C.2.2.3. *All doctoral students have access to scientific research laboratories or other facilities depending on the specific domain/domains within the Doctoral School, according to internal order procedures.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The doctoral students have access to the university's research laboratories, which is guaranteed by a doctoral student contract. Students are also involved in research projects, work with research teams that

are regulated by the contract. Doctoral students in the field of Medicine also have access to research opportunities at the hospital.

The indicator is fulfilled.

Criterion C.3. Internationalization

Standard C.3.1. IOSUD/Doctoral school has a strategy in place, and it is applied to enhance the internationalization of doctoral studies.

As a result of the analyzes made from the assessed institution's documents and the evaluation visit itself, it was decided that the standard and critical performance indicators were not met. Two of the indicators (3.1.1 and 3.1.4) partially met the indicator *C.3.1.3. "At least 10% of the doctoral theses of every doctoral school of the IOSUD are drafted and/or submitted in an international foreign language or are organized in international co-tutelage." was not met. However, this indicator is not mandatory. In addition, suggestions were made for the internationalization of doctoral studies, and detailed analyzes are presented below.

Performance Indicator *C.3.1.1. *IOSUD, for every doctoral school, has concluded mobility agreements with universities abroad, with research institutes, with companies working in the field of study, aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements for the doctoral studies). At least 35% of the doctoral students have completed a training course abroad or other mobility forms such as attending international scientific conferences. IOSUD drafts and applies policies and measures aiming at increasing the number of doctoral students participating in mobility periods abroad, up to at least 20%, which is the target at the level of the European Higher Education Area.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The UMF Carol Davila has 68 international agreements (36 inter-institutional cooperation agreements, 29 ERASMUS, three agreements include both), ten of which are outdated. According to the internal evaluation report, in the last five years (2016-2020), 257 students (36%) had at least one international activity. The report does not provide information about faculty mobility. Although it was determined that the teaching staff participated in international activities during online interviews, it was determined that the number of those who benefited from these opportunities was quite limited.

Recommendations:

IOSUD should also have a focus on the internationalization activities of the doctoral supervisors. It is also recommended that the institution attach more importance to initiatives that will ensure the effectiveness of agreements and take necessary actions against outdated agreements.

The indicator was partially fulfilled.

Performance Indicator C.3.1.2. *IOSUD supports, including providing financial support, to the organization of doctoral studies in international co-tutelage or invitation of leading experts to deliver courses/lectures for doctoral students.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

IOSUD supports, including providing financial support, to the organization of doctoral studies in international co-tutelage or invitation of leading experts to deliver courses/lectures for doctoral students. There is an institutional framework, and the realization of doctorates in international co-supervision is financially supported. The related Methodology regarding the academic mobility of doctoral students, the procedure regarding the use of the budget allocated to doctoral studies, and co-supervision agreement were given in annexes.

The indicator is fulfilled.

Performance Indicator *C.3.1.3. *At least 10% of the doctoral theses of every doctoral school of the IOSUD are drafted and/or submitted in an international foreign language or are organized in international co-tutelage.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

712 theses in 2016-2020, 7 (0,98%) were written in English, and two international co-supervision agreements were made.

Recommendations:

At least 10% of the doctoral theses of every doctoral school of the IOSUD should be drafted and/or submitted in an international foreign language or organized in international co-tutelage.

The indicator is not fulfilled.

Performance Indicator C.3.1.4. *The internationalization of activities carried out during the doctoral studies is supported by IOSUD through concrete measures (e.g., by participating in educational fairs to attract international doctoral students; by including international experts in guidance committees or doctoral committees⁶, etc.).*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The increase of the international visibility of the "Carol Davila" University of Medicine and Pharmacy in Bucharest and the increase of the internationalization degree of the activities within the doctoral studies represented the objective of several institutional development projects developed in the last five years. According to the report, four projects were developed in the University to increase internationalization. It has been observed that UMFCF carried out a variety of activities for improving internationalization. Even some internationalization activities were reported, results and concrete measures are not reported.

Recommendations:

The internationalization of activities carried out during the doctoral studies is supported by IOSUD can be improved. It can also be recommended that the support of the IOSUD can be evaluated, and the improvement can be made in the line of evaluation results with the participation of related stakeholders.

⁶ Doctoral studies are completed by presenting the doctoral thesis in public session in front of a committee whose members hear and judge the final public presentation of the thesis

The indicator is partially fulfilled.

Criterion C.4. System for assurance of ethical and academic integrity

Standard C.4.1. IOSUD/Doctoral school has a functional and efficient system in place for prevention and assuring ethical and academic integrity norms

As a result of the analyzes made from the assessed institution's documents and the online evaluation meetings, it was decided that the standard was met. IOSUD/Doctoral school has a functional and efficient system for prevention and assuring ethical and academic integrity norms. A detailed analysis of the performance indicators and related recommendation/s are given below.

Performance Indicator C.4.1.1. IOSUD applies the current provisions regulating ethics, deontology/academic integrity, respectively to academic freedom and has developed:

- *policies based on prevention regarding possible violations of the Code of ethics and academic integrity, demonstrated by public positioning, studies, analyses, or measures are taken;*
- *practices and mechanisms for preventing fraud, from an institutional perspective as well as from the perspective of the doctoral students;*
- *practices for preventing possible fraud in academic activity, research, or any other activity, including active measures for preventing and avoiding plagiarism of any kind, as well as promoting ethical and integrity/deontology principles or observing intellectual property norms, authors' rights, and other related rights, among all members of the academic community;*
- *administrative instruments which allow applying effective and eliminatory sanctions;*
- *mechanisms and measures to assure equal opportunities and protection against intolerance and discrimination of any kind;*

IOSUD monitors and permanently evaluates these practices and can prove they are applied to all activities and engagement of students in all these processes, and the results of the monitoring are made public yearly or whenever it becomes necessary.

According to the internal evaluation report, there are policies based on prevention regarding possible violations of the Code of ethics and academic integrity. The University Ethics and Deontology Commission (ECHR) within UMF "Carol Davila" from Bucharest, consisting of 4 teachers and a student representative, develops and implements the Code of Ethics and Deontology, in accordance with the provisions of the National Education Law no. 1/2011. The scientific research activity of doctoral students is carried out in compliance with ethics in research and publishing. The research protocol is subject to the approval of the Commission for Ethics of Scientific Research of the University of Medicine and Pharmacy "Carol Davila" or the Ethics Commission of the hospital where the study is conducted, as appropriate. The Ph.D. students are informed about the norms of scientific, professional, and University ethics by forming specific competencies within the training program through advanced university studies and by the doctoral supervisor and the guidance committee. The support of the doctoral theses is performed only after prior verification of the content through anti-plagiarism programs.

Verification and control mechanisms to prevent fraud in academic activity, research, or any other activity; plagiarism and the practices; administrative instruments which allow applying effective and eliminatory sanctions; mechanisms and measures to assure equal opportunities and protection against intolerance and discrimination of any kind are precise.

The indicator is fulfilled

Recommendations:

Performance Indicator C.4.1.2. *All intimations regarding suspicion of plagiarism related to doctoral theses have been analyzed and resolved by the IOSUD within the time interval legally established for expressing in writing its position regarding the intimation received.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

According to internal evaluation report of IOSUD, during 2016-2020, there was only one plagiarism complaint within a doctoral thesis, submitted to the National Council for Attestation of University Degrees, Diplomas, and Certificates (CNATDCU), a notification that was rejected by CNATDCU (Decision no. 16220 / 17.12.2019). CEDU has analyzed and resolved the doctoral thesis regarding suspicion of plagiarism within the legal period to resolve the notification.

The indicator is fulfilled

Performance Indicator C.4.1.3. *Annual Reports of the Ethics Commission of the IOSUD contain information on the stage of solving each case of intimation or own-initiative intimation regarding violation of norms or ethical aspects relevant for university doctoral studies.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The annual reports of the Ethics Commission within UMF "Carol Davila" contain information on the state of settlement of each case in which there was a notification or self-notification relevant for doctoral studies on violations of specific rules and ethical issues.

The indicator is fulfilled

Performance Indicator C.4.1.4. *The measures taken by IOSUD after the final decision of CNADTCU to withdraw the title of "doctor" following accusations of plagiarism have addressed all the aspects mentioned in CNADTCU's decision and in the current legislation.*

- *Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*
- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

There were no situations that required measures.

The indicator is fulfilled

Performance Indicator C.4.1.5. *The measures aiming to prevent academic fraud in the doctoral studies, taken by IOSUD, could be:*

a) *Suspension of the right to advise newly enrolled doctoral students, for three years, in the case of doctoral advisors having coordinated a doctoral thesis with a definitive decision of withdrawal of the "doctor" title for plagiarism;*

b) Exclusion from the IOSUD of the doctoral advisor having coordinated at least two doctoral theses with definitive decisions of withdrawal of the "doctor" title for plagiarism;

c) Suspension of the right to organize the admission process of new doctoral students in the Doctoral studies domain for two years if in the respective domain a doctoral thesis has been finalized and defended with a definitive decision of withdrawal of the "doctor" title for plagiarism.

- Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.
- Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.

The measures aiming to prevent academic fraud in the doctoral studies taken by IOSUD are specified in Annex titled "the Regulations For Organization and Deployment of Doctoral Studies in IOSUD UMF. "Carol Davila " - Bucharest". The regulation is available at the website of IOSUD (<https://umfcd.ro/wp-content/uploads/2019/04/Regulament-IOSUD.pdf>). It includes suspensions of doctoral supervisors (suspension of the right to advise newly enrolled doctoral students, exclusion from the IOSUD, suspension of the right to organize the admission process of new doctoral students in the Doctoral studies domain, etc.).

The indicator is fulfilled

Performance Indicator *C.4.1.6. *The scientific reviewers' members in the commissions for public defense of two or more doctoral theses with definitive decisions of withdrawal of the "doctor" title for plagiarism have not been nominated in other commissions for public defense of doctoral theses for at least three years.*

- Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.
- Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.

There were no situations that required measures to scientific reviewers who were part of the commissions for public support of doctoral theses with a final decision to withdraw the doctoral degree for plagiarism. However, what is the IOSUD decision on scientific reviewers on the subject is not given.

Recommendations:

The IOSUD decision on scientific reviewers who were part of the commissions for public support of doctoral theses with a final decision to withdraw the doctoral degree for plagiarism should be determined. Document/s containing IOSUD decisions regarding scientific reviewers should be available to the public.

The indicator is partially fulfilled

Performance Indicator C.4.1.7. *IOSUD has a database open to the public containing all the doctoral theses defended in the institution beginning at least in 2016 in a format including the domain, author, doctoral advisor, title of the thesis, and the thesis in electronic format (if there is an agreement of the author).*

- Description of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.

- *Analysis of the facts, the findings from the assessed institution's documents, and the evaluation visit itself.*

The information regarding the public defense of the doctoral theses, provided by OMNCS no. 3482/2016 and OMEC no. 5229/2020 (field, author, doctoral supervisor, public support committee, doctoral student's CV, CVs of the members of the doctoral committee, thesis summary date, time and location of the thesis, place where the text of the thesis can be consulted in printed format) are presented on the university website. The doctoral theses held in the last five years are uploaded in electronic format in the platform of the Ministry of Education, the access to the full content of the doctoral thesis being in accordance with the option of publishing the doctoral thesis on the national platform, by the provisions of the Government Decision no. 681/2011 on the approval of the Code of doctoral studies, with subsequent amendments and completions. Although plans are being made to access the theses in a digitalized environment, it has been stated in the interviews that they have some regulation problems.

The indicator is fulfilled

IV. SWOT Analysis

<u>Strengths:</u>	<u>Weaknesses:</u>
<p>The strengths identified throughout the report will be resumed as part of the indicators' analysis. Other general strengths that do not fall within a particular indicator may be formulated.</p> <ul style="list-style-type: none"> • The University is the oldest University of Medicine and Pharmacy in Romania, and it has a variety of educational programs at different levels • The University has valuable expert doctoral supervisors • Most of the doctoral supervisors took part in the projects • The doctoral school is a school preferred by candidates. • Doctoral supervisors have publications in high impacted journals and existing patent applications • 217 out of 271 doctoral supervisors are holders, either with a contract of indefinite duration (148 supervisors, 55% of total supervisors) or in the extension of the activity as holders (69 supervisors) • UMFCD is positioned in the top Shanghai 2021 in the range 151-200 in the field of "Clinical Medicine," the best ranking of a university in Romania, and also UMFCD is present in the URAP for the year 2020-2021, on position 944, the 2nd place among all the Universities in the country • There are various support services offered to 	<p>*the weaknesses identified throughout the report will be resumed as part of the indicators' analysis. Other general weaknesses that do not fall within a particular indicator may be formulated.</p> <ul style="list-style-type: none"> • The institution has no IT system dedicated to monitorization of the progress of doctoral students • The less number of the supervisors in dentistry and Pharmacy • Difficulty in conducting research of doctoral students during the pandemic • The processes for the elimination of deficiencies defined in line with the evaluation report/s are not clear • The low rate of the doctoral thesis written in English • The similarity system is used only for doctoral theses, not for other artistic or scientific works of students • Limited grant and funding opportunities for research • Intra-institutional differences in access to funds • Limited focus the internationalization activities of the doctoral supervisors • There are outdated international agreements

<p>doctoral students (financial, accommodation, etc.),</p> <ul style="list-style-type: none"> • There are two extensive libraries • There are control mechanisms to improve the development of processes • Providing funding support to young researchers • The effective leadership and motivation of administrators to improve the quality of doctoral studies • Potential of graduates to publish in high-impact journals • The IOSUD/doctoral school have a modern research infrastructure to support the conduct of doctoral studies' specific activities • Having national agreements with universities and protocols with hospitals for using various research infrastructures • Existence of efforts to raise funds from internal and external sources for the renewal of research infrastructure • Having a contract base anti-plagiarism detection program • There is a mechanism to encourage the students to publish • Strong relationship with employers of graduates. • The measurement of the degree of satisfaction of the doctoral students towards the quality of the organization and development of the doctoral program • The UMFCF has many international agreements. • The 36% of doctoral students had at least one international activity in the last five years • There is an aim to prevent academic fraud in doctoral studies at the IOSUD level • There is an effective relationship between doctoral students and doctoral school personnel • There is online training program to support the student for patent applications 	
<p><u>Opportunities:</u></p> <p>*possible lines of action for the development of the institution under review shall be identified;</p>	<p><u>Threats:</u></p> <p>*the possible causes of the deficient aspects (= the causes of the identified weaknesses), which are practically the threats to</p>

<p>*examples of opportunities: a favorable economic environment in the proximity of the assessed institution, the uniqueness of the study programs and their relevance to the local/national market, the overall attractiveness of the study programs, etc.</p> <ul style="list-style-type: none"> • Existence of the programs that can provide national and international funding for research • Existing regulations for the organization of doctoral studies in the country • Increase in employment rates of doctoral graduates at the national and international level, increase in the number of research-oriented institutions • There are many institutions, research centers, laboratories, etc., that can be cooperated throughout the country for doctoral studies. • Evidence-based practices in the field of health are becoming more valuable every day, and there is a need for doctoral graduates who will produce evidence. • There are a variety of international exchange opportunities for the students and doctoral supervisors among European countries as well as around the world. 	<p>the proper functioning of the institution, shall be identified;</p> <p>*Besides, there may be external threats, such as the inopportune economic environment in the proximity of the assessed institution, the conduct of low attractiveness study programs for both candidates and the labor market, etc.</p> <ul style="list-style-type: none"> • Increase in doctoral programs in health (including Medicine, Pharmacy, and dentistry) in Romania, in Europe and, in the world. • Limitation of research competitions for the fields of Dentistry and Pharmacy • Poor funding through doctoral grants, respectively institutional development grants • The low quotas are given to Exchange programs at the institutional level • A limited number of workplaces that allow graduates of doctoral programs to work with a research focus
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V. Overview of judgments awarded and of the recommendations

No.	Type of indicator (*, C)	Performance indicator	Judgment	Recommendations
1	C	A.1.1.1.	Fulfilled	
2	C	A.1.1.2.	Fulfilled	-
3	*	A.1.1.3 ⁷ .	Fulfilled	-
4	C	A.1.2.1.	Partially fulfilled	It is recommended to create a functional IT infrastructure to monitor doctoral students and create mechanisms for

⁷ The indicators marked with an asterisk (*) hold a special status, referring exclusively to the evaluation of doctoral schools, as per Article 12 from the annex No.1 of the Order of the minister of education No. 3651/12.04.2021 approving the Methodology for evaluating university doctoral studies and the system of criteria, standards and performance indicators used in the evaluation In case they are not fulfilled, the Agency extends a period of maximum 3 years to IOSUD to correct the respective deficiencies.

				evaluating its effectiveness.
5	C	A.1.2.2.	Fulfilled	
6	C	A.2.1.1.	Fulfilled	
7	C	A.2.1.2.	Fulfilled	
8	C	A.2.1.3.	Fulfilled	
9	*	A.3.1.1.	Fulfilled	Since the supervisors' number varies between and in disciplines, close attention should be given to all disciplines.
10	C	A.3.1.2.	Partially Fulfilled	Increasing the number of supervisors in the pharmacy and dentistry programs is recommended.
11	*	B.1.1.1.	Fulfilled	
12	C	B.1.1.2.	Fulfilled	
13	C	B.2.1.1.	Fulfilled	
14	C	B.2.1.2.	Fulfilled	
15	C	B.2.1.3.	Fulfilled	
16	C	B.3.1.1.	Fulfilled	Although there are mechanisms for verification of the results of doctoral studies under the specificity of the particular domain, it has not established an electronic-based monitoring system. Therefore, it is recommended to establish an electronic system that facilitates monitoring verification of the results of doctoral studies
18	C	B.4.1.1.	Fulfilled	
		C.1.1.1.	Fulfilled	
19	C	C.1.1.2.	Fulfilled	
20	C	C.1.1.3.	Fulfilled	

21	*	C.1.1.4.	Partially fulfilled	It is recommended to complete the elimination processes of deficiencies (closing PDCA cycles) defined in line with the evaluation reports and share the improvement results with the stakeholders.
22	C	C.2.1.1.	Fulfilled	
23	C	C.2.2.1.	Fulfilled	
24	C	C.2.2.2.	Partially Fulfilled	It should be recommended to encourage students to use the similarity system for other existing scientific or artistic works.
25	C	C.2.2.3.	Fulfilled	
26	*	*C.3.1.1.	Partially fulfilled	IOSUD should also have a focus on the internalization activities of the doctoral supervisors. It is also recommended that the institution attach more importance to initiatives that will ensure the effectiveness of agreements and take necessary actions against outdated agreements.
27	C	C.3.1.2.	Fulfilled	
28	*	*C.3.1.3.	not fulfilled.	At least 10% of the doctoral theses of every doctoral school of the IOSUD should be drafted and/or submitted in an international foreign language or organized in

				international co-tutelage.
29	C	C.3.1.4.	Partially fulfilled	The internationalization of activities carried out during the doctoral studies is supported by IOSUD can be improved. It can also be recommended that the support of the IOSUD can be evaluated, and the improvement can be made in the line of evaluation results with the participation of related stakeholders.
30	C	C.4.1.1.	Fulfilled	
31	C	C.4.1.2.	Fulfilled	
32	C	C.4.1.3.	Fulfilled	
33	C	C.4.1.4.	Fulfilled	
34	C	C.4.1.5.	Fulfilled	
35	*	*C.4.1.6.	Partially Fulfilled	The IOSUD decision on scientific reviewers who were part of the commissions for public support of doctoral theses with a final decision to withdraw the doctoral degree for plagiarism should be determined. Document/s containing IOSUD decisions regarding scientific reviewers should be available to the public.
36	C	C.4.1.7.	Fulfilled	

The recommendations contained in the report shall be resumed in the indicators' analysis. Other general recommendations may be made that do not fit within a particular indicator.

VERY IMPORTANT. – Each identified weakness must be correlated with at least one recommendation to improve the situation! No weakness can be identified without formulating at least one recommendation regarding the way it could be corrected!

VI. Conclusions and general recommendations

Several important issues raised during the evaluation are resumed, and some general conclusions are drawn on the quality of the education provided by the IOSUD under review; the Experts Panel also presents general assessments about the institution. Other general recommendations may also be presented, which cannot be related to a specific indicator and have not been presented at point V.

A decision is proposed, together with the reasons for granting it (if the Experts' Panel members do not reach a consensus, each of them can propose and argue his/her own decision).

This report is based on my experiences what I have seen, read, heard during the external remote evaluation of the IOSUD UMF "Carol Davila" from Bucharest. I hope that this report I have prepared will contribute to improving the institution's quality assurance processes. According to the analysis of the IOSUD UMF Carol Davila internal evaluation report, report annexes, web page, and the results obtained from different meetings during the remote evaluation, it has been determined that the critical standards under institutional capacity, educational effectiveness, and quality management have been met. The institution's doctoral education programs and graduates can create added value in the country, in the European region, and the world. **I decide to accredit IOSUD UMF "Carol Davila" from Bucharest.** However, my recommendations for improving the quality assurance processes of doctoral education at the level of IOSUD UMFC are presented below:

- close attention to the number of doctoral supervisors that varies between and in disciplines and increasing the number of doctoral supervisors in the pharmacy and dentistry programs
- Establishing an electronic system that facilitates monitoring the verification of the results of doctoral studies
- Completing the elimination processes of deficiencies (closing PDCA cycles) defined in line with the evaluation reports and sharing the improvement results with the stakeholders.
- Encouraging students to use the similarity system for other existing scientific or artistic works.
- Focusing on the internalization activities of the doctoral supervisors.
- Taking some initiatives that will ensure the effectiveness of agreements and taking necessary actions against outdated agreements.
- Increasing the rate of doctoral schools' thesis that are drafted and/or submitted in an international foreign language or organized in international co-tutelage.
- Evaluating and improving the support of IOSUD for the internationalization activities carried out during the doctoral studies
- Determining and publishing the IOSUD decision on scientific reviewers who were part of the commissions for public support of doctoral theses with a final decision to withdraw the doctoral degree for plagiarism
- ***It should also be recommended*** to increase the number of national and international grants
- Providing more funding opportunities to the students for their research
- Providing information to the doctoral students about research grants
- Maintaining relations with graduates through more structured mechanisms
- Revising the duties of the ethics committee to focus on ethical issues (The duties of the ethics committee seem overlapping) and/or building a scientific research ethics committee at UMFC
- Continuing the membership of a certain number of members in the Quality Commission in terms of the sustainability of the institutional memory when the university management changes
- The university strategic plan should be published in a way that all stakeholders can access, along with the rector's report.



- A specific report of Quality Commission should be prepared and shared on webpage
- Students in the quality commission must have the same agreement conditions as other members of commission

At the end of the report, I would like to thank the rector of UMF “Carol Davila” from Bucharest and all the university staff, students, graduates, graduates' employers for creating a collaborative environment during the meetings. I also thank IOSUD evaluation director-Prof. Radu OPREAN, IOSUD committee coordinator- Prof. Liliana Marcela Rogozea, Ph.D. student evaluator- Alexandra-Simona Zamfir, and IOSUD expert evaluator- Prof. Monica Hăncianu for the environment they have created for effective teamwork during the external evaluation. Lastly, I would like to extend my special thanks to ARACIS for inviting me as an international expert to the external evaluation of UMF “Carol Davila”'s IOSUD and thanks to Vlad Popescu for his kind support throughout the process.

International Expert of ARACIS
Hacettepe University Faculty of Nursing
Ankara/Turkey
November 09, 2021

VII. Annexes

The following types of documents shall be attached:

- *The detailed schedule of the evaluation visit – MANDATORY.*
 - *The survey questionnaire was applied to doctoral students or academic staff affiliated to the IOSUD under review, the results - optional (e.g., in graphic form) and their interpretation - if applicable.*
 - *Scanned documents – any document requested from the IOSUD during the evaluation visit and received, which is not found in the internal evaluation file received before the visit and referred to in the report.*
 - *Pictures – if relevant issues are raised regarding the condition of the student residences, cafeterias, premises for teaching and learning activities, library, etc.*
- Screenshots/Print screens of the Doctoral School(s)/IOSUD website prove specific claims in the report, accompanied by the date they were accessed and saved.*
- *Any other documents relevant to the evaluation process referred to in the report.*