MEDICAL EDUCATION - A PROPOSAL TO HARMONISE OPERATING CRITERIA AND IMPROVE QUALITY

Foreword

"Following the latest assessment procedures of integrated study programmes in Medicine, the respective External Assessment Teams (EATs) stated that A3ES should have a set of minimum criteria that could govern, in a first phase, the assessment of the new proposals for those study programmes. This has been a recurring issue in the various assessment periods launched by A3ES and has also been insisted on by the international experts who have been part of the EATs. These criteria exist in several European countries and are mentioned in the World Federation for Medical Education (WFME) regulations, which A3ES intends to integrate."

This group was given the task by the President of the A3ES Management Board, Professor João Guerreiro, of reflecting on and proposing the specific criteria that should guide the teaching of integrated master's degrees in Medicine (A3ES Order no. 5/2023 of 27 June).

The first question put to the committee was whether there was any justification for revising the criteria that had been widely used up until now and by which the programmes in operation and new study programmes (hereafter referred to as "proposals") submitted in the meantime had been assessed and, as a result, approved or rejected.

The position was affirmative because it would make sense to reflect on these criteria for various reasons. Changes have been introduced into medical practice, mainly as a result of technological developments and the growing digital transformation of society in general, both of which have a clear impact on teaching and learning processes. The importance of disease prevention has been reinforced, and cultural and social references have changed, impacting the doctor's relationship with the patient and with society in general.

It is increasingly complex to meet healthcare needs, which are very focused on productivity, while at the same time promoting the core values of the doctor-patient relationship. Uncertainty makes it difficult to envisage what the medicine of the future will be, given the announced developments with potential effects on the way "the medical art" is practiced, such as data science, robotics, and artificial intelligence applications.

We, therefore, believe that this reflection will not only serve the new proposals and the responsibility that the granting of a master's degree confers on the professional practice of medicine in the "European area", which is naturally of concern to the World Federation for Medical Education, but could also help to harmonise references in the university units teaching integrated master's degrees in medicine (from now on referred to as "Medical Schools"), which have made a great effort to innovate in the training of new medical doctors.

The Work Group¹

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Justification for the proposal

- The opening of an Integrated Master's programme in Medicine (MIM) takes place in contexts that express a balance of needs and opportunities. These contexts are assessed on two levels: one refers to the national dimension, in which the criteria are general and transversal to all medical schools, and the other recognises regional or local interests, as well as institutional ones.
- The assessment of the general context of the application should focus on the clarity of the definition of the objectives (Why a new school? What for?), the adequacy of the existing resources, and the procedures that guarantee the quality and sustainability of the project.
- 3. Specificities of a local nature, which are almost always aimed at improving health conditions in the region and facilitating the future recruitment of qualified human resources in this area, can never override the verification of compliance with the general conditions, nor should they be eligible as the primary justification for the project application.
- 4. The application must identify all the components of a medical school's activity, not just the undergraduate programme. The application must contain a strategy for postgraduate studies in the short and medium term and define a policy for research in its different fields (basic sciences, clinical sciences, social sciences, behavioural sciences, etc.)
- 5. The means proposed for carrying out the project (curriculum and its development, teaching facilities in classrooms, laboratories, and healthcare spaces), as well as the qualified human resources, in particular professionals holding a PhD, must be explained rigorously and transparently in order to assess their sufficiency in meeting the objectives.
- 6. The proposal must explain its innovative characteristics: What do they consist of? How do they improve on what already exists? What do they seek to reinforce? Pedagogical innovation is an essential foundation of the application, i.e., what it proposes to add to the range of programmes currently on offer and what applicants may prefer over traditional models.
- 7. The assessment of the sustainability of the proposal must include not only the logistical capacity to "set up" the project but also justify the capacity to dispose of the financial resources supporting the costs that the university proposes to take on. The budgetary effort to set up the school must be based on the assumption that the new project adds innovation and is not intended to "do more of the same" with worse resources.

Mission

- The Medical School's mission is to provide quality teaching, promoting pedagogical innovation and excellence, and establishing high levels of training and qualification, both at undergraduate and postgraduate levels. This mission also includes the development of an inter- and transdisciplinary research policy and intra- and inter-institutional collaboration aimed at internationalization.
- Within the scope of medical education, the pursuit of these goals aims to contribute to
 progress in the quality of healthcare and to improving the health of the population, with
 particular attention to the development of the community in which the Medical School
 is located.
- It is desirable to have a concurrent and complementary training strategy with other bachelor's and master's programmes in the health sciences. Within this strategy, the creation of the MIM programme identifies the objective of training professionals with high technical-scientific competence capable of contributing to the progress of medical education, clinical practice, and biomedical research, promoting a more qualified, just, and supportive society.

Underlying principles

A project to train medical doctors must promote values and cultivate principles. These values include solidarity, compassion, inclusion, respect for differences, integrity, and professionalism. The principles which guide the proposal include independence, justice, fairness, transparency, and respect for the autonomy of the human person and their dignity.

These principles must be implicit in the MIM's graduation process. Since this is a joint endeavour, it should mirror the responsibilities of the students themselves, the teachers who train them, the non-teaching staff, and the patients, when applicable.

I)

- Students should be educated to become pluripotential professionals, i.e. at the end of the educational process they should demonstrate the ability to exercise and apply their knowledge in different areas of professionalisation specific to the different fields of the health sciences. This qualification includes the skills for future professionals to incorporate scientific and technological developments, which requires an attitude committed to excellence in clinical practice.
- At the end of the teaching/learning process, they should also be able to take part in research projects and even start careers in clinical and basic research, as well as work in companies related to medicine, such as in pharmacological development and therapeutic innovation.
- MIM graduates are expected to recognise the principles and manifest the values of empathy/compassion, honesty, integrity, and respect in all interactions with patients, in which they actively participate during the different teaching moments.

0	Students must demonstrate adequate attendance, punctuality, availability towards colleagues and patients, participating with a high sense of personal responsibility in all learning duties and, at the end of the training period, demonstrate professionalism, multidisciplinary collaboration, and teamwork skills.
0	Students should know how to respect patients in terms of their dignity and the exercise of their rights, just as they would in relation to other health professionals, with a good understanding of the technical limits of their interventions.
0	Students should be aware of the importance of patient safety, adherence to quality promotion and assurance programmes, and the prevention of medical error.
0	The programme's humanistic training should raise students' awareness to cultural and social aspects, especially the most sensitive ones that require sympathetic and inclusive attention to those most in need due to economic, social, cultural, ethnic or health factors.
0	Lastly, the training process should pay special attention to developing the capacity for trainees to maintain continuous learning throughout their professional lives, incorporating scientific and technological developments as they arise, as well as developing the skills to critically evaluate information communicated through different channels.
II)	
0	Teachers must be dedicated to transmitting the values of the medical profession and must be committed to excellence in education and research in their areas of specialisation, becoming models of scientific and clinical professionalism.
0	They should be committed to continually improving the programmes and syllabi, keeping pace with the evolution of teaching/learning processes, and are therefore expected to promote the implementation of new teaching and assessment strategies that challenge students, expanding their capabilities, including the development of critical thinking, the ability to solve new problems, and decision-making. The relationship with students should endeavour to achieve bilateral gains.
0	In addition to imparting knowledge and attitudes, teachers will also be committed to promoting medical and scientific literacy in the population, in full commitment to their abilities as educators and academics.
III)	
0	All those involved in the educational process must contribute to the progressive innovation and improvement of the institution in the different dimensions of its university, cultural, and social intervention, not only in teaching and research, but also in well-being, governance, and global sustainability.
0	Those involved in MIM's educational process (teaching staff, non-teaching staff, students) teach, learn, and are facilitators of research. Everyone should contribute to improving the learning and research environment, where critical thinking,

communication, continuous training, proactivity, teamwork, and institutional wellbeing are valued.

• Patients, through their representatives or ombudsmen, should also contribute to improving the training process as a whole.

Educational objectives

- At the end of their training, the holder of a master's degree in Medicine should have acquired a wide range of knowledge and skills, including general clinical skills, communication skills, skills that promote teamwork, leadership skills and skills that encourage lifelong learning.
- The learning objectives include training to act professionally within the recommended ethical and deontological principles, intervene in favour of patient safety, and act as the patient's provider with humanity and compassion.
- It is essential to provide training aimed at acquiring transversal and digital skills and those that promote the ability to use up-to-date scientific information and incorporate it into professional practice. Students should also be exposed to knowledge about health management and the policies and organisation of health systems (public, private, and social).
- The Medical School must have a teaching staff, including university degree holders, nonteaching human resources, physical facilities, and equipment suitable for efficiently achieving the learning objectives. These include care spaces that allow for the approach and study of patients with pathologies that are diverse in type, complexity, and context.

Admission of students to the programme

- The process for admitting students to public higher education must be transparent, nondiscriminatory, and follow the national rules for access to higher education.
- Admissions outside the general procedure are provided for by law and, in some cases, follow alternative curricular paths, which justifies strengthening mechanisms for transparency and non-discrimination.
- As in the case of public higher education, admission of students to private education institutions must follow criteria that are made known in advance, established by the organisation promoting the proposal, and their application also requires clear procedures.

- When considering admitting international students to the MIM programme, they must have sufficient knowledge of Portuguese to communicate fluently (oral and written communication) with patients and members of the healthcare team. This requirement should naturally be understood as being associated with the phase of the programme in which systematic clinical teaching with patients takes place.
- The existence of additional selection methodologies in the admission processes has already been tried in some schools. Still, the difficulties in applying them and the limited benefits expected have not justified their implementation or the modification of the criteria in force. However, models that medical schools may propose within the scope of their autonomy, alternative to the current ones, cannot be ruled out, but they will always have to be validated by A3ES.

Curriculum

- The curriculum is a key pedagogical tool in the MIM application. It also makes it relatively easy to highlight robust areas as well as weaknesses where they exist.
- The guiding principle in the construction of the curriculum must be well detailed in the application, so that it is clear how the contents are integrated, i.e. the design of the curriculum cannot be a mere sum of teaching parts, without justified articulation between them.
- The curriculum supports the school's mission, which must be seen through its organisation and structure. The relationship between the different subject areas must identify proper integration, making it clear that the curriculum has been chosen for its characteristics and not for adapting to the human resources available, which must be adequate for the project.
- The model chosen for the curriculum must anticipate the principles behind its design and provide an assessment of its structure over the six years, as well as its components, both core and optional. Its content should therefore detail the knowledge to be imparted, as well as the manual/technical gestures (skills) to be developed.
- The content of the curriculum should enable the student to achieve the learning objectives at the end of their schooling, preparing them for the stages of postgraduation in true lifelong learning. It should also facilitate the student's choices for an optional personal pathway, explicitly justified in the context of the learning objectives and well-articulated with the general pathway.
- The curriculum does not have to conform to a single standard for all medical schools, particularly in terms of the types and names that link its components. It must include content considered indispensable to the doctor's training but also content that aims to achieve other objectives, both institutional and personal.

- The curriculum is based on three structural pillars:
 - The basic biomedical sciences pillar
 - The clinical sciences and manual skills pillar
 - The relevant social and behavioural sciences pillar
- The biomedical or basic sciences include the disciplinary content fundamental to understanding and applying clinical sciences to various pathologies.
- Clinical sciences enable the development of skills for professional practice so that the MIM degree holder can take responsibility for patient care.
- Social and behavioural sciences help develop skills in interpersonal relationships and at different levels of society.
- There should be room in the training pathway and in the organisation of the curriculum to address relevant issues associated with patient autonomy, in the acceptance or rejection of treatments and, in particular, end-of-life decisions, respect for advance statements and the participation of family members in the decisions to be made.
- We recognise the usefulness of teaching about health policies and systems in order to better integrate future professionals, as well as using strategies that seek, through medical humanities, to convey the foundational values of the profession in a context of practices that are heavily dominated by technology-based models.
- Education in health technologies, imaging, digital, and artificial intelligence is also considered relevant, preparing students for a constantly evolving medicine.
- Regardless of what they are called (areas, subjects, modules), teachers of specific parts of the curriculum have an academic degree and technical-scientific qualifications in these areas, which can be demonstrated by mentioning previous experience.
- Only in justified circumstances can responsibility for more than two curricular units be bestowed to PhD-holding lecturers who collaborate in teaching or to those who, without a PhD, have a relevant technical-scientific curriculum vitae.
- There should be a committee responsible for designing and monitoring the implementation of the curriculum.

Teaching methods

• The curricular project should include different teaching-learning methods that enable active, student-centred learning and the development of cognitive, communication, teamwork, and critical and reflective reading skills.

- The methods must include new teaching tools such as simulation exercises, didactic models, and digital technologies that allow students to study and train in a risk-free environment for patient safety. These methodologies, which are necessary and relevant to the learning process, are complementary to and not a substitute for hands-on contact and practice with the actual patient.
- Teaching methodologies must be appropriate to the learning objectives in each curricular area and the teaching staff must be trained for this purpose, with evidence of their pedagogical training.

There are various teaching-learning methods that should be used to better achieve the specific curricular objectives:

- Plenary theoretical classes: to guide students through all the knowledge to be acquired, with potential use of innovative teaching-learning technologies and methods.
- Clinical case-based learning (CBL): promotes active learning and is based on the presentation and discussion of real clinical cases, which allows for the development of clinical reasoning and teamwork, clinical skills and behaviour. This methodology is used in small groups, after prior reading of the related theoretical content.
- Evidence-based medicine: to be introduced at the beginning of the course to develop analytical reasoning through the evaluation of medical literature. It is reflective learning associated with research skills and the use of databases.
- Problem-based learning (PBL): learning is based on solving problems without prior provision of theoretical information on the subject. It is collaborative, integrated, self-directed, and comprehensive learning, in small groups, where the tutor takes on the role of facilitator. It enables the development of clinical reasoning skills, and research efficiency and also improves knowledge retention.
- Simulation: desirably implemented in the early years of the programme, it allows standardised learning of gestures and attitudes in a controlled environment, with no risk to the patient.
- E-learning: self-study through the provision of videos, seminars, orientation guides, and virtual clinical cases. Learning can be synchronous or asynchronous and aims to complement classroom and real-world teaching.
- Peer-assisted learning or mentoring: based on teamwork and collaboration, this involves selecting students with suitable characteristics for the mentoring role, particularly at advanced stages of their undergraduate training.

- Observational learning: implies the student's interest in observing but does not allow them to evaluate their behaviour. It can be observation in a real context or through video or animation content.
- Flipped classroom: a blended learning technique that uses appropriate content to invert the conventional lecture model.
- Teamwork: applied to small groups of students, this allows critical thinking to be developed, individual and group activities to be carried out, discussion and debriefing to be generated and communication skills to be developed.

Teaching resources

- The Medical School, its nuclear hospital, and the partner health establishments are parts
 of a whole that must be duly articulated with each other- A nuclear hospital is
 understood as a hospital with a high level of differentiation, equivalent to the current
 designations of groups D and E, according to the classification² of the Central
 Administration of the Health System, IP, ACSS, of the Ministry of Health of the
 Portuguese Republic, with its own facilities and equipment.
- School facilities for the acquisition of knowledge and practical learning have been undergoing changes in terms of the physical installations where teaching/learning takes place and their use for demonstration purposes. This, among other effects, will require an effort to adapt the Medical Schools created when the teaching contexts were different, especially for clinical subjects.
- Some of these contexts can be listed in a simplified way: the student's face-to-face contact with the patient has been progressively reduced, essentially because the conditions of current care practice are different; the "supplementary mediation" of medical technologies in various acts of this relationship (different depending on the medical area); the digital transformation of many areas of health.
- The physical spaces mentioned in the application must be adapted to the type of teaching methodologies used at different points in the curriculum (see the Educational Methodologies chapter in this document), as well as the estimated number of students and their distribution across the different healthcare spaces, particularly those for clinical teaching.
- The teaching content, which essentially demonstrates the medical application of the teaching areas, is predominantly integrative. The transmission of knowledge and the acquisition of practical skills have been supported above all by methodologies that use

² See <u>https://benchmarking-acss.min-saude.pt/BH_Enquadramento/GrupoInstituicoes</u>, accessed on 5 January 2024 as part of the classification process for hospitals, hospital centres, and local health units of the Serviço Nacional de Saúde (National Health Service); "Portaria" no. 147/2016, of May 19, amended by "Portaria" no. 331-B/2021, of December 31.

problem cases, which are closer to the multidisciplinary care practice of current clinical activity.

- The teaching of the so-called basic sciences and other areas justifies the need to have an appropriate number of spaces for teaching/learning in small groups, which has the advantage of favouring teacher-student contact and interaction.
- Laboratories and simulation centres are necessary facilities for practical learning exercises, to train gestures and also behaviours, making it possible to mimic virtual environments of typical clinical situations, training students and reducing the risks for patients when they act in similar situations, but in a real context.
- The relationship between students and the content of the various teaching areas is now very dependent on platforms that bring them closer to the learning sites and sources of information and allow them to streamline training exercises and assessment processes.
- The digital transformation has opened up new possibilities for meeting the diverse demands of teaching/learning processes, so the school must have technically qualified staff to support the needs of teachers and students.
- The proposal must, therefore, provide precise information on teaching spaces including information on number and areas – in accordance with the methodologies that will be used: lecture rooms, rooms for small groups, rooms for individual study, simulation centres, and adequate student support spaces at clinical teaching sites. It should also mention the availability of reading and library rooms, rooms for using digital platforms and spaces for catering, breaks, and socialising.
- The proposal for a new Medical School must mention collaborations with Higher Education Institutions with experience in medical teaching, national or foreign, detailing the forms of support for the organisation and teaching of the study programme.

Teaching staff

- Teachers must have recognised academic qualifications, and their number must be appropriate to the number of students and the diversity of the specific areas of knowledge, namely the basic and clinical areas included in the school curriculum.
- Recognition of academic qualifications means having: 1) curricular qualifications (medical and research career), 2) previous undergraduate teaching experience, preferably in the field of medicine, 3) pedagogical qualifications and experience in the educational methodologies that will be used, 4) participation in scientific activities in the field of medicine.
- The selection of professors must be transparent and non-discriminatory, and the selection methods used must be identified. The stability of recruitment and mechanisms

and activities aimed at continuously training teachers to update and expand their teaching skills must be demonstrated.

- The academic community must be aware of the mechanisms for evaluating teaching performance (peer evaluation, student evaluation) and the criteria for academic career progression.
- The participation of lecturers in teaching more than one subject area must be made explicit in terms of the condition in which this will occur, the number of hours allocated to each participation and the absence of overlapping or overloaded teaching times.
- Teachers responsible for groups of subjects must belong to the respective or related scientific area (e.g. internal medicine and cardiology), and the quantification of coordination tasks must be mentioned in detail.
- Teachers responsible for teaching clinical curricular units must carry out clinical work in health establishments that support clinical teaching and hold a doctorate (with duly justified exceptions).
- The Medical School has a code of conduct for all members of the academic community (teachers, non-teaching staff, students), namely promoting the principles of scientific integrity, safeguarding potential conflicts of interest, and establishing procedures for emerging issues related to various forms of harassment.
- Teaching staff have a duty to participate in drawing up the syllabi for their respective areas of competence and in the measures to be adopted to improve them.
- The core of the teaching staff includes different typologies, mainly career teachers/researchers teaching basic or social subjects, and clinical teachers, career doctors who participate part-time in the clinical activity of health establishments.
- Teachers recruited from the staff of the partner health establishments must be duly integrated into a team supervised by teachers with qualifications and experience in medical teaching and familiar with the teaching methods adopted by the Medical School.
- As required by law, the committees that make up the governing bodies of the Medical School and the partner health establishments must collaborate in the organisation of teaching in their respective units, as well as in the process of selecting teachers to lecture.
- The difficulties experienced by medical schools that already teach MIM programmes in recruiting clinicians and allocating them to teaching tasks have led certain organisations (such as the Conselho das Escolas Médicas Portuguesas - Portuguese Medical School Council) to consider new ways of hiring and recruiting clinicians, namely by creating a career for clinician-teachers, with its own rules and a potential increase in attractiveness (see "Parecer do Conselho de Escolas Médicas Portuguesas sobre a Revisão do RJIES -2007-2023" - Opinion of the Portuguese Medical Schools Council on the Revision of the RJIES - 2007-2023).

Within the scope of the legislation concerning higher education and medical education, the following interpretations are admissible, only applicable to the assessment of a MIM:

- The coordinator of the study programme must hold a higher education degree in Medicine and hold a PhD in the area of Health Sciences.
- The career teaching staff includes teachers from the partner health establishments where the clinical teaching takes place.
- Specialised teaching staff must hold a higher education degree in Medicine, and only PhDs in areas of the Health Sciences can be considered for this purpose.

(See Decree-Law 74/2006, of March 24, has written in Decree-Law 68/2018, of August 16, Decree-Law 312/84, of September 26, and Decree-Law 206/2004, of August 19.)

Teaching quality

- The quality of teaching, due to the demands of its aim, needs to be monitored on an ongoing basis, which is why the Medical School must have a defined policy for this purpose, known to those involved in the teaching/learning process, the university bodies, and society in general.
- The entire school community (management bodies, teaching and non-teaching staff, internal and external stakeholders) must be committed to promoting and assuring a quality policy for teaching.
- It is the responsibility of the institution, applying for lecturing a MIM, to establish the rules and maintain a programme aimed at ensuring the quality of teaching/learning, making resources available for this purpose.
- The resources, namely facilities, technical staff, and internal procedures to fulfil the objectives, will operate with the necessary pedagogical independence and autonomy and will be accountable to the Medical School management.
- The model and organisational structure (office, unit or other) of the Medical School that ensures quality assurance procedures must include improvement processes.
- The system for regular monitoring of teaching/learning quality must include the active participation of students, who must be made aware of this.

• The results of the implementation of programmes for internal quality promotion and assurance should be disseminated in a timely manner.

Governance and sustainability

- In the proposal, it must be possible to clearly identify the existence of a governance model for the school in order to guarantee rigour and professionalism, even in voluntaristic initiatives.
- The hierarchical organisation of roles, tasks, and responsibilities is essential for success. For this reason, the model should indicate the bodies considered fundamental for the coordination and management of the study programme. In addition, it is advisable to justify, through their qualifications, who will carry out these functions.
- It is essential to have an administrative structure specifically assigned to the Medical School to support the implementation and management of the study programme, as well as to provide the necessary support to the academic community, namely social support for students.
- The proposal must demonstrate the economic viability of the project, namely its financial sustainability, which guarantees its stability both in the short term and, more importantly, in the medium term.
- The teaching/learning project must not base its viability on a disproportionate number of volunteer collaborators, which, in addition to potential pedagogical instability, does not dignify the teaching profession.

- The director of the Medical School must have qualifications and experience in medical education processes and methodologies that enable him or her to deliberate and supervise the school's curricular programme. Ideally, the director should also have clinical and biomedical research experience.
- The school must have a set of bodies for good governance, namely a board of directors, a management board, a scientific council, and a pedagogical council, whose functions and operating procedures are clearly defined in their regulations.
- The school's budget should be drawn up by its competent management bodies, with appropriate validation, and there should be mechanisms in

place to ensure that department heads, other faculty representatives, and the head of financial services are heard.

- The expenditure of the different departments is monitored to ensure that the budget is adhered to. The financial and business plans should cover all expected staff costs, namely salaries, benefits, and training for teaching staff, researchers, and non-teaching staff.
- There must be a system of communication between teaching and nonteaching staff in order to implement school policies and educational objectives efficiently and effectively.
- The administrative structure responsible for supporting the resolution of student problems and difficulties must be sufficient for the number of students and the diversity and demands of the programme's coordination, particularly the participation of affiliated assistance units.
- It must be demonstrated that the administrative structure is not only adequate, but also operates with fairness, impartiality, and effectiveness in all its activities.
- Partner healthcare establishments must have a clinical teaching structure controlled and coordinated by the Medical School in the areas in which students are trained, in conjunction with the programme director. This structure should have a clinical director of the affiliated healthcare unit, teaching staff for each area, and its own administrative staff.
- The school must present a written protocol with each of the partner healthcare establishments which must be in effect. The protocol must set out the roles and responsibilities of both parties, the educational objectives, the responsibilities of the teaching staff, the time commitment, the assessment procedures, and information on the student's access to appropriate hospital resources and facilities.
- The number of teachers must be appropriate to the number of students enrolled, academically qualified and specialised, with pedagogical qualifications and teaching experience, with evidence of stability and training dynamics.
- Teaching staff should be involved in decision-making related to the medical education curriculum, including opportunities to participate in establishing policies and procedures for programme improvement. There should be an identification of the leaders responsible for sector areas, as well as the committee responsible for curriculum design and monitoring and harmonisation of student assessment processes.
- The Medical School guarantees additional time to teaching staff members for preparation, student mentoring, and committee work and offers opportunities for maintaining competence/continuing medical education and professional development in the areas of teaching and research.
- The Medical School provides evidence of the hiring and training of teaching staff and has a defined policy for the selection and appointment of teachers.

Teachers are informed prior to signing the contract about workload distribution, benefits, and payment, as well as work and academic regulations.

- The Medical School has a code of conduct for all members of the academic community, including standards of behaviour for teacher-student relations. It defines policies to obviate and mitigate conflicts of interest and pursues an anti-discrimination policy for the entire academic community.
- There is a definition of the policy of merit and recognition of teaching staff in terms of excellence in teaching, research, and contribution to the success of the institution. To this end, there is an internal system for periodic assessment of the competence and performance of the teaching staff and for promotion and career progression, which should be carried out in a transparent manner, with targets set in line with international standards. There should be a system for regularly informing the teaching staff about their performance and the progress of their academic activities.
- In addition to career teachers, there may be an adequate number of external teachers to take part in practical teaching, who should be part of a teaching team supervised by senior teachers, i.e. those with teaching experience and responsible for the objectives to be achieved in each area.
- The Medical School has a prior training plan for external or guest lecturers with no teaching experience to familiarise them with the teaching and assessment objectives and methodologies of the area in which they will be participating and provides resources to improve the lecturers' training with regular monitoring of their participation in teaching.
- The categories of non-teaching staff include technical, administrative, and management staff. The school must present the structure and organisation of the non-teaching staff, who must be suitably qualified for their role in supporting the teaching of the study programme. There must be a procedure for evaluating the technical, administrative, and management staff and measures to ensure their ongoing training and professional development.
- The application must guarantee the economic resources necessary for the start of the Medical School's operation, until its complete development (all years in operation and complete curriculum) and for subsequent years.
- The funding available must cover all the expected costs, both the initial costs of establishing the institution and the programme, and the running costs. Specifically, this should include buildings, equipment, salaries, staff benefits, student support, and the cost of maintaining the school and its educational programme.
- The Medical School should obtain audited financial statements every year, which should be subject to an independent external evaluation and approved afterwards.
- An appropriate contingency plan should be in place to minimise disruption to the teaching programme due to catastrophic events and natural disasters.

Periodic review of the criteria

The criteria proposed in this document must be reviewed every 2 years by an expert work group appointed by the Management Board of A3ES.