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## Special article

# Accreditation of specialized surgical units in general and digestive surgery: A step forward by the AEC for quality improvement and subspecialized Fellowship training<sup>☆</sup>



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## ABSTRACT

At present, in daily practice, the Departments of Surgery in most hospitals in Spain are organized into “Specialized Surgical Units”, including specific structure, human resources, organization, teaching and research in the different subspecialties included in General and Digestive Surgery (GDS). Furthermore, there are also several specialized “fellowship-like”, training programs in the different subspecialties already working in some of these “Specialized Surgical Units”, although not officially financed. However, until now there was no model for accreditation or recognition of these Units or fellowship programs. The AEC has designed a regulation for the accreditation of Specialized Surgical Units in GDS, that will also serve as a model to define subspecialty training in these areas. The accreditation process, and with it, the process of quality improvement, includes different quality indicators, including unit structure, process quality, and result indicators.

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## Accreditación de unidades quirúrgicas especializadas en cirugía general y aparato digestivo: un paso de la Asociación Española de Cirujanos para mejorar la calidad asistencial y la formación subespecializada tipo *fellowship*

### R E S U M E N

#### Palabras clave:

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En la práctica clínica asistencial la existencia de determinadas «unidades quirúrgicas especializadas», que se distinguen por su estructura, dotación de recursos humanos, organización, docencia e investigación ya son una realidad en la mayoría de los hospitales en España. Igualmente, están ya en marcha programas de formación especializada tipo *fellowship*, financiados de forma no estatal, en algunas de las áreas reconocidas de unidades quirúrgicas especializadas dentro de la cirugía general y aparato digestivo, algunas de ellas avaladas por la AEC. No obstante, hasta el momento no existía un modelo para dotarlo de reconocimiento y acreditación. La AEC ha diseñado una normativa para la acreditación de unidades quirúrgicas especializadas en cirugía general y aparato digestivo, que servirá de base también para definir la formación en estas áreas. El proceso de acreditación, y con ello de mejora de la calidad, engloba aspectos de calidad estructural, calidad de proceso y calidad de resultados.

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### Introduction

According to the Oxford Dictionary, to *accredit* is “to give authority or sanction to (someone or something) when recognized standards have been met”. Accreditation is a voluntary process by which an organization is able to measure the quality of services or products and the performance of these versus nationally or internationally recognized standards. Accreditation recognizes the quality of the programs or the accredited institution (European Standard ISO 9001: 2015). The accreditation process should be robust, defendable, unambiguous, and transparent.

In healthcare, accreditation means that recognition is obtained for meeting the necessary requirements for quality medical care,<sup>1-3</sup> such as sufficient knowledge and experience in the management of a particular disease or procedure, a volume of activity that guarantees an adequate level of quality and patient safety, necessary equipment and personnel, additional hospital resources (multidisciplinary team), procedural indicators and adequate results (in addition to an information system to monitor the activity carried out and to evaluate the results), and the capability to train other professionals.

Currently, in the information age, patients have more and more possibilities to find information about the fundamentals of their disease and diagnostic-therapeutic possibilities. The doctor-patient relationship has gone from paternalism to information and decision-making with the patient. Society, patients and medical professionals demand quality care, and the need for assistance and subspecialized training in the specialty of general and digestive surgery (GDS) is evident.

### The need for specialized surgical units in general/digestive system surgery and fellowships

Scientific and technical progress lead to super-specialization, and in clinical practice it is associated with an evident

improvement in results. There is a well-known relationship between the number of complex surgical procedures performed in a hospital and morbidity; therefore, the centralization of these procedures is recommended.<sup>4-8</sup> For this reason, there are already examples in place of a mandatory system of patient concentration in Spain for the surgical and multidisciplinary treatment of certain tumors (esophagus, pancreas, rectum, etc), such as the Oncology Plan of Catalonia.<sup>9</sup>

It is also evident that the axis of these good results is the participation of highly qualified surgeons and teams. According to the definition of the European Union Of Medical Specialists, GDS is comprised of the following surgical subspecialties: general surgery, coloproctology surgery, hepato-biliopancreatic surgery and transplantation, esophago-gastric surgery, endocrine surgery, breast surgery, emergency and trauma surgery, and bariatric and metabolic surgery.<sup>10</sup> As for the training in these areas of sub-specialization, there are already fellowship-type subspecialized training programs under way (with non-government funding) that are similar to programs in the USA. One of the authors (EGG) has been a promoter of the first fellowship training program in Spain in coloproctology, which is in its 14th edition this year, and currently there are at least 4 others in coloproctology, 2 in hepato-biliopancreatic surgery and one in bariatric surgery, all endorsed by the Spanish Association of Surgeons (AEC).

This training in the different subspecialties aims to expand both the theoretical and practical knowledge that are not fully covered during GDS residency. The European Union of Medical Specialists (within the framework of the European Union) has proposed standardizing this training. Therefore, its different divisions have prepared specific curriculum vitae and proposed to homogenize subspecialty training, with the possibility of obtaining the European Board of Surgery certification in the different subspecialties described above. Thus, specialists in the different areas would also be awarded distinctive recognition.

Until now, this subspecialized training has not been regulated in our country, and the same is true for the units

where this training is offered. However, the AEC<sup>11</sup> has been a pioneer in this area and has already established regulations for the development of fellowship programs applicable to the different specific training areas within GDS.

In clinical practice, certain units at different hospitals have been recognized by medical professionals themselves. Due to their structure, human and material resources, and organization, they are at a super-specialized level of quality of care, without forgetting the connotations that this has in the teaching and research field. In fact, areas of specialization are already a reality in most hospitals in Spain. For all these reasons, the need for accreditation has been raised.

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### Accreditation of surgical units specialized in general and digestive system surgery by the Spanish Association of Surgeons (AEC)

The AEC believes that it is essential to define and regulate the acquisition of highly specialized skills within GDS and therefore proposes regulations for the accreditation of surgical units specialized in general and digestive system surgery.<sup>12</sup>

The purpose of this regulation is to establish requirements for the designation of specialized surgical units by the AEC. In the near future, these will have the objective of diagnosing and treating complex processes that will undoubtedly benefit from the concentration of cases and super-specialization.

In other countries, accreditation protocols have already been created to assess what requirements are necessary for a hospital to perform certain types of surgery. In our setting, different accreditation procedures have been proposed by certain scientific societies, including the Spanish Association of Coloproctology,<sup>13</sup> which has been operating successfully for several years. Other societies, such as the Spanish Society for Obesity Surgery, have also prepared an accreditation program. Within the AEC, it is important for the coordinators of the aforementioned divisions to establish the criteria for the designation of accredited units, following the regulations. Some divisions have already defined these criteria, which is the case of the emergency and trauma surgery, esophagogastrointestinal surgery, obesity surgery and endocrine surgery divisions (in publication phase).

The AEC will give the designation 'specialized surgical units' to those units that are specialized in the care of diseases or groups of diseases, whose high level of specialization and experience can only be achieved and maintained through certain volumes of activity, in accordance with scientific evidence and public demand. The AEC will also consider partnerships between 2 or more medical centers, services or units that share all their resources and function as a single center, service or healthcare unit that opts to be accredited as a reference unit.<sup>12</sup>

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### Final comments

From the standpoint of the AEC, the objective of accreditation is, therefore, to define specialized surgical units as functional elements of the healthcare system that meet established requirements in terms of their services, solvency, specialized

care, specialized teaching and specialized research, allowing them to be recognized as referral units.

This project is especially important and is the absolute responsibility of the AEC. First of all, it favors the consolidation and organization of the current reality of most hospitals, which is the outcome of the intellectual and technological development of our specialty. Secondly, the current Spanish Health Law contemplates the development of specific skill areas and training diplomas. The Spanish Royal Decree that would legislate this issue is a priority objective of the medical specialty training subdirectorates of the Ministry of Health for the coming months. Therefore, it is especially important that the possible areas of application, accreditation models and methods to obtain diplomas are well defined and analyzed for the advancement of clinical surgery in the coming years. This project is also in line with the Spanish medical specialties decree, which deals with specific training areas. It will enable foundations to be laid so that the units can train specialists in the areas of sub-specialization, either through fellowships or another training system.

The accreditation process, which goes hand in hand with improved quality, encompasses aspects of structural quality (eg education/training, continued training, clinical facilities and organization), process quality (diagnostic algorithms, collaborations with other units, treatment protocols/clinical practice guidelines) and quality of results (improvement in the treatment or cure of diseases, patient satisfaction, complications, and morbidity and mortality).<sup>12</sup>

Finally, it is important to highlight that the AEC has initiated this dynamic process with the crucial participation of the interested divisions. The AEC, including the Training Division, the Scientific Committee and the Board of Directors, has created a *special commission for the accreditation of specialized surgical units*, which will oversee and guarantee the reliability of these accreditations.

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### Conflict of interests

None.

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### REFERENCES

1. Braithwaite J, Greenfield D, Westbrook J, Pawsey M, Westbrook M, Gibberd R, et al. Health service accreditation as a predictor of clinical and organisational performance: a blinded, random, stratified study. *Qual Saf Health Care*. 2010;19:14-21. <http://dx.doi.org/10.1136/qshc.2009.033928>.
2. Shaw CD, Groene O, Botje D, Sunol R, Kutryba B, Klazinga N, et al. The effect of certification and accreditation on quality management in 4 clinical services in 73 European hospitals.

- Int J Qual Health Care. 2014;26 Suppl 1:100-7. <http://dx.doi.org/10.1093/intqhc/mzu023>.
3. Musholt TJ, Bränström R, Kaderli RM, Pérez NM, Raffaelli M, Stechman MJ, et al. Accreditation of endocrine surgery units. *Langenbecks Arch Surg.* 2019;404:779-93.
  4. Luft HS, Bunker JP, Enthoven AC. Should operations be regionalized? The empirical relation between surgical volume and mortality. *N Engl J Med.* 1979;301:1364-9. <http://dx.doi.org/10.1056/NEJM197912203012503>.
  5. Pieper D, Mathes T, Neugebauer E, Eikermann M. State of evidence on the relationship between high-volume hospitals and outcomes in surgery: a systematic review of systematic reviews. *J Am Coll Surg.* 2013;216:1015-25. <http://dx.doi.org/10.1016/j.jamcollsurg.2012.12.049>. e1018.
  6. Duclos A, Peix JL, Colin C, Kraimps JL, Menegaux F, Pattou F, et al. Group CS Influence of experience on performance of individual surgeons in thyroid surgery: prospective cross sectional multicentre study. *BMJ.* 2012;344:d8041. <http://dx.doi.org/10.1136/bmj.d8041>.
  7. Simons R, Kirkpatrick A. Assuring optimal trauma care: the role of trauma centre accreditation. *Can J Surg.* 2002;45:288-95.
  8. Ministerio de Sanidad. Available from: <https://www.mscbs.gob.es/profesionales/portada/home.htm>. [Accessed 13 January 2021].
  9. PLA ONCOLOGIC DE CATALUNYA. Available from: [https://salutweb.gencat.cat/web/.content/\\_ambits-actuacio/Linies-dactuacio/Estrategies-de-salut/Cancer/Documentacio/pd\\_oncologia\\_2017\\_2019.pdf](https://salutweb.gencat.cat/web/.content/_ambits-actuacio/Linies-dactuacio/Estrategies-de-salut/Cancer/Documentacio/pd_oncologia_2017_2019.pdf). [Accessed 13 January 2021].
  10. UEMS especialidades CGAD. Available from: <https://www.uemssurg.org/section-and-board/ebsq-examination>. [Accessed 13 January 2021].
  11. Bases Generales de la AEC para las becas Fellowship. Available from: [https://www.aecirujanos.es/files/portalmenus/315/documentos/Bases\\_becas\\_fellowships\\_AEC\\_vf\(1\).pdf](https://www.aecirujanos.es/files/portalmenus/315/documentos/Bases_becas_fellowships_AEC_vf(1).pdf). [Accessed 13 January 2021].
  12. Normativa de la AEC para unidades acreditadas. Available from: [https://extranet.aecirujanos.es/files/portalmenus/385/documentos/NORMATIVA\\_AEC\\_para\\_Unidades\\_Acreditadas.pdf](https://extranet.aecirujanos.es/files/portalmenus/385/documentos/NORMATIVA_AEC_para_Unidades_Acreditadas.pdf). [Accessed 13 January 2021].
  13. Asociación Española de Coloproctología. Available from: <https://acredita-aecp.com/>. [Accessed 13 January 2021].