

# Professional development of emergency medical responders from ambulance attendants to paramedics in Spain (7): expectations for 2012

FERNANDO LÓPEZ MESA<sup>1</sup>, JUAN JORGE GONZÁLEZ ARMENGOL<sup>2</sup>

<sup>1</sup>Vicepresidente 4º, Vocalía de Técnicos. <sup>2</sup>Presidente SEMES-Madrid, Spain.

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Health emergency technicians (TES in Spanish) are the mainstay of out-of-hospital medical emergency services in Spain. No ambulance service exists without their involvement<sup>1</sup>. In fact, most medical transport is performed exclusively by this professional group. Recent legislative changes, outlined in various "Viewpoint" articles in this Journal<sup>2-5</sup>, have led to the recognition of TES as medium grade certification. This has raised expectations and the desire to obtain this certification in all staff engaged in active health transport functions (regulated by Royal Decree 295/20046 amended by Royal Decree 1087/2007), and obtaining it also implies qualification in multiple victims and disaster healthcare, also regulated by Royal Decree 1087/2005.

It should be remembered here again that a professional qualification is a set of professional skills and competencies with implications for employment, which can be acquired by modular or other types of training, and through work experience. These competencies are defined in the National Catalogue of Professional Qualifications (CNCP) as level 2 competencies (Table 1). They are a set of well-defined professional activities with the ability to use the appropriate tools and techniques, which mainly concern workers who are capable and qualified to carry out their functions in an autonomous manner. It requires knowledge of the fundamental technical and scientific principles of their activity, comprehension and implementation skills.

In this regard, the various public administrations involved, with the support of social agents and associations in the sector, are collaborating to establish the assessment procedures and accreditation of these competencies (PEAC in Spanish). The

purpose is to help minimize the difficulty of this process, which requires substantial economic, material and human resources. PEAC will culminate in the award of the relevant professional certificate, regulated by Royal Decree 710/2011 of 20 May and included in the national directory of professional certifications, in the Health section. Thus, medical transport technicians (TTS in Spanish) who qualify through PEAC can now continue their education and meet the requirements for access (to the higher level of TES), to study the subjects included in the training curriculum, including: basic anatomico-physiology and pathology, tele-emergencies, work-related training and orientation, enterprise creation and entrepreneurship and, in some regions, technical English. This way they can complete all the units of competence required to obtain the medium grade certification. The autonomous communities are implementing various forms of TES training as defined in Royal Decree 1397/2007. Thus, they are establishing the formal academic course of access for future TES through the educational system. Along with this, they are implementing "free" tests (open access) leading to the title of TES at approved public centers, regulated by RD 1147/2011. The free tests are another way to obtain the title for workers who possess the knowledge but not official recognition.

## Professional category and LOPS

Over the coming months, we expect a change in RD 619/1998 of 17 April, which establishes the technical characteristics, medical equipment and staffing of ambulances. In the section on personnel, there is an amendment regarding the posi-

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**CORRESPONDENCE:** F. López Mesa. Vicepresidente 4º SEMES-Madrid, Spain. E-mail: fernando.lopez@semesmadrid.es

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**Table 1.** Levels of the National Catalogue of Professional Qualifications

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<b>Level 1:</b> Competence in a small set of relatively simple work activities for standardized processes, with limited theoretical knowledge and practical skills.
<b>Level 2:</b> Competence in a well defined set of professional activities with the ability to use the instruments and techniques, mainly concerning the performance of work that can be performed independently within the limits of these techniques. Requires knowledge of technical and scientific fundamentals of the activity, understanding and application of the process.
<b>Level 3:</b> Competence in a group of professional activities that require mastery of various techniques and can be performed autonomously. Involves responsibility for coordination and supervision of technical and specialized work. Requires an understanding of the scientific and technical fundamentals and the evaluation of process factors and their economic impact.
<b>Level 4:</b> Competence in a broad range of complex professional activities carried out in a variety of contexts that require mastery of technical, scientific, economic and organizational actions to plan, define and develop projects, processes, products or services.
<b>Level 5:</b> Competence in a broad range of highly complex professional activities carried out in various contexts, often unpredictable, which involves planning actions or developing products, processes or services. Great personal autonomy. Responsibility for resource allocation, analysis, diagnosis, design, planning, implementation and evaluation.

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tions of attendant and driver who will be designated TES and TES-driver. The directors of the various medical transport services will establish new work rules and standard protocols based on the professional competencies of the title TES. The change should be accompanied by the corresponding change in the professional category in collective agreements of the sector and include TES in the Law 44/2003<sup>8</sup> of November 21, regulating the health professions (LOPS in Spanish) in Article 3 of Point 2b.

### Scientific base, publication, work groups, continuing education and bibliography

TES training curriculum is established respecting the pedagogic, organizational and management autonomy of the centers that offer the training. They will promote teamwork by the teachers and the development of training plans, research and innovation in their teaching field, and encourage continuous improvements in the process of training. It is the responsibility of the teachers to transmit the same values to the new TES, so that once their training is completed they can actively participate in the activities of professional emergency societies in developing the profession with publications, operating procedures and quality training for TES. Some scientific journals published in Spanish already offer TES the possibility of publishing articles related with their professional activity, with all the repercussion and benefit that publication entails. TES are already involved in work and research groups, independently or along with nursing and medical professionals. Examples include the regional working groups of SEMES (Table 2) or SAMUR in Madrid, who among other out-of-hospital emergency services have already introduced TES contributions in their scientific publications.

Those responsible for the TES sections should

continue to support and encourage them to participate in training their colleagues and educating the general public on the duty to promote health. Continuing education programs serve to extend and update TES knowledge on scientific advances as they occur. Similarly, it is necessary to improve the fund of specific scientific literature for this group. Greater and better material covering the total curriculum is required, since at present these professionals largely have to rely on publications by other professionals to answer their needs, questions and doubts. In this regard, SEMES, the main scientific society representing these health emergency professionals, is the reference point for information and training in accident and emergency medicine (Table 3)<sup>9</sup>. SEMES works to secure the cohesion and harmonious development of TES in Spain, and is the vehicle of communication with institutions. It organizes continuous education programs, briefing sessions, events for scientific dissemination, and promotes public training courses to obtain the professional qualification of TES. To meet these challenges it is essential to promote the cohesion of TES, grouped in associations or societies seeking their development and improving social recognition and professional dignity. Today, TES are already performing advisory functions in the vehicle body manufacturing sector, medical transportation specialist centers, emergency coordinators and emergency telepho-

**Table 2.** Active working groups in different autonomous communities of Spain within the section of SEMES Technicians

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<b>Madrid:</b> Working Group "evacuation and patient transport": Report on attention and transfer of the patient.
<b>Madrid:</b> Working Group "FCT: On the Job Training": TES Student's practical work notebook.
<b>Andalusia:</b> Working Group "Out-of-hospital initial trauma care."
<b>Andalusia:</b> Working Group "Initial attention of multiple victims and catastrophe victims. "
<b>Andalusia:</b> Working Group "First responders".
<b>Andalusia:</b> Working Group "Guidance on the assessment process and accreditation of skills acquired through work experience. "
<b>Andalusia:</b> Working Group "DESA group."

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**Table 3.** Referring Sites SEMES information in the different regions, together with the responsible technical section and email address

Region	Website	Technician representative	E-mail
National	www.semes.org/tecnicos.php	Carlos Vicente Faguas Fernández	carfaguas@hotmail.com
Andalucía	www.semesandalucia.com/10/index.php/vice4	José Antonio Saucedo Sánchez	jortega@se.epes.es
Aragón	http://semesaragon.org/	Ángel Domingo Gotor	angeldomingo1@gmail.com
Asturias	www.semesasturias.net	Luis Alberto Mames Delgado	luismames@hotmail.com
Baleares	www.semesbalears.org/sociedad.aspx	Guillermo Nicolau Far	guillermonicolau@hotmail.com
Canarias	www.semescanarias.org	---	---
Cantabria	http://semescantabria.zoomblog.com/cat/18864	Ignacio Achurra Pardo	nachuko@msn.com
Cataluña	www.socmue.cat/	Jordi Venaci García Patiño	jvenanci@ccoo.cat
Castilla y León	www.semescyl.org/taxonomy/term/3	Raúl Artiguez Terrazas	artiguez@ono.com
Castilla la Mancha	---	José A. García Carrasco	joseantoniocar@wanadoo.es
Euskadi	www.semeseuskadi.org	Alfonso Picabea Zubia	apicabea@semeseuskadi.org
Extremadura	www.semesextremadura.com	Enrique Pedro Carballo Domínguez	vocaltecnicos@semesextremadura.com
Galicia	www.semesgalicia.es	María José Rodríguez Lorenzo	mariajoserodriguez@hotmail.com
Madrid	www.semesmadrid.es/tecnicos.html	Fernando López Mesa	fernando.lopez@semesmadrid.es
Murcia	---	---	---
Navarra	http://semesnavarra.org	José Javier Valenzuela Moreno	jjvalenmoreno@gmail.com
Rioja	http://semesrioja.blogspot.com/	Miguel Fallanza Pérez	fallanza@yahoo.es
Valencia	www.semes-cv.com/p/tecnicos.html	Juan de Dios Pastor Cano	gerencia@ambulcsa.com

ne services (CCU-061 or 112), and TES are acting as coordinators of local services, regional services and as specialists in logistics or civil protection. But it will be when the people in whole current production system have completed their training to level 2 according to the CNCP that we will begin to develop real professionals in all these fields. Finally we can expect to see regulated courses for level 2 specialists according to the CNCP, accessible after obtaining the title of TES, or a future development to level 3, similar to that already in place in other countries<sup>10,11</sup>, requiring mastery of several techniques and ability to use them autonomously, and with responsibility for coordination and supervision of technical, specialized work functions, among others.

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