Endocrine Connections (2026) **15** ec260056
https://doi.org/10.1530/EC-26-0056

Received 19 January 2026
Accepted 15 May 2026
Available online 18 May 2026
Version of Record published 2 June 2026

RESEARCH

Recognition and accreditation of postgraduate training centres in endocrinology in Europe

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Abstract

Background: The quality of care of patients with endocrine diseases depends on the training of trainees. To ensure this, the European Society of Endocrinology (ESE) and the UEMS (European Union of Medical Specialists) Section and Board of Endocrinology (SBE) have recently published the updated curriculum and formulated recommendations on postgraduate training.

Aim: To complement this, information on the number of training centres and trainees in endocrinology in European countries, on the process of accreditation and re-accreditation of training centres and on the organisation of training is presented here.

Methods: Delegates to the General Assembly of the UEMS SBE were asked to complete a questionnaire.

Results: Delegates from 35 countries provided data. In three countries, endocrine training occurs in other countries, and in one country, endocrinology is not a recognised independent speciality. Thirty-one delegates reported 767 training centres, 18 reported having rotation centres, and 26 reported a total of 4,248 trainees. An accreditation process, which varies across countries, is in place in 27 countries. Re-accreditation is mandatory in 22 countries at intervals ranging from 1 to 7 years. Thirteen countries have a train-the-trainer programme, and the trainee-to-trainer ratio varies from 3:1 to 1:1.

Conclusion: The accreditation and re-accreditation process of training centres varies across European countries. Information on the number of trainees might provide a basis to estimate whether a sufficient number of endocrinologists are produced in Europe to ensure optimal care of the growing number of patients with endocrine and metabolic diseases.

Keywords: accreditation of centres in endocrinology; rotation centres; train-the-trainer programme; training centre site visit

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Introduction

The accreditation of centres providing medical education – the certification of the suitability of medical education programmes and of the competence of institutions delivering postgraduate training – assures patient safety through the training of competent doctors to provide optimal patient care. Accreditation can be accomplished by self-evaluation and/or a peer review that may include a site visit. This may be undertaken by a responsible ministry, a professional regulatory body, a national accrediting body or a professional society. Sets of standards form the basis of the accreditation. The WHO issued a statement in 2016 that 'by 2020, all countries will have established accreditation mechanisms for health training institutions', which is now the case in almost all of the countries of this survey (1).

Meanwhile, an ESE curriculum and training recommendation in endocrinology has been jointly published by the ESE Education Committee and the UEMS SBE that includes recommendations for training centres (2). In short, training centres must satisfy the following parameters:

- be recognised and accredited by the respective national authorities,
- be based in a university department, a university-affiliated institution or in an institution with an equivalent educational and/or research programme,
- be located in a hospital or institution, which also has surgical, intensive care and radiology departments and access to histopathology, biochemistry, microbiology and haematology laboratory facilities.
- have a broad array of other medical speciality services, such as cardiology, pneumonology, gastroenterology, haematology, nephrology, infectiology and oncology,
- be housed in suitable buildings and have facilities for inpatients and outpatients, as well as a diabetes unit and an endocrine clinical investigation room/laboratory, and
- have satisfactory premises for education with teaching space, library and contemporary information technology and audio-visual teaching aids.

Centres lacking the full complement of training facilities and opportunities may be recognised as a rotation-training centre. A trainee may, therefore, fulfil the training by rotating between a number of recognised training centres (1–2 years), each of which may provide specific but not all aspects of the training requirements in endocrinology.

A 'Charter for Visitation and Accreditation of Training Centres' was published by UEMS in 1997 (3), and the UEMS Working Group on Postgraduate Training (PGTWG) has recently revisited this charter and has asked all sections and boards to analyse implementation and practice of accreditation of training centres according to these UEMS recommendations. This is essential to further develop means of promoting and harmonising the aspect of quality process in training of medical specialists. Furthermore, it might inspire member countries to expand cooperation on training and accreditation.

In a recent survey on Postgraduate Training and Continuous Medical Education/Continuous Professional Development published jointly by ESE and UEMS SBE, most delegates of the UEMS SBE reported that their countries have accredited training centres (4), but details of the accreditation processes were not sought in that survey. In an effort to obtain more insight into the information gathered in the initial survey, it was decided to conduct an additional in-depth survey to obtain an overview of the current national management of recognition, accreditation and re-accreditation of training centres in endocrinology in European and neighbouring countries. In addition, we present here data on the number of training centres and trainees in each country, as well as more details on the organisation of training.

Methods

The survey was conducted between October 2024 and August 2025. Delegates of the member countries of the UEMS Section and Board of Endocrinology, including the 35 who participated in the previous survey (4), were asked to provide the following information:

- Is training in endocrinology structured and delivered by a national body?
- Please provide a list of all postgraduate training centres for endocrinology in your country.
- Do you have a system with rotation between centres?
- Number of trainees in endocrinology.
- Is there a required trainer-to-trainee ratio?
- Is there an established train-the-trainer programme?
- Details on the accreditation and re-accreditation process.
- Are there training centres in your country that wish to act as centres for European training, and/or take part in a European accreditation process?
- Do your training centres comply with the recommendations in the ESE curriculum?

All delegates were asked to confirm the data provided in Table 1 in October and November 2025, and approval was obtained from 27 countries.

Results

We have obtained information from 35 delegates, including 26 representing full member countries and 5 (Montenegro, Serbia, Ukraine, Israel and Turkey)

Table 1 Number of training centres in endocrinology in Europe, number of trainees, trainee-to-trainer ratio, train-the-trainer programme and information on accreditation and re-accreditation.

	Recognised centres (*n*)[§]	Rotation centres (*n*)[§]	Population (million)	Trainees (*n*)[§]	Trainee-to-trainer (ratio)	Train-the-trainer programme	Total training duration (years)[§]	Accredited by	Accreditation	Accreditation with site visits	Re-accreditation
Malta	1	No	0.6	10	1.5–1	No	8	Postgraduate Training Centre at Mater Dei Hospital (Ministry of Health)	Yes	No (same site)	No
Montenegro	1	No	0.62	50	No	No	6	Agency for Control & Qual. Assur. of Higher Education (final licence, Ministry of Education)	Yes	Possible	No
Latvia (ped.)	1	No	1.9	Dna	Dna	Dna	5	External auditors	Yes	Yes	Yes
Slovakia	3	No	5.4	57	No	Yes	5	Accreditation Committee at Ministry of Health	Yes	No	Yes
Estonia	3	2	1.37	5	No	No	4	University of Tartu	Yes	No	Yes
Lithuania	2	19	2.82	20	2–1	Yes	6	Centre for Quality Assurance. Ministry of Education, Science and Sport	Yes	Yes	Yes
Bulgaria	3	15	6.5	50	3–1	Yes	4	The Accredited Medical Universities/Affiliated Hospitals, supervision of the Minister of Health	Yes	Yes	Yes
Norway	4	39	5.6	45	Dna	Dna	6.5	No formal accreditation, but regular visits from the Norwegian Society for Endocrinology	No formal	No	No
Denmark	5	18	5.9	90	2–3 to 2	Yes	7	National Board of Health	Yes	Yes	Yes
Serbia	5	No	6.6	50	No	No	6	National Entity for Accreditation and Quality Assurance (Ministry of Education)	Yes	No	Yes
Finland	5	10	5.6	53	1–1	Yes	6	The University Hospitals under the supervision of Ministry of Social Affairs and Health	Yes	Yes	Yes
Switzerland	6	32	8.9	60	No	No	6	SIWF Swiss Medical Association	Yes	Yes	Yes
Romania	6	No	19.9	Dna	Dna	Dna	6	Vice – Rector (prorector) and by the Public Health Direction	Yes	Yes	Yes
Ukraine	6	No	42	Fluctuates	No	No	0.25	Dna	No	No	No
Belgium	7	7	11.1	Undefined	No	No	6	No formal accreditation, but indirect accreditation of maitre de stage	No formal	No	No

(Continued)

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Table 1 Continued.

	Recognised centres (*n*)[§]	Rotation centres (*n*)[§]	Population (million)	Trainees (*n*)[§]	Trainee-to-trainer (ratio)	Train-the-trainer programme	Total training duration (years)[§]	Accredited by	Accreditation	Accreditation with site visits	Re-accreditation
Sweden	7	10	10.6	105	1–1	Yes	6	Lipus, a national organ performing external quality review of postgraduate training	Yes	Yes	Yes
The Netherlands	7	No	18.2	40	2–1	Yes	6	Committee Section of Endocrinology	Yes	Yes	Yes
Croatia	8	20	3.86	67	3–1	No	5	Ministry of Health	Yes	No	Yes
Czech Republic	14	59	10.85	336	2–1	Yes	5	Ministry of Health (Czech Endocrinological Society)	Yes	Yes	Yes
UK	20	20	68.4	495	No	Yes	8	No formal accreditation of centres, but multicentre regional programmes accredited by GMC	No formal	No	No
Ireland	14	12	5.3	56	1.5–1	Yes	6	Medical Council of Ireland accredits the RCP of Ireland that ensures that training centres meet its standards	Yes	Yes	Yes
Israel	18	No	10.15	45	No	No	8	Scientific Council in the Israel Medical Association	Yes	Yes	Yes
Portugal	18	No	10.6	>90[‡]	1–2–1	Yes	5	Directive Board of the Portuguese Endocrinology Medical Association	Yes	Yes	Yes
Hungary	21	8	9.6	Not defined	No	No	7	One of four Universities and approved by National Directorate	Yes	No	Yes
Greece	24	Yes	10.41	90	3–1	Yes	6	Qualification Board and Accreditation Committee	Yes	No	No
Austria	31	No	9.1	79	1–1	No	6	Governor of the respective Federal state/official statement of the Medical Chamber of Austria designated	Yes	Possible	No
Italy	33	No	59	796	No	No	4	Ministry of Education	Yes	No	Yes
Poland	51	3	36.7	429	3–1	No	5	Special Commission of the Medical Centre of Postgraduate Education	Yes	Yes	Yes
Turkey	58	20	85.3	258[†]	3–1	Yes	7	Ministry of Health Qualification Board and Accreditation Committee	Yes	Yes	Yes

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Table 1 Continued.

	Recognised centres (*n*)[§]	Rotation centres (*n*)[§]	Population (million)	Trainees (*n*)[§]	Trainee-to-trainer (ratio)	Train-the-trainer programme	Total training duration (years)[§]	Accredited by	Accreditation	Accreditation with site visits	Re-accreditation
Spain	85	No	48.4	448	No	No	4	Ministry of Health	Yes	No	No
France	300	50	69	424	No*	No	4	29 cities with several universities, in each a coordinator accepts or refuses application	Yes*	No	Yes
Slovenia		Nrs									
Luxembourg, Cyprus and Iceland		Training abroad									

ped, paediatric; Dna, data not available; Nrs, not recognised speciality; RCP, Royal College of Physicians; GMC, general medical council.
*At least one senior in the centre being a member of a university and, therefore, holds MD or PHD. [†]Years 1, 2 and 3. [‡]Up to 180. [§]Recognised centres per million (*n*): median: 0.7, range: 0.3–4.4; rotation centres per million (*n*): median: 0.3, range: 0–6.7; trainees per million (*n*): median: 9, range: 2–17.4, training duration (years); median: 6, range: 0.25–8.

representing associated countries. Four countries were not included in this survey (1 country where endocrinology is not a recognised speciality (Slovenia) and three countries which send their doctors for training abroad (Luxembourg, Iceland and Cyprus)) (Table 1).

While there is some correlation between population size and the number of training centres, some smaller countries such as Croatia, Ireland, Hungary and Austria have more accredited centres, whereas the UK, the Netherlands and Romania have fewer. This variation was also observed for the number of trainees.

As reported previously, there is also variation in the structure and duration of training in endocrinology across Europe and neighbouring countries and also the roles of specialists, which might contribute to some of the above-mentioned variations. For instance, in some countries, endocrinology specialists and trainees contribute very substantially to Internal Medicine duties, whereas in others, they do not (4).

Thirty-one countries reported having a total of 767 main centres in endocrinology (Table 1) and 344 rotation centres (18 countries have a rotation programme; 13 countries do not). An estimated number of 4,248 trainees were reported across 26 countries. Twenty-three countries reported that most or all their centres comply with the ESE curriculum recommendations, and four said that they did not.

Fifteen countries reported a national standard for the trainee-to-trainer ratio varying between 3:1 and 1:1.5; eleven countries had no stipulated ratio; and five countries did not provide any information.

Thirteen countries have a train-the-trainer programme, 14 do not have one and 4 did not comment.

Training in endocrinology is structured and delivered in centres accredited by a Ministry and/or attached national body/committee in 16 countries, by a central university hospital in 4, the relevant medical association in 6 and external auditors in 1; data are missing from 1. Three countries have no formal accreditation of training centres. The national bodies responsible for accreditation are listed in Table 1.

In the 3 countries with no formal accreditation process, a quality assessment is nevertheless in place, in the form of regular visits by the national endocrine society, through indirect accreditation by a group of professors or, finally, by a public body that maintains the official register of medical speciality trainees and provides the relevant data to the responsible institution or organisation in the different speciality areas. They arrange site visits to the hospitals where training is provided, as appropriate.

Site visits form part of the accreditation programme in 15 countries and potentially also in another 2 (e.g. Norway has site visits but no formal accreditation programme). Other aspects of the accreditation

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programme include the description of the institution and training structure (either at site visits or on paper) in 25 countries, stipulated trainee-to-trainer ratio in 20 countries and, finally, stakeholder interviews in 13 countries.

Re-accreditation is performed in 22 countries (every 5 years in 10 countries, 3–7 years in 2, 2–4 years in 3, annually in 2, when directors change in 1, periodically in 2 and not specified in 1). Nine countries do not have a re-accreditation process. Delegates from 8 countries reported there had been cases where institutions had lost or had their accreditation suspended or had been accredited with a note/concerns.

When asked whether their country would be interested in participating in a European training programme and in a European accreditation programme, 1 country with no accreditation processes said yes and 10 countries with accreditation programmes said yes (1–5 centres per country in the latter group). Three countries reported an ongoing discussion in this regard.

Discussion

This survey offers for the first time a benchmark for the recognition and accreditation of postgraduate training centres in endocrinology in Europe and neighbouring countries. It also provides information on the number of doctors undergoing training in endocrinology and the number of training centres in each country. This information is of great importance to evaluate whether an adequate number of endocrinologists will be available in the future to ensure adequate care of the rapidly growing number of patients with endocrine and metabolic diseases. In the discussion with national and European regulatory bodies, it might also serve as a basis for effective lobbying and workforce planning. However, to determine the optimal number of endocrinologists per country, we also need data on the number of individuals with endocrine and metabolic disorders. Furthermore, the structure of healthcare provision and services targeting patients with endocrine diseases in different regions and countries needs to be considered. Equitable distribution of healthcare provision mandates a network of healthcare professionals comprising general practitioners, specialists in general internal medicine and specialists in diabetes and endocrinology. The relation between these different providers might vary across countries. Furthermore, while data on the current and projected prevalence of very common diseases, such as diabetes mellitus (Europe: 65.6 million adults in 2024 and an estimated 72.4 million adults in 2050 (5)) and overweight and obesity (overweight in Europe in 2022: 58.76% of the male population ≥16 years and 43% of the female population ≥16 years (6)) are available, there is a lack of such data for numerous rarer and very rare endocrine and metabolic diseases, which together amount to a significant number of people requiring care by highly specialised endocrinologists.

We also demonstrate in this survey that accreditation and quality assurance are established in the majority of European countries represented in the UEMS Section and Board of Endocrinology. Site visits and interviews form part of the accreditation programme in about half of the countries included in this survey. A re-accreditation of training centres is scheduled in about two-thirds of the countries, but the modalities and intervals between these processes vary considerably. As reported previously, the duration of training also varies between countries (4) and rotation of trainees between centres is designated in about a half of them. Surveys on the organisation of PGT and accreditation/re-accreditation of training centres of other subspecialities of internal medicine and other specialities have also reported considerable heterogeneity (7, 8, 9). However, all reinforced that a standardised training programme provided from accredited training centres plays a fundamental role in standardising and improving the quality of patient care. They also acknowledge the logistical difficulties and variations of how the quality of PGT in accredited centres should be monitored, e.g. at which intervals, by on-site visits or a self-reporting system. Standards and criteria for education and accreditation of training centres in surgery have also been defined by the Australian Competition and Consumer Commission (10). Minimum requirements as opposed to desirable ones are described, acknowledging the flexibility required because of the wide range of hospitals in which surgical education and training takes place.

A minority of country representatives expressed interest in establishing European accreditation of training centres. Considering the substantial differences between European countries, it is important to state that the responsibility to define and control the duration, content and organisation of postgraduate training remains within the remit of national authorities. It is also important to state that the focus of this survey was to obtain information on the training of clinicians, including clinician-scientists. Due to the many different medical and natural scientific specialities involved in basic research in endocrinology, we could not include information on the training of basic researchers.

The strengths of this survey include the comprehensive assessment of the organisation of PGT with presentation of data from 35 countries with a broad geographical distribution serving as benchmark and thereby providing a solid basis for decision makers to optimise and harmonise PGT across Europe. Weaknesses include self-reported and missing data and possible heterogeneity of definitions across different countries.

In conclusion, this survey offers an overview of the current accreditation status of postgraduate training centres in endocrinology in Europe and neighbouring

countries. Ongoing collaboration between ESE and UEMS can continue to contribute to the harmonisation of PGT across Europe. Only by ensuring that a sufficient number of endocrinologists are trained in quality centres under the mentorship of highly qualified trainers will the optimal care of the rapidly growing number of patients with endocrine diseases across Europe be achieved and maintained.

Declaration of interest

None of the authors reports any conflict of interest. Richard Quinton is a Senior Editor of *Endocrine Connections*. Richard Quinton was not involved in the peer review of this manuscript, on which he is listed as an author.

Funding

This research did not receive any specific grant from any funding agency in the public, commercial or not-for-profit sector.

Ethics approval

An ethical approval was not required for this survey as it does not include data on individual human subjects.

Acknowledgements

The authors acknowledge the delegates who responded and approved the data presented here: Josanne Vassallo, Malta; Sanja Medenica, Montenegro; James Ahlquist and Richard Quinton, UK; Mustafa Cesur and Ayse Kubat Uzum, Turkey; Miklos Toth, Hungary; Marinella Tzanela and Stelios Tsagarakis, Greece; Trine Elisabeth Finnes, Norway; Charlotte Höybye, Sweden; Teri Brouwer, the Netherlands; Michel Hochuli, Switzerland; Tomaž Kocjan, Slovenia; Marko Stojanovic and Marina Nikolic-Djurovic Serbia; Saara Metso, Finland; Birute Zilaitiene and Lina Zabuliene, Lithuania; Liana Tripto Shkolnik, Israel; Iveta Dzivite-Krisane, Latvia; Ana Barbosa, Portugal; Adela Krausova and Jan Skrha, Czech Republic; Peter Jackuliak, Slovakia; Magdalena Stasiak and Marek Bolanowski, Poland; Darko Kastelan, Croatia; Ioana Zosin, Romania; Sophie Christin-Maitre, France; Bruno Lapauw and Patrick Petrossians, Belgium; Emmanuale Jannini, Enrico Papini and Roberto Attanasio, Italy; Juan-Carlos Galofre and Alberto Fernandez, Spain; Zdravko Kamenov, Bulgaria; Ingrid Reppo, Estonia; Nicos Skordis and Stelia Kadis, Cyprus; Boris Mankovskyy, Ukraine; Susanne Kaser, Austria; Maeve Durkan and Graham Roberts, Ireland; and Caroline Raun, Denmark.

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