



UNION EUROPÉENNE DES MÉDECINS SPÉCIALISTES
 EUROPEAN UNION OF MEDICAL SPECIALISTS

Multidisciplinary joint committee in phlebology (MJCP) - Road map.

Comité mixte multidisciplinaire en phlébologie (MJCP) - Feuille de route.

Guex J.J., Mariani F.

Introduction

This document's goal is to outline the current position of the "Multidisciplinary joint committee in phlebology" (MJCP) in relation to the European recognition of Phlebology and the "Union Européenne des Médecins Spécialistes" (UEMS) certification of Phlebologists.

In addition the desired education and acceptance of Phlebology by the UEMS will be explained.

The MJCP has been created by the UEMS Council meeting in April 2014 with the support of the UEMS sections of Dermatology, Surgery, Vascular Surgery and Radiology.

The kick-off meeting of MJCP was held in Brussels April 10th, 2015 (MJCP Board in Appendix, doc. 1).

The road map for the european recognition of phlebology

- I. Phlebology - Definition
- II. Venous Chronic Diseases - Relevance for society
- III. Education of the Phlebologist
- IV. Certification of Phlebology
- V. European Recognition
- VI. Conclusions
- VII. Appendix

I. Phlebology - Definition

Diagnosis and treatment of venous diseases is a multidisciplinary issue. Phlebology is the study of the anatomy, physiology, diseases and treatments of the veins.

Complaints and clinical signs of Chronic Venous Disorders (CVD) are related to disturbances of the macro- and microcirculation.

Jean-Jérôme Guex, President MJCP.

Fabrizio Mariani, General Secretary MJCP.

E-mail : jj.guex@wanadoo.fr

Venous Disorders concern mainly the lower legs, and it can be acute *e.g.* superficial and/or deep venous thrombosis, varicose vein bleeding, or chronic *e.g.* varicose veins, post-thrombotic syndrome and venous malformations.

The CEAP classification is a clinical classification method accepted worldwide, it was first developed in 1995 and revised in 2004. The CEAP classification describes Clinical classes (from 0 to 6), Etiology, Anatomy and Pathophysiology of CVD.

Venous symptoms may include tingling, aching, burning, pain, muscle cramps, swelling, sensations of throbbing or heaviness, itching skin, restless legs, leg tiredness, and/or fatigue.

Although not pathognomonic, these may be suggestive of CVD, particularly if they are exacerbated by heat or worsen during the course of the day, and are relieved by leg rest and/or elevation. Clinical signs are varicose veins, telangiectasias, corona phlebectatica, edema, hyperpigmentation, lipodermatosclerosis, white atrophy and leg ulcers. Overweight, obesity, occupational factors, hormones and hormonal treatments, inherited and genetic factors seem to play an important role in Phlebology. Patients with varicose veins usually have a positive family history for the disease, and in the analysis of deep vein thrombosis patients inherited thrombophilia risk factors are sometimes discovered.

Some venous diseases are congenital, *e.g.* May-Thurner or Klippel-Trenaunay syndrome. Furthermore diseases of the lymphatic system usually belong to the working area of Phlebology. Phlebology is practiced mainly by angiologists / vascular physicians, internists, dermatologists and general/vascular surgeons.

The management of the phlebology patient demands not only extensive knowledge of the venous anatomy, pathophysiology and diseases, but also a variation of invasive and non-invasive diagnostic and therapeutic skills.

The fact that phlebology in most countries does not exist as a distinct (sub) specialty, and the diversity of medical knowledge and skills that is needed to treat phlebology patients, explains why physicians of different specialties practice phlebology.

This broad spectrum of medical doctors justifies the multidisciplinary and a separate representation in the UEMS.

II. Chronic Venous Disorders - Relevance for the society

The incidence and prevalence of venous diseases is high. The incidence of varicose veins and CVD is 2% per year.

Venous diseases belong to the most common diseases all over Europe with a prevalence of varicose veins of about 25%, of Chronic Venous Insufficiency (CVI, CEAP 3-6) of about 15% in the general population and of severe CVI with skin changes and venous ulcers 5% in the European adult population. Deep and superficial venous thrombosis, are other frequent venous diseases. Therefore the cost of the management of venous diseases for society is significant. One percent of the Western European population will develop a leg ulcer in their life.

Diagnosis and treatment of venous leg ulcers mounts up to 1-2% of the total healthcare budget in these countries, not calculating the indirect costs because of the loss of working days due to venous diseases.

As the incidence of venous diseases increases with age, the need for phlebological care will increase in the near future due to the aging European population. Until 2050 the incidence of chronic venous diseases will increase by more than 20%. CVD may affect several aspects of quality of life (QoL). These functional effects are usually operationalized as (limitations in) physical, psychological, and social functioning.

CVD can negatively affect patients' QoL, as it is a painful and disabling disease that can restrict physical functioning and mobility, and that is associated with depression, negative emotion and social isolation.

Patients with venous leg ulceration or deep venous thrombosis report impairment of their physical functioning and mobility similar to patients suffering from congestive heart failure.

Skilled phlebologists can offer highly cost-effective treatments. Research on new diagnostic investigations like Duplex ultrasound and treatments like endovenous thermal ablation techniques have been recently introduced and contribute to evidence-based treatments, with significantly lower costs than before.

For example phlebography and hospitalization have almost disappeared of varicose vein treatment. Good evidence-based phlebology will contribute to higher cost-effectiveness for this enormous medical and social burden.

Education of the Phlebologist

The development of phlebology in the last decade with new antithrombotic drugs and new treatment options for varicose veins and CVD have changed the profession substantially. Nevertheless phlebology is not well recognized in the European medical system.

Officially recognized subspecialisation is only possible in Germany, Austria and Switzerland. In addition phlebology is an interdisciplinary specialization involving vascular surgeons, internists, vascular physicians (angiologists) and dermatologists in a similar way, not to forget radiologists, hematologists and other disciplines which play also an important part in the game.

Because of the epidemiologic magnitude of the problem general practitioners play a very important role in selecting patients for further diagnosis and treatment.

There is a great need for a well-defined educational program to educate phlebologists and to assure patients that they can obtain the best possible treatment from a registered phlebologist.

A well-defined curriculum phlebology has been designed by the ECoP (European College of Phlebology - Maastricht March 8th, 2015) and from the Union Internationale de Phlébologie (UIP) which has a worldwide coordinating role in the field of Phlebology.

The Curriculum Phlebology (Appendix, doc.2) will be discussed and approved by the MJCP Members to set up a uniform, high quality educational program for Phlebology in Europe, consequently to certify the curriculum of Phlebologists.

Certification(s) in Phlebology

As mentioned above certification is mandatory to guarantee the highest level of knowledge. The UEMS is the only European body, which is able to host this certification (ECAMSQ®, CESMA).

As the certification is open to a wide group of Physicians with many different backgrounds, this certification will not create barriers and will serve only to guard the desired minimal levels of quality of care in Phlebology.

After founding an MJC on Phlebology within the UEMS, the institution of a Task Force “European Board of Certification of Phlebology (EBCP)” is the second step to provide an European Certification of Phlebology.

This is necessary to guarantee a high level of phlebological care for the EU community.

Certification in “Phlebology” in general is certainly the highest and ultimate aim of such a board, but progressively, certification in limited parts of the discipline (e.g. ultrasounds, endovenous procedures, chemical ablation, etc) will be a sound procedure to build up the whole.

European recognition of Phlebology

The European Directive on recognition of professional qualifications (Directive 2005/36/EV of the European Parliament and of the Council on the recognition of professional qualifications as a particular medical competence in Europe in Annex 5.1.3.) does not identify Phlebology as a medical specialty or sub-specialty.

The European Union requires that, to become a specialty, it must be recognized in at least 2/5th of the Member States and at the same time, by a particular majority (a weighted vote that is determined by the population of each country and other factors and giving what is called a “qualified majority”) in a committee on Qualification of the European Commission (not only for medical professions but generally for all protected professions).

Furthermore, to create a Specialist Section for Phlebology within the UEMS, Phlebology has to be recognized as an independent specialty by more than one third of the E.U. Member States and must be registered in the Official Journal of the European Commission (Medical Directives).

These requirements for a primary specialty are not fulfilled for Phlebology and therefore the aim should be the incorporation of Phlebology as a particular competence in the European Directives 2005/36/EV of the European Parliament and of the Council on the recognition of professional qualifications.

This terminology is consistent with all forms of training based on acquisition of competencies.

In the survey of training programmes in different EU Member States the minimum duration of training in months for Phlebology varies, but the median time in Europe is 24 months, e.g. in Germany, where Phlebology is recognized as a sub-specialty (Appendix, doc.3).

An important additional factor to consider is how the status of recognized Phlebology may affect the quality of patient care. Current evidence indicates that patient outcomes are better when patients are cared for by trained phlebologists.

In Europe this can be achieved by facilitating the acquisition of harmonized competencies in Phlebology by trainees from a wide variety of primary specialty training programmes. This may also have the added benefit of optimizing the practice of Phlebology.

Specialty training and regulation in the European Union

Medical specialties are represented at European level within the Union by the non-statutory body called the Union Européenne des Médecins Spécialistes UEMS (www.uems.eu), founded in 1958, which collaborates with the EU as the relevant body for harmonizing training and quality assurance.

With a current membership from 37 countries, it is the representative organization of the National Associations of Medical Specialists in the European Union and its associated countries.

Its structure consists of a Council responsible for and working through 43 Specialist Sections and their European Boards, addressing training in their respective Specialty and incorporating representatives from academia (Societies, Colleges and Universities).

An Executive comprising the President, the Secretary-General, the Liaison Officer, and the Treasurer, is responsible for the routine functioning of the organization.

The UEMS represents over 1.6 million medical specialists in all the different specialties. It also has strong links and relations with European Institutions (Commission and Parliament), the other independent European Medical Organizations and the European Medical / Scientific Societies.

By its agreed documents, UEMS sets standards for high quality healthcare practice that are transmitted to the Authorities and Institutions of the EU and the National Medical Associations stimulating and encouraging them to implement its recommendations.

The UEMS has three branches:

- the Council, the National Medical Associations, the EACCME,
- and the Specialty Sections, the Multidisciplinary Joint Committees (MJC)
- and the Boards (Explanatory Notes on the functioning of UEMS Specialist Sections, Divisions, Multidisciplinary Joint Committees, European Boards and Thematic Federations, August 2013- <http://www.uems.eu/about-us/statutes>).

Each section is composed of national representatives elected by the National Medical Associations drawn from universities and professional organizations from each member country.

According to current UEMS rules, a medical discipline has the right to create a section if it is recognized as a specialty in more than one third of EU member states and is in the list of the official journal of the European Commission.

Each Section or MJC can create an European Board (part.IV of the Explanatory Notes on the functioning of UEMS Specialist Sections, Divisions, Multidisciplinary Joint Committees, European Boards and Thematic Federations, August 2013 - <http://www.uems.eu/about-us/statutes>), which is a working group, and which is composed of members of the section and of the scientific societies in the field.

The Boards provide educational credits, harmonize training, and foster quality in medical education through visiting programmes.

Establishing an European Board for Phlebology (EBP)

In order to facilitate the harmonization of training in Phlebology across Europe (Appendix, doc.2), the MJCP can create an European Board for Phlebology, with representatives drawn from the Multidisciplinary Joint Committee in Phlebology (MJCP) and from the European Societies of Phlebology. The Board can thus accommodate all current national models of training.

The MJCP will act as an executive committee for the Board, and provide a conduit for the Board to report to the council of the UEMS. All members of the Board will have a vote.

Conclusions

There is a great medical social and financial burden related to venous diseases. Well-educated physicians can only give best medical care. As many different medical specialties as dermatology

and surgery are involved in daily phlebological practice, it's only realistic to cooperate, defining minimal requirements and creating an educational program with UEMS labeled certification, to guarantee cost-effective, evidence-based phlebological care of the highest level in the EU.

A Multidisciplinary Joint Committee in Phlebology in the UEMS can best reach this goal.

Appendix

Document 1

MJC in Phlebology - Board

President		GUEx	Jean Jérôme	France	
Secretary		MARIANI	Fabrizio	Italy	
Full Members					
STROHAL	Robert	Austria	FULTON	Greg	Ireland
HOKE	Matthias	Austria	SOZIO	Giampaolo	Italy
VUYLSTEKE	Marc	Belgium	VELICKA	Linas	Lithuania
STAELENS	Ivan	Belgium	DE ROOS	K.p.	Netherlands
WAUTRECHT	Jean-Claude	Belgium	WIKKELING	Marald	Netherlands
KLITFOD	Lotte	Denmark	ZUBILEWICZ	Tomasz	Poland
HAMEL DESNOS	Claudine	France	URBANEK	Tomasz	Poland
FLESSENKAEMPER	Ingo	Germany	PEREIRA ALBINO	José	Portugal
KROEGER	Knut	Germany	MANSILHA	Armando	Portugal
VASDEKIS	Spyros	Greece	SÄLVÄSTRU	M. Carmen	Romania
CHRISTOPOULOS	Dimitris	Greece	POREDOS	Pavel	Slovenia
BIHARI	Imre	Hungary	TRABER	Jurg	Switzerland
SZABO	Attila	Hungary			

Document 2

Phlebology in Europe

(Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Poland, Switzerland)

Summary Draft - MJC in Phlebology, October 2015

Contents

1. Education in Phlebology
2. Scientific Phlebological Societies
3. Guidelines
4. Reimbursement
5. Other considerations
6. Appendix - Table

1. EDUCATION IN PHLEBOLOGY

In Europe, Phlebology does not have the status of a Specialty.

It is recognized as a Subspecialisation (Additional Training), only in Germany, Austria and Switzerland.

Phlebologists are General Practitioners, General and Vascular Surgeons, Angiologists, Vascular Physicians, Dermatologists, Doctors in Aesthetic Medicine, Plastic and Reconstructive Surgeons, Doctors in Internal Medicine.

There are important differences between the countries concerning the specialization of the Physicians working in the field of Phlebology - in some countries (e.g. Poland) most people come from Vascular Surgery (VS) and Vascular Medicine (VM) field, in others (e.g. Germany) there is high prevalence of dermatologists in this area.

Taking into account the programs of training in VM, VS or Dermatology there still no unification of the specialization programs in Europe that makes potential differences in the training in Phlebology between the countries.

The Phlebology training in each country is part of the general training of a Vascular Surgeon, of a Dermatologist (Germany, Switzerland, Netherlands) or a Vascular Physician (Angiologist) in France.

Masters and Courses organized by Scientific Societies or Universities or even Private Organizations are available in all European countries but there is not a real uniform, shared curriculum leading to Phlebology.

- In Germany**, regulations differentiate the status of Medical Specialization from Subspecialisation and Additional Training. Phlebology has the status of an Additional Training. There is a paper called "Musterweiterbildungsordnung (MWBO)" which is the base for all the WBO (regulations for postdoc education) which are only valid each for one out of sixteen "Bundesländer" (Provinces).

In the WBO times and contents of education in Phlebology are regulated (the text is added to this draft). The Subspecialisation of phlebology embraces prevention, recognition, treatment and rehabilitation of diseases and malformations of the venous system of the lower extremities, including thrombotic diseases. In addition the German Society of Phlebology (DGP) has founded an academy for education and offers a curriculum for gaining phlebological competence and certifying this competence.

In contrast, to gaining the level of a proofed additional training, which is a legal act, the training according to the DGP academy is a private activity.
- The French University** teaches Vascular Medicine (VM) by means of a DESC (diploma of complementary specialized studies) after the student has received a DES (diploma of specialized studies) for example in General Medicine. The DESC in VM includes education in Phlebology as well as in arterial and lymphatic diseases*.

It must be emphasized that all students in VM DESC receive a high-level education and training in Duplex Ultra Sound Scanning. The DESC gives a Hyper-Specialization in VM but does not entitle to a Specialty, neither in VM nor in Phlebology.

There is no official Specialty of VM or Phlebology in France despite the existence of diplomas.

If a newly graduate in VM wants to aim his activity toward Phlebology, the possibility exists to enhance his knowledge thanks to several university diplomas including one in Phlebology (Paris VI).

This is optional for Vascular Physicians but the French high authority for health (HAS) requires a special knowledge and training for physicians wishing to practice endovascular procedures.
- In Greece** Phlebology is practiced mainly by vascular surgeons and the training involves all aspects of venous diseases (thrombosis, varicose veins etc.). The majority of young vascular surgeons participate in the FEBVS "Fellow of the European Board in Vascular Surgery" exams. Additionally a 6-month training program for vascular ultrasound, supervised by the Ministry of Health, is offered to Vascular Surgeons who need an official certification for ultrasound practice. This program is run in three University Hospitals of the country where the Vascular Departments have the necessary facilities.
- In the Netherlands Phlebology is still not a separate specialty but it is incorporated in the training of Dutch Dermatologists since the 1985. Phlebology is also incorporated in the surgical training for the residents with a examen during this course. For vascular surgeons in training the FEBVS "Fellow of the European Board in Vascular Surgery" is mandatory. The Section and Board of Vascular Surgery has defined the especially of Vascular Surgery as "the clinical and scientific discipline concerned with the diagnosis, treatment and prevention of diseases affecting arteries, veins and lymphatics".
- In Switzerland to obtain the certificate of competence in Phlebology candidates have to complete their curriculum in Phlebology which has been developed by the SGP and is supervised by the SIWF ("Schweizerisches Institut für ärztliche Weiter- und Fortbildung").

The curriculum encourages all theoretical aspect in phlebology and the various diagnostic and treatment options. Formal condition for the acquisition of the certificate in Phlebology is a completed medical specialist training. The final audit includes a written multiple-choice part, and an oral exam in the subsequent 9 weeks in one of the competence centers or selected specialized institutions. After a three-year period phlebologists have to confirm an adequate further education (at least 36 hours of specific and certificated training) to renew the certificate in Phlebology for another 3 year period.
- In Italy and in Poland the Italian College of Phlebology and the Polish Society of Phlebology introduced the system of certification (Certificate in Phlebology) based on the previous training, experience and the number and kind of performed phlebological interventions (including ulcer treatment, compression therapy, sclerotherapy and other kind of interventions). To maintain the certificate there is need of continuous education based on the conference and courses participation, phlebological journals subscriptions and conference reports presentation or paper publication (certificate is valid for 2 years).

* The situation in France as described in this paragraph is not true anymore. Since December 6. 2015, Vascular medicine is officially listed as a full specialty in France; the cursus will be 4 years long and the first 3 semesters a common trunk with cardiology. Adaptation modalities are still pending but this is an extremely important evolution.

2. SCIENTIFIC PHLEBOLOGICAL SOCIETIES

The National European Phlebological Societies are:

Austria	Austrian Society of Phlebology and Dermatology Angiology
Balkan countries	Balkan Venous Forum
Baltic countries	Baltic Society of Phlebology
Benelux	Benelux Society of Phlebology
Bulgaria	Bulgarian Society of Phlebology
Croatia	Croatian Society of Phlebology
Czech Republic	Czech Society of Phlebology
France	French Society of Phlebology (SFP)
Germany	German Society of Phlebology (DGP)
Greece	Hellenic Phlebological Society
Hungary	Hungarian Venous Forum
Italy	Italian Association of Phlebology (AFI) Italian College of Phlebology (CIF) Italian Society of Phlebology (SIF)
Netherlands	Dutch College of Phlebology
Poland	Polish Phlebological Society
Portugal	Phlebological Section of The Portuguese Society of Cardio-Thoracic and Vascular Surgery Portuguese Society of Angiology and Vascular Surgery Portuguese Society of Surgery, Chapter of Venous Surgery
Romania	Romanian Society of Phlebology
Serbia	Serbian College of Phlebology
Spanish	Spanish Chapter of Phlebology And Lymphology
Swiss	Swiss Society of Phlebology
Scandinavian	Scandinavian Venous Forum
Turkey	Turkish Society of Phlebology
United Kingdom	Venous Forum of The Royal Society of Medicine

There are two other European Phlebological Societies:

- The European Venous Forum EVF (the EVF is an all European Society with personal membership),
- The European College of Phlebology ECoP (an Union of Phlebological Societies in Europe).

Others societies more devoted to VM or VS but including Phlebology:

- The Société Française de Médecine Vasculaire,
- The Société Française d'Angéiologie, which is more multidisciplinary,
- The Italian Society of Angiology and Vascular Pathology
- And all the national societies of VS.

Some societies in Europe are devoted to the knowledge and care of leg ulcers, i.e.

- European Wounds Medical Associations,
- Italian Association of Cutaneous Ulcers and others.

The International Compression Club is devoted to Compression Therapy.

The Phlebologists members of the Phlebological Societies are approximately 10.000.

The majority of the Phlebological Societies is affiliated to the International Union of Phlebology UIP, founded in 1959.

3. GUIDELINES

1. Agus G.B., Allegra C., Arpaia G., Gasbarro V., De Francis S. Coll. Mariani F., et al. Guidelines Italian College of Phlebology. International Angiology 2013; vol.32, suppl.1-n°4.
2. Nederlandse Vereniging voor Dermatologie en Venereologie (NVDV), Richtlijn Varices & Diep veneuze ziekte, 2013.
3. Rabe E., et al. European guidelines for sclerotherapy in chronic venous disorders. Phlebology 2014 Jul; 29(6): 338-54.

4. Mariani F. (Editor) Compression. Consensus Document based on Scientific Evidence and Clinical Experiences. Ed. Minerva Medica, Torino 2009.
5. Maessen-Visch M.B., de Roos K.P. Dutch Venous Ulcer guideline update. *Phlebology* 2014 May 19; 29(1 suppl): 153-6.
6. NICE clinical guideline 168. Varicose veins in the legs. The diagnosis and management of varicose veins. Issued: July 2013.
7. Wittens C., et al. Management of Chronic Venous Disease. *European Journal of Vascular and Endovascular Surgery* (2015).
<http://dx.doi.org/10.1016/j.ejvs.2015.02.007>.
8. Zawilska K et al. Polish guidelines for the prevention and treatment of venous thromboembolism, 2012 update. *Pol. Arch. Med. Wewn.* 2012; 122 Suppl 2: 3-74.
9. **The guidelines of the German Society of Phlebology (DGP, 2008) are:**
Leitlinie zur Diagnostik und Therapie der Krampfadererkrankung
DGP und DEGAM gemeinsam erstellte Kurzversion zum Ulcus cruris venosum
Diagnostik und Therapie der Venenthrombose und der Lungenembolie
Leitlinie: Lipödem der Beine
Leitlinie: Phlebologischer Kompressionsverband (PKV)
Prophylaxe der venösen Thromboembolie (VTE)
Diagnostik und Therapie des Ulcus cruris venosum
Leitlinie: Sklerosierungsbehandlung der Varikose
Leitlinie: Venöse Diagnostik mit der Venenverschlusplethysmographie mittels Dehnungsmeßstreifen
Leitlinie: Venöse Diagnostik mit der Phlebodynamometrie
Leitlinie: Diagnostik und Therapie der Chronischen Venösen Insuffizienz (CVI)
Leitlinie zur venösen Diagnostik mit der Licht-Reflexions-Rheographie / Photoplethysmographie
Leitlinie: Leitlinie zur Diagnostik und Therapie der Thrombophlebitis superficialis
Leitlinie: Medizinischer Thromboseprophylaxe-Strumpf (MTS)
Leitlinie: Intermittierende pneumatische Kompression (IPK oder AIK)
Leitlinie: Medizinischer Kompressionsstrumpf (MKS)

4. REIMBURSEMENT

The public reimbursement for the phlebological procedures covers vascular phlebological visits, Duplex Scan and varicose veins open surgical procedures in most European countries. The surgical procedures apply to varicose veins referred to as C2-C6 in the CEAP classification used for varicose veins.

Usually they do not apply to varicose veins referred to as Co and C1 in the CEAP classification, as a rule the treatment of these varicose veins is not an insurable provision under the Health Insurance (public and private) because these are generally cosmetic interventions.

In the United Kingdom are only reimbursed the procedures for venous chronic insufficiency in C4-C6 and for the venous thrombotic diseases; to be eligible for treatment in most areas, patients need to have varicose veins with complications such as ulcers, phlebitis, bleeding or skin changes such as lipodermatosclerosis or varicose eczema.

EVLT, RF, elastic stockings and sclerotherapy are not covered by the public reimbursement in all European Countries.

In France DUS mapping is reimbursed around 75 €. Sclerotherapy of varicose veins is reimbursed around 30€, US guided foam sclerotherapy around 40€. Fees for stripping are around 130€ (plus hospital expenses) and 190€ for thermal ablation.

In Italy the reimbursement for varicose vein open surgery is regulated by the public DRG system and the fees for the doctors is around 135€, 270€ for non resident patient (coming from other Italian Regions), 410€ for the surgical treatment of the leg ulcers. In most cases the EVLT, RFA, sclerotherapy procedures are paid for out-of-pocket by the patient or they are reimbursed by private medical insurances.

In some regions of Italy reimbursement of endovenous thermal ablation (EVTA) is expected in outpatient, as reimbursement of services provided in the regional health care office based with the actual diversity of content and recognized clinical validity.

This treatment is supplied as clinical pathway including the visit preoperative of anesthesia, the anesthesia, preoperative blood tests, surgical procedure, medication and post-operative check-up with possible removal of stitches.

They are also considered benefits payable only at clinics protected, or at clinics located within public hospital or accredited private.

Italian regions where there is a rate of reimbursement for the EVTA are Lazio, Veneto, Marche and the province of Bolzano. The rate of reimbursement varies widely ranging from 400 euro in Lazio to 1334 euro in Marche, going through 833 euro in Veneto e 765 euro in Bolzano.

In all regions where it is expected reimbursement for EVTA is paid only the andovenous laser ablation and the amount of the refund is always less than the reimbursement for saphenectomy surgical procedure performed in the same care setting , except in the region Marche where the refund for EVTA is higher than the reimbursement for surgical saphenectomy.

Doctor's fees may be higher with optional reimbursement by complementary medical insurances.

5. OTHER CONSIDERATIONS

Duplex ultrasound DUS is not carried out by technicians, only by Physicians (or Surgeons).

Venous DUS is done above all by Vascular Physicians.

However, recently a broad spectrum of medical doctors are consulting and treating venous patients in dedicated phlebological centers and private offices, as the effect of the current health situation and the increasing demands of patients as well as current guidelines emphasizing the role of preoperative or preprocedure DUS evaluation.

In most countries it becomes the practical standard of care, even if DUS is not involved in many specialisation programs.

Some Radiologists or Cardiologists with different degrees of specific education also perform Venous DUS; in this case, they mainly perform DUS of deep veins, however, they do not manage phlebology treatments.

Sclerotherapy treatments are mostly done by Phlebologists, Vascular Physicians, Dermatologists, Doctors in Aesthetic Medicine.

An increasing number of them also carry out EVLT, RF.

Very few carry out classical varicose surgery. Surgery, including stripping is mostly reserved to Surgeons, Vascular or General, some of them practice EVLT, RF and sclerotherapy.

In France there is a trade association for Vascular Physicians, the SNMV (Syndicat National des Médecins Vasculaires), which has over 1,300 members.

6. SUMMARY TABLE

Country	Speciality	Sub-speciality	Curriculum training	Others	Guidelines	Public Reimbursement
Belgium	No	No	Dermatology – Vascular Surgery		Yes	Yes
Denmark	No	No	Dermatology – Vascular Surgery		Yes	Yes
France	Yes	No	Vascular Medicine Specialty/University DES in VM (Diploma of specialized studies) Complementary Diplome University Paris VI	Syndicat National des Médecins Vasculaires	Yes	Yes
Germany	No	Yes	Regulations for postdoc education Certification German Society of Phlebology	German Society of Phlebology Academy	Yes	Yes
Greece	No	No	Vascular Surgery University Master Venous Ultrasound Diplome (Vascular Surgery)	Hellenic Phlebological Society Courses	No	Yes (not all the treatments)
Italy	No	No	Vascular Surgery University Master Italian College of Phlebology certification		Yes	Yes (not all the treatments)
Netherlands	No	No	Dermatology Vascular Surgery University Master	Dutch College of Phlebology Training Programme	Yes	Yes
Poland	No	No	Vascular Medicine Vascular Surgery Polish Society of Phlebology certification		Yes	Yes (not all the treatments)
Switzerland	No	Yes	SIWF Certification Swiss Society of Phlebology		No	Yes (Insurance system)

Document 3

Curriculum Phlebology

E. Rabe, C. Wittens, M. Neumann, A. Davies

Approved by the European College of Phlebology (ECoP)

Maastricht March 8th, 2015

1. DEFINITION

Phlebology includes prevention, diagnosis, treatment and rehabilitation of patients with venous diseases and venous malformations.

2. KNOWLEDGES AND CLINICAL EXPERIENCE

A phlebologist must have knowledge and clinical experience in different components of the discipline. This includes:

- Basic sciences
- Clinical sciences
- Diagnostic evaluation
- Treatment
- Other competences

2.1 Basic sciences: Knowledge and clinical experience in:

- Anatomy of the vascular system
- Embryology of the vascular system
- Genetics of venous and lymphatic diseases
- Physiology and pathophysiology of the venous and lymphatic system
- Histology and histopathology of venous diseases
- Wounds and wound healing
- Differential diagnosis of skin changes of the extremities
- Thromboembolic diseases
- Coagulation and anticoagulation
- Pharmacology
- Basic physical principles of diagnostic and therapeutic tools

2.2 Clinical sciences: Knowledge and / or clinical experience in:

- Superficial venous incompetence
- Deep venous incompetence
- Perforator incompetence
- Chronic venous insufficiency
- Pelvic venous insufficiency
- Functional venous insufficiency
- Lymphatic incompetence
- Venous thromboembolism
- Venous obstruction and compression
- Venous malformations
- Venous tumors
- Vascular emergencies
- Differential diagnosis of signs and symptoms of venous diseases

2.3 Diagnostic evaluation: Knowledge and clinical experience in

- History taking
- Physical examination
- Differential diagnosis of venous signs and symptoms
- Ultrasound Doppler evaluation of veins and arteries, Sonography including duplex and triplex
- Dynamic venous function tests
- Edema assessment
- Venous thromboembolism diagnosis
- Disease Classification

- Severity scoring systems
- Quality of Life assessment
- Patient reportet outcome evaluation Knowledge of principles, indications and assessment in
- Magnetic resonance imaging (MRI)
- Computed tomography (CT)
- Contrast Venography
- Laboratory tests

2.4 Treatment: Knowledge and clinical experience in:

- Counselling of life style, behaviour and diet
- Compression therapy
- Pharmacological treatment of chronic venous diseases
- Wound care
- Sclerotherapy
- Endovenous ablation
- Transcutaneous venous ablation
- Venous thromboembolic diseases o Conservative therapy
- Treatment of venous emergencies and complications
- Knowledge of principles, indications and assessment in
- Venous surgery o Superficial veins o Deep veins
- Endovascular embolisation
- Pelvic venous disorders
- Venous thromboembolic diseases o Invasive therapy
- Deep venous obstruction
- Anesthetic procedures in venous therapy

2.5 Other competences:

- Epidemiology
- Evidence-based medicine
- Evaluation of study results

3. GENERAL RECOMMENDATIONS

- A. Two years of clinical education in a certified institution with personal experience in an adequate number of procedures of the above listed items seems to be adequate to gain personal knowledge, clinical experience and personal skills as preconditions to become a phlebologist.
- B. Accredited courses providing essential knowledge on: Basic and Clinical Sciences, Superficial and deep venous interventions, sclerotherapy, DVT diagnosis and treatment, Doppler and duplex investigations, compression and ulcer treatment combined with a number of clinical procedures and a European exam can also be a precondition to qualify as a phlebologist.
- C. These recommendations are based on:
 1. Parsi K., Zimmet S., Allegra C., Bergan J., Gasparis A.P., Labropoulos N., Lee B.B., Malouf G.M., Partsch H., Rabe E., Ramelet A.A., Schadeck M., Vin F. International Union of Phlebology. Phlebology training curriculum. A consensus document of the International Union of Phlebology (UIP)-2010. Int. Angiol. 2010 Dec; 29(6): 533-59.
 2. Zimmet S.E., Min R.J., Comerota A.J., Meissner M.H., Carman T.L., Rathbun S.W., Jaff M.R., Wakefield T.W., Feied C.F. Core content for training in venous and lymphatic medicine. Phlebology 2014 Oct; 29(9): 587-93.