

The ESMO/ASCO Global Curriculum and the evolution of medical oncology training in Europe

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Medical oncology is a relatively young specialty. However, it is old enough to have a history. That history is one of diversity between countries in the speed with which medical oncology has been recognised as a distinct specialty and in the provision made for specialist education. As part of the multidisciplinary team that cares for patients with cancer, medical oncologists have a key role in treatment, comprising the antitumour therapy and the management of symptoms and side-effects, and follow-up, as well as in clinical and translational research to promote therapeutic innovation.¹ In an era of dramatically expanding knowledge and correspondingly rapid advances in the complexity and individualisation of therapy, ensuring that all patients receive optimum care requires ever-increasing attention to training and continuing medical education.¹⁻³

HOW WAS THE GLOBAL CURRICULUM INFLUENTIAL ON RECOGNITION OF MEDICAL ONCOLOGY SPECIALTY IN EUROPE?

Within Europe, there has been considerable variability, particularly in the duration of initial training required in internal medicine and in the duration of specific training in medical oncology. This issue is increasingly relevant in the era of multidisciplinary team working. There are also major differences between countries in the way the means are used to establish the competence of those who complete a programme, and in the recognition of medical oncology as distinct from training in a 'mixed' specialty such as clinical or haemato-oncology, and in the way training programmes are certified.

In this context, the joint ESMO/ASCO Global Curriculum for Training in Medical Oncology has already served as a useful tool

in the past 10 years. The European Commission took the recommendations of the Global Curriculum Task Force (GC TF) into account in 2011 when it endorsed (for the first time) the independent nature of medical oncology and agreed on the requirement for a minimum of 5 years for specialisation in this specialty.⁴ Indeed, the GC has been an instrument for change in convincing many countries to move towards 5-year training programmes in medical oncology.

However, the GC TF has received only occasional feedback on the extent to which the Curriculum as a whole (originally published simultaneously in the *Annals of Oncology*⁵ and *Journal of Clinical Oncology*⁶) and now in its second edition⁷ and available in several languages has been adopted in individual countries or employed in adapted form. This uncertainty applied also to the use of the associated Log Book, in which the progress of trainees in the educational programmes undertaken is recorded.

To obtain more comprehensive information, the GC TF recently undertook an online survey of the landscape of medical oncology training in Europe. Questions were developed by the GC TF and sent to persons nominated by each ESMO National Representative as being involved at a national level in their country's medical oncology training. Where no such person could be identified, the TF sent the survey to a colleague whom they considered to have the relevant expertise. Between December 2012 and June 2013, data were obtained from 35 countries.

Two-thirds of EU countries now recognise medical oncology as a distinct specialty (figure 1). In the Netherlands, it was described as a subspecialty, as it was in Turkey. In Germany and Austria, medical oncology training is conducted along with



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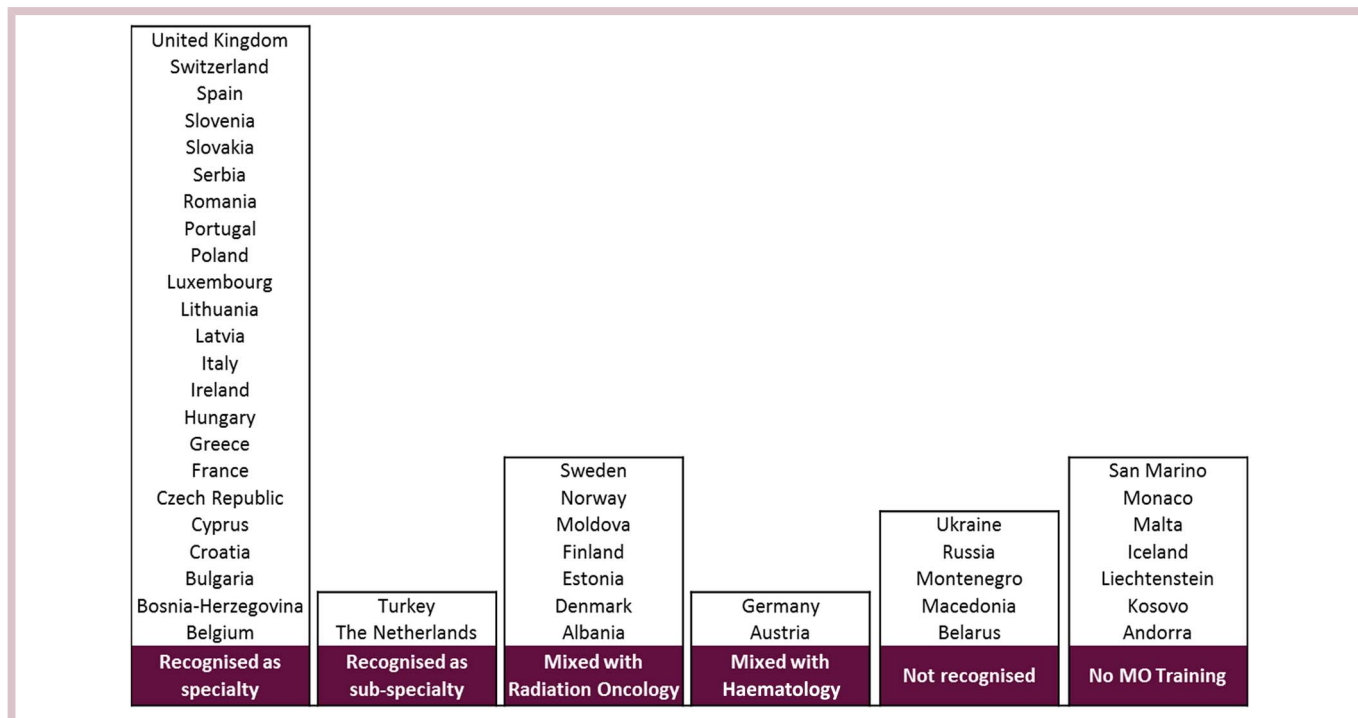


Figure 1 Recognition of medical oncology (MO) according to the Global Curriculum Task Force classification.

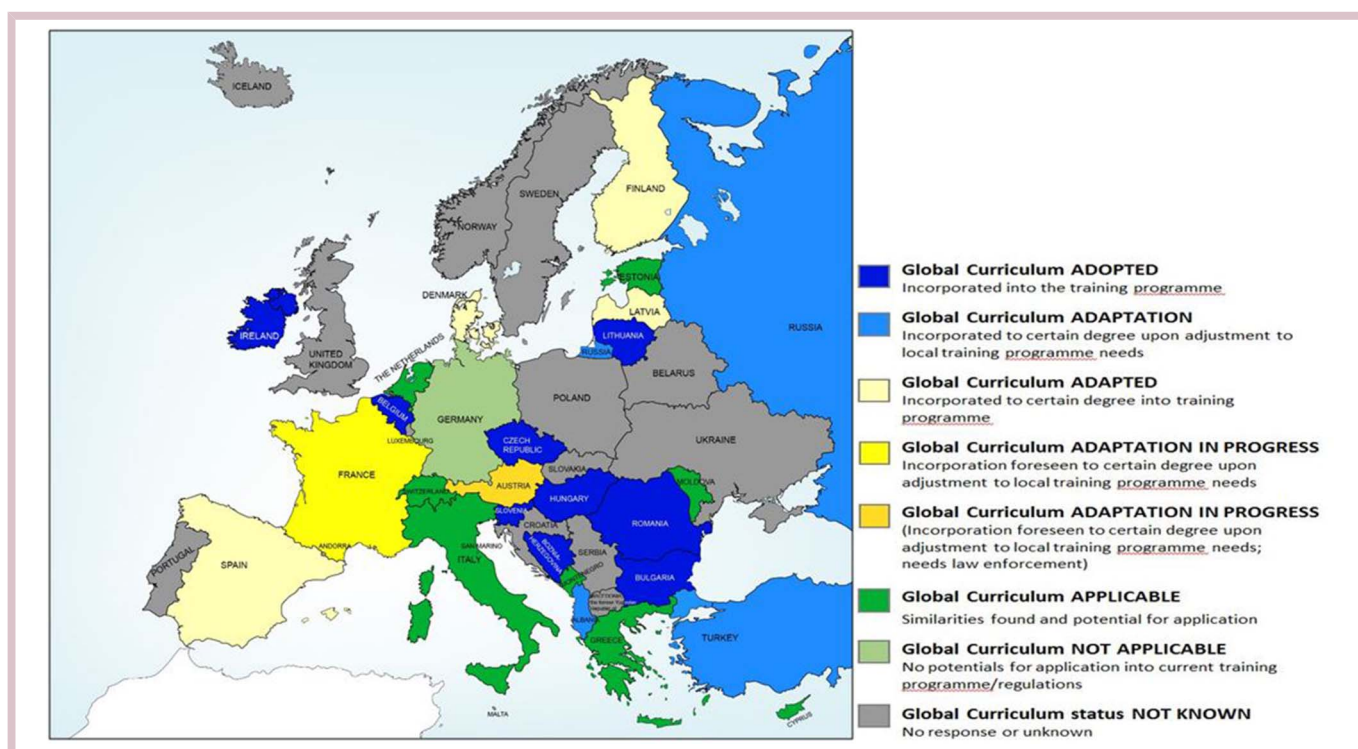


Figure 2 Adoption, adaptation and applicability of the Global Curriculum in Medical Oncology. Adopted: Belgium, Bosnia–Herzegovina, Bulgaria, Czech Republic, Hungary, Ireland, Lithuania, Romania, Slovenia. Adaptation: Albania, Russia, Turkey. Adapted: Denmark, Finland, Latvia, Spain. Adaptation In Progress: France. Adaptation In Progress (needs law enforcement): Austria. Applicable: Cyprus, Estonia, Greece, Italy, Moldova, Montenegro, Switzerland, the Netherlands. Not Applicable: Germany. Not Known: Andorra, Belarus, Croatia, Iceland, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Norway, Poland, Portugal, San Marino, Serbia, Slovakia, Sweden, Ukraine, UK.

training in haematology, and in the Nordic countries, Estonia, Moldova and Albania, it is taught along with radiation oncology. In Russia, Belarus and the Ukraine, medical oncology is not recognised as a specialty distinct from general oncology, and the training is of very short duration. Iceland's medical oncologists are trained in other European countries or the USA.

In a majority of the countries (22 of 35; 63%), approval of medical oncology training was the legal responsibility of ministries of health. In four countries, it was said to be the sole responsibility of the national medical association; in two countries, it was the responsibility of the national medical oncology society, and in an additional two countries it was the responsibility of both the national medical and medical oncology societies. In 21 countries (60%), medical oncology training was reported as being standardised across all teaching institutions. In 50%, there is an annual quota for those entering training.

The total duration of training (general internal medicine plus specialisation) that medical oncologists needed ranged from 2 years in Russia to 6–8 years in Austria, Belgium, Bosnia–Herzegovina, Denmark, Germany, Greece, Ireland, Luxembourg, Moldova, the Netherlands, Romania, Slovenia, Switzerland and the UK. The mean of 5.5 years is consistent with GC recommendations.

GC ADOPTION/ADAPTION STATUS IN EUROPE

Of central interest in the survey was the number of countries which had adopted or adapted the GC (figure 2). The 12 countries which reported that they had adopted the curriculum were Albania, Belgium, Bosnia–Herzegovina, Bulgaria, the Czech Republic, Hungary, Ireland, Lithuania, Romania, Russia, Slovenia, and Turkey. However, the fact that medical oncology is not considered a fully independent specialty in Albania, Russia and Turkey suggests that in these three instances at least the GC must have been adapted to local circumstances. Austria (where a change in national legislation will be considered) and France were said to be in the process of adapting the training according to the GC recommendations. In Denmark and Finland, the GC has apparently been adopted within the clinical oncology training programme; in Latvia and Spain, applicable components have been taken into account during revision of the national training programme. Its overall influence therefore has been considerable. However, the GC has neither been adopted nor adapted in 12 countries. These included Germany, Greece, Italy, the Netherlands, Switzerland and the UK. Training in these countries nevertheless seems to be highly compatible in duration and content with GC provisions. It is encouraging that respondents from Cyprus, Estonia, Greece, Italy, Moldova, Montenegro, the Netherlands and Switzerland have reported that GC might be applicable in their

countries. Furthermore, it seems that there are a lot of similarities between GC recommendations and the current medical oncology training programme in Italy; however, any potential application should require a change in law at the national level. The status of the GC was not known in 5 countries.

Six countries said that the GC Log Book had been adopted and 26 (74%) that it had not, although only 5 said that it was not applicable. In 19 countries, a national Log Book of some form was in use, and in 16 it was mandatory. Continuous assessment of trainees is required in 24 (69%) countries, and a formal examination is a necessary part of the qualification in 8 countries. A final examination is foreseen in 20 of 35 countries at the exit of the specialisation programme in medical oncology. The ESMO examination is a mandatory part of the process of the medical oncology specialty qualification in only Switzerland and Slovenia. It should also be noted that questions for the ESMO examination are distributed in the Examination's Blueprint based on topics included in the GC.

Despite more than 1 year of effort to collect, collate and clarify uncertainties in the data provided, it has to be admitted that the reliability of the information obtained in this survey is not assured. In part, this is due to the fact that survey respondents in certain countries tended to report their perceptions rather than facts. Also, there was no provision in the survey for information supplied to be checked by national authorities, since the survey represents a voluntary initiative of dedicated persons without legal European power.

However, these data provide the most comprehensive and recent information available about the state of medical oncology training in Europe. Conducting the survey has encouraged interest in the sharing of experiences and best practices across countries. Its main findings suggest that medical oncology is now more generally recognised as an independent specialty than it was at the time of the MOSES surveys of 2006⁸ and 2008,⁹ that efforts are being made to extend the duration of specialist training required for certification in some countries for homogenisation in Europe, and that the ESMO/ASCO GC is increasingly influential. This is particularly evident in countries which have joined or which wish to join the EU and have adjusted their training systems accordingly.

An additional benefit of the survey is that GC TF is now in a better position to identify the training institutes and teaching staff responsible for medical oncology education across Europe. This should allow us to further improve the dissemination of the GC and recognition of the status of medical oncology as an independent discipline. ASCO and ESMO are considering a global survey of medical oncology recognition, training and certification along the lines of the survey recently conducted in Europe, in order to promote optimal training in medical oncology worldwide.

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REFERENCES

1. Popescu RA, Schäfer R, Califano R, *et al.* The current and future role of the medical oncologist in the professional care for cancer patients: a position paper by the European Society for Medical Oncology (ESMO). *Ann Oncol* 2014;25:9–15.
2. Schrijvers D, Vermorken JB, Bokemeyer C, *et al.* Continuing medical education: a must for every medical oncologist. *Ann Oncol* 2003;14:1455–9.
3. Ciardiello F, Arnold D, Casali PG, *et al.* Delivering precision medicine in oncology today and in future—the promise and challenges of personalised cancer medicine: a position paper by the European Society for Medical Oncology (ESMO). *Ann Oncol* 2014;25:1673–8.
4. Casali PG. Medical oncology: the long-awaited prize of recognition. *Ann Oncol* 2011;22:1695–7.
5. Hansen HH, Bajorin DF, Muss HB, *et al.* Recommendations for a global core curriculum in medical oncology. *Ann Oncol* 2004;15:1603–12.
6. Hansen HH, Bajorin DF, Muss HB, *et al.* Recommendations for a global core curriculum in medical oncology. *J Clin Oncol* 2004;22:4616–25.
7. ESMO/ASCO Recommendations for a Global Curriculum in Medical Oncology 2010. <http://www.esmo.org/content/download/8171/168764/file/ESMO-ASCO-Revised-Recommendations-for-a-Global-Curriculum-in-Medical-Oncology.pdf> (accessed 15 Sep 2014).
8. The ESMO MOSES Task Force. Medical Oncology Status in Europe Survey (MOSES)—Phase II. 2006. <http://www.esmo.org/Policy/Recognition-and-Status-of-Medical-Oncology/Status-of-Medical-Oncology-in-Europe> (accessed 15 Sep 2014).
9. The ESMO MOSES Task Force. Medical Oncology Status in Europe Survey (MOSES)—Phase III. 2008. <http://www.esmo.org/Policy/Recognition-and-Status-of-Medical-Oncology/Status-of-Medical-Oncology-in-Europe> (accessed 15 Sep 2014).