

Editorial

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Harmonisation of specialist training and continuing professional development in laboratory medicine: a long but necessary journey

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Harmonisation has become a major topic in laboratory medicine over recent years. It is driven by the simple but important belief that reducing variability in an increasingly global healthcare environment will lead to more consistent and higher standards of practice, which, in turn, will lead to improved clinical outcomes and enhanced patient safety.

The standardisation of methods in laboratory medicine has been a core activity of the International Federation of Clinical Chemistry and Laboratory Medicine for many years [1]. More recently, it has been accepted that it is both possible and desirable to harmonise methods where formal standardisation may not be possible [2]. The clinical benefits of method standardisation and harmonisation are beginning to be realised [3, 4].

It has also been appreciated that harmonisation should extend well beyond laboratory methods. Accordingly, harmonisation initiatives have been undertaken in reference intervals, test names and laboratory practices [5]; in pre-analytical quality indicators [6]; and in steps towards medical laboratory accreditation [7]. There is a growing call for laboratory medicine specialists to embrace harmonisation across the complete scope of laboratory medicine practice [8, 9]. There have even been special issues of journals dedicated to harmonisation in laboratory medicine [10, 11]. Thus, there is growing acceptance of the proposal that harmonisation is part of the added value of laboratory medicine and that it is a professional responsibility [12].

Amidst this commendable activity and ‘call to arms’ one aspect of laboratory medicine has been largely overlooked. Can we assume that the specialists in laboratory medicine who are being urged to embrace harmonisation are operating from a level playing field of education, training and continuing professional development? Intuitively, we may expect the answer to be ‘no’ and this issue of the journal provides convincing and concerning evidence of

wide diversity in specialist training [13] and continuing professional development [14] within countries of the European Union (EU). Such variability in the building blocks of our profession has implications not only for the free movement of professionals within the EU but also of our ability to harmonise our practices in the best interests of patients.

The publication from Oosterhuis and Zerah [13] contains the results of a wide ranging survey conducted among 28 countries within the EU. The findings reveal considerable variation between countries, including:

- 1) The name of the specialty and the professionals who work in the specialty;
- 2) The professional background of specialists; medical, scientist, pharmacist;
- 3) The organisation and service delivery of sub-specialties of laboratory medicine;
- 4) The length and content of specialist training and the assessment of that training;
- 5) The professional responsibilities of individual specialists, especially in clinical areas;
- 6) The requirement for registration and re-registration of professionals.

The survey did not assess the extent to which specialist training in the different countries embraces the more generic aspects of professionalism, such as good medical/scientific practice; leadership; or research, development and innovation. However, it seems likely that the pattern of variation will extend into these areas.

The results of the survey will come as no surprise to those of us working in the specialty. There is an issue about our identity with peers, users of the service, patients and the public. A high percentage of clinical decisions are influenced by the results that we produce [12] but our failure to present ourselves as a readily identifiable specialty within medicine means that our impact is poorly appreciated. The recent decision of the European Federation of Clinical Chemistry and Laboratory Medicine

(EFLM) to adopt the term ‘specialist in laboratory medicine’ is a welcome move to make the profession more recognisable [15].

The variation in specialty training exists despite the efforts of the European Union of Medical Specialists [Union Européenne des Médecins Spécialistes (UEMS)] Section of Laboratory Medicine, Medical Biopathology and the EC4 European Register of Specialists in Laboratory Medicine, both of which have well established standards and curricula for specialist training in laboratory medicine [16, 17]. However, as the survey [13] reveals adherence to these standards and curricula is variable.

Continuing professional development (CPD) (also known as continuing medical education) is now undertaken by trained specialists in laboratory medicine in most European countries [13]. The publication by Martin and colleagues [14] looks in detail at the approaches to and measurement of CPD in four European countries. This study reveals marked variation in:

- 1) The approaches to and requirements for CPD;
- 2) The amount, content and assessment of CPD;
- 3) The extent to which CPD encourages the specialist to reflect on their practice.

The authors point out that there is little evidence for the desired link between the completion of CPD and competence. Overall, the conclusion from the study is that European employers should understand that CPD, as currently practised, is variable.

The take away message from these two publications is that we are a long way from having a harmonised profession of specialists in laboratory medicine in Europe. The main driver for professional harmonisation in Europe has been two-fold: to establish high standards of training; and to encourage free movement of specialists across the EU. Medical doctors, including specialists in laboratory medicine, are subject to UEMS charters and European Commission (EC) directives, which allow automatic recognition of basic medical training and specialist doctor training [18]. Recently, the EC Directive on Recognition of Professional Qualifications (Directive 2005/36/EC) has been revised to allow harmonisation of some professions under ‘Common training frameworks’ [19]. EFLM is currently working to establish the ‘specialist in laboratory medicine’ as a harmonised profession for the primary scientist and pharmacist specialists in laboratory medicine. If this can be achieved then the separate harmonisation of medical specialists and non-medical specialists in laboratory medicine will be facilitated but the harmonisation between medical and non-medical specialists will remain to be addressed.

High standards of training and free movement of specialists across the EU are desirable and are a positive development for specialists within the profession. However, on their own, they are no guarantee of uniform high standards of practice. As the momentum to harmonise the professional practice of laboratory medicine grows it is likely that a barrier to implementation will be the variable understanding of the need for and expected outcomes of harmonisation, which in turn may be traced back to variations in specialty training.

Looking to the future it is perhaps convenient to consider three related areas for further work:

- 1) More effort is required to reduce variability in the content of specialty training in laboratory medicine. This should occur for medical specialists, for non-medical specialists and, ideally, between medical and non-medical specialists. Individual countries have invested huge resources into specialty training, which has been tailored to meet their particular approach to service organisation and delivery. Therefore, full integration of specialty training in laboratory medicine is an unrealistic goal. The most practicable approach will be to further develop, and align, the standards and curricula that have already been produced by UEMS and EC4 and to present them as a framework. Individual specialty training schemes may then be ‘plugged into’ that framework to show areas of commonality and areas of difference, which individual specialty training schemes may care to address. UEMS and EFLM are the obvious organisations to lead this project.
- 2) A common approach to clinical leadership training will help specialists in laboratory medicine to understand the clinical context of their work; the benefits of multidisciplinary team working; the move towards increasing patient focus; and the requirements for high levels of professionalism as defined in good medical/scientific practice. Harmonisation of practice will depend on strong clinical leadership from the profession. Clinical leadership training is still at an early stage in many countries and so the opportunity exists to establish standards and a common framework before national schemes become too entrenched. In an increasingly global community clinical leadership training may benefit from an international as well as a European initiative.
- 3) The purpose of CPD needs to be clarified and, if possible, the approach to CPD should be harmonised. Attendance at conferences and reading scientific publications are valuable ways to gain new knowledge and keep up to date with scientific developments but on their own they do not improve the competence

of the specialist or the clinical relevance of the service that they oversee. An international framework for CPD for specialists in laboratory medicine would seem to be a worthy, if challenging, objective.

Consideration of the second and third suggested areas of further work leads to an appreciation that they are not specific to laboratory medicine. Indeed, they apply to all specialties of medicine and across healthcare. There may be considerable merit in establishing what other specialties are doing and in encouraging a multi-professional approach to clinical leadership training and the future of CPD. In Europe leadership can be provided by UEMS and EFLM working together with their international partners and with other expert stakeholders.

As this editorial reveals the harmonisation of specialty training and CPD is complex and challenging. It is a journey that will be long and fraught with barriers. However, the public and patients have a right to expect uniform high standards of practice and care at European and international level. Therefore, the journey towards more harmonised specialty training, better clinical leadership and meaningful CPD is a necessary one.

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