Abstract

One hundred and thirty speakers and delegates met in London for the fifth annual meeting of the European CME Forum which took place on 15 and 16 November 2012. Over the two days, current and future trends in European Continuing Medical Education (CME) were examined, discussed and debated. The meeting employed a mixture of styles: plenary presentations, workshops and panel discussion, but with a high focus on open question-and-answer interaction between speakers and delegates.

The predominant target audience comprised people with an interest in European CME including the accreditation bodies, scientific societies, education providers, medical communications agencies and industry supporters.

Each interest group had a dedicated meeting on the day before the formal programme; European pharmaceutical company involvement, scientific societies and the Good CME Practice Group which announced that following the publication of its recent work, it was opening its membership to all qualifying providers.

A pre-meeting needs assessment was carried out which informed the programme structure and led to a more interactive format.

Session themes included the new European Accreditation Council for CME (EACCME) accreditation criteria, e-learning, panel discussions with experts from throughout Europe as well as CME professionals from the USA, Canada, India and Australia.

Keywords: CME, proceedings, Europe, 2012, CPD

Introduction

The European CME Forum is a not-for-profit, independent organisation whose primary objective is to discuss and debate the practicalities and implementation of Continuing Medical Education (CME). This report summarises the presentations and discussions that took place at the fifth Annual Meeting of the European CME Forum, held in London on the 15 and 16 November 2012.

Eugene Pozniak (Programme Director, European CME Forum, UK) opened the European CME Forum meeting by emphasising how timely the event was to current developments in European CME. Not only is there an ever-increasing shift from voluntary to mandatory CME and Continuing Professional Development (CPD) in Europe, but also significant milestones have occurred within European CME over the previous 12 months. Most significantly, the European Union of Medical Specialists (UEMS) has
developed new EACCME guidelines for the accreditation of live educational events, which will come into force as of 1 January 2013.1 These new UEMS–EACCME guidelines were adopted by the UEMS Council at a meeting on 19 October 2012 in Larnaca, Cyprus.

Another milestone in 2012 was the publication of a paper by the Good CME Practice Group (http://www.gcmep.eu/) that establishes the standard core principles for CME programmes, with a view to adoption by European CME providers.2 The Good CME Practice Group was set up following the 2nd European CME Forum meeting, when it became apparent that improved guidance was required to raise the standards of CME. The Group helps to define what organisations should do to ensure that CME is carried out in the best possible way. It is open to expansion and now represents a formidable voice amongst the European CME community. The mission statement for the group is ‘to guide how European CME providers contribute to improving public health outcomes by championing best practice in CME, maintaining and improving standards, mentoring and educating and working in collaboration with critical stakeholders.’

Also in 2012, the open access Journal of European CME (http://www.jecme.eu/) was launched, with the first papers being published in March. This journal is the first specifically to represent European stakeholders, and focuses on the practical and regulatory aspects of CME–CPD.

Surveys performed following the fourth European CME Forum indicated that the key question in CME today is how to improve quality. A primary objective of the fifth European CME Forum was, therefore, to answer some of the questions surrounding quality of CME, including how we can make it more effective, the pros and cons of industry involvement and other related issues. In this regard, the first session of the forum was centred on improving CME standards ‘in real-life’.

**Session 1: CME-IRL (CME in real-life)**

**Needs assessment: not the missing link to educational excellence in CME/CPD**

Jonas Nordquist (Director, Medical Case Centre, Karolinska Institutet, Sweden) began his presentation by highlighting that everyone involved in CME wants to achieve good learning standards, the main reason being that well-executed medical education is a key factor in improving health services. To gain good education, needs assessment is essential for finding out what topics are relevant to learners. However, there is a missing link in CME today across the world – the consideration of educational design. In other words, effective delivery of CME to individual learners is often not a major consideration, but should be, if we want to achieve educational excellence.

So, what is educational excellence? Research from Gothenburg University published in the 1970s addressed the questions ‘how do we learn?’, ‘how do we retain knowledge?’ and ‘how long do we retain knowledge?’3 There are two types of learning: deep and surface. Surface learners typically read text and try to remember as many details as possible, but they may not be able to recall the differing arguments within the text. A deep learner typically skims over the text to understand the basic arguments contained within, and then re-reads to take in the details. This latter method of learning is more beneficial for long-term retention and understanding. Although there are two types of learners, learners can move between the two types.

High-quality learning is typically associated with the surface approach and tends to be content-focused, passive, expert-centred, delivered as a monologue, and assessed using multiple choice question tests. In contrast, high-quality learning is typically associated with the deep learning approach and tends to be learning orientated, active, centred on the participant and involves a dialogue. Deep learning is better achieved via discussion and interactivity and better assessed with essay examinations – which are often missing in an educational environment. It is important to recognise that learning should be a continuum between high-quantity and high-quality learning (Figure 1). Both approaches are required. In this regard, it is often necessary to have high-quality, fact-based education (e.g. a lecture) before a discussion can take place. However, CME currently tends to focus primarily on high-quantity learning. For effective learning, there should be an appropriate balance between the two approaches.

Research carried out by John Biggs in the 1970s introduced the idea of different levels of learning with the Structure of Observed Student Learning Outcomes (SOLO) theory (Figure 2).4 When designing learning content, the active words from Figure 2 should be used to ascertain the expectations of learning, or ‘learning objectives’, from the session. In other words, educators should consider what they want the learner to achieve from an item of education – do they want the learner to achieve ‘level 2’ and be able to perform simple procedures – or is the aim to take the learner to ‘level 5’, where the individual will be able to theorise, generalise and reflect? The level aimed for will, of course, depend on the learning objective, and this is important for CME
The accreditation of live educational events by the EACCME

Edwin Borman (Secretary General, UEMS) provided an overview of the recently adopted criteria for the accreditation of live educational events from the UEMS, which will be enforced from 1 January 2013. The over-arching principle of the new guidelines are that they are discriminant, fair, relevant, specific and transparent.

To achieve this, the new criteria are based on seven different accreditation fields: (1) the learner, (2) the educational activity, (3) the provider, (4) the activity developers, (5) ethical matters, (6) internal review and (7) process matters. The first five of these fields were discussed in detail. From ‘the learner’ perspective, the criteria aimed at ensuring that the learner has been considered, that a proper needs assessment has been conducted and that there has been clear confirmation that the learner attended the activity. In relation to ‘the educational activity’, considerable information is required regarding the objectives, learning methods, educational material and other details, which would help the UEMS to determine whether the event will be of high quality. With regard to ‘the provider’, the new criteria aimed at understanding more about the company or institution, its track record and whether there is a separation between CME and promotional activity. In terms of ‘activity developers’, a key change is that the event must be led by a registered doctor, who accepts accountability, for an event to be accredited. The information required about the activity developers helps the UEMS to decide if the activity will be appropriate, balanced and unbiased. Finally, in relation to ‘ethical matters’, the criteria seek to ensure that conflicts of interest and funding are disclosed, and that there is an absence of inappropriate influence and bias.

During a discussion that followed there was some debate about whether the new guidelines enabled accreditation of pharmaceutical-sponsored satellite symposia. Due to the current political framework, it is unlikely that these types of meetings would be accredited unless they were driven by academics and supported by a demonstrable ‘hands-off’ grant. However, it was acknowledged that the current wording in the guidelines is ambiguous on this issue. A clearer statement on this matter will be made in due course.

Session 2: CME by the health professionals

This session of the European CME Forum examined the approaches and engagement in CME by the medical societies – how they view and implement it, and how they assess the needs of their membership. The session considered how the medical societies engage with patient groups and how they engage in educational activities, from their annual congresses to highly targeted collaborative initiatives.

The accreditation of CME in Ireland: potential learning for other countries

Éamonn Breatnach (Scientific Director, European Board of Radiology, Ireland) gave an overview of the status of CME in Ireland, which evolved through collaboration between medical societies and the Irish Medical Council. This ultimately led to CME becoming mandatory for practising clinicians in Ireland in May 2011. There is now a legal obligation on all practitioners on the Irish Medical Register to maintain professional competence in order to remain on the register as practising physicians.

The CME system in Ireland involves a system of credits. Fifty credits a year are required with one credit being awarded for each hour of CME activity. Verification of the number of credits obtained is performed each year on 3–5% of registrants in a supportive exercise aimed at promoting confidence in the activities that physicians are recording, identifying shortcomings and providing support to assist in meeting the CME requirements. If a practitioner has not met the requirements in one year, then support is offered. If the requirements are not met in a second consecutive year and the physician...
does not respond to offers of assistance, the physician may be offered a qualitative review of his or her practice.

The required level of CME activity is relatively easy to achieve in the early part of a physician’s career when there are plenty of relevant CME activities available (as younger clinicians have more educational requirements). However, it becomes more difficult as a physician’s career progresses: he/she gains more experience and expertise, and the number of relevant and accessible CME activities decrease. What is more, older, semi-retired physicians struggle to gain the mandatory 20 credits for audit activities, including activities related to analysing patient and/or department outcomes and activities related to patient satisfaction surveys. Inability to achieve the mandatory 20 credits for audit activity is leading to physicians being removed from the register at earlier ages, with a corresponding loss of valuable experience to the medical profession. This issue does not only impact on older, semi-retired physicians, but also affects others, including women on maternity leave and physicians with long-term medical conditions.

At the current time and given that the system has only been mandatory for just over a year, it is difficult to say whether mandatory CME has improved patient care in Ireland. There are, however, concerns given the loss of experienced professionals due to the reasons mentioned above.

European Society of Cardiology: a comprehensive educational and training offering for European cardiology

Celine Carrera (Head of Education Department, European Society of Cardiology, France) stated that the European Society of Cardiology (ESC) was created in 1950. ESC Constituent Bodies now include 55 national cardiac societies, 34 affiliated cardiac societies, 6 associations, 18 working groups, 5 councils and ESC fellows (approximately 70,000 individuals in total). The mission of the ESC is to reduce the burden of cardiovascular disease in Europe and education is vital to achieve this mission.

Within the ESC, CME is defined as the transfer of knowledge together with assessment of the breadth of knowledge and skills that have been retained by members. In 2002, a core syllabus and curriculum were created for the training of general cardiologists. In 2006, work on implementation of the syllabus commenced with reflection on how to deliver the core curriculum, how to harmonise training and how to provide lifelong learning to cardiologists in Europe. The core curriculum was written collaboratively by the ESC Constituent Bodies (ESC Associations, working groups, councils and national cardiac societies). The curriculum was endorsed by ESC and national cardiac societies, implemented either fully or in part and became legally recognised in several European countries including Belgium and Portugal. The curriculum is regularly revised by the ESC Constituent Bodies to identify gaps. Quality assurance and accreditation are achieved through close co-operation with the European Board for Accreditation in Cardiology (EBAC) for didactic CME activities and all ESC educational programmes are submitted to EBAC for accreditation.

Historically, the ESC focused on delivering congresses to meet members’ CME requirements. However this approach is gradually changing. Now, the ESC offers a range of live events, distance learning activities and assessment/certification programmes. The latest collaborative initiative is the ESC e-learning platform, which is an online platform containing educational content developed by experts, self-assessment tools, skills tracking tools and professional development tools. The platform allows the tracking of professional development and education in the six sub-specialities of cardiology. ESC aims to use the online platform to reinforce needs assessments and outcome measurements via ESC practice guidelines, educational activities, registries, surveys and outcome measurement.

While the ESC e-learning platform does contain a wealth of information, a key challenge has been finding a balance between content collection and content selection— that is, a balance between quality and quantity. It has also been recognised that the platform has shortcomings as it lacks interactivity, which is important for achieving deeper learning. In these respects, the ESC plans to develop version 2 of the platform not only to allow lifelong learning and training, but also to foster localisation and collaboration with national cardiac societies, and to encourage peer-to-peer discussion, including with key opinion leaders. The ESC will report on the e-learning platform and other CME initiatives at the ESC Congress and the European CME Forum in 2013.

Overview of legal aspects of Continuing Medical Education and Continuing Professional Development (CME/CPD) in Georgia

According to Nino Kandelaki (Georgian Association of Medical Specialties, GAMS, Georgia), in Georgia, many people use the terminology for CME and CPD interchangeably. However, there is an educational need to inform people of the differences between the two. The meaning of CPD was illustrated in a manuscript by Regnier and colleagues in 2005: a question arising from practice should lead to acquisition of data and information, analysis, synthesis and judgment, resulting in increased knowledge and wisdom. From this increased knowledge, physicians can formulate a strategy to improve their competence, which they are then able to put into practice, leading to an improvement in performance. In contrast, CME can be defined as ‘educational activities which serve to maintain, develop or increase the knowledge, skills and professional performance and relationships that a physician uses to provide services for patients, the public, or the profession’. CME differs from CPD in that the educational need is decided
upon by self-assessment. Acquisition of knowledge is generally achieved didactically and involves post-learning reflection.

In Georgia, several legal acts contributed to the initial development of a CME/CPD programme. These included the Law on Health Care 1997, the Law on Physicians’ Act 2001, the Law on Patients’ Rights 2000, the Law on Medical Insurance 1997 and the Law on Drug and Pharmaceutical Activity 1996. Prior to 2004, the Georgian system required physicians to acquire CME points, which were awarded on the basis of time spent on an educational activity. However, the system was abandoned due to a number of weaknesses with the process. The system required no evidence of attendance; there was no quality assurance of the courses attended; and there was a lack of evidence to show that the programmes improved clinician performance.

In 2005, GAMS was established, and a year later this association became a member of UEMS. Since then, GAMS has been working with other institutions to develop a new CME/CPD system in Georgia. This process has involved numerous challenges, including management and monitoring of the CME and CPD processes, examination of the key issues surrounding CME and CPD, development of relevant recommendations, and participation in drafting legislative acts. As a consequence, further steps are required before the system can go live.

In the meantime, CME in Georgia will most likely be coordinated by an independent multidisciplinary representative board and professional medical associations (including GAMS), in collaboration with the Ministry of Education. It is proposed that a registry of physicians and institutes be set up to allow development of a ‘sign of excellence’, which can be awarded to members and employees who undergo CME training. Importantly, however, there will be no penalties for those who do not take part. GAMS feel that there should not be a need for government legislation or sanctions to force the profession into mandatory CME. This is in line with UEMS (www.uems.net), which believes that CME is a moral and ethical obligation that should not be mandatory. On an individual level, participation has to be encouraged, but mandatory CME is not yet proven to be effective in identifying and assisting weak physicians.

Kandelaki stated that CME needs to become a higher priority in Georgia. Funding is required for organisational learning, acquisition of resource materials and sponsorship for individual learning. Failure to commit to a robust CME strategy will limit medical development in Georgia. Therefore, more rapid restructuring and re-invention of CME training programmes in Georgia are required to keep pace with the rest of the world. Health care in Georgia is at a crossroad and this is a critical time for addressing the competence and performance gaps of physicians in the country.

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Table 1. Steps for developing content for the E-TEACCH web portal.

| Steps for developing content |
|----------------------------|
| 1. Content research by analysing literature, articles, books, websites |
| 2. Definition of the target groups |
| 3. Definition of the learning targets for each group |
| 4. Validation of content by using quality criteria and interviewing the target groups |
| 5. Final content approved |
| 6. Curriculum development: |
| a. Extract content for each target group |
| b. Define important basic and advanced knowledge (optional and mandatory) |
| c. Choice of methods and media which fit the learning targets and the target groups |

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**E-TEACCH: A good practice example of a support solution for healthcare professionals and patients on how to address the existing educational and information gaps**

Colette Andrée (Center of Public Health Research Luxembourg, World Headache Alliance, Health Care University Basel, Switzerland) presented the results from a Pan-European project ‘Eurolight’, a consortium consisting of 28 partners, public bodies, patient organisations, scientific organisations, hospitals and headache experts from 15 European countries. It is supported by a grant from the European Commission (EC) and is promoted by the CRP-Santé, Luxembourg. The World Health Organization’s ‘Lifting The Burden’ campaign is a supporting project partner.

Headaches are the most common brain disorders in Europe with substantial**6,9** individual and socio-economic burden. In spite of this, headache is an underdiagnosed condition, partly because of the lack of understanding and knowledge amongst healthcare professionals. In Europe, only 4 hours of undergraduate training are dedicated to headache, and only 18 hours of training for specialists. The key to reducing the burden of headache is education of physicians, pharmacists, headache patients and headache experts. To address this need, an e-coaching programme has been developed, called e-TEACCH: E-Training, Education, Assessment, Communication, Competence Centre for Headaches. This portal is initially being developed in German.

The aim is for E-TEACCH to become a cost-efficient, quality e-coaching portal that is practice relevant, independent, free to access and motivating. It is based on up-to-date medical knowledge, and draws on the extensive experience of GPs, pharmacists, headache sufferers and headache experts. In order to develop E-TEACCH, alliances were fostered between all stakeholder groups, which are imperative for producing timely, high-quality content. The stages for developing content are summarised in Table 1.

Given that e-TEACCH is being developed to provide information and training to a broad range of target groups, some of the content is tailored to the learner who is viewing it. For example, the information that a patient requires may be different from the information
that a pharmacist or a doctor requires. While each target group is able to view other target groups' information, content is colour-coded to indicate clearly the content that has been tailored to the specific target group.

The general didactic design for a learning module, regardless of target group, involves an introduction, information/education, training/case stories, assessment and finally after passing the test, a 'gift', which is individually designed for each target group to support them in the disease management. For the clinician's clinical practice, for example, it can consist of a patient supervision tool. On entry into a module, the learner may take a quiz to gauge whether they should go through the module or not. The start page for each module contains a list of study objectives for the module.

In summary, collaborative, integrated and people-centred educational care provision is a feasible way forward to sustainable and efficient care systems. The success of e-TEACCH, and its contribution to support the necessary changes in current headache management, depends on the active involvement of, and respectful collaboration with a broad range of committed stakeholders.

**Session 3: e-CME in practice**

E-learning is growing in importance and popularity. This session looked at actual examples of online education that go beyond recreating textbooks or meetings on-screen. The speakers delved into what one can expect from the technology, and examples were presented of innovative online practice and of ways in which the accreditation requirements can help in guiding the content creators, as well as examining the techniques and expectations in the evaluation of effectiveness.

**e-CME – current perspectives**

Reinhard Griebenow (Chair, European Cardiology Section Foundation, Germany) emphasised that electronically accessible CME (e-CME) forms a substantial and growing part of CME in Europe. It comprises approximately 10% of the total CME accredited through EBAC, 4% through EACCME and 1% of all CME in Germany. Although e-CME comprises only 1% of accredited CME content in Germany, 22% of physicians take part in e-CME and 17% of CME credits awarded in CME are for electronic activities. These data show that e-CME is a popular format, which can be delivered as lectures online, pure e-learning programmes, blended learning and through other media, including apps.

There are many advantages to e-learning. The main benefit is that it is flexible and can be undertaken around the physician's work commitments and other activities. Research has shown that e-CME activities are mainly completed in leisure time with some learners undertaking CME activities at night. Dr Griebenow also mentioned that there is a broad range of self-reported reading times. Some reviewers take a long time to complete an activity, while others will finish the same activity in a much shorter time. This created discussion at the European CME Forum as to whether learners taking more time to read content of a given e-CME activity should be awarded more credits, and the consensus was that there should be no difference (i.e. if the activity is estimated to take one hour, then one credit should be awarded).

There was also some discussion at the meeting regarding whether live educational events and e-CME should be treated equally in terms of the number of credits awarded. The general consensus was that the mode of access should not dictate the number of credits awarded. The quality standards for e-CME are equal to those for live educational events and the same rules apply regarding independence and financial support. However, it was mentioned that there are some issues that remain to be resolved, particularly relating to control of attendance and duration of attendance. Although questions can be set at the end of e-CME to ascertain if a person has attended the whole session, an element of trust remains.

In the future, e-CME could potentially offer even greater flexibility for learners in Europe. For example, point-of-care CME could be developed, allowing learners to amass credits for learning whilst working. This is already available to clinicians in the United States, where credits can be awarded for performing short spells of research online (e.g. 15 minutes), for instance to research a patient's condition, or the optimal management of an individual patient. This would require a change in the definition and accreditation of CME in Europe (i.e. a deviation from one credit awarded for an hour-long activity).

**Measuring e-learning success**

Peter Henning (Director, Institute for Computers in Education, Karlsruhe University, Germany) mentioned that it is becoming necessary to use digital media in learning because knowledge today is found in digital networks. Current educational mega-trends include mobile learning, game-based learning and social media, and CME needs to keep pace with these trends. As new technology becomes more common within CME, it is expected that demand for seminars will fall as physicians choose to access medical education on mobile devices. Using digital media to support learning at this level makes learning faster and more flexible, and also leads to better learning results. In 2008, the QUAIME project (http://www.quaime.com/) compared knowledge gain amongst two groups of neurologists and general practitioners undertaking either e-learning or print learning. Average knowledge gain was 25% for print learners and 50% for e-learners. Participants were positive about the use of e-learning in CME, in terms of its flexibility, time-saving, enjoyment, difficulty and improvement of CME.

In spite of these benefits, there are important considerations related to the evaluation of e-learning initiatives. In this respect, the main way to assess e-learning
activities is through formative and summative evaluation. Formative evaluation judges the value of an e-learning programme while it is live. It permits the designers, learners, and instructors to monitor how well the instructional goals and objectives are being met. Its main purpose is to catch deficiencies so that appropriate learning interventions can take place that allow the learners to master the required skills and knowledge. Summative evaluation judges the value of an educational programme after it has finished, with the goal of assessing if the activity improved long-term quality of care and the stated objectives of the activity. Summative evaluation can be performed through post-CME questions, the answers to which enable the planning of future activities.

The process of assessment is illustrated in Figure 3. Essentially, the figure demonstrates the circular process of evaluating learning, and using the feedback to plan future events. An important aspect of Figure 3 is its cyclical character, which is not always present in CME. This should perhaps become more entrenched in the way we devise activities.

As shown in Figure 3, the evaluation process can be divided into ‘Perception,’ ‘Learning,’ ‘Transfer’ and ‘Results.’ While each of these stages is important, there are challenges with each of them that planners of CME activities need to consider. In terms of ‘Perception’ (are the learners motivated to learn?), often the evaluation is subjective with ambiguities. Regarding ‘Learning’ (did the learners learn the needed skills?), there is the issue of dealing with highly sensitive personal data. In relation to ‘transfer’ (did the learners transfer the knowledge into practice?), CME evaluators need to take into account the immense influence of external factors. Finally, for ‘Results’ (are the desired results achieved?), a major problem is that, in CME, organisational objectives are almost never discussed. Evaluation of CME activities may be improved by setting clear overall objectives and assessing if these are met at the end of the evaluation period.

A new system is being developed that incorporates the fundamentals of the learning cycle and that allows for both formative and summative evaluation of the learner. Intelligent Tutoring Interface for Technology Enhanced Learning (INTUITEL) is a state-of-the-art learning management system with features that, up to now, have only been provided by human tutors. There are 12 partners from seven different European countries, and the project is co-financed by a 2.9 million euros grant from the EC. The INTUITEL-enabled system will constitute an integrated learning environment that can reconfigure and adapt itself to the needs of the learners. INTUITEL will monitor their learning behaviour and their progress in order to support their learning with formative feedback based on the learners’ profiles, and the relevant pedagogical models. Additionally this learning feedback will be informed by insights arising from monitoring the learning style and attitude, the cultural and emotional context in which learning takes place and the relevant environmental influences such as ambient noise, available communication bandwidth and interface features such as the screen size. As a consequence, this system will help dramatically to enhance the value of e-learning.

A new pathway for e-CME? Non-linear branched e-Learning
Sophie Wilson (Director of CME Services, International Medical Press, UK) introduced a new e-learning platform that has been developed by International Medical
Press to recreate the clinical dilemmas facing physicians in a real-time virtual clinic. The branched learning format of the platform gives consequences for choices made by the learner to allow user-driven, non-linear, effective learning. Effective learning is brought about via realistic decision making, reflection, feedback on decisions and a reiterative process. Essentially, the electronic system simulates and tests how clinicians would respond to a patient case in the most realistic way possible, in the same way that a flight simulator tests a pilot.

In the initial development of this innovative technology, a virtual emergency scenario was selected of an individual with chest pain. With extensive interaction and direction from colleagues at Glasgow Royal Infirmary, a database of assessment and management of treatment options was developed and finally, a beta version of the learning platform is now ready for testing. In order to simulate the clinical environment, a very complex database was and is still being developed with extensive scripting of clinical scenarios including vital signs, treatment options, patient history and red herrings. An easy-to-use virtual clinic front page has been developed with extensive features to give a realistic feel to the activity.

In a small pilot test of five people, most enjoyed the activity and most found the platform intuitive to use. However, most also felt that further development of the database was required, demonstrating the extensive amount of work necessary to make this type of simulation possible.

Amongst the audience at the European CME Forum, there were unanswered questions relating to how learners would be assessed and how accreditation would be assigned. It was also generally agreed by the participants that some degree of debriefing after having undertaken the activity would be required. The evaluation could be through the individual gaining personal feedback, or could be run in a group with other team members commenting on the learners’ decisions.

eCancer.org
Gordon McVie (Senior Consultant, European Institute of Oncology, Milan) stated that the eCancer.org online platform (www.ecancer.org) was developed with the European Institute of Oncology and was originally designed to accommodate a peer-reviewed, online, open access journal which allows fast-track publication of research with no fees for reviewing, publishing or viewing content. However, the web portal grew significantly in terms of content and educational offerings and now contains 22 educational e-learning modules available in several languages, and videos through ecancertv (http://ecancer.org/tv). In particular, ecancertv has proved extremely popular, with over 2.15 million views of 1680 videos over the past 5 years – demonstrating the importance of digital media for enhancing the education of healthcare professionals.

eCancer.org remains entirely independent and is funded by charitable grants. Recently, the platform has been awarded a charitable grant to generate educational material in Latin American Spanish, with a view to providing training for physicians in Venezuela and eventually the rest of South America.

Session 4: CME – Euro-vision
Over the past year there have been a rapidly growing number of people in European pharmaceutical companies with responsibility for CME. This session gave an industry perspective of medical education and discussed whether there is a role for industry in medical education, while reflecting on the importance of transparency, quality and co-operation in CME. Eva Thalmann (Head of External Scientific Relations and Medical Education, Janssen Cilag, Austria), Jean-Jacques Murama (Head of European Medical Education, Lilly, Switzerland) and Rian Visser (Manager, Continuous Medical Education, MSD, The Netherlands) formed a panel to give their views and experience from the perspective of their respective companies.

From a poll of the audience, there was some disagreement about whether educational meetings provided by pharmaceutical companies are promotional. In this respect, a member of the audience cited research involving 6000 participants in CME, in which 10% detected bias in an industry-supported CME activity and 5% detected bias in a non-supported CME activity. Therefore, in general many learners do not feel that industry-supported activities are any more biased than those that are independent.

Most of the audience at the European CME Forum agreed that the pharmaceutical industry should be involved to some degree in accredited CME, but there was disagreement about the precise role of industry. Most agreed that industry should support CME financially. Some believed that the industry should provide a consultative role, particularly regarding local legal and compliance issues. However, almost all the audience thought that full involvement of industry in CME (e.g. in terms of guiding content) was not appropriate. There was not even full consensus of opinion within the pharmaceutical industry delegates at the meeting around their level of involvement in CME. Some commented that completely independent CME represents a missed opportunity for educators to access knowledge experts within the pharmaceutical industry.

Overall, the industry panellists agreed that the provision of CME is a corporate responsibility and as a way of making contact with healthcare professionals. All panellists mentioned that they have a clear approach to CME-sponsored activity – and that is to have a totally hands-off approach. The three companies had a generally similar approach. First, there is a clear separation between medical education and commercial activities. Secondly, external expert clinicians are in charge of and
take responsibility for the content. Thirdly, the principles of fair balance are applied. Finally, the activities are designed to address needs assessments and skills gaps. In answer to a question, it was stated that the main reason why pharmaceutical companies continue to run non-accredited meetings is because they provide information which cannot be accredited, based upon the rules for accreditation, but which can add value to the educational mix. In general, particularly for newly approved drugs, industry is best placed to help with the dissemination of new clinical data.

There was some discussion about why the pharmaceutical industry would want to continue supporting CME as the rules around industry involvement become ever tighter. Improving patient care was the key reason given by industry representatives at the meeting. Other issues being addressed and supported by pharmaceutical companies include healthcare systems and environmental issues; education is just one piece of the puzzle. Increasingly for some companies, CME is included only when appropriate to effect an improvement in patient care.

Another recent change, given the current economic climate, is a shift to providing funding for fewer programmes of higher quality. It is becoming important for industry to evaluate whether education is making a difference to patient care and to target funding to the programmes whose aim is to effect change.

Session 5: CME-X-TRA

This panel-led session involved three heads of CME bodies from across the globe, who compared and contrasted their various visions for CME: Edwin Borman (UEMS-EACCME), Murray Kopelow (President and Chief Executive Officer, Accreditation Council for Continuing Medical Education, ACCME, US), and Pam Montgomery (Director, Fellowship & Standards and Deputy CEO, Royal Australasian College of Surgeons). The topics for discussion were informed by a large needs assessment carried out by European CME Forum.

How to change the attitudes of learners regarding CME?

In order to change the attitudes of learners, it is important to know what their current attitudes are, what learners expect from CME and whether they are undertaking CME to learn or to gain credits. When conducting an activity, the attitude of learners is often unclear and it is difficult to generalise, as there are differences in attitudes according to age, career stage and individual personalities. In general, younger learners have a more positive attitude to CME as they have become used to it through undergraduate and postgraduate training. Younger learners also tend to be more comfortable with, and attracted to the new technology that is becoming more common in the delivery of CME.

Additionally, to change attitudes, CME should be undertaken in collaboration with the learners rather than something that is done to them. In the CME context, demonstrating that education is relevant to the individual physician’s practice is important and this can be achieved in part by aiding self-directed learning in response to perceived needs. Issues surrounding unperceived needs, when a physician does not recognise the shortcomings in his or her own practice, may be overcome in some instances by looking at outcomes that occur in practice. This can be performed through clinical audit or discussion in peer review. It may also be necessary to compel physicians to undertake certain types of CME/CPD since self-directed needs assessments tend to result in physicians choosing topics that they are more comfortable with, rather than areas in which they need to address issues.

There was agreement at the meeting that to progress from ‘good’ to ‘better’ in terms of patient care, physicians need to realize the importance and value of CME/CPD. However, punitive assessment can cause resistance to CME as physicians feel threatened. Assessment that is supportive and not threatening is more likely to lead to greater engagement with the process.

What is the point of CME accreditation?

Accreditation of CME activities is important to ensure that clinician education is of high quality. It sets explicit standards, has high levels of transparency, is guided by sound principles and has demonstrable accountability. These attributes are important for many stakeholders – including physicians, providers and politicians. As a consequence, accredited events attract high attendance as it is expected that the standard of such events will be high. Another benefit of CME is that educational professionals and experts are now involved in the provision of knowledge transfer to clinicians.

There is however, a recognised risk that a more prescriptive accreditation and credit system may lead to a decrease in innovation. In this regard, accreditation bodies are constantly trying to find ways of accrediting new CME formats as innovation spreads.

How to guarantee the quality of CME programmes?

The principles of CME, in terms of having clear rules and standards, help to ensure that CME programmes are of good quality. However, it is difficult to guarantee quality in CME as it depends on many factors. Some believe that education only counts if it changes clinical practice, but it is difficult to prove this. In addition some CME activities serve to confirm to physicians that a certain aspect of their practice is correct and therefore reinforces it. So a change of practice may not always be required for a CME activity to be of high quality.

There is a continuing need for new research analysis of the effectiveness of newer forms of CME. Traditional randomised controlled trial research into this area is difficult and not necessarily called for. However, one way
to raise standards would be to define a ‘quality’ CME programme, and then evaluate how that quality can be measured. This is an area that requires further research.

What are the pros and cons of industry involvement in CME?

Many believe that there is benefit to be derived from industry involvement in CME (e.g. through grants), leading to benefits for the patient in the long-term. The difficulties arise in balancing the medical and scientific expertise and financial support with potential conflicts of interest. Industry is a profit-making business and as a consequence there is a perceived expectation that the companies give money with the expectation of a return, either directly or indirectly. Therefore a need remains for a rigorous code of conduct in Europe to ensure adherence to the principles of CME (Table 2).

The main issue with pharmaceutical industry involvement is the perception by some stakeholders, such as politicians and patients, that the companies are employing a ‘hands-on’ approach, leading to educational bias. There is consequently a significant need to manage this problem, which can only be achieved through full transparency and disclosures.

Session 6: Born in the USA? Evaluation and assessment workshop – what problems are we trying to solve? Quality gaps, learning needs, systems issues and outcomes

According to Maureen Doyle-Scharff (Senior Director, Medical Education Group, Pfizer, USA), Pfizer has recently changed its focus from concentrating on programmes that help learners achieve the lower levels on the Moore’s scale to supporting higher level learning – Levels 4–7 – including improvements in competence, performance, patient health and community health.11 Focusing on higher level learning is important to a number of key stakeholders and is thought to be key to bringing about large-scale improvements in healthcare.

To attain higher levels of learning, it is first important to consider whether a difference or gap exists between learners’ assessment of the importance of a clinical skill and the assessment of their own ability to perform that skill. A practice gap, if demonstrated, may be a motivator for undertaking educational activities. Motivation is important in encouraging clinicians to undertake learning, and creates a mood of ‘readiness’ to change the way they practise. Figure 4 shows the four groups of learners in relation to their level of motivation against their actual needs. Those with high actual needs and high perceived needs are highly motivated to learn.12 In contrast, those with high actual needs and low perceived needs are not motivated to learn. Learners from each of these groups exist throughout society, but currently education tends to be one-size-fits-all rather than tailored. Educators need to understand better how to tailor education to individuals.

Secondly, to attain higher levels of learning, educators need to understand the gaps in practice and how to fill those gaps. A clinical practice quality gap is ‘the difference between health care processes or outcomes in practice, and those potentially achievable on the basis of current professional knowledge’. A needs assessment should enable the identification of the gap and understand why it exists. A discrepancy analysis can then be used to identify the causes of the gap which may be due to the patient, the healthcare provider, the healthcare system or the community.

Once the gap is identified and fully understood, backward planning can be helpful in designing the necessary educational activities to address the gap. Starting from the expected change in ‘patient health status’ and working backwards to identify the changes required in ‘clinical performance’ and then the required ‘competencies’, can assist in designing effective education. For example, to improve patient health status by increasing smoking cessation rates in the community by 20% (the ‘patient health status’ measure), relevant guidelines may need to be implemented in a clinician’s practice (‘clinical performance’ measure). In order to achieve this, a healthcare professional may need to improve his/her motivational interviewing technique through a role-playing communication skills workshop (‘competency’ measure).

It is not just clinician education that is required when considering community health improvements. The healthcare system may also need to change. Figure 5 shows the process that is required to bring about change in patient health status at a community level.

When a gap is identified, both the system and the healthcare provider should be evaluated to identify the

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**Table 2. Principles of CME in Europe.**

| Guiding principles                                          |
|------------------------------------------------------------|
| • Transparency/perception/patient benefit                  |
| • High-quality evidence-based CME                          |
| • Clinician-led convening body – with grant/sponsorship    |
| • No direct financial payment to presenter/participant     |
| • Modest expense reimbursements                            |
| • Declaration of company representative (to participants and patients) |

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cause(s) of the gap. A root cause analysis should determine whether the system is a barrier to learning, and if so, this can be addressed. Additionally, competency gaps in the healthcare professional can be identified and strategies for learning and change put into practice.

In order to measure performance at the patient health or community health levels of learning (Level 6 and 7, respectively, on Moore’s scale), physician and patient questionnaires may be undertaken. However, the only accurate method of measuring the success of the learning and the changes that are implemented at these levels is by looking at patient health records or possibly administrative records.

**Lunch with the learners**

Session 6 of the meeting was followed by a lunchtime forum that was chaired by Lawrence Sherman (SVP Strategic Education, Prova Education, US), who led a discussion with a UK specialist registrar in gastroenterology (Dr Mathena Pavan) and a UK General Practitioner (Dr Suma Grandhi). This was a popular, engaging forum that explored the opinions of the two learners on educational programmes in general. Specifically, the two learners provided their thoughts on where they find details of CME activities, their experiences of online learning, their views on how to distinguish high quality, how industry involvement influences whether they participate in an activity, and finally, their general attitudes towards CME. It became clear during the discussions that learners should be at the heart of any discussions about CME to ensure that programmes fully meet their needs.

**Session 7: Question time**

This session consisted of an open panel Q&A, which delved deeper into the issues the delegates wanted to cover with a distinguished panel of experts (chaired by Robin Stevenson, Editor-in-Chief, *Journal of European CME*, UK. Panellists: Janet Grant, Emerita Professor of Education in Medicine, Open University, UK; Eva Thalmann, Head of External Scientific Relations and Medical Education, Janssen Cilag, Austria; Anita Simmonds Chair, European School of Respiratory Medicine, UK; Ian Starke Director of CPD, Federation of Royal Colleges of Physicians, UK).

**Accreditation and credits: is a credit system important?**

As mentioned, it is generally agreed that accreditation of CME activities is beneficial and assists in improving the quality of programmes. However, there is disagreement relating to the practice of awarding credits for the length of time spent on an activity. It is felt by some that this is not the most effective method of evaluating educational outcomes. Collection of points does not in itself show whether the information has been learned and whether practice has been changed as a consequence. In the opinion of others, the benefit of the current system of collecting credits is that the activity of all learners is measured in the same way, and that it is better than having no system at all. One alternative to the system of collecting credits is a five yearly examination. However this is not a popular alternative with physicians. Another issue is that all learners learn in different ways and there is no single ‘best’ way to gain knowledge. Some members of the panel stated that learners should be awarded more credits for demonstrating a change of practice that occurred due to CME activity.

**What are the roles for different organisations, e.g. societies, in providing education for professional development?**

The role of medical societies in CME is changing and societies are increasingly being expected to develop competency and skills-based training, and not just arrange congresses and postgraduate courses. Societies are probably the best placed to deliver CME, as they have the expertise in the required specialties.
One member of the panel felt that it was important to stem the tide of ever-increasing definition, control and measurement in CME. Societies need support to identify those within the profession that require further training, rather than forcing every member to undergo prescriptive training, according to a curriculum.

Collaborations between societies in different countries are important to assist poorer countries to develop and deliver higher quality education. There has been little research into needs assessment in Eastern Europe and the Middle East and there may be a role for medical societies in Western countries to provide more assistance with this. However, it should be borne in mind that improving competencies and effecting change in health services worldwide may not necessarily be an education problem. Other barriers may exist to improving patient care, including local politics, organisational issues, cultures, traditions and economics.

Is Europe moving towards an accredited provider model?
In the United States, CME providers are accredited. This means they can provide CME credits for all of their activities, without submitting each to the accreditation board. This system does not exist in Europe.

Some delegates at the European CME Forum were somewhat concerned about introducing this type of system into Europe. In particular, a question was raised about how CME providers would be monitored to ensure high-quality CME programmes. Although the current system is labour intensive, it does provide good quality control of individual CME activities. Another question related to who would be eligible to become a provider and whether having profit-making, commercial organisations involved would lead to similar issues as those surrounding the pharmaceutical industry – that is, potential introduction of bias.

How could the European CME Forum be used to move CME forward?
The European CME Forum is already an important event for sharing of ideas and knowledge, and for networking of key stakeholders. However, additional involvement of more medical societies in the European CME Forum may be beneficial for improving CME provision in Europe. Some medical societies have the view that the European CME Forum is primarily a commercial organisation and this misapprehension should be addressed to encourage the gathering together of a greater number of key stakeholders with an interest in CME.

In addition, European CME moving forward will need to consider providing educational activities for the whole multidisciplinary team, bearing in mind the overlapping roles of trainee medics, consultant physiotherapists/nurses and non-medical hospital practitioners.

Session 9: CME unsession
The final session of the meeting was an unbrieﬁed and unpreconceived session led by Lawrence Sherman (SVP Strategic Education, Prova Education, US), with the aim of helping to make sure that no one left the meeting room with any question still in his or her own mind.

Under the new UEMS-EACCME accreditation guidelines, where is the line drawn with regard to conﬂict of interest for a provider that undertakes both CME and non-CME work?
There was some debate about whether it was possible for a CME provider to be involved in both educational and promotional programmes without content being inﬂuenced, and whether there should be complete separation and ﬁrewalling in a company that offers both types of work. In the United States, conﬂicts of interest are not just disclosed, they are resolved so that there is clear separation between companies providing educational material and companies providing promotional material. However, in Europe the rules are less stringent, unless the funding for the educational programme comes from the United States, in which case, American rules generally apply. With regard to this topic, the Good CME Practice Group is currently working with accreditation bodies to decide and provide guidelines on what is acceptable in Europe.

Are CME best practices applicable globally or is there a need to look at regionalised best practice?
The meeting ended with robust discussion regarding adult education principles and evidence for learning theory, with some believing that learning processes and principles are broadly similar across regions and others believing that learning is entirely culturally-bound.

It was agreed that the definition of ‘best practice’ was a topic worthy of further discussion at a future European CME Forum meeting.

Summary
The ﬁfth annual meeting of the European CME Forum involved lively debate amongst the 130 delegates who gathered from across Europe and throughout the world to discuss issues such as how to ensure the quality of CME programmes, the involvement of industry in CME, and the role for medical societies in CME. The meeting featured presentations that highlighted innovative CME activities, provided information regarding new accreditation guidelines, and enabled sharing of best practice. The meeting provided delegates with an opportunity to discuss current issues in CME and to gain knowledge regarding new developments and methods.

The sixth Annual Meeting will take place in London 13–15 November 2013.
Declaration of interest

Pozniak reports no declaration of interest, Woodrow and Flemming are Directors of Aspire Scientific Ltd, a company that supplies medical writing services to the pharmaceutical industry. The authors alone are responsible for the content and writing of the paper.

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