William Wijns

The evolving needs in education for interventional medicine

Confluence spoke with Dr William Wijns, Co-Director of the Cardiovascular Research Centre, O.L.V.Z. Aalst, Belgium and Chairman of EuroPCR, to discuss how education in the field of interventional cardiology has changed over the past 20 years, how it will change in the future and consider the place of industry in education.

Why is education so important for interventional cardiologists?

Education is so important because interventional medicine is a dynamic discipline and we are constantly extending the frontiers. There is continuous change as technologies and devices are updated at a rapid pace. In order to learn the new skills necessary to keep up with these changes, continuing medical education (CME) is key. This idea holds true for all disciplines in medicine, even in non-medical fields. I am sure you need to learn new skills all the time, but interventional medicine is a young field that did not even exist 30 years ago and, at present, it is advancing rapidly. The second reason is the need to share experiences, both the good and the not so good ones, and peer-to-peer exchanges are very important to facilitate this.

How was training for interventional cardiologists organised in the past?

Three pillars underpin the abilities of a good interventionalist: knowledge, skills and experience. The traditional approach to education is proctoring, be it from a senior within your own institution, or by someone external who brings a new technique to your institution. This approach is still valid for the skills component, but falls short of providing a complete educational experience by focusing too much on the technical knowhow and skills; that is only the beginning.

How has training, both initial medical training and CME, changed over time since that proctoring model first came into practice?

Proctoring is still used, but nowadays it can also be organised by industry, particularly for learning about new devices. It is a good model to learn new skills, but you also need to gain experience by applying the technique once it has been learned.

CME is central to innovation and the adoption of varied solutions for patients, and face-to-face meetings represent the most effective means of facilitating exchange between peers. Physicians vote by attending or not attending these meetings and they also give a lot of feedback. However, it is clear that physicians no longer want to attend meetings passively. The interventional community is eager to engage in advanced, lifelong educational opportunities that are transformative, self-directed, relevant and impactful. As a result of this, there has been a shift in the content and the format of the courses on offer at such meetings, which is driven by the interests and preferences of participants. We are moving away from lectures where slides are just presented on a screen, towards sessions with more direct peer-to-peer interaction, where colleagues have the opportunity to ask questions. This interactivity feeds highly successful meetings where the participants are actually driving the agenda; they are both the source of education and they drive the flow of the session. We answer their questions rather than taking a top-down preaching approach.

That is not to say that lectures aren't important, but if we think back to the three pillars, learners are not purely seeking information because this is available on the internet. What they want is a more reflective approach to techniques or problems. As an example, data from a big trial may be released, but the learner wants to know what it means for their practice. It is about translating these data into their environment. The value that education should provide is in hearing the views of respected and experienced colleagues who are regarded as trustworthy, and having the opportunity to interact and discuss the findings in this context. There are enormous time pressures on everybody these days,

so time spent at a meeting has to add value for the learner in their working life.

Why is this interactivity with peers so important?

Each patient is an individual and her/his interventional cardiologist may have the perfect skills and an exceptional knowledge base derived from books and trials, but the same question always needs to be asked: 'What is the best approach for this particular patient?' That requires a holistic approach and the integration of everything that you know, all the skills that you have, and also your experience.

Some patients have a strong dislike of surgery, and this becomes a factor in the decision-making process for those patients. It changes the rank order of the options available for a particular patient, irrespective of the evidence. For example, in a diabetic patient where most of the evidence points to surgery being the best option, after consideration of the pros and cons, you may still agree with the patient that PCI is the best approach for them, because of their personal views on surgery.

These are the kinds of issues that attendees want to discuss at meetings, because they want to reassure themselves. They know the evidence and they know that their practices may, or may not, be in line with this evidence, but they need to reassure themselves, and discussing with colleagues from all over the world allows this. I think that this is part of the reason why people still attend face-to-face meetings.

What do you think is the value of the web-based education?

The web gives us a fantastic opportunity to make education continuous, and online resources are useful tools that will play an increasingly important role. Learning in this way allows education to be individually tailored, because the user can select the most appropriate resources for themselves.

Conventional e-modules or structured resources are a part of the professional educator's toolbox, alongside in-person learning. Young people are very good at sourcing specific information on the web, and professional organisations can help by making existing resources available on websites. Having the facility to make available the collective intelligence that is generated through peer-to-peer interaction during a meeting will be tremendously powerful. It will allow those who could not attend the meeting physically to benefit from that essential learning experience, provided we can find a suitable technique to effectively transfer this knowledge.

Social networking is the online resource that I myself understand the least, but I appreciate that it is very active and I think more research is needed. There is, however, an issue of confidentiality that has not been explored much.

How can we maintain the interactive element with more electronic-based learning?

This is a work in progress, but something that allows a short dialogue between a learner and an experienced colleague, alongside the factual information, i.e. slides, could achieve this. An alternative is to have very short video clips on key elements with, say, three key learning points based on case examples. We know from usage metrics that people do use these, but it is vital that they are short and snappy. Such resources might provide a bridge for learners to maintain learning in between different in-person courses, or as a refresher.

How do you think that industry and the physician community can contribute to the objective of improving education?

My experience has been that industry involvement through unrestricted educational grants and independent faculty can work really well. Yet, there are perceived issues with the credibility of CME, be they right or wrong, that arise from the interaction between industry and physicians. We may be forced to invent a new model for CME in interventional medicine, and I would love to see more involvement from academia where we can take advantage of the professional knowhow for teaching. This may help maximise credibility. There is pressure from the public and perhaps from some media to increase transparency, but we need to be careful that in trying to achieve this, we don't achieve the opposite. I have seen some models whereby industry only sponsors its own meetings. They select the topic, select the speakers, they can invite doctors; to me, that is exactly the opposite of what should be happening.

More or less all educational efforts are financially supported by industry at present, and there is certainly a place for industry, especially in supporting very specific proctoring aspects

for new devices. For example in invasive electrophysiology, devices are extremely complex, and it is necessary to learn exactly how the device works from industry, but I think that is where the active engagement of industry with the scientific programme content should stop, in an ideal world.

How can we reassure people that a patient-centric approach is taken to education?

Regardless of how education is delivered, we must always remember that the purpose of any learning is to improve individual patient care. Information provided must be trustworthy and take a patient-centric approach to maintain credibility. The objective is peer-to-peer education that creates a body of collective intelligence derived from discussions between peers and the sharing of experience. Keeping these high-level objectives in sight, I am optimistic that we can find a new model where the interests of industry are served in the long term. Ensuring that devices are used appropriately and in the right patients will ultimately benefit both the patient and industry, while also ensuring that doctors enjoy this great job.

Do you think that the recommendation by Eucomed (the European medical technology industry body) to phase out industry sponsorship of healthcare professionals' attendance at third party organised conferences will benefit education?

I have heard that some associations want to abruptly stop it completely as soon as 2018 rather than phasing it out, and I think this would be a major threat to healthcare quality. I urge Eucomed to engage with the physician community so that, together with industry and course providers, a new model is defined that allows CME to continue instead of being stopped abruptly, which is what may happen if this approach is pursued. My concern is that the proposed approach would fail to meet the needs of either industry, doctors or, most importantly, the patient.

What does the future of medical education look like?

I have talked about a new model to ensure the quality of education. I think there are too many meetings that simply comprise a succession of lectures, overcrowded with slides, and with no time for interaction. In my opinion, it is perfectly acceptable that those types of meetings are no longer supported.

By ensuring that we have competent professional bodies to deliver CME, who effectively manage the educational toolbox, we can strive to have a true objective of education that offers added value for practice. In the end, we will have to come up with some sort of metrics to measure accountability. We already gauge participant satisfaction but further, more sophisticated analyses will be needed, and new methods implemented, to assess the impact of CME on practices and outcomes. That will not be an easy task for professional educational organisations, but I think it should be doable. Different healthcare systems in different parts of the world have adopted ways to inform the public about education and re-certification of doctors. In my country, higher fees are provided to re-certified cardiologists, and patients are aware of this. This incentive scheme can be seen as a contribution by payers, i.e. the public, to CME and improved quality of care.

Dialogue between peers and all stakeholders in a respectful and trustful way is key to a successful process moving forward. I am amazed to see how much experience and goodwill there is, and offering colleagues an environment that enables exchange, and the sharing of all this knowledge and experience, is the passion of the last part of my career.

Address for correspondence
Dr William Wijns
Cardiovascular Research Centre
O.L.V. Hospital, 164 Moorselbaan
9300 Aalst, Belgium

wwijns@europcr.com

DISCLOSURES: Institutional research grants with several pharmaceutical and device companies, including Medtronic. Non-executive Board Member and shareholder of Argonauts Partners, Cardio3BioSciences (now Celyad) and Genae Inc.

Comment from Rob Ten Hoedt

Chairman of the Board of Eucomed and Executive Vice President and President, EMEA, Medtronic, Switzerland

Rob Ten Hoedt

The education of physicians has always been, and will continue to be, key in our industry. The major developments and progress that have been made in medical care result from a close collaboration between doctors and the industry, with the shared goal of finding solutions for different diseases. Education is key to disseminating these learnings and techniques to the broader community of doctors.

In the past, education was very technique-oriented and focused on learning how to use certain technologies or innovative diagnostic tools and interpret the data. Hands-on training, proctoring, live cases and classroom training have been the main modalities of education.

The future of training and education, however, will need to become more patient-centric and multidisciplinary in nature. Elements of value-based healthcare will need to be included to allow a better, more holistic and patient-centric care model to develop. Physicians and the industry as a whole have a major responsibility in ensuring the sustainability of healthcare delivery in the western world.

The industry will always support large scientific and educational congresses, for these events and gatherings are crucial for progress in healthcare.

Eucomed's decision on the phasing out of direct sponsorship is concerned with the invitation of individual healthcare professionals, by the industry, to attend these third-party events. Such invitations and individual sponsorship creates an unnecessary risk on both the healthcare professional as well as the host company. Therefore, the Eucomed Board proposes removal of this is model by 2018. This will give congress organisers, physicians and the industry the opportunity to develop new and innovative ways to support education going forward.