

App review

Cardiac device challenge Pro: a new interactive cardiology training tool

An innovative iPhone and iPad App for cardiology has been produced by two cardiologists



The digital face of medicine has grown by leaps and bounds over the last several years, now dominating every aspect of clinical care from online electronic health records to phone-based medical calculators. It is only natural, then, that medical training would soon become a beneficiary of this digital revolution. Digital training materials can indeed be much more than simply searchable textbooks; they can integrate diverse sources and types of data, create interactive learning environments, offer customizable self-assessments, and link to supplemental data.

Jan Steffel, MD and David Hürlimann, MD have taken this idea and applied it to advanced cardiac device training for future electrophysiologists with their new application, *Cardiac Device Challenge Pro*. In many ways, electrophysiology devices represent the perfect opportunity for this type of training tool, with cases requiring analysis of a wide array of digital and graphical information. *Cardiac Device Challenge Pro*, available in both iPhone and iPad formats, tackles key issues with pacemakers, implantable cardioverter defibrillators (ICDs), and cardiac resynchronization therapy devices in a quiz-based format. Each question is presented as a case scenario with a rich set of interactive features. A sample question on atrial tachycardia (AT) in a patient with an ICD, for example, supplements the case with a complete device history, shows a zoomable and scrollable image of the Medtronic AT/AF event

printout, displays the device interrogation summary, and even includes a PA/lateral chest X-ray to confirm lead locations.

The software also offers multiple ways for individuals to engage with these questions. Starting users can navigate through the questions in a 'tutor' mode, attempting each question individually and reviewing the answer and discussion immediately after. More advanced users can create mock examinations and assess their performance at the end of the exam. Questions can be filtered by device, manufacturer, and difficulty level, ranging from basic to significantly more advanced questions.

The current iteration of the application is fully functional, if a little aesthetically rough around the edges and free to try with four included sample questions. Another 50 questions are available for purchase within the app itself, and the authors are continuing to add content, with another 50 questions scheduled to be released by the end of the year and more still in development.

Cardiac Device Challenge Pro represents the future of training tools. Its interactive, filterable, rich database of challenging questions, along with detailed, insightful answers, and explanations, will allow a wide range of healthcare professionals to learn about a variety of advanced cardiac devices. Their target audience—board-certified practitioners looking to brush up on their knowledge, fellows learning device material for the first time, and Registered Nurses, Nurse Practitioners, and technicians working daily with these devices—would be well-served by taking this interactive tool for a spin.

