Communications strategies and technology continue to change at an increasingly rapid rate affecting all aspects of society. One only needs to reflect on the global penetration of cell phones to bring that point home: recent data indicate that traditional phones in the home are an increasingly endangered species, having been replaced by the now ubiquitous cell phone, which is used as the sole means of communication. Likewise, PDAs and tablets are replacing computers not only because of their portability, but also because of the many applications they offer for multitasking and overall rapid communication using one of several techniques (phone call, e-mail, text, and so on).

Adoption of new strategies occurs at a significantly accelerated pace (Fig. 1). While it took approximately 270 days before 1 million iPods (Apple, Cupertino, California) were sold, the time lag decreased rapidly with the release of the iPad 1, taking only 25 days to reach the sale of 1 million units.

Changes in communication technology and their rapid and widespread adoption have profound implications for the transmission of medical information. An increasingly large number of platforms are now available, forming a “cloud” of new technology. Cloud computing provides applications, databases, file servers, e-mail, and so on via a computer network, so that desktops have minimal software requirements and instead act primarily as display units. Many institutions have embraced a variety of these approaches. One such multilayered approach has been implemented and widely used at the Mayo Clinic, which has established a Center for Social Media focused on healthcare literacy and delivery using social media. That same institution uses YouTube for healthcare providers, the videos on which have exceeded 4 million views, and Facebook, which it uses to publish physician educational opportunities to its 45,000 connections. Mayo Clinic also uses Twitter (whatever that is) and has 150,000 followers, Second Life, an online virtual reality, and physician video blogs for educational presentations. Finally, there are general Mayo Clinic blogs for patients and lay press communications.

Another example uses a list serve for problem solving in patient care. In interventional cardiology, a list serve of 86 worldwide experts including the American College of Cardiology (ACC) Interventional Council can be queried about specific patient management issues. Recently, these experts were asked about a 45-year-old patient with refractory coronary spasm and another patient in whom there was great difficulty removing the access sheath because of arterial spasm after performance of coronary angiography using a radial artery approach. In each case, experts on the list serve were able to offer specific suggestions for the care of the patients. Such an approach offers education for the members on the list serve, as well as directions for specific patient care.

This cloud of technology is also used to disseminate the body of established and unbiased information available from the ACC, including practice guidelines, expert
consensus documents, advisory panel deliberations, performance measures, and appropriate use criteria, among others. Transmitted via this cloud, this information is broken down into bytes of data, which can be collated together to form knowledge and, over time, wisdom.

The continued evolution of this cloud of new technologies will permeate medical education. Medical meetings, such as live face-to-face programs and annual scientific sessions, have been the most common means of educating physicians in recent years and have several important functions. The primary focus has always been on the presentation of science and education, twin pillars that form the backbone of the “College” function of the ACC. There are other important functions served by medical meetings: networking with personal and professional colleagues, interfacing with sponsors and vendors, observing live case demonstrations, and learning from established mentors. These latter groups of functions are still best served in face-to-face venues such as the upcoming ACC.12 and i2 Summit 2012 in Chicago. Such meetings, however, may be forever changed by the new cloud of information technology.

Take, for example, a project initiated by Duke cardiology fellows at the ACC.11 and i2 Summit 2011 in New Orleans. These cardiology fellows taped interviews with leading researchers, reported on data from late-breaking clinical trials, talked with presenters of oral and poster sessions, and uploaded the results to their blog. Astoundingly enough, within 1 day of uploading their first ACC blog, over 800 of their peers from 30 countries on 5 continents logged in. Imagine the impact of staying home yet telecommuting to your meeting and receiving the most up-to-date scientific data and interpretation of results as soon as they are presented.

What will this cloud of information mean to professional societies, educators, meeting planners, and our members? It will never take the place of face-to-face encounters; however, it will offer unparalleled opportunities to reach the global world of cardiovascular specialists, patients, and society as a whole. It will provide opportunities for people to define and optimize their own individual approaches to learning, their own learning portfolios—the definition of personalized learning.

Are there risks? Certainly. Loss of face-to-face networking has a substantial downside irrespective of what stage in career the individual is—from trainee to emerging leader to established investigator or clinician. It is also possible that data will be transmitted from meetings that have not yet been fully vetted by our current vigorous peer-review process. Finally, some individuals will be uncomfortable or even fearful of embracing and fully utilizing some newer information technologies.

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**Figure 1** The Pace of Innovation: Adoption of New Technology

Courtesy of Deloitte UK and Gartner Research (www.gartner.com) and the Mayo Clinic.
The cloud approach to science and education will expand our options to deliver the science and educate our family. The ACC is committed to fully utilizing the strength of all strategies to educate and facilitate knowledge transfer. At ACC.12 and i2 Summit in Chicago under the guidance of Rick Nishimura, MD, FACC, Pat O’Gara, MD, FACC, and ACC senior education staff, in conjunction with cardiology fellows and emerging faculty from around the country, there will a vigorous online community to make this knowledge transfer seamless and available not only for those in Chicago but also for our far-flung family of cardiovascular disease caregivers, optimizing the application of science to patient care.

From the ACC to You!

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