

# Looking to the Future of Healthcare Technology

Robert Stiefel, CCE, Guest Editor

As AAMI wraps up its 40<sup>th</sup> anniversary celebration, this special issue of *Horizons* looks to the future with a series of articles that cover every aspect of AAMI's involvement in healthcare technology.

Without a doubt, there will continue to be breakthroughs in specific technologies. Which ones? Some likely candidates are described in a series of articles on minimally invasive procedures, imaging, remote monitoring and telemedicine, and virtual surgery.

New technology has been and will certainly continue to be VERY expensive. What is uncertain is if—or how—we will be able to pay for it. Ted Mannen writes about the future of healthcare costs, and points out the futility of projecting costs, in large part because we can't predict the impact of innovation. His reasoning may or may not surprise you, but it will definitely interest you.

There will be some major trends—areas that will have the greatest impact and influence on the future of healthcare technology. How well can we predict what these will be? In a fascinating “big picture” roundtable discussion, a half-dozen experts in a number of areas discuss the potential for technology to improve not only outcomes, but also safety and cost effectiveness. A second roundtable involving a diverse group of AAMI's long-time leaders predicts the roles that AAMI could play in shaping these trends—in areas like regulation, management, safety, data integration, and globalization of economies and standards.

The next articles examine future challenges to finding and educating three types of healthcare technology specialists: biomed, standards experts, and manufacturing experts.

What is the future for healthcare technology management—the arena in which all of these new technologies are actually put to their intended uses? Two peer-reviewed articles delve into this area. Alan Lipschultz predicts the specific technologies that will have the greatest impact on healthcare, and Ray Zambuto and Steve Grimes discuss the convergence of medical, information, and

telecommunications technologies. In an article on how the Joint Commission tries to keep up with changes in healthcare technology management, experts in the Environment of Care—from both the Joint Commission and the field—predict

the pressures and trends that will shape future standards.

FDA has a major impact on when and how innovative medical devices come to the market, and oversight of their safety once they are in use. See the article featuring thoughts of two FDA leaders. They acknowledge that the agency will have its work cut out for itself as more and remarkably different technologies become involved in new devices, and standards for these devices are developed.

And what of AAMI's continued work in the development and harmonization of international medical device standards? Charles Sidebottom discusses the challenges of future standards development efforts as a series of paradoxes. We also have a peer-reviewed article by Peter Linders and Carl Wallroth on the effects of international regulations on healthcare technology.

I know that you will enjoy this special issue of *Future Horizons*. How about joining me 40 years from now to see how well we have predicted the future of healthcare technology, and how well AAMI's second 40 years compare to our first?



A handwritten signature in black ink that reads "Robert Stiefel". The signature is written in a cursive, slightly slanted style.

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