Driving to Pathology’s Future

Corporate Innovation as an Engine for Change

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This is an exciting time for pathology. In my 20 years of focusing on digital pathology, it is rewarding to see that the future is coming into being now and becoming a reality. Many new and exciting techniques, technologies, and processes are being presented as the future of pathology, but the obvious question is, what is the future of pathology? Alan Kay, inventor of Smalltalk, which was the inspiration and technical basis for the Macintosh and subsequent windowing-based systems, stated in 1971: “The best way to predict the future is to invent it.”

I am going to talk about 4 questions: What is the future of pathology? (The obvious question.) Where are we today? How do we get to the future? When do you start “inventing” the future?

“The future of pathology is really all about the pathologist.” I think Jared Schwartz, MD, stated this in his talk earlier today, here at Futurescape. The drivers for this are the increasing need for specialization; the increasing amount of information, which will require additional management by the pathologist; and the increasing need for rapid diagnosis.

To get to the future, you need to understand where you are today. Digital imaging is the standard in health care. Digital imaging is an important part of pathology today, but its full value has yet to be realized. Most laboratories today are having a difficult time managing the images they use currently, let alone trying to manage the new technologies that are being discussed here this weekend.

The days when a pathologist can plop a new device on the counter and begin using it are over. The underlying information technology infrastructure that ties the various components of today’s health care delivery is under tremendous economic pressure to be tightly integrated. Any device introduced into the laboratory environment has to address the information technology infrastructure; hospital security; the Health Insurance Portability and Accountability Act; regulatory requirements; clinical practice and workflow for the pathologist, laboratory, and institution; and the business realities of achieving a return on investment.

Apollo PACS, Inc (Falls Church, Virginia) recommends that you develop a digital pathology strategic plan to move to a digital pathology work environment. You need to look at your organization’s strategic plan for the future, understand your current imaging practices, look to vendors for partnerships to support that effort, and develop a strategic plan to move to a digital laboratory environment.

When do you start inventing the future? I recommend you start immediately. You need to go back and engage the parties involved in the decision: the chief information officer, your laboratory manager, other anatomic pathologists, and informatics specialists that you have internally in your organization. You need to begin to understand what you are currently doing with imaging so that you can seek out information on digital pathology solutions, technologies, and devices and begin to develop your own strategic plan.

We hope we can work with you to help invent your future. Thank you.