Achieving interoperability for radiology requires a holistic approach and long-term vision

Network roaming equivalents are not true interoperability for radiologists. True interoperability in radiology must integrate with workflow and reporting systems, and tie into wider healthcare system initiatives. While well-intentioned, simply interconnecting image archives falls short of interoperability goals and is comparable to the early days of cell phone roaming.

Karen Holzberger
Posted May 18, 2018
Interoperability for healthcare IT and radiology is a tough, yet important challenge that healthcare systems, providers and patients face. The goals for interoperability as defined by the U.S. Office of the National Coordinator for Health IT (ONC) include:

1. the vision of a learning health system where individuals are at the center of their care and providers have a seamless ability to securely access and use health information from different sources.

2. to provide access to individuals health information, which is stored in electronic health records (EHRs) but includes information from many different sources and portrays a longitudinal picture of their health.

3. helping public health agencies and researchers rapidly learn, develop, and deliver cutting-edge treatments.

Achieving those goals within a complex and diverse healthcare IT environment involves multiple, carefully considered steps along the way. For example, interoperability can include interconnection of radiology image networks. But solutions limited to simple network connectivity without addressing workflow and reporting fall short of the ONC’s goals.
Connectivity alone imposes added layers of IT infrastructure for limited functionality and requires physicians to take additional steps outside of their normal workflow to access and use the images.

Radiologists should be aware that a connectivity-only approach is being compared to the early days of cell phone roaming.

Food for thought: today, we use our phones worldwide without a second thought. But the early days of mobile phones weren’t nearly as well-designed. “Roaming” happened when you entered another mobile provider’s service area and wanted to use their network. You had to register your phone on their network usually by entering strings of access codes and account numbers to use that network. It was not seamless or optimal.

Achieving seamless interoperability is critical to Nuance and our customers – it is the reason why we invest in building, supporting, and protecting the robust PowerShare Network with images from more than 5,200 facilities and why more than 1,000,000 studies are exchanged per month. It’s also why we launched the AI Marketplace for Diagnostic Imaging to propagate via the network the development, validation and adoption of diagnostic algorithms integrated into a radiologist’s preferred workflow. Further, the network is the vehicle for delivering future radiology innovations. All of that integrates with our other initiatives in structured radiology reports, embedded clinical guidance, and EHR optimization. Each of those areas represents progress on the multiple fronts required to achieve the benefits of interoperability.

The days of cell phone roaming are gone, and a broader, long-term vision of true mobile interoperability has prevailed. We all are enjoying the benefits of that vision, not the least of which is the continuing integration of mobile devices into healthcare IT. It’s important to learn from the lessons of the past, and keep them in sight, for ourselves and our customers to achieve true interoperability for radiology and outcomes-based healthcare.

**Tags:** AI Marketplace, diagnostics solutions, health IT, interoperability, radiology

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**About Karen Holzberger**

Karen Holzberger is the senior vice president and general manager of Nuance’s Healthcare’s diagnostic solutions business. Karen joined Nuance in 2014 with more than 15 years of experience in the Healthcare industry. Prior to Nuance, she was the vice president and general manager of Global Radiology Workflow at GE Healthcare where she managed service, implementation, product management and development for mission critical healthcare IT software. Karen attended Stevens Institute of Technology where she earned a B.S in Mechanical Engineering.

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