

By Elaine Sanchez Wilson

## WHAT'S UP WITH THE CLOUD?

**The forecast is bright with a new works-in-progress that will empower patients to manage their own imaging data.**

The passage of the Health Information Technology for Economic and Clinical Health (HITECH) Act in 2009 brought swift changes regarding privacy and security requirements previously imposed under the Health Insurance Portability and Accountability (HIPAA) Act of 1996.

Cristine Kao, Carestream Health's marketing manager for global healthcare IT, also noticed two other trends. Healthcare organizations are looking for ways to provide better services and eliminate the fragmentation that patients may experience as they receive treatment and care. At the same time, a push toward "consumerized" healthcare has patients demanding more from their physicians. Keeping these needs in mind, Carestream is developing a works-in-progress\* patient portal that seeks to streamline workflow while also empowering patients to manage their own care. The product will be powered by the company's cloud computing technology. The portal is intended to replace the traditional practice of having patients carry their medical images and reports to specialists or other physicians on film, CDs or DVDs. Instead, users will receive a unique log-in ID and a secure password in order to access their individual health records—automatically and immediately. "This portal is designed to allow patients to grant access to their referring physician or other caregivers," Kao said. "Patients will be empowered since they are the ones granting access and managing their own data."

After the portal's launch, patients will not need to worry about losing CDs or remembering to bring them to various doctor appointments. Easy electronic access to cloud-based imaging data will also reduce the need for duplicate exams and the resulting radiation exposure. Kao explained that clinicians today may elect to perform additional imaging procedures in the advent of a missing CD. "By having information readily available wherever the patient is, that's where the benefit of cloud technology will really show its versatility."

### Commitment to Cloud

Carestream's cloud-based offerings began in 1997 with archiving services. Recently, Carestream updated its cloud portfolio to include two more services: the CARESTREAM Vue Cloud PACS and Vue Cloud Community.

"Customers were asking us, 'If you can archive the images on the back end and help me save money over time, can you do this for our front-end application as well?'" Kao said. "Now that we've built the infrastructure, customers are

demanding expanded cloud offerings."

Cloud-based PACS functionality is ideal for healthcare providers of all sizes that want to decrease their investment in infrastructure and are attracted to the predictable operational cost offered by pay-per-use. This flexible business model is an economical option for customers who want to upgrade their outdated PACS capabilities while avoiding significant ongoing capital investments.

Workstations enable customers to access their images onsite, while monitoring of reports will be permanently handled off-site. Benefits for radiologists include native 3D post processing tools, which mitigates the need to go out and purchase third-party applications. Also a clinical results notification tool helps doctors collaborate with other clinicians.

Typical PACS installations generally take around six months to a year to install depending on the size of the site, but Carestream's cloud-based solution is targeted to require only three to six months, Kao said. "Because the cloud infrastructure is already built, we can mainly focus on training, change management and the workflow redesign."

A second portfolio under the company's cloud umbrella is its Vue Cloud Community, a cloud-based service that grants clinicians on demand access to images and reports no matter where



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—Christine Kao, Marketing Manager for Global Healthcare IT, Carestream Health

they are located. Specifically, it offers secure connections for authorized stakeholders, such as radiologists, specialists, referring physicians, and patients—facilitating workflow between resources that are onsite and offsite. It also eliminates the need to implement a costly common infrastructure for use by affiliated or independent enterprises.

"We're helping our customers better serve their customers, which is the referring community," Kao said.

Carestream now manages 30 million imaging studies (1 petabyte of data) in 10 different clouds worldwide.

\* Not Commercially Available

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