HealthManagement.org
Promoting Management and Leadership

RSNA 2013: GE Healthcare Unveils Innovative Software Solutions

Breakthrough software innovation delivers improved clinical capabilities, personalization, lower costs and operational results

At the 2013 Radiological Society of North America (RSNA) annual meeting, GE Healthcare, a unit of General Electric Company, unveiled four software breakthroughs to deliver improved clinical capabilities, productivity and diagnostic confidence for clinicians.

Up-to-date, reliable and accurate software is critical to quality care for the patient and usability for the clinician. GE Healthcare recently announced a $2 billion investment in software development that is focused on maximising asset performance, improving hospital operations management, improving clinical effectiveness and optimising care across entire populations. The launch of GE Healthcare's Xeleris 3.1, DV24.0, VolumeRAD*, Enterprise Imaging Solutions and iCenter further demonstrated this commitment.

Xeleris 3.1 delivers automation and personalisation for clinicians
In Nuclear Medicine, one of the greatest challenges clinicians face is access to the advanced and unique applications required to harness the power of Nuclear Medicine examinations. The latest release of GE Healthcare's Xeleris software enables automation, personalisation and access to these advanced applications. Nuclear Medicine clinicians will gain access to specific image results where and when they are needed. With its open interface architecture, Xeleris applications can now be launched through an integrated unified desktop from the Universal Viewer, as well as using the generic Application Programming Interface with other PACS vendors, providing radiologists and Nuclear Medicine physicians with tools previously only available on the Xeleris workstation, for enhanced access and productivity.

The Xeleris workstation includes DaTQUANT*, which enables visual evaluation and quantification of 123I Ioflupane images. This application provides tools to analyse dopaminergic neuron terminal binding and differences between multiple scans and may provide adjunct information to physicians assessing patients for Parkinson's disease. It also provides an exclusive AdreView™ planar application for automated heart to mediastinum ratio generation for Iobenguane I-123 images and the Dosimetry Toolkit for a quantitative SPECT and Planar calculation of the Radioisotope Therapy planning value.

"The personalised workflow and unique new clinical applications will give clinicians the information they demand with speed, convenience and flexibility," said Nathan Hermony, general manager for GE Healthcare's Nuclear Medicine business.

DV24.0 Continuum Pak advances clinical capabilities for MRI

GE Healthcare MRI's mission is to deliver the best clinical solutions with great patient experience at the right cost and quality. This year, GE Healthcare MRI is pleased to announce DV24.0, a unique software platform featuring innovative applications like Silent Scan.

“The DV24.0 Continuum Pak upgrade that includes Silent Scan is, in my opinion, the most innovative approach in MRI in the last few years that will make a significant contribution in the chain of diagnosis,” said Jean-Marc Pinon, Imaging Manager of MR and CT at CHR Laennec in Creil, France.

DV24.0 Continuum Pak is available on the Optima MR450w, Optima MR450w with GEM, Discovery MR750 and Discovery MR750w with GEM scanners. With DV24.0, productivity improvements of up to 30 percent compared to previous versions are possible with new features such as the eXpress PreScan and Workflow 2.0, driving efficiency by greatly reducing the number of mouse clicks for technologists. DV24.0 also features enhancements to increase diagnostic confidence. By evaluating the top clinical needs and trends, GE MRI has improved 3D imaging through a real-time motion correction technique called PROMO that automatically compensates for head motion.

Additionally, DV24.0, with FOCUS, takes Diffusion Imaging to the next level with the ability to optimise for image quality and signal to noise. FOCUS provides high-resolution, organ-specific Diffusion-Weighted Imaging (DWI) and Diffusion Tensor Imaging (DTI) for a small field of view. MAVRIC SL, a new technique designed for imaging the joints of patients with MR conditional implants, is also featured in DV24.0 and is setting new standards in musculoskeletal radiology.

VolumeRAD* Tomosynthesis offers greater sensitivity in detecting lung nodules
GE Healthcare’s VolumeRAD offers improved detection and management of patients with lung nodules compared to conventional radiography for imaging of the chest. As the first thoracic radiographic tomosynthesis product with a specific indication, this advanced application aims to improve the detection of lung nodules and the subsequent management of patients. VolumeRAD is 7.5 times more sensitive than chest X-Ray in detecting lung nodules 4mm – 6 mm in diameter, and patients benefit from low dose by receiving only 1.6 times more radiation than a 2 view (PA and LAT) chest x-ray exam.3

“We are very excited by these results that clearly show the benefit of radiographic tomosynthesis versus conventional X-ray,” said Michelle Edler, general manager of RRF for GE’s Detection & Guidance Solutions business. “Customers who use this technology will be able to detect more and will benefit from 360 percent greater sensitivity without any reduction in specificity, for lung nodules 3–20mm in diameter. The potential of VolumeRAD as a high-quality, cost effective and low dose imaging alternative for lung nodule detection is massive.”

VolumeRAD can also offer an intermediate solution. “Rather than simply getting a CT, we can do a VolumeRAD to verify whether it’s a nodule or not,” said Dr. Gautham Reddy, professor of Radiology and vice chair for Education and director of Thoracic Imaging in the Department of Radiology at the University of Washington. “[For] something that has low likelihood of being a nodule, VolumeRAD will probably exclude the possibility of a nodule and there won’t be as much radiation.”

Enterprise Imaging Solutions helps lower IT costs & enhance diagnostic confidence
GE Healthcare is introducing its expanded suite of Enterprise Imaging Solutions to help lower IT costs, improve clinician productivity, expand networks of care and enhance diagnostic confidence. The launch features Centricity 360* solution that connects unaffiliated clinicians and patients through a professional online collaboration tool and gives them secure on demand access to imaging applications. Centricity 360 is the newest addition to GE’s PREDICTIVITY* solutions, which harnesses the power of the Industrial Internet to help industrial organisations achieve zero unplanned downtime and peak productivity. GE Healthcare’s Enterprise Imaging Solutions also include Centricity PACS with Universal Viewer and Centricity Clinical Archive, recently validated by IHS as the Number One1 global vendor neutral archive (VNA).

“Overall, GE Healthcare’s upgraded solution set is in perfect alignment with evolving end-user demands and the various directions taken by imaging providers in the U.S.,” announced Frost & Sullivan in a release recognizing GE Healthcare with the 2013 North American Frost & Sullivan Company of the Year Award2. “Combining top-quality service, high performance and technology innovation, GE Healthcare’s Centricity imaging solutions have enabled providers to lower costs of ownership while preparing for the challenges of the future.”

iCenter improves operational results for hospitals
GE Healthcare’s iCenter provides instant access to critical information such as asset status, location,

maintenance history, and use and planning – which helps enable data-driven decisions and improved operational results. Now information is easier to digest with a more dynamic, customizable and colorful user interface. Improvements mean fewer clicks, a built-in analytics engine for more visual and intuitive data depiction, user security enhancements, and integrated guided tours. iCenter is the platform for future online service applications from GE Healthcare.

Source: GE Healthcare

4 December 2013

Published on : Thu, 5 Dec 2013