Xcelera solutions for nuclear cardiology

Philips Xcelera – one solution to manage cardiovascular care
Xcelera is a robust multimodality cardiology image management, analysis and reporting solution that provides patient-centric access to cardiology data and examinations. The system is highly configurable, scalable and customizable with the potential, via optionally available plug-ins, to support cardiovascular X-ray, ultrasound, nuclear medicine, computed tomography, magnetic resonance, and electrophysiology examination types. Furthermore, optional software is available for Xcelera to retrieve electrocardiograms from certain ECG management systems. Xcelera performs the necessary functions for exam storage and review. Xcelera additionally offers various analysis and quantification packages, clinical reporting and archiving features as optional functionality.

Nuclear cardiology analysis and reporting is a key strength of the Xcelera portfolio of cardiovascular information solutions. Similar to its corresponding applications for echocardiography, CT, MR, and the cath lab, Xcelera features a patient-centric design that speeds workflow and helps you enhance patient care... all from a single cardiovascular workspace.

Results can be summarized in a comprehensive clinical report that includes patient demographics, quantification results and conclusion statements. The clinical report is generated by ARG, the automatic report generator, and stored in Xcelera in a standard PDF format along with the images.

Clinicians can review all results information in conjunction with other multi-modality patient information managed by Xcelera.

AutoQUANT works hand-in-hand with the Philips JETStream Workspace. Nuclear cardiology examinations are acquired with a Philips SPECT camera, such as the CardioMD or BrightView, and pre-processed through the JETStream acquisition station. The images can then be post-processed using AutoQUANT with Xcelera, which provides a single, multi-modality approach to patient management.

How Xcelera works in the nuclear cardiology lab

AutoQUANT
Xcelera nuclear cardiology quantification provides tools to process and quantify gated and non-gated cardiac SPECT studies (i.e. myocardial perfusion). Xcelera utilizes AutoQUANT software, which provides access to integrated perfusion and function applications and offers optional clinical reporting within a single application. Xcelera displays the nuclear exams in 2D, 3D or polarmap formats.

Main window

Quantitative Gated SPECT (QGS)

Quantitative Perfusion SPECT (QPS)
Tele-Cardiology
As we continue to enhance Xcelera, our priority is to continuously improve your clinical workflow. Xcelera tele-cardiology solutions provide various options to support the cardiology enterprise, including full system functionality wherever you are, whenever you want, without compromising image fidelity or quantification applications. Access the full range of Xcelera’s powerful functionality via a secure VPN connection, or in a remote networked location. The ability to ‘push’ or ‘pull’ cardiology exams to multiple locations that you designate gives you greater flexibility on your work routines.

Remote Workflow
• Benefits the cardiologist on the move and improves clinical support for satellite clinics.
• Push batches of exams to a remote location prior to review and analysis. Studies sent to a shared drive at a location can be conveniently accessed by other clinicians at that location.
• Pull exams on demand for convenient access, allowing for remote review, quantification and reporting while away from the cardiology department.
• Copy exams to an external drive and take them with you to review later.

Remote Access to Results
Xcelera WebForum is a separate application to distribute exam results, including images and finalized clinical reports, across your healthcare enterprise. Whether you need to share information with a referring physician, another cardiologist providing treatment, or just for your own reference, access to images and reports is as close as your Internet connection. Xcelera’s remote results access option facilitates the review of reference images and finalized reports from the ICU, the exam room, your office and even your home computer.

Enterprise Integration
Deploying Xcelera as a component of your electronic medical records system or other enterprise application provides patient-centric access to exams for improved workflow and enhances patient care delivery.*

Xcelera – robust, secure and feature-rich platform designed for today and tomorrow

Safeguarding security and performance
Xcelera will support High Availability via a Microsoft® cluster environment to reduce potential system downtime. If one server fails, a secondary fail-over server can perform the functions to maintain operation so the end user can continue to access Xcelera functionality. By maintaining uptime this functionality will provide cost savings.

Clinical roles
Each user only has access to relevant information based upon the roles assigned and can only make edits and additions at the level of permission granted. Activity is recorded in an audit log.

Business tools
In addition to streamlining workflow in the cardiology department, advanced investigation of stored discrete data can be performed on Xcelera’s database views with the use of standard data analysis tools. Xcelera provides the tools necessary to aid compliance with HIPAA regulations.

* network bandwidth speeds need to be taken into consideration

Quantitative Bloodpool SPECT (QBS)
Value-added services
Philips can assist you in creating a more efficient clinical workflow by offering an extensive range of services to help you implement, integrate and configure your Xcelera solution.

DICOM interoperability
- Easily access third party DICOM archives, leveraging your existing investment in IT solutions.
- Take advantage of expanded DICOM capabilities, such as DICOM Query/Retrieve, manual DICOM export, DICOM Structured Reporting, and DICOM-based archive connectivity.
- Leverage existing IT solutions and take advantage of expanded DICOM capabilities so that you can easily utilize third-party DICOM compliant systems and archives.

Connectivity throughout the enterprise
Xcelera’s HIS interfaces for ADT/orders and results reporting can potentially reduce errors, save critical time to treatment and lead to faster billing.

Database and operating system
Xcelera utilizes industry-leading supporting technology: Windows 2003 for the server operating system and SQL 2005 for the database application.

Intuitive user interface
Xcelera’s graphical user interface conforms to Philips’ user interface standards, minimizing training and enhancing ease of use.

Future-safe investment
With Xcelera you are investing in a proven platform. In fact, nearly every Philips cardiology informatics product introduced since 1996 has a defined upgrade path to the latest most advanced Xcelera functionality, retaining all historical data, including images, reports, and templates.

Xcelera gives you a platform for further expansion, enabling you to review, quantify, and report on a variety of cardiac modalities at the same workspace. You also have the ability to access ECG reports via optional interfaces to Philips TraceMasterVue and GE MUSE ECG management systems.

For more information, contact your local Philips representative.