Centricity™ Cardio Workflow v7.0

Comprehensive workflows bring order to a complex care area

Overview

Centricity™ Cardio workflow v7.0 offers a comprehensive collection of tools for all data and information management in the cardiovascular department. It streamlines workflow, tracks and manages inventory, creates structured clinical reports, and runs clinical and administrative queries.
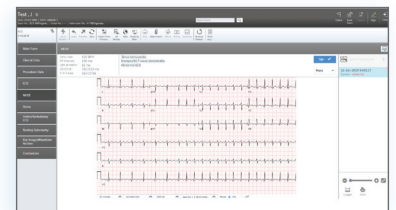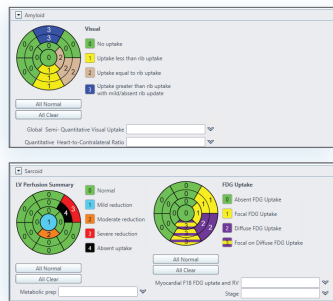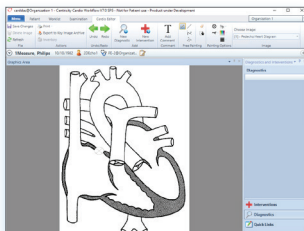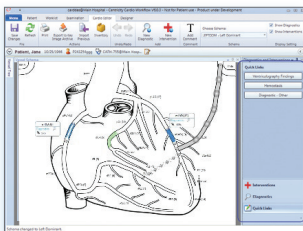
With the release of the v7 platform, Centricity Cardio Workflow transforms the physician reporting experience with the addition of side-by-side reporting and quick reports that result in fewer clicks per report. Additionally, we partnered with leading physicians to create out-of-the-box clinical content that helps streamline installations, which continue to be refined as we deploy Centricity Cardio Workflow across the globe.

New! In the latest release, Centricity Cardio Workflow features several key physician reporting improvements such as Intelligent Reporting, Worklist Prioritization and Reporting Contradictions. Intelligent Reporting within the Adult Echo module leverages a rules based AI engine that automatically generates findings based on measurement values. Worklist Prioritization within non-invasive modes helps prioritize physician worklists by identifying STAT, Urgent and Routine studies. Reporting contradictions warns the user of conflicting statements contained in the clinical report.

Centricity Cardio Workflow features seamless ECG management, powered by MUSE™ NX, supports decision making with proven algorithms and measurements validated against thousands of records in multiple peer reviewed studies and editing tools developed with leading cardiology hospitals. Integration of MUSE NX with Centricity Cardio Workflow enables a single cardiology patient jacket with the ability to read all cardiology related studies including ECG's from a single workspace.

Centricity Cardio Workflow also features powerful workflow efficiency tools to help improve patient throughput and enhance staff productivity. Whether your facility generates orders for cardiology exams, uses an enterprise-wide or a cardiology only scheduling system, Centricity Cardio Workflow offers multiple advanced interfaces and solutions that are flexible to help optimize your workflow.
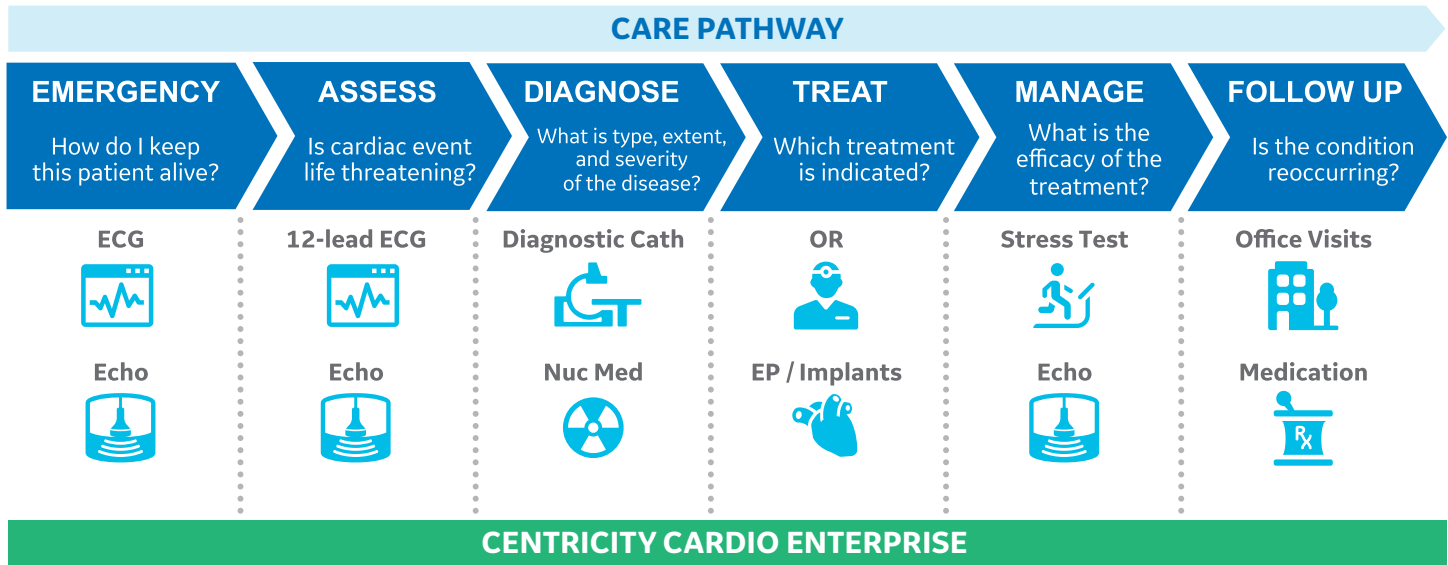
A variety of modules and interfaces complement the EMR with discrete data to bring care area insights to the broader care team and form the foundation for analytics. As workflow needs and system requirements can vary, please consult with your local team.

Consolidate clinical and administrative tools with discrete, minable data, extensive diagrams, and robust physician reporting.

MUSE NX embedded in to Centricity Cardio Workflow offers streamlined ECG workflow in a single solution.

gehealthcare.com

Serving the cardiovascular enterprise across the entire continuum of care

CARE PATHWAY

EMERGENCY	ASSESS	DIAGNOSE	TREAT	MANAGE	FOLLOW UP
How do I keep this patient alive?	Is cardiac event life threatening?	What is type, extent, and severity of the disease?	Which treatment is indicated?	What is the efficacy of the treatment?	Is the condition reoccurring?
ECG	**12-lead ECG**	**Diagnostic Cath**	**OR**	**Stress Test**	**Office Visits**
Echo	**Echo**	**Nuc Med**	**EP / Implants**	**Echo**	**Medication**

CENTRICITY CARDIO ENTERPRISE

Management modules

Scheduling

Centricity Cardio Workflow offers a revamped web based scheduling module allowing for access either within the application or via the web from any PC. The scheduling module offers comprehensive time/task management tools designed for clinical and administrative roles in cardiovascular departmental workflow.

Charge Capture

The Cardio Workflow Charge Capture module provides the capability to assign procedure codes for each patient encounter while reporting on the outcome of the procedure at the point-of-care. Codes can be uploaded to accommodate new or modified code sets through the administrative component of the application.

Inventory Management

Centricity Cardio Workflow's Inventory Management module represents a comprehensive set of stock management tools designed to track inventories within cardiology departments. It offers the ability to manage master supply lists, procedural inventory documentation and stock - all by stock location or from a central stock location to child locations such as procedure rooms. It also includes a full order-deliver-invoice-handling solution with interfaces to health system-wide materials management system, as well as internal transfer proposal from central stock location to child locations.

Supply entry:
- Populate, characterize, and categorize supplies for streamlined management
- Barcode scanner support to simplify inventory item documentation and management
- Medical code or barcode search
- Inventory association with vendor and supplier information

Procedural inventory, cost summary and stock:
- Document supply used during procedures in combination with MacLab/CardioLab, invasive monitoring systems, and in non-invasive settings
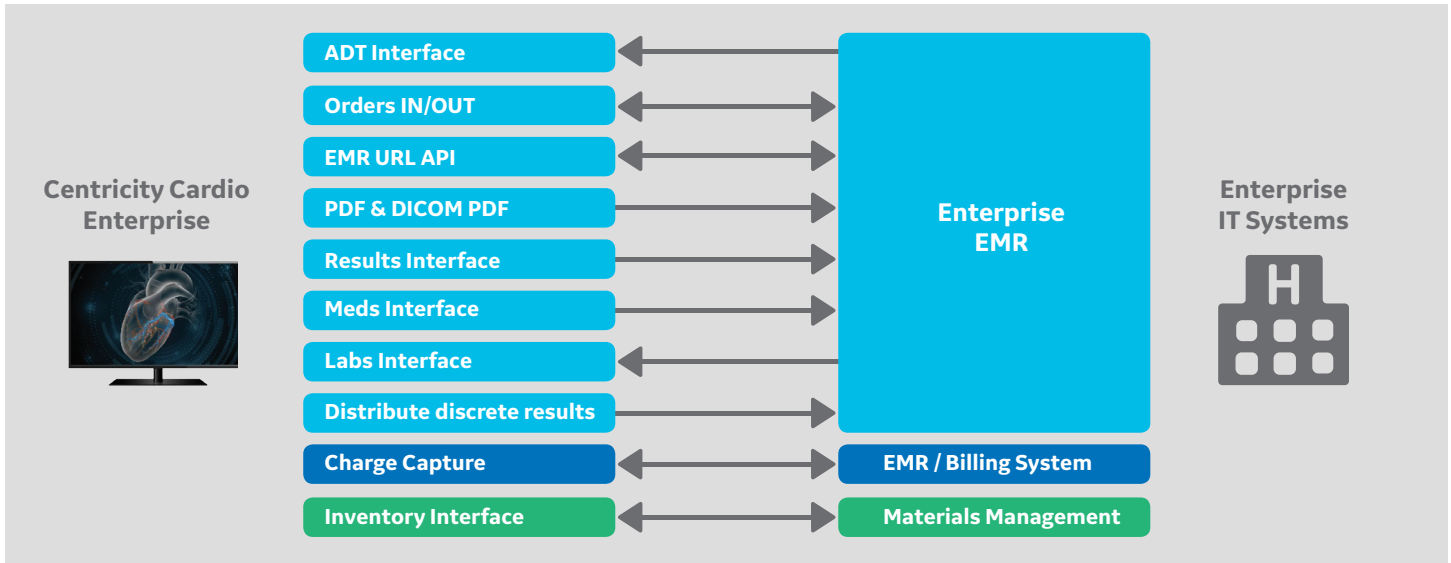- Material package grouping
- 2D Barcode scanner support

Stock management:
- Monitoring of stock level
- Separation of stock location shelf count
- Material addition and loss capturing
- Expiration date monitoring
- Scanning of lot number and expiration date upon delivery
- Core-to-Stock-Management
- Core-to-Room

Orders, deliveries, and invoices:
- Inventory order, delivery, and invoice tracking
- Automatic order generation of a pre-set stock volume per item
- Manual order volume correction per item
- Automatic matching of orders, deliveries, and quantities
- Auto-generation of invoices with discounting and tax calculation for the gross billing amount

Extensive interfaces help unite service lines to a single point of access

Centricity Cardio Enterprise

| ADT Interface |
| Orders IN/OUT |
| EMR URL API |
| PDF & DICOM PDF |
| Results Interface |
| Meds Interface |
| Labs Interface |
| Distribute discrete results |
| Charge Capture |
| Inventory Interface |

Enterprise EMR

EMR / Billing System

Materials Management

Enterprise IT Systems

Labs Interface

The labs inbound interface brings in the most recent lab information from the hospital lab system to the CVIS database and displays the results within the patient record.

Meds Interface

The medication outbound interface sends detailed administered medication information directly to the medications administered record (MAR).

Discrete Data Results

Following a procedure, Centricity Cardio Workflow can export an XML file containing discrete procedural data that is consolidated in a structured manner. This enables the GE Healthcare implementation team to configure an interface to route XML discrete procedural data to be stored in the EMR (or 3rd party application), provided it is able to accept it.

Clinical reporting modules

Cath Lab

The Cath module enables all clinical content and workflow features for cardiac catheterization lab procedures and acts as a hub of information related to the patient encounter. The Cath module provides tools for clinical data entry and procedural information related to the patient events. The Cath module also supports Appropriate Use Criteria (AUC) scoring with relevant statistical reports as well as allowing the extraction of Intrasocietal Accreditation Commission™ (IAC) relevant information. It also provides a graphic tool for representing patient coronary anatomy and image annotation that can be included in the final physician report. This module can be utilized with or without the integration of a hemodynamic recording system.

Invasive Peripheral Vascular

The Invasive Peripheral Vascular module enables all structured reporting and workflow optimization tools for interventional peripheral vascular procedures. With the use of this module, procedural information captured from various devices, such as a hemodynamics recording system, is aggregated into a structured database and auto-populates physician reports and documentation records. The module includes a graphic tool for diagramming and image annotation that can be included in the final physician report. This module can be utilized with or without the integration of a hemodynamic monitoring system.

Electrophysiology

The Electrophysiology module enables all clinical content, workflow features and reporting for EP studies and acts as a hub of information related to the patient encounter. The procedural documentation includes EP Studies, ablations, tilt tables, and cardioversions. With its user friendly interface, the module assists each department in capturing clinically relevant data and allows the extraction of Intrasocietal Accreditation Commission™ (IAC) relevant information. This module can be utilized with or without the integration of an EP recording system.

Structural Heart

The Structural Heart module provides a solution for all structured reporting and workflow optimization tools for structural heart procedures. With the use of this module, procedural information captured from various devices, such as a hemodynamics recording system, is aggregated into a structured database and auto-populates physician reports and documentation records, as well as allowing the extraction of Intrasocietal Accreditation Commission™ (IAC) relevant information. The following procedures are supported as a part of this module: Valve Replacement, Valve in Valve, Left Atrial Appendage Occlusion, MitraClip, Alcohol Septal Ablation, Valvuloplasty, Atrial Septostomy, Atrial Septal Defect, Ventricular Septal Defect, Patent Foramen Ovale and Paravalvular leak. This module can be utilized with or without the integration of a hemodynamic monitoring system.

Cardiac Rhythm Management (CRM) Implant

The Cardiac Rhythm Management Implant module provides a solution for the electrophysiology clinical space focused on device implants such as Implantable Cardiac Devices (ICDs) and pacemakers. This module features clinical content, workflow and reporting and can be utilized with or without the integration of an EP or hemodynamic recording system.

Data can be imported from the programmers of the following vendors:
- Biotronik™
- Medtronic™
- Boston Scientific™
- Abbott™

Cardiac Rhythm Management (CRM) Follow-up

The Cardiac Rhythm Management Follow-up module is designed to document the follow-up visits of implantable devices, such as ICDs and Pacemakers with import of data from Biotronik, Medtronic, Boston Scientific, and Abbott programmers.

Clinical reporting modules

Adult Echo with Intelligent Reporting

The Adult Echo module offers a complete exam management and reporting solution for procedural documentation and reporting of clinical content and workflow features for adult echocardiography. With its user friendly interface, the module assists each department in capturing clinically relevant data, Echo Appropriate Use Criteria (AUC) scoring with relevant statistical reports, as well as allowing the extraction of Intrasocietal Accreditation Commission™ (IAC) relevant information. This module features Intelligent Reporting which automatically populates exam findings based on imported measurement values. Reports can be routed for formal representation of the procedure. These modules can be utilized with or without the integration of ultrasound systems.

Pediatric Echo

The Pediatric Echo module offers a complete exam management and reporting solution for procedural documentation and reporting of clinical content with use of Meyer Mulllins diagrams and workflow features for pediatric and fetal echocardiography. With its user friendly interface, the module assists each department in capturing clinically relevant data and allows the extraction of Intrasocietal Accreditation Commission™ (IAC) relevant information. This module supports the ability to document z scores, which can then be routed for formal representation of the procedure. This module can be utilized with or without the integration of ultrasound systems.

Resting ECG

Centricity Cardio Workflow features the ability to read and finalize ECG's powered by deep integration with MUSE NX from a single workspace. When integrated with MUSE NX, Centricity Cardio Workflow can display a multi-organizational ECG work list as well as pass exam status updates and discrete results from resting and HiRes examinations.
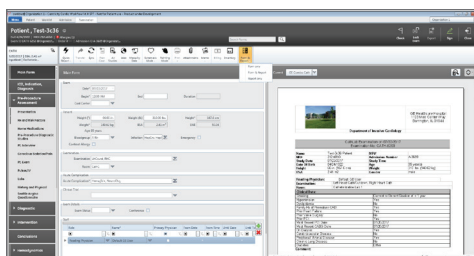
Non-Invasive Peripheral Vascular

The Non-Invasive Peripheral Vascular module enables all structured reporting and workflow optimization tools for non-invasive peripheral vascular procedures. With the use of this module, procedural information captured from various devices, such as an ultrasound imaging modality, is aggregated into a structured database and auto-populates physician reports and documentation records. This module assists in capturing clinically relevant data and allows the extraction of Intrasocietal Accreditation Commission™ (IAC) relevant information. Additionally, this module includes a graphic tool for diagramming and image annotation that can be included in the final physician report. This module can be utilized with or without the integration of ultrasound systems.
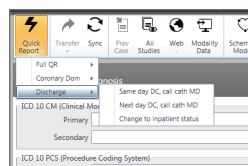
Nuclear Medicine

The Nuclear Medicine module supports physicians, nurses, and technologists in recording relevant data during cardiology examinations in the Nuclear Medicine department. The Nuclear Medicine Module also supports Appropriate Use Criteria (AUC) scoring with relevant statistical reports as well as allowing the extraction of Intrasocietal Accreditation Commission™ (IAC) relevant information.
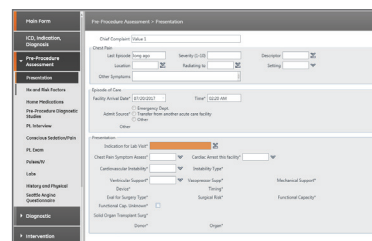
Stress ECG

The Stress ECG module enables storage and management of discrete stress ECG data. When integrated with GE Healthcare's CASE™ stress system, this reporting module pre-populates with measurements from the CASE system.

Side-by-Side View Options

Quick Reports

Required Fields Visual Indicators

Vertical Navigation

Registry modules

Data Registry submission modules, without use of a 3rd party interface, certified directly by GE Healthcare:

	Module	Description
Europe	CVIS Cards ACS Reg.	Software enabled CVIS OPT CARDS ACS
	CVIS Cards EP ICD Reg.	Software enabled CVIS OPT CARDS EP ICD
	CVIS Cards EP PM Reg	Software enabled CVIS OPT CARDS EP PM
	CVIS Cards EP ABL Reg.	Software enabled CVIS OPT CARDS EP ABL
	CVIS Cards PCI Reg.	Software enabled CVIS OPT CARDS PCI

	Module	Description
United Kingdom	CVIS CCAD NPDB/ICD Reg.	Software enabled CVIS OPT CARDS ACS
	CVIS CCAD Paeds Reg.	Software enabled CVIS OPT CARDS EP ICD
	CVIS CCAD Cardiac Surgery UK Reg. Module	Software enabled CVIS OPT CARDS EP PM
	CVIS CCAD BCIS Reg.	Software enabled CVIS OPT CARDS EP ABL
	CVIS CCAD EPS Reg.	Software enabled CVIS CCAD EPS Registry
	CVIS CCAD MINAP Reg.	Software enabled CVIS OPT CARDS PCI

	Module	Description
Germany	CVIS 3rd Party BQS Interface Module	Software enabled QS-Monitor Software enabled iMed One Software enabled QS-MED Site Interface
	CVIS BQS PTCA Reg.	Software enabled CVIS BQS Cath Registry
	CVIS BQS PTA Reg. Module	Software enabled CVIS BQS PTA Registry
	CVIS BQS PM/ ICD Reg.	Software enabled CVIS BQS PM/ICD Registry

In the United States, we have partnered with Cedaron to offer the following registries through integration with Centricity Cardio Worflow:

	Module	Description
United States	Society of Thoracic Surgeons (STS)	Adult Cardiac Surgery
		General Thoracic Surgery
		Congenital Heart Surgery
		State Registries: CCORP, Northern New England Surgery Registry
	American College of Cardiology (ACC) and National Cardiovascular Data Registry (NCDR)	Cath PCI
		ICD
		Afib Ablation
		Chest Pain
		PVI
		IMPACT
		STS/TVT TAVR
		State Registries: New York Diagnostic Cath, New York Cardiac Surgery, New York Cath PCI, Mass/DAC, New Jersey Cardiac Surgery, New Jersey Cath
	American Heart Association (AHA)	GWTG - Stroke
		GWTG - Heart Failure
		GWTG - Coronary Artery Disease
	Additional Registries	ASE - American Society of Echocardiography Registry
		ASNC - American Society of Nuclear Cardiology Registry
		AACVPR - Outpatient Cardiac Rehab and Outpatient Pulmonary Rehab

Technology specifications

Multi facility / organization support:

- Web-enabled deployment
- Centricity Universal Viewer and
  Centricity Cardio Imaging Solution Integration
- Microsoft™ SQL R2, 2012, 2014 & 2016 Support
- Microsoft Windows™ Server 2012, 2014 and 2016
- Web access to reports
- Windows™ 10 support
- 1280 x 1024 resolution
- Hyper-V virtualization

**Customers can access the following documents in
GE Healthcare's Customer Documentation Portal
at the following location:**
https://customer-doc.cloud.gehealthcare.com/#/cdp/dashboard

Declaration of Compatibility	DOC2299104
System Requirements Specification	DOC2037181

Requirements

To support our customers in the best possible way, GE Healthcare requires access to customer systems and servers to monitor and/or resolve reported issues. A connection by GE Healthcare via a Virtual Private Network (VPN) enables the GE Healthcare support organization to remotely connect to the system running Cardio Workflow. Such remote capability should be tested and approved prior to the system go-live for clinical use. If GE Healthcare cannot be granted access to the customer's Cardio Workflow system to diagnose and resolve technical or configuration issues, an escalation process through management at customer's site should be established to ensure GE Healthcare's ability to provide timely support. In the event that a customer does not provide access or connectivity, services may be provided and charged on a time and material basis (minimum 4 hours), including travel time, at then-current rates. GE Healthcare will not be responsible for any failure to perform its obligations under this service policy that results from customer's refusal or inability to provide access. In the event that a GE Healthcare support professional is required on-site, internet access must be provided to connect to the GE Centricity support infrastructure.