Project Implementation Guide

Diagnostic Cardiology

Working together to get your new technology online and begin providing patient care.



Table of Contacts

1.0 Introduction	
1.1 About this manual	
1.2 Intended audience	
1.3 Product specifications	
2.0 Implementation teams	
2.1 Team roles and responsibilities	4
3.0 Additional responsibilities 3.1 Additional customer responsibilities	
3.2 Additional GE responsibilities	
4.0 Project actions and ownership 4.1 Initiating	10
4.2 Planning	11
4.3 Executing	
4.4 Monitoring and controlling	
4.5 Closing	
5.0 Applications planning for clinical user implementation	
5.1 Overall training definitions	
5.2 Clinical sub team	18
5.3 Headquarters and mobile class training guidelines	18
5.4 On-site training guidelines	19

1.0 Introduction

1.1 About this manual

To ensure the successful implementation of your Diagnostic Cardiology equipment and/or software from GE Healthcare, this guide provides information needed to prepare for planning, installation, configuration, testing, and activation of your system.

Implementation of this system and/or equipment is best accomplished through a team effort involving both the customer and GE. The activities outlined in this guide are designed to:

- Define the team members and their responsibilities
- Outline high-level project tasks
- Identify what information is needed, who should supply it, and when it should be supplied
- Transition the customer to successful operation of the Diagnostic Cardiology equipment and/or software

1.2 Intended audience

The Project Implementation Guide is an information resource for both GE and customer team members involved in any phase of implementation. This guide also can be useful to hospital administrators, managers, and staff who have an interest in the overall implementation process. Our intent is to keep this guide concise and, when possible, to reference other GE-published documents for product descriptions, specifications, and technical information.

1.3 Product specifications

Please refer to product brochures and service manuals for detailed physical, electrical, and environmental specifications. Hardware specifications also can be found in the pre-installation guide for the product(s) purchased. The GE Project Manager or Account Coordination Specialist will provide required specifications for customer-supplied hardware at the beginning of the project. The pre-installation guide also includes specifications for hardware that is supplied by GE.

2.0 Implementation teams

2.1 Team roles and responsibilities

The successful implementation of your Diagnostic Cardiology system depends on critical factors such as leadership, project planning, effective communication, and proficient execution of tasks. Teams with defined project goals and objectives will deliver more effective and timely project implementation.

Guidelines for team members' roles and responsibilities are outlined as follows. Depending on the scope and complexity of the system implementation, some roles may either be combined or further subdivided. However, the overall responsibilities of these roles will remain as defined under these guidelines. If any roles and responsibilities need to be modified to meet the specific needs of the project, the changes should be documented, communicated, and agreed upon by the Project Team.

The Project Team is composed of both GE and hospital personnel. All team members should review the following team member definitions and responsibilities.

Customer core team members

Project Role Manager (PM)-Maintains overall responsibility and authority for project activities. This person will be the central contact for planning meetings, scheduling site visits, and gathering/disseminating any documentation that needs to be provided to and from the GE Project Team throughout project implementation.

System Administrator(s) (SA)-Primary system owner and/or Clinical super user. Manages system configuration and overall setup and performance within hospital clinical environments. Additional responsibilities include:

- Updates physician lists, new users, location codes, and procedure codes.
- Identifies equipment or performance issues and escalates to hospital IT support or contacts GE technical support.
- Provides first-line contact for applications questions from hospital clinical personnel.
- Performs daily system backups and reviews error logs.
- Verifies archive queues and correct system performance.
- May attend GE system and/or equipment training.

Department Supervisor-This person should have the knowledge and authority to represent the clinical needs of the organization as they relate to this project. This person will assess the need for user training and will coordinate such training activities with the GE implementation team.

Lead Clinical System Owner/Super User-This person is responsible for the daily clinical-related operations of the respective GE system(s), and should have the knowledge and authority to represent the clinical needs of the organization as they relate to the project.

The Lead Clinical System Owner/Super User should have a detailed knowledge of the department's workflow, and will work closely with the GE team to ensure the GE equipment and/or system(s) are configured to meet the needs of the established or enhanced workflow. Additional responsibilities include:

- Attending GE system and/or equipment training.
- Identifying clinical users who will need training.
- Working with department managers who will be affected by new equipment and/or system(s) to ensure buy-in and identify training needs.
- Creating and maintaining clinical team work instructions.
- Creating and maintaining clinical equipment downtime procedures.
- Developing and implementing workflow enhancements.
- Acting as liaison between the clinical, medical, and IT staff.
- Training staff on new workflow and/or policies and procedures, as needed.

Basic clinical user-A Basic clinical user utilizes the MUSE® Cardiology Information System for accessing patient information. This may include nurses, physicians, and clerical and support staff. The Basic user shall have the ability to perform basic system functions, including editing demographics, retrieval of patient records, assignment of records to physician in-baskets, database search, and basic troubleshooting.

Lead Physician/Cardiology Head-Main physician champion within the cardiology department who assists with workflow and interface development.

Information Technology Department (IT)

- **Hardware Site Coordinator-**Works with GE Field Engineer on installation and maintenance of all project-related system hardware throughout the clinical departments and IT facilities. Communicates and coordinates site physical modifications and readiness with GE Field Engineer.
- **Network Integration Lead-**Manages and provides network modifications per system requirements. Works with GE Field Engineer to integrate all system hardware and software components into the hospital network environment
- **Database Administrator-**Responsible for overall database environment once the GE system(s) are in production. Works with hospital HIS database administration and GE conversion specialists on database conversion, migration, and/or patient identification data tasks.
- **HIS Interface Analyst** -Provides HIS interface requirements to GE Healthcare HIS integration specialist and supports build and test of the HIS interface within the timeline established in the overall project plan.
- Technical System Administrator-Manages technical maintenance tasks once system is live. Manages
 operating system, directory permissions, and system networking components. Manages documentation for
 system and downtime procedures. Coordinates system-related tasks such as upgrades, patches/fixes, new
 hardware installation, back-up and restore coordination, disaster recovery documentation, startup, and
 shutdown procedures.
- **Biomedical Engineer-**Supports, tracks, and repairs diagnostic cardiology equipment. Familiar with how equipment communicates with the hospital network.
- Facilities Manager-Main point of contact for the hospital buildings, trash disposal, power, HVAC, and telecommunications. Provides GE access to hospital loading dock and equipment staging areas, if required.

GE core team members

Project Manager (PM) or Account Coordination Specialist (ACS)-Provides leadership and serves as primary contact of the GE core project team for the successful planning, execution, and acceptance of the GE system(s). The GE PM or ACS works with GE and customer project teams to coordinate all implementation activities, resources, documentation, and training.

Product Sales Specialist (PSS)-Primary Account Manager for the local site; owns the long-term relationship with the hospital. The PSS is responsible for submitting the quote and for any and all changes to the order during the project. Manages customer expectations regarding configuration and functionality, and overall project scope during the sales process. First-tier customer point of contact for sales and remains involved throughout the project.

MUSE/MARS® Sales Specialist-MUSE and MARS configuration specialist and regional support resource for GE PM or ACS and PSS. Available to assist PSS on any and all changes to the order during the project. Manages customer expectations regarding MUSE and MARS system configuration, functionality, and overall project scope. Provides second-tier customer point of contact for current and future MUSE and MARS equipment sales.

Field Engineer (FE)-Responsible for integration of GE system(s) onto hospital network, and for configuration and testing of the system within the hospital clinical environment. Serves as GE technical lead for the system implementation and communicates with GE and customer team during project execution.

HL7® Integration Engineer-Works with hospital HIS interface analyst to review the customer's HIS message layouts, coordinate development of the HIS interface, and perform HIS interface testing. Addresses customer system workflow issues relative to HIS. Supports migration to production and project follow-up.

Clinical Applications Specialist (CAS)-Works with customer's Lead Clinical System Owner(s)/Superuser(s) to develop the training schedule and content. Analyzes and configures system workflows with hospital system administrator(s), department supervisors, and Lead Clinical System Owner(s). Performs purchased training and communicates issues with the GE PM or ACS.

Database Conversion Specialist-Works with GE PM or ACS, FE, and hospital IT staff on database conversion, migration, and/or patient identification data tasks.

Network Integration Engineer—Works with GE PM or ACS, FE, and hospital IT staff on network integration of selected GE system(s).

3.0 Additional responsibilities

3.1 Additional customer responsibilities

The customer is responsible for the following tasks prior to and during implementation of the GE system(s). All action items will be reviewed in detail during project scope discussion and kickoff meeting. Unavailability of or delays in providing certain items prior to installation may result in delayed GoLive and/or additional customer cost. Please note that any changes to the project schedule require advance mutual agreement.

Customer resources

Customer will assign a primary contact person to assemble customer resources and requirements as needed throughout the implementation process. This person also will be responsible for the implementation schedule and the deliverables owned by the customer.

Project meetings

Customer is responsible for participating and providing feedback in a Scoping Discussion prior to the Kickoff meeting. During the Scope Discussion, the GE PM or ACS will review the technical specifications, training requirements, and project timeline to assist in preparing for the implementation.

During the Kickoff meeting, GE will provide an overall review of the project implementation. High Level Stakeholders are encouraged to participate.

Status Meetings will provide timely and pertinent project information throughout the life of the project.

Based on scope and complexity of the project, a Scope Discussion, Kickoff meeting, and/or Status Meetings may not occur.

Customer-supplied equipment

The customer is responsible for ensuring that all supplies, equipment, and furniture provided by the hospital will be available on time, as agreed per the project timeline. Any delay on these items will impact the schedule and may delay the project GoLive.

All system hardware must meet GE requirements per the specifications provided by the GE PM or ACS. The customer is responsible for installation and configuration of any hardware and operating systems purchased outside of GE. The customer must allow GE staff accessibility to servers and equipment as needed (examples: ECG Cart(s), MARS Holter System, CASE Stress Machine(s), etc.)

Equipment placement and security

The customer is responsible for identifying equipment placement locations and for assuring the availability of these spaces during installation. Server and network equipment locations shall have controlled access and environmental controls. The customer shall provide members of the GE implementation team with access to secure locations as needed.

Closet location and rack/space allocation

The customer is responsible for providing adequate communication room rack space for installation of the server and system network components. Hardware specifications will be provided by the GE PM upon customer request.

Uninterruptible power sources

Uninterruptible Power Sources (UPS) are required for all servers and network components. The customer is the responsible for ensuring the UPS meets GE product specifications and for ongoing maintenance of the UPS.

Equipment storage and transportation

GE will ship system and/or software components directly to the customer site according to the address specified on the purchase order. It is the customer's responsibility to receive all system components and transport them from the

receiving dock to its designated storage and/or staging location. The customer is responsible for the proper and secure storage of the equipment.

Network infrastructure

It is the customer's responsibility to install, terminate, configure, test, and activate any Ethernet, fiber-optic network drops, analog lines, or wireless networks required to support the GE system(s). The customer is also responsible for the following network-related activities:

- Assignment of permanent IP addresses (Static or DHCP, as determined by equipment/hardware specifications)
- Purchase and installation of GE-validated anti-virus and backup software for the MUSE server
- Creation of domain user accounts
- Configuration of customer-supplied printers for report routing
- Provide Wireless SSD ID, etc.

Electrical outlets

The customer is responsible for providing any additional electrical outlets required for the GE system(s) and networking components. It is recommended that all electrical supplies be on the hospital's emergency power system.

Refuse disposal

GE will make every effort to keep refuse, such as packing materials and shipping cartons, organized and stowed away during installation. It is the responsibility of the hospital to make arrangements for the proper disposal of the installation refuse. Any old equipment that is being replaced and is not a part of a trade-in belongs to the customer. GE personnel will not dispose of this equipment.

Remote system support

The method of remote system support depends upon the product to be installed. Specifications and customer requirements for the appropriate method will be provided by the GE PM in advance of project kickoff. In any case, the customer will act as the liaison between GE and any third-party vendors in the resolution of remote system support issues that may arise. The customer will assign a person to assist during installation and testing of the system.

Interface specifications

If a new HL7 interface is purchased, the customer is responsible for providing complete specifications for HL7 communication and data protocols, routing rules, and translations. The HL7 interface survey will need to be completed by the customer before a GE HL7 HIS integration engineer will be assigned to the project. This document will be provided to the customer by the GE PM or ACS in advance of the Scope Discussion.

Three-Week Confirmation

A three-week GoLive confirmation will be needed prior to securing all GE resources, including but not limited to field engineering, training, and HL7 engineering. If the customer main point of contact is unable to provide a verbal three-week GoLive confirmation, GE has the right to reassign the project resource(s) to another customer project implementation.

Clinical training

Customer is responsible to coordinate the appropriate individuals to be available to participate in Headquarters, Mobile, and/or on-site training during the duration of the project. For more information on clinical training guidelines, please refer to Chapter 5 of this guide.

System GoLive

The GE implementation team will assist the customer team with GoLive operations and the resolution of any issues that may develop.

Services expiration

The Information Technology Professional Services (ITPS) will expire if the services have not been performed within one (1) year of the date the customer places the order. ITPS services include clinical application training, project management, HL7/HIS systems integration, database conversion, and network design and integration (ND&I).

3.2 Additional GE responsibilities

GE is responsible for the following tasks prior to and/or during the system implementation.

GE resources

GE will provide a single point of contact for the Diagnostic Cardiology Implementation, as well as coordinate and schedule resources to support the system GoLive.

Equipment configuration and interface development

GE will schedule HIS equipment configuration and interface development only after remote system support capabilities have been established. Equipment configuration and interface development are to be performed remotely by the HL7 HIS integration engineer.

Installation and system verification

GE will install, configure and test all system components supplied by GE. Following installation of all GE and customersupplied equipment and software, GE will perform system verification to confirm system operation and integrity prior to GoLive.

Remote System Support

Upon successful installation of the equipment, GE will establish communications with remote systems by configuring the operating system for appropriate protocols, verifying communications at the protocol level to/from remote systems, and capturing raw data from remote systems. The method of remote system support depends upon the product(s) to be installed. Specifications and customer requirements for the appropriate method will be provided by the GE PM or ACS as part of the Scope Discussion.

Hours of operation

The installation and upgrade, including the training, will be performed during normal GE business hours of 8 a.m. to 5 p.m. local customer time. If a customer wishes for the installation or upgrade to begin outside of those normal business hours, he or shee will be subject to additional fees associated with the overtime hours.

Training

GE provides product training through a variety of training options. Education will be delivered in accordance with the purchased training plan. For training conducted at GoLive, the customer's equipment will be used for training once the installation of the new system or upgrade has been completed.

GoLive support

The GE PM or ACS, clinical applications specialist, field engineer, and HL7 HIS integration engineer will help support the GoLive and provide on-site support based on system implementation and purchased services.

4.0 Project actions and ownership

The GE implementation consists of the major activities listed below. Most of the planning and decisions are made in project meetings and discussions that focus on the preparation and implementation of these activities. The following is a list of tasks and their ownership to help team members manage and track their progress. Based on the scope, complexity, and product(s) purchased, some key actions may not apply.

Key Actions

- Initiating
- Planning
- Executing
- Monitoring and controlling
- Closing

4.1 Initiating

This phase consists primarily of an internal exchange of information intended to familiarize the GE Core Team with the scope of the project and prepare for the project kickoff.

	Task	GE	Customer
1	Obtain copy of sales order and pre-quote survey, if applicable	PM or ACS	
2	Estimate project timeline and resources	PM or ACS	
3	Allocate resources and form implementation team	PM or ACS	
4	Provide customer contact information	Sales	
5	Conduct call with GE implementation team to review sales order and high-level project scope	Core Team	
6	Contact customer for introductory project discussion and to schedule Scope Planning meeting	PM or ACS	

4.2 Planning

The intent of the Planning Phase is to assemble the customer core team and conduct the Scope Planning meeting and Kickoff meeting. During this phase, a preliminary timeline will be established. Follow-up meetings or calls also will be scheduled at this time.

Task	GE	Customer
1 Generate Project Book and project-specific documentation	PM or ACS	·
2 Provide customer with necessary project documentation	PM or ACS	
3 Administer Scope Discussion	PM or ACS	Core Team
 a. Review project scope and system-configuration-based purchase order(s) and sales agreement(s) 	Core Team	Core Team
b. Review customer and GE roles and responsibilities	Core Team	Core Team
c. Review actions, tasks, and ownership	Core Team	Core Team
d. Discuss role of and identify system administrator	Core Team	Core Team
e. Identify third-party vendor roles, responsibilities, and contacts, if applicable	Core Team	Core Team
f. Review training and GoLive terms based on team purchase order(s) and sales agreement(s)	Core Team	Core Team
4 Review implementation timelines and target GoLive dates based on scope discussions	Core Team	Core Team
5 Allocate resources and form implementation team	PM or ACS	PM
6 Provide team member list and contact information	PM or ACS	PM
7 Conduct Kickoff meeting (on-site or via teleconference)	Core Team	Core Team
a. Review products purchased	PM or ACS	
b. Present agreed-upon project scope and timeline to high-level stakeholders	PM or ACS	
c. Discuss training plan	PM or ACS	
d. Official Kickoff of the project	Core Team	Core Team
8 Define mechanism and frequency of future project communications	Core Team	Core Team
9 Document any open issues and/or action items	PM or ACS	
10 Publish and distribute MUSE Project Book and project implementation schedule	PM or ACS	

4.3 Executing

This phase includes equipment delivery, system installation, data conversion (if applicable), HL7 configuration and testing, and system training.

	Equipment Delivery and Installation			
	Task	GE	Customer	
1	Schedule and confirm on-site delivery of equipment and network components	PM or ACS	PM	
2	Complete any power, network, wireless, and telecommunications requirements, based on pre-installation guide(s) (if applicable)		Facilities, IT	
3	Perform physical inventory		Biomed, Facilities, IT	
4	Install customer-provided hardware (if applicable)		IT	
5	Rack, power, and network GE hardware (if applicable)		IT	
6	Install and configure GE software (if applicable)	FE		
7	Test remote support connection	FE		

	Interface specifications, configuration, and testing			
	Task	GE	Customer	
1	Develop interface specifications document and system test plan	HL7 Engineer	HIS Interface Analyst	
2	Configure HL7 interface box for testing	HL7 Engineer	Facilities, IT	
3	Perform HL7 Connectivity Testing	HL7 Engineer	HIS Interface Analyst	
4	Perform end user HL7 integration testing	HL7 Engineer	HIS Interface Analyst, Super User	
5	Validate HL7 workflow testing is complete and GoLive	HL7 Engineer		
6	Obtain necessary department signoff(s), acknowledging HL7 readiness		РМ	

	Upgrade Conversion (if applicable)			
	Task	GE	Customer	
1	Review system downtime and conversion process	Core Team	Core Team	
2	Complete conversion process	FE		
3	Test completed conversion	FE		

	System Training (if applicable)			
	Task	GE	Customer	
1	Schedule System Training	PM or ACS	PM	
2	Finalize class schedule and attendance	PM or ACS		
3	Order training materials and supplies (if applicable)	CAS		
4	Distribute training agenda outlining class objectives	PM		
5	Conduct training and ensure adherence to class size guidelines to best meet training	CAS		
6	Conduct course evaluation	CAS		
7	Distribute CEU certificates if criteria is met and doing so is applicable to state guidelines	CAS		
8	Complete training report/post-training summary	CAS		

	GoLive Readiness			
	Task	GE	Customer	
1	Finalize GoLive plan including review of system downtime for upgrade sites	PM or ACS	PM	
2	Finalize interface configuration	HL7 Engineer	HIS Interface Analyst	
3	Conduct pre-GoLive status call to confirm completion of required customer site preparation activities and make go/no-go decision regarding start of GE on-site installation activities	Core Team	Core Team	

4.4 Monitoring and controlling

This phase includes final system checks and the transition to a live production environment.

	Task	GE	Customer
1	Complete upgrade or residual conversion (if applicable)	FE	·
2	Finalize system default settings	CAS	Super User
3	Verify performance of system(s) including communication with external devices	FE	
4	Perform system backup (if applicable)	FE	IT
5	Administer GoLive training	CAS	
6	Begin acquiring data into system		Clinical Team
7	Conduct GoLive status call	Core Team	Core Team

4.5 Closing

The Closing Phase ensures that any open items have been documented and assigned for completion, and formalizes final system acceptance in accordance with GE standard Terms and Conditions. Transition to Service provides project closure and detailed plan for ongoing customer support.

	Task	GE	Customer
1	Conduct Transition to Service meeting	PM or ACS	PM
2	Review system performance, project commitments, and post-GoLive support during Transition to Service meeting	PM or ACS	
3	Review open issues and establish follow-up plan	PM or ACS	PM
4	Confirm customer acceptance, per standard Terms and Conditions	PM or ACS	PM
5	Confirm customer acceptance, per standard Terms and Conditions	PM or ACS	PM
6	Forward Transition to Service letter to customer	PM or ACS	
7	Review project and discuss lessons learned	PM or ACS	

5.0 Applications planning for clinical user implementation

Involvement and support from clinical staff is vital to the success of the GE system(s) implementation. It is essential for administration to manage the change process and facilitate open communication with affected staff. GE recommends that customers create an Implementation Sub Team to focus on the specific needs of clinical staff throughout system implementation. This section defines staff requirements, provides recommendations for creation of policies and procedures for patient monitoring, and outlines GEHC IT training guidelines.

5.1 Overall training definitions

GE has created a variety of GE headquarters, on-site and remote training programs designed to meet the dynamic needs of your staff. Based on the education options you have selected, our CAS staff will assist you in coordinating a comprehensive on-site training program and will provide support during the GoLive and Support phase.

System training (GE headquarters or mobile on-site class)

- MUSE integrated headquarter training-In this 3.5-day class, held at the GEHC Research Park location in Wauwatosa, WI, customers receive comprehensive training in the MUSE program, including setup, editing, and profile configuration. This class provides an interactive, hands-on experience for customers, enhancing the learning experience. Discussion on workflow, experience with editing, developing database searches, and adding users are addressed. Advanced-level MUSE setups are covered, instructing customers how to create and modify user profiles.
- MUSE integrated mobile training—Mobile classes are offered for customers who have four or more attendees. By providing MUSE training on-site, customers can target class discussions to specific workflow needs and challenges. This option saves the customer travel time and expenses, because the trainer goes to the customer site. The customer is responsible for acquiring space for training, an LCD projector, and adequate electrical power for laptop computers.
- MARS headquarter training A three-day course hosted at Research Park, training customers in the basic setup of the MARS Holter system. Customers learn basic configuration and scanning processes of the MARS Holter system.

Remote training

WebEx training (two-hour segments) - A remote training offering provides customers with targeted training (based on need) via WebEx modules. Typically done prior to GoLive as a method to introduce or train customers to various aspects of MUSE or MARS. This may include training on interfaces, workflow or editing process, depending on the needs of the customer.

On-site training/GoLive support

- Blended MUSE training-This option is available to small-to medium-sized hospitals and customers who are upgrading or new to MUSE. This training option includes up to a four-hour WebEx that serves as a product overview and instruction on Training Workbook, which includes tasks to be completed by customer prior to GoLive. There will be at least one phone call to review progress of the Training Workbook and assign any outstanding tasks. At time of GoLive, the GE Trainer will require one-two hours of setup and configuration time, after which staff and physicians may be trained. Day 2 is dedicated specifically to training of staff and physicians.
- MUSE GoLive 2.5-day on-site training—For smaller GoLive projects, those that are not adding new interfaces (with the exception of results interface) and require little change to workflow. Trainer discusses workflow and arranges training schedule via phone prior to scheduled MUSE GoLive date. On day 1 of MUSE training, the GE Trainer will work with designated customer user to set up system, set privileges, and configure profiles as applicable to workflow. This should be completed by the afternoon, when training the ECG staff typically begins. The remaining days are spent training necessary staff, including physicians as applicable. The GE Trainer will briefly review training accomplishments prior to departing at 12:00 p.m.
- MUSE GoLive 3.5-day on-site training—On-site trainers for MUSE GoLives involving interface upgrades, initiating online reading for the first time, or having multiple facilities. GE Trainers speak to customers prior to GoLive to discuss workflow changes, arrange training schedule, and coordinate other trainers, if applicable. On Day 1 of GoLive, GE Trainers work with customer-designated user to set up system, assign privileges, configure profiles, and make sure interfaces are configured and working properly. By afternoon, staff training can begin and may include downloading orders to ECG carts and workflow changes. The remaining days are used to train staff and

- physicians in MUSE editing and supporting system owners in tasks such as database searches and troubleshooting system status logs. Trainer departs at 12:00 p.m. on the last day of training.
- MUSE follow-up Training (two days) Follow-up on-site training as needed. Training schedule is developed based on customer needs relative to system additions and/or upgrades. Trainer will contact customer to discuss training needs and arrange training schedule.
- On-site CASE set up and training-One-day on-site training to provide setup and user training. Users will learn to
 add users, how to customize protocols or reports, and other setup processes. Trainers also will review the
 process of performing a stress test using the CASE system, including specials information pertaining to transfer
 to MUSE and workflow-specific needs.
- On-site MARS training (one, two, and three days)-On-site training for users in MARS application, including setup, scanning and editing. Customers will learn to configure the system, add users, how to scan and save strips' and additional editing processes. Number of training days is determined based on user experience and functionality purchased.

Workflow engagement program

The Workflow Engagement program helps clarify the best methods for increasing operational efficiencies, improving quality of care, and decreasing costs. Through data mining and quantified assessments, based on LEAN methodologies, Workflow Engagement consultants uncover inefficiencies and areas for improvement. The customer completes a detailed online survey, and GE Workflow Experts analyze the survey and identify opportunities for improvement. Consultants conduct a two-day on-site assessment to observe and measure your critical to quality processes—from patient admittance and ECG workflow to billing. Workflow improvement opportunities are identified and analyzed using LEAN methodologies, and the consultants prepare a comprehensive recommendation report, offering key findings and a customized road map for success. Post-GoLive there will be follow-up to review user adoption.

Technical training

Instructor-led classes detail the operation, software configuration, hardware, and communication of each system, as well as the practical skills needed for troubleshooting and setting up the equipment. Extensive hands-on labs are designed to reinforce the concepts learned during lecture. Participants receive a brief review of basic networking concepts and how to apply them to support system requirements. MUSE classes include basic system administration and interconnectivity to other devices to store and retrieve tests and patient data. For more information about the courses and schedule, please contact your sales representative or project manager.

After GoLive training support

Once your device or system is live, you may contact the Diagnostic Cardiology Clinical Applications Support Line at 800-531-5613. This Support Line is staffed Monday through Friday, 8 a.m. to 5 p.m. Central Time (excluding holidays) for Applications Support. It is offered free of charge. When calling, please have your serial number available for prompt support.

The Clinical Applications Support Line is staffed by Trainers on the Clinical Applications Team. This CAS team will only be able to answer questions related to the application of your Diagnostic Cardiology device or system. If determined there is a technical issue, the CAS will perform a soft handoff to the Technical Support team (which may be subject to warranty or hourly billed service).

5.2 Clinical sub team

Depending on the size and scope of the project, the implementation team may choose to form a Clinical Sub Team. GE will look to the Sub Team to provide recommendations and decisions, such as selection and evaluation of the Resource Team Members, and to establish policies and procedures relating to the MUSE system.

Members of this committee should include:

- System Administrator
- Department Manager(s)
- MUSE Super User
- Basic System user

Our Clinical Applications Specialist (CAS) will work closely with your staff to identify and accomplish key implementation milestones during System Training, GoLive, and Support phases of the project.

The Clinical Sub team will be responsible for coordinating the creation, approval, and education of specific policies and procedures associated with the GE system(s). These policies and procedures should include information such as workflow standards and protocols for system operators and caregivers.

We recommend consideration of the following when developing the standards and protocols:

- Standard workflow
- Communications issues
- Equipment use

5.3 Headquarters/Mobile class training guidelines

The GE Project Manager or GE Sales Representative will work closely with your Project Manager to schedule and coordinate the headquarters/mobile class based on project schedule and class availability. Below are some general guidelines when planning for the headquarters/mobile class training.

- For headquarters classes, class will typically be scheduled Tuesday through Thursday, 8 a.m. to 4 p.m., and on Friday from 8 a.m. to 12 noon, unless otherwise discussed with Clinical Applications Specialist.
- For mobile classes, classes will typically be scheduled Tuesday through Thursday, 8 a.m. to 4 p.m., unless otherwise discussed with the Clinical Applications Specialist.
- Allow a minimum one-hour-long meal break for lunch.
- The students who have been chosen to attend class should make themselves available for the duration of headquarters/mobile Class training. Completion of entire course is required to earn CEUs.
- Only the number of students purchased will be able to attend class. No auditing or swapping seats, please.
- The CAS will provide any education materials (such as training laptops, training documentation) needed on the first day of class.

Please ask your Project Manager or Sales Representative for detailed information on headquarters/mobile class agenda and travel information (for headquarters class).

5.4 On-site training guidelines

The GE Clinical Applications Specialist (CAS) will work closely with your Lead Clinical system owner/superuser and make every attempt to meet your scheduling needs for on-site education based on the following guidelines:

- Super User(s) should make themselves available for the duration of on-site/GoLive training.
- The Super User(s) at the facility are responsible for setting/managing the training schedule. Training schedule should be finalized one week before training to maximize the efficiency of CAS on-site support time.
- Other specific Clinical Users (physicians, nurses, technicians, receptionists, etc.) will be scheduled throughout the duration of on-site/GoLive training, but typically will only be trained on the functions that their job would require. The Super User(s) should plan to be involved with these training sessions to not only learn these functions but also be a reference source should future training be required for this type of user.
- CAS will call the lead clinical owner/superuser prior to the start of training to discuss a training itinerary based on the number of days purchased.
- Total training time is not to exceed consecutive eight hours per day.
- Allow a minimum one-hour-long meal break for lunch.
- If hospital policies and procedures are being added or changed and this information is to be presented during staff training, the lead clinical owner/superuser must provide this information to the CAS in advance of the on-site GoLive training.

Please ask your Project Manager or Sales Representative for detailed information on a typical training agenda for more information on on-site training.

© 2012 General Electric Company – All rights reserved.
General Electric Company reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your GE Representative for the most current information.
GE, GE Monogram, MARS, and MUSE are trademarks of General Electric Company. All other product names and logos are trademarks or registered trademarks of their respective companies
GE Medical Systems Information Technologies, Inc., doing business as GE Healthcare.

DOC1265881

Healthcare Re-imagined

GE is dedicated to helping you transform healthcare delivery by driving critical breakthroughs in biology and technology. Our expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, and biopharmaceutical manufacturing technologies is enabling healthcare professionals around the world to discover new ways to predict, diagnose and treat disease earlier. We call this model of care "Early Health." The goal: to help clinicians detect disease earlier, access more information and intervene earlier with more targeted treatments, so they can help their patients live their lives to the fullest. Re-think, Re-discover, Re-invent, Re-imagine.

GE Healthcare 9900 W. Innovation Drive Wauwatosa, WI 53226 U.S.A.

www.gehealthcare.com

