DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF HEALTH SERVICE REGULATION

ROY COOPER
GOVERNOR

MANDY COHEN, MD, MPH
SECRETARY

MARK PAYNE
DIRECTOR

May 17, 2017

James Roskelly
1200 North Elm Street
Greensboro, NC 27401-1020

Exempt from Review – Replacement Equipment

Record #:	**2264**
Facility Name:	Cone Health
FID #:	943494
Business Name:	The Moses H. Cone Memorial Hospital
Business #:	1811
Project Description:	Replace cardiac catheterization equipment in one of The Moses H. Cone Memorial Hospital's existing cardiac cath rooms
County:	Guilford

Dear Mr. Roskelly:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of & (Date), the above referenced proposal is exempt from certificate of need review in accordance with N.C. Gen. Stat. §131E-184(a)(7). Therefore, you may proceed to acquire without a certificate of need the Philips Alllura cardiovascular X-ray system to replace the GE Medical Systems CARD, Serial #1049, cardiovascular X-ray system. This determination is based on your representations that the existing unit will be sold or otherwise disposed of and will not be used again in the State without first obtaining a certificate of need if one is required.

Moreover, you need to contact the Agency's Construction and Acute and Home Care Licensure and Certification Sections to determine if they have any requirements for development of the proposed project.

It should be noted that the Agency's position is based solely on the facts represented by you and that any change in facts as represented would require further consideration by this office and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Celia C. Inman
Project Analyst

Martha J. Frisone
Assistant Chief, Certificate of Need

cc: Construction Section, DHSR
Paige Bennett, Assistant Chief, Healthcare Planning, DHSR
Acute and Home Care Licensure and Certification Section, DHSR

CONE HEALTH
The Network for Exceptional Care

1200 North Elm Street
Greensboro, NC 27401-1020
336.832.8199
www.conehealth.com

May 8, 2017

Ms. Martha Frisone, Assistant Chief, Certificate of Need
Ms. Celia Inman, Project Analyst
Healthcare Planning and Certificate of Need
Division of Health Service Regulation
2704 Mail Service Center
Raleigh, NC 27699-2704

RE: Moses Cone Hospital Cardiac Cath Lab Replacement FID # 943494

Dear Ms. Frisone and Ms. Inman:

Pursuant to NCGS § 131E-184(a)(7), I am writing to inform you of Cone Health's plans to replace cardiac catheterization equipment in one of its existing cardiac cath rooms at The Moses H. Cone Memorial Hospital. Exhibit 1 attached to this letter provides a comparison of the relevant information and specifications for the existing equipment and the planned replacement equipment. Of particular note, the replacement equipment will cost $1,067,683 for the Allura Xper FD10 single-plane cardiovascular system. The new equipment will be functionally comparable to the equipment being taken out of service. Minor renovations to the existing space result in renovation costs of approximately $385,000. These costs were estimated by Cone Health construction management, based on knowledge and expertise with similar projects. The total proposed capital costs of $1,452,683 for the planned equipment replacement are detailed in Exhibit 2.

The new equipment, which will be owned and operated by Cone Health, is planned to be placed in service in November 2017. The existing equipment will be removed and taken out of service by Philips Healthcare, the vendor of the new equipment, as noted on page 20 of the equipment quote, which is attached as Exhibit 3. Cone Health is simply updating an important piece of equipment with newer technology that offers improved patient throughput and increased patient safety due to decreased radiation doses. Indeed, Cone Health acquired the existing equipment eleven (11) years ago and it has exhausted its useful life.

Please let me know if I can answer any questions for you regarding this planned replacement.

Sincerely,

James Roskelly

James Roskelly
Executive Vice President
Strategic Development

Attachments

JR/jc

Exhibit 1

Equipment Comparison Form

EQUIPMENT COMPARISON

	EXISTING EQUIPMENT	**REPLACEMENT EQUIPMENT**
Type of Equipment (List Each Component)	Cardiovascular X-ray system	Cardiovascular X-ray system
Manufacturer of Equipment	GE Medical Systems	Philips
Tesla Rating for MRIs	N/A	N/A
Model Number	CARD	Allura
Serial Number	1049	TBD
Provider's Method of Identifying Equipment	Serial Number	Serial Number
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	N/A	N/A
Mobile Tractor Serial Number/VIN #	N/A	N/A
Date of Acquisition of Each Component	9/26/2006	TBD-9/2017
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Title
Specify if Equipment Was/Is New or Used When Acquired	Refurbished	New
Total Capital Cost of Project (Including Construction, etc.) <Use Attached Form>		1,452,683
Total Cost of Equipment	950,033	1,067,683
Fair Market Value of Equipment	10,900	1,067,683
Net Purchase Price of Equipment	939,133	1,067,683
Locations Where Operated	The Moses H. Cone Memorial Hospital	The Moses H. Cone Memorial Hospital
Number Days In Use/To be Used in N.C. Per Year	365	365
Percent of Change in Patient Charges (by Procedure)		0
Percent of Change in Per Procedure Operating Expenses (by Procedure)		0
Type of Procedures Currently Performed on Existing Equipment	Adult Cardiac Cath	
Type of Procedures New Equipment is Capable of Performing		Adult Cardiac Cath

Exhibit 2

Capital Cost Worksheet

PROJECT CAPITAL COST

A.	**Site Costs**				
(1)	Full Purchase Price of Land		$ -		
	# of Acres _____ Price per Acre	$ -			
(2)	Closing Costs		$ -		
(3)	Site Inspection and Survey		$ -		
(4)	Legal fees and subsoil investigation		$ -		
(5)	Site Preparation Costs [Include]		$ -		
	Soil Borings				
	Clearing and Grading				
	Road and Parking				
	Sidewalks				
	Water and Sewer				
	Excavation and Backfill				
	Termite Treatment				
	Sub-Total Site Preparation Costs		$ -		
(6)	Other (specify)		$ -		
(7)	**Sub-Total Site Costs**			**$ -**	
B.	**Construction Contract**				
(8)	Cost of Materials [Include]				
	General Requirements				
	Concrete/Masonry				
	Woods/Doors & Windows/Finishes				
	Thermal and Moisture Protection				
	Equipment/Specialty Items				
	Mechanical/Electrical				
	Sub-Total Cost of Materials		$ -		
(9)	Cost of Labor		$ -		
(10)	Other **(Construction Contract)***		$ 385,000		
(11)	**Sub-Total Construction Contract**			**$ 385,000**	
C.	**Miscellaneous Project Costs**				
(12)	Building Purchase		$ -		
(13)	Fixed Equipment Purchase/Lease		$ 1,067,683		
(14)	Moveable Equpiment Purchase/Lease		$ -		
(15)	Furniture		$ -		
(16)	Landscaping		$ -		
(17)	Consultant Fees				
	A&E Fees and Reimbursables	$ -			
	Legal Fees	$ -			
	Market Analysis	$ -			
	Other (specify)	$ -			
	Total Consultant Fees		$ -		
(18)	Financing Costs				
	(e.g. Bond, Loan, etc.)		$ -		
(19)	Interest During Construction		$ -		
(20)	Other (specify)		$ -		
(21)	**Sub-Total Miscellaneous**			**$ 1,067,683**	
D.	**Total Capital Cost of Project (Sum A-C above)**				**$ 1,452,683**

*Cone Health does not separate the cost of materials from the cost of labor in the construction contract

Exhibit 3

Equipment Quote

PHILIPS HEALTHCARE
A division of Philips Electronics North America Corporation
22100 Bothell Everett Highway
P.O. Box 3003
Bothell, Washington 98041-3003

PHILIPS

Quotation #: 1-1HIMAYJ	**Rev:** 3	**Effective From:** 06-Mar-17	**To:** 30-Jun-17

Presented To:

MOSES H CONE HEALTH SYSTEM
1200 N ELM ST
GREENSBORO, NC 27401-1004

Tel:

Alternate Address:

Presented By:

Brett Kimball
Account Manager
Tel:
Fax:

Amy Morrow
Regional Manager
Tel: (828) 553-3118
Fax:

Date Printed: 06-Mar-17

Submit Orders To:

22100 BOTHELL EVERETT HWY
BOTHELL WA 98021

Tel: (888) 564-8643

Fax: (425) 458-0390

This quotation contains confidential and proprietary information of Philips Healthcare, a division of Philips Electronics North America Corporation ("Philips") and is intended for use only by the customer whose name appears on this quotation. It may not be disclosed to third parties without the prior written consent of Philips.

IMPORTANT NOTICE: Health care providers are reminded that if the transactions herein include or involve a loan or discount (including a rebate or other price reduction), they must fully and accurately report such loan or discount on cost reports or other applicable reports or claims for payment submitted under any federal or state health care program, including but not limited to Medicare and Medicaid, such as may be required by state or federal law, including but not limited to 42 CFR 1001.952(h).

Quote Solution Summary

Line #	Product	Qty	Price
	100241 Allura Xper FD10	1	$1,067,683.20
		Equipment Total:	$1,067,683.20

Solution Summary Detail

Product	Qty	Each	Monthly	Price
100241 Allura Xper FD10	1	$1,067,683.20		$1,067,683.20

Buying Group: **VIZIENT SUPPLY LLC** **Contract #:** **XR0312 CV**

Addt'l Terms:

Each Quotation solution will reference a specific Buying Group/Contract Number representing an agreement containing discounts, fees and any specific terms and conditions which will apply to that single quoted solution. If no Buying Group/Contract Number is shown, Philips' Terms and Conditions of Sale will apply to the quoted solution.

Each equipment system listed on purchase order/orders represents a separate and distinct financial transaction. We understand and agree that each transaction is to be individually billed and paid.

Payment Terms: 0% Down, 80% Upon Delivery, 20% Due When the Product is Available for First Patient Use, Net due 30 days from date of invoice

Quote Summary

100241 Allura Xper FD10

Qty	Product
1	NNAE854 FlexVision_XL 9 Input Package
1	**NNAE861 AlluraClarity_FD10 Floor**
1	NNAE463 Single Phase UPS
2	FCV0587 Xper Live/Ref Slaving
1	NCVA080 Automatic Position Control (APC)
1	NCVA121 FULL AUTOCAL
1	NCVA784 Ventricular Quant.Sw pkg(Xper)
1	NCVA097 Cath Arm Support
1	NCVA098 Pulse Cath Arm Support
1	NCVA783 Pivot for table base.
1	FCV0510 Long mattress cardio
2	FCV0017 CABLE CARRIER CS
1	NCVB630 FlexVision XL,Snapshot
1	NCVB294 Set of 2 additional 21in. LCDs
1	NCVB591 2ND REF for FlexVision XL
1	980406041009 Rad Shield w/ Arm (Contoured) 61X76
1	980406190009 PIVOTING TABLE-MOUNTED RADIATION SHIELD
1	989801220012 Cable Spooler
1	989801220273 Ceiling Track w/Column & Handle Ext
1	989801220279 LED Single Color Exam Lamp
1	989801220375 Black Anti-fatigue Floor Mat w/logo.
1	989600213942 AD5 TO XPER TABLE ADAPT. PLATE
1	989801220281 25 kVA Fluoro only UPS - UPC
1	SP003 Installation Labor
1	SP005 Contract Labor

Options

Qty	Product
1	FCV0604 DoseAware Bundle
1	989801220158 Mark 7 Arterion, Table Mount
1	989801220357 Volcano CORE IVUS - Cardiac Bundle

100241 Allura Xper FD10

System Type: New
Freight Terms: FOB Destination
Warranty Terms: Part numbers beginning with two (2) asterisks (**) are covered by a System 12 Months Warranty. All other part numbers are third (3rd) party items.
Special Notations: Contingencies must be removed 120 days before scheduled shipment to assure delivery on specified date.
Any rigging costs are the responsibility of the Purchaser.
Additional Terms:

Line #	Part #	Description	Qty
1	**NNAE854	FlexVision_XL 9 Input Package	1

The FlexVision XL9 input package provides nine isolated wall connection boxes.
Isolated Wall Connection Box

This Isolated Wall connection Box facilitates connection of the video source via standard DVI cable/connector and lossless transfer of the video signal over the approximate 30 m cable distance. It can be mounted in the exam room or in the control room, depending on the location of the video source.

The quantity of the VWCB's has to be calculated as follows:

For each video signal to FlexVision XL on Vascular System: 9 VWCB
Note:

No VWCB is required in case a video signal is connected directly to a dedicated LCD from the following sources:

1) Xper Live/ref Slaving

2) Interventional HW (XtraVision), ViewForum, Xcelera (only if workstations are powered by Allura Xper)

3)Xper IM

2	**NNAE861	AlluraClarity_FD10 Floor	1

The AlluraClarity FD10 (Floor) single-plane cardiovascular system comprises a ceiling mounted G-arm stand and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures.
ClarityIQ technology is the foundation of AlluraClarity systems touching every part of the imaging system.

ClarityIQ incorporates powerful state-of-the-art image processing technology, developed by Philips research, all working in real-time enabled by the latest computing technology:

- Noise and artifact reduction, also on moving structures and objects
- Image enhancement and edge sharpening;
  Automatic real-time patient and accidental table motion correction on live images.
- Flexible digital imaging pipeline
- ClarityIQ systems have a flexible digital imaging pipeline from tube to display that is tailored for each and every application area such as Cardio or Neuro. This gives the flexibility to select virtually unlimited application-specific configurations.
- With ClarityIQ over 500 system parameters are fine-tuned for each application area; the result of years of Philips clinical leadership. It is now possible to filter out more X-ray

radiation, use smaller focal spot sizes, shorter pulses, thereby fully utilizing the unique capabilities of the Philips MRC X-ray tube.

The AlluraClarity FD10 system uses an integrated single-host concept. The system is comprised of five functional building blocks: Geometry, X-ray Generation, Image Detection, Viewing, and User Interface. Each functional building block is explained in further detail including accessories.

GEOMETRY

The AllurClarity FD10 Stand

The floor mounted geometry segment. This component comprises the following features:

- A motorized dedicated cardiovascular floor-mounted Poly-Diagnost G-stand with a rotatable base that allows for a clear area around the patient table. The stand is capable of manual or motorized movement.
- All stand movements are motorized. The manual and motorized parking movement consists of floor-mounted rotation. The counterbalanced Dynamic Flat Detector can be positioned manually and motorized. Angulation and Rotation of the Poly Diagnost G-arm is also motorized at high speeds.
- Parking and longitudinal movement of the Poly Diagnost G stand, can be performed either manually either motorized. The longitudinal movement comprises electronic auto-stop positions, to facilitate positioning in the iso-center with ease and accuracy.
- Single operator control of stand parking or longitudinal positioning. It provides motorized base rotation at 12 degrees/s from +90 to -90 degrees, and motorized longitudinal movement at 15 cm/s over a maximum range of 260 cm.
  - The projection angles for the Poly Diagnost G-arm are: Rotation 120 degrees LAO to 120 degrees RAO
  - Angulation 45 degrees cranial to 45 degrees caudal
- Motorized stand movements are variable speed with a configurable maximum speed, allowing:
  - Rotation speed up to 25 degrees/s
  - Angulation speed up to 18 degrees/s
- The depth of the Poly Diagnost G arm is 105 cm.
- The stand features BodyGuard capacitive sensing collision avoidance for patient protection.
- The variable source image distance range between the x-ray tube foci and the Dynamic Flat Detector input screen is 86.5 to 123 cm.

Patient Support

Xper Table

- Patient support provided with a flat carbon fiber tabletop
- Tabletop length of 319 cm and tabletop width of 50 cm
- Floating tabletop movement of 120 cm longitudinal and 35 cm transverse
- Motorized height adjustment from 74.5 to 102.5 cm
- Maximum cantilever of 223 cm , for full patient coverage
- Maximum patient weight 250 kg plus 500 N for CPR (or 225 kg plus 1000 N) in any longitudinal position of the table top
- Xper Geometry and Imaging Modules for exam room controls.
  - The operating modules can be attached to either side of the table.

Patient Support Accessories

- Three rail accessory clamps
- Mattress pad
- Translucent catheterization armrest
- IV Pole
- Set of Cable Holders
- Set of Arm Supports (FCV0248)
- Arm Support (FCV0258)
- Patient straps
- Table-mounted radiation shield
- Antifatigue Mat with Philips logo

X-RAY GENERATION

The AlluraClarity FD10 comprises an integrated dedicated X-ray system, micro-processor controlled 100kW generator, based on high frequency converter technology. The user interface control of this X-ray Generator is incorporated into the Xper module, Xper Desktop Console, and the Xper on-screen displays.

- The Certeray generator comprises:
- X-ray generator: 100 kW
- Voltage range: 40 - 125 kV
- Program selection:
  - Pulsed X-ray up to 3.75 , 7.5 , 15 , 30, frames/s for digital dynamic exposures
  - Pulsed X-ray for pulsed fluoroscopy (3.75, 7.5, 15, 25, 30 frames/s).
  - Minimum exposure time of 1ms.
  - ECG triggered acquisition: allows acquiring one exposure for each QRS peak with selectable delay time
  - Automatic kV and mA control for optimal image quality prior to run to save dose
  - Optimal X-ray tube load incorporated in the Certeray generator
- An X-ray collimator with single semi-transparent wedged filter with manual and automatic positioning.
- SpectraBeam filtering of low energy radiation to optimize image quality and dose efficiency with the MRC-GS 0508 X-ray tube.
- Xper Beam Shaping, which means that, both shutters and wedges can be positioned on the Last Image Hold without the need for X-ray radiation.

Fluoroscopy

- Three programmable fluoroscopy modes can be selected from the Xper Imaging T.S.O. Each mode has a different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, and adaptive harmonization).
- Xper Fluoro Storage, a grab function allows storage and archiving of a single fluoro frame or the last 20 seconds of fluoroscopy. These images or runs can be archived as a regular run.

X-ray Tube

The AlluraClarity FD10 includes a Maximus ROTALIX Ceramic tube assembly MRC-GS 05 08 and cooling unit CU 3101 for cardio-vascular systems. Comprising:

- 0.5/0.8 mm nominal focal spot values maximal 45 and 85 kW

IMAGE DETECTION

The AlluraClarity FD10 comprises the following image detection chain:

- A 25 cm (10 in.) diagonal triple-mode Dynamic Flat Detector. It comprises a 6"/8"/10" triple mode Dynamic Flat Detector
- The outer detector box diameter is 37 cm diagonal square
- The digital output of the Flat detector is a 1024 x 1024 matrix at 14 bit depth and the detector pixel pitch is 184 micron by 184 micron
- The DQE (0) is 75% providing high conversion of X-ray into a digital image, while maintaining a high MTF.

VIEWING

The AlluraClarity FD10 comprises the following components in order to display the clinical images in the control and examination rooms:

Displays

Examination Room

Two 19-inch monochrome LCD monitors

- 19-inch monochrome TFT-LCD display
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These monitors are not delivered when FlexVision XL, EP Cockpit or EP Cockpit XL is selected.

The monitor ceiling suspension in the exam room can be configured to accommodate 3, 4, 6, or 8 LCD monitors and includes motorized height adjustment. The height adjust feature is dependent on the room ceiling height. When FlexVision XL, EP Cockpit or EP Cockpit XL is selected the monitor ceiling suspension is configured for one of those options.

- The first reference channel is for the display of reference images or runs, controlled by infra-red remote-control Xper Viewpad.
- The On-Screen Display provides status information on stand rotation, angulation, display of system messages, X-ray tube load status, selected fluoroscopy mode, selected detector Field of View, and both the rate and accumulation of the dose area product and skin dose.

Control Room

One 19-inch color LCD monitor

- 19-inch color TFT-LCD display

Control Room

One 19-inch monochrome LCD monitor

- 19-inch monochrome TFT-LCD display
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These control room monitors are not delivered when EP Cockpit or EP Cockpit XL is selected.

Acquisition

The acquisition segment coordinates the parameters for automatic exposure control. The program is selected via the Xper module or Xper Desktop Console.

This AlluraClarity offers a storage capacity of:

- 100,000 images at matrix size of 1024 x 1024, 10-bit
- Maximum number of examinations is 999, with no limit to the maximum number of images per examination

USER INTERFACE

Xper is comprised of three elements: 1) Xper Settings, which customizes the system to each user preferred settings; 2) Xper User Interface 3) Xper Integration, which makes advanced integration functionality available such as DICOM Query / Retrieve, background archiving, and Xper Fluoro Storage.

The Xper User Interface comprises a range of User Interface modules in the Examination Room, including On-Screen Display.

On-Screen Display

- X-ray indicator and X-ray tube temperature condition
- Gantry position in rotation and angulation and Source Image Distance
- Detector field size display
- Selected Frame speed
- Fluoroscopy mode
- Integrated fluoroscopy time
- Stopwatch
- Skin Dose: dose rate with X-ray, cumulated dose with no X-ray
- Dose Area Product: dose rate with X-ray, cumulated dose with no X-ray
- Graphical bars for indication of Body Zone specific dose rate and accumulated skin dose levels, related to the 2 Gy level

Remote Intercom

A separate intercom, which is connected independently from the system that allows separate placement of the intercom at the preferred working position in the control room and examination room.

Xper ViewPads

The Xper ViewPad contains the preprogrammed function settings. The system is provided with two Xper ViewPads. The following functions are provided:

- Run and image selection
- File and run cycle
- File overview
- Store to Reference image file
- Copy image to photo file
- Digital (fixed) zoom and panning
- Recall reference images, which means switching control of Xper ViewPad function from live to reference monitor
- Laser pointer, intended to point at regions of interest on the imaging monitors
- LED indication of laser pointer on/off and battery low

Tableside Modules

One Xper Module is provided for use at either the tableside or in the control room. This module uses a touch screen, which can be operated when draped with sterile covers. The Xper Module contains the following functionality:

- Acquisition settings
- Selection of Xper Setting allows the user to set frame rates and x-ray generation settings applicable for the type of the preferred intervention
- Automatic positioning recall to allow the stand position to match the reference image.
- Image Processing

The Xper Geometry T.S.O. module can be positioned on all sides of the patient table, while keeping the button operation intuitive. The Xper Geometry T.S.O. provides the following functionality:

- Tabletop float and table height position
- Source Image Distance selection
- longitudinal movement of the Gantry along the ceiling
- Gantry rotation in an axis perpendicular to the ceiling
- Store and recall of two scratch gantry positions including SID
- Emergency stop button

The Xper Imaging T.S.O. module can also be positioned at three sides of the patient table, while keeping the button operation intuitive. The Xper Imaging T.S.O. provides the following functionality:

- Fluoroscopy Flavor selection defined per Xper Setting
- Shutters and Wedge positioning
- Xper Fluoro Storage and Grab
- Selection of the Detector field size
- Shutters positioning
- Reset of the fluoroscopy buzzer

Pan Handle

The Pan Handle is an extension of the control facility for floating movements of the table top.

Control Room

The control room comprises an Xper Review Module, a keyboard, a mouse. The Xper Review Module offers the basic functions for review. The Xper Review Module contains the following functionality:

- Power on/off
- Tagarno wheel to control the review of a patient file
- File and run cycle
- Contrast, Brightness, and Edge enhancement settings
- File, Run, Image stepping and run and file overview
- Delete run
- Image invert and digital zoom
- Reset fluoroscopy timer and enable/disable X-ray

System information is displayed on the bottom of the data monitor:

- Stopwatch and Time
- System guidance information
- Dose Area Product (DAP), Skin Dose, and accumulative dose
- Frame speed settings, fluoroscopy mode, and accumulated fluoroscopy time
- Exposure and fluoroscopy settings as Voltage (kV), Current (mA) and pulse time (ms)
- Geometry information as rotation, angulation, and SID

The workflow is divided in scheduling, preparation, acquisition, review, and archive.

Any Allura system built after Jan 1, 2017, will use and include Windows 7 (embedded standard).

Scheduling

The patients can be added, listed and selected per date, physician, and intervention type. Previous DICOM patient studies can be uploaded with the DICOM Query Retrieve function.

Patient management protocols are flexible and allow for multiple studies to be selected under one patient identification number. This means that new studies can be appended to an earlier patient file. Furthermore, each study can contain multiple examinations to allow for split administrative purposes. Each examination contains multiple files, i.e. acquisition file, reference file, and QA results file.

Preparation

The preparation page provides the information of the room and patient preparation of each individual physician. The preparation page is customizable per Xper Setting and allows each physician to provide his or her own room protocols.

Acquisition

The acquisition page contains information on the current selected patient.

Review

- The review page allows for reviewing of patient's:
- Previous examination cases
- Review of other DICOM XA or DICOM SC studies.

Coronary QuantificationS oftware Package

Functions:
diameter measurement along the selected segment
- cross sectional area
- %-stenosis
- pressure gradient values
- stenotic flow reserve
- calibration routines

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

Analysis of the targeted vessel segment has been simplified by the single click function: positioning of the mouse on or close to the stenotic area and apply one click is enough to get the relevant segment detected, including the reference diameters and stenosis diameter.

RIS/CIS DICOM Interface

This package allows communication of the Allura Xper system with a local information system (CIS or RIS). The interface uses the DICOM Worklist Management (DICOM WLM) and Modality Performed Procedure Step (DICOM MPPS) standards.

If a hospital has an Allura Xper system and an information system it can receive patient and examination request information from the information system and report examination results in order to:

-Eliminate the need for retyping patient information on the Allura Xper
-Prevent errors in typing patient names and registration numbers (ensuring consistency with IS information to prevent problems in archive clusters auto-search for a name in case of later retrieval)
-Inform the IS about the acquired images and radiation dose

Upon request from the Allura Xper system the complete worklist with all relevant patient and examination data is returned from the IS to the Allura Xper system. For each patient the following information will be shown on the Allura Xper after it has been retrieved from the IS:

Patient Identification:

- Patient name
- Patient ID
- Birth date
- Sex

Examination/Request Information:

- Accession number

- Scheduled procedure step start time
- Scheduled performing physician's name

It is possible at all times to enter patient demographics information manually within the Allura Xper system in case of an emergency or in case the local Information System connection is down.

On request of the clinical user the Allura Xper will report the following information about the selected patient to the IS:
Patient Identification:

- Patient name
- Patient ID
- Birth date
- Sex

Examination/Request Information:

- Accession number
- Performed procedure step status start/end date and time
- Performing physician's name
- Referenced image sequence

Radiation dose:

- Total time of fluoroscopy
- Accumulated fluoroscopy dose
- Accumulated exposure dose
- Total dose
- Total number of exposures
- Total number of frames

Further detailed information can be found in the Allura Xper DICOM Conformance Statement.

The interface requires an EasyLink (hardware and software) if the IS is not compliant with DICOM Work List Management and Modality Performed Procedure Step.

Radiation Dose Structured Report

Collection of dose relevant parameters and settings and export to a DICOM database (e.g. PACS, RIS), according IEC60601-2-43, 2nd Edition.
The reported data can be used for, for example:

- Quality improvement: evaluating trends in X-ray dose performance per facility, system and operator.
- RDSR enables analysis of average dose levels & variance for routinely performed exams and procedures.
- Typical system usage can be extracted from the data.

Secondary Capture Dose Report

- The Secondary Capture Dose Report function allows the user to save & transfer, manually or automatically, a patient Dose Report to PACS in DICOM secondary capture format.
- The dose report will be stored in the related patient image folder.

Archive

Continuous Autopush (NCVA090)

Continuous Autopush is an archive accelerator which ensures that background archiving continues with minimal disruptions.

Clinical studies can be archived to a CD or a PACS. The archive process can be completely automated and customized with Xper Settings. Parameters like multiple destinations and archive formats can be selected to the individual needs.

The Xper DICOM Image Interface enables the export of clinical images to PACS. The export formats are based on DICOM 3.0 protocols. The system exports clinical studies in Cardiac DICOM XA Multi-Frame or DICOM Secondary Capture formats.

- The export format is configurable in 512x512 or 1024x1024.
- The examination can be sent to multiple destinations for archiving and reviewing purposes.
- The Xper DICOM Image Interface provides DICOM Storage and DICOM Storage Commitment Services.
- The DICOM Query/Retrieve function allows older DICOM XA MF and DICOM SC studies to be uploaded in the system. Furthermore, additional information can be appended to a study, while keeping the patient identification the same.

Clinical Education Program for Allura SystemsEssentials OffSite Education: Philips will provide up to two (2) Cardiovascular Technologists, Registered Technologists Registered Nurses, or other system operator as selected by customer, with in-depth didactic, tutorial, and hands-on training covering basic functionality and work-flow of the cardiovascular imaging system. In order to provide trainees with the ability to apply all fundamental functioning on their system, and to achieve maximum effectiveness, this class should be attended no earlier than two weeks prior to system installation.

In the event that an EP Navigator workstation has also been ordered, the offsite training course will be tailored to focus on the electrophysiology functionality of the FD system and the EPN workstation.

In the event that your main FD system will be dedicated to Cardiac applications your offsite training course will be tailored to focus on the Cardiac functionality.

This twenty-eight (28) hour class is located in Cleveland, Ohio, and is scheduled based on your equipment configuration and availability. Due to program updates, the number of class hours is subject to change without notice. Customer will be notified of current, total class hours at the time of registration. This class is a prerequisite to your equipment handover OnSite Education. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. **Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292102 (CV Full Travel Pkg OffSite) is purchased with all OffSite courses.**

Handover OnSite Education:

Philips Education Specialists will provide twenty-eight (28) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 28 hours, and must include the two OffSite education attendees. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. **It is highly recommended for systems that are fully loaded or for customers with a large number of staff members to also purchase 989801292099 (CV Add OnSite Clin Educ 24h).**

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 106107-110915

Line #	Part #	Description	Qty
3	**NNAE463	Single Phase UPS	1

The single phase UPS (Uninterruptable Power System) enables a proper shut-down of the Allura system processor-units in case of a hospital mains power failure.

Note:
In case a (local) three phase UPS is used, the single phase UPS is not required.

4	**FCV0587	Xper Live/Ref Slaving	2

This option contains a kit to split the Live or Ref video source from the Allura Xper. The total amount of Xper Live/Ref Slaving that can be selected is maximal. 4. Additional monitors are not included in this option and must be ordered separately. This kit contains a video splitter and a cable set for one slave monitor. The Slave monitor is not powered by Allura.

5	**NCVA080	Automatic Position Control (APC)	1

The Automatic Position Controller (APC) for Integris Allura Flat Detector systems provides two modes of operation:

- Preset Position Sequence; the sequence of projections is determined per Xper Settings. Each set contains a maximum of 10 positions. Positions can be recalled in sequence or directly. The projection sequence comprises rotation, angulation, and SID settings, related to the selected reference image.
- Reference driven positioning. The projections on the reference monitors can be recalled with the push of a button. The reference driven positioning recollects the rotation, angulation, and SID.

6	**NCVA121	FULL AUTOCAL	1

The AutoCal option is a software package to be used in conjunction with quantitative analysis software packages. It provides an auto calibration procedure for an object to be analyzed that is placed in the iso-center. When the object to be analyzed (e.g. Left Ventricle Vessel Segment) is placed in the iso-center AutoCal avoids the need to:

- acquire an additional image series containing a sphere or grid for calibration purposes
- calibrate manually on a calibration object (e.g. catheter) displayed in the image or image series to be analyzed

7	**NCVA784	Ventricular Quant.Sw pkg(Xper)	1

Left Ventricular Quantification Software Package. Software package for the analysis of single plane Left ventricular angiograms. Calculates the Ejection fraction and local wall motion parameters in different formats.

Functions:

- Various LV-volumes
- Ejection Fraction
- Cardiac Output
- Centerline Wall Motion
- Slager Wall Motion
- Regional Wall Motion
- Calibration routines

Line #	Part #	Description	Qty

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

Comprising:

- software license

Compatible with:
. Allura Xper FD 10 Rel 3 and FD10/10 Rel 2 onwards
. Allura Xper FD20 Rel 2, FD20/10 Rel 2 onwards

8 ****NCVA097** **Cath Arm Support** **1**

For brachial catheterisation and digital imaging technique
The support is made of X-ray transparent material with exception of the fixingclamp and pivots.

9 ****NCVA098** **Pulse Cath Arm Support** **1**

Facilitates catheterization trough the pulse and provides room for placing catheterization instruments. It is a flat radio translucent board and is placed under the patient while a part projects at either the left or right side of the tabletop to support the arm.

Size: 100 x 85 cm
Material: carbon-fibre reinforced material

10 ****NCVA783** **Pivot for table base.** **1**

For angiographic- and interventional procedures of the upper peripherals.
Provides improved table access for patient transfer.
Allows pivoting of the table base around its vertical axes.
Pivot range from -90 degrees to + 180 degrees (or -180 to +90 degrees) with locked positions on 0, -13/+13 (facilitating arm-angiography) and -90/+90 and 180 degrees.

Comprising:

- pivot device with graduated scale to be mounted on the universal floor plate of the table.

Compatible with Xper Table

11 ****FCV0510** **Long mattress cardio** **1**

• Enhances patient comfort
• Adapts to the shape of the patient's body

Enhance patient comfort during cardio exams
To enhance patient comfort during cardio exams, the inflatable, latex free mattress can be used. It is extra-long to accommodate the patient on the tabletop, and adapts to the shape of the patient's body. The pressure within the mattress is evenly distributed so that it recovers its original shape quickly.

Dimensions of the mattress:
Length: 3165mm
Width: 500mm
Height: 70mm
Radius: 150mm

12 ****FCV0017** **CABLE CARRIER CS** **2**

Additional carrier for suspension of cable hose from X-ray tube assembly or TV monitor.

100241 Allura Xper FD10

Line #	Part #	Description	Qty
13	**NCVB630	FlexVision XL,Snapshot	1

FlexVision XL is an integrated viewing solution designed to give you full control over your viewing environment.
The FlexVision XL provides the ability to:
• Display information from up to 8 sources simultaneously (incl. third party systems) on the Philips 58-inch color LCD with LED backlight in the Exam Room.
• Resize and/or enlarge information at any stage during the case.
• Select and customize viewing lay-outs of the Philips 58-inch color LCD via the Xper table-side module
• Overview connected equipment (incl. third party systems) from a single location.
The FlexVision XL consists of:
• DVI video composition unit.
o The DVI video composition unit allows the user to direct and switch the video output of all connected medical equipment to specific sub windows of the Philips 58-inch color LCD with LED backlight in the Exam Room.
o The DVI video composition unit is operated from the Xper tableside module.
o The DVI video composition unit supports a wide variety of display formats (up to 1920x1200)
o Up to 9 external inputs are connected to the DVI video composition unit via Wall Connection Box(es).
• Medical grade, high resolution color LCD in the Exam Room
o This display supports the image quality requirements for monochrome X-ray images as well as color images and replaces all displays normally delivered with an Allura Xper FD or AlluraClarity system for the Exam Room.
o Main characteristics are:
- 58-inch, 8 Megapixel color LCD
- Native resolution: 3840x2160
- Brightness: Max: 700 Cd/m2 (typical) stabilized: 400 Cd/m2
- Contrast ratio: 4000:1 (typical)
- Wide viewing angle (approx. 176 degrees)
- Constant brightness stabilization control
- Lookup tables for gray-scale, color and DICOM transfer function
- Full protective screen Ingress Protection: IP-21
• Large color LCD control (Xper Module)
o Resize and/or enlarge information at any stage during the case via the Xper tableside module in the Exam or Control Room
o Select viewing lay-outs via the Xper table-side module in the Exam Room
o Create new layouts by matching inputs to desired locations on preset templates.

• Monitor Ceiling Suspension
o Monitor ceiling suspension for use in the Exam Room carries the 58-inch color LCD, providing highly flexible viewing capabilities. The monitor ceiling suspension is height-adjustable and moveable along ceiling rails. It can be positioned on either side of the table.

Line #	Part #	Description	Qty

• Snapshot
o The snapshot function allows the user to store/save a screen-capture of any image on the 58-inch display as a DICOM Secondary Capture image to a connected PACS. The snapshot-all function allows the user to store/save a screen-capture for each displayed image in the Exam Room / Control Room as separate DICOM Secondary Capture images .

14 ****NCVB294** **Set of 2 additional 21in. LCDs** **1**

Two 21inch additional displays are located on top of the monitor ceiling suspension frame which carry the 56 inch large screen color LCD display.

These 2 additional LCD's can be used to display additional video sources or used as display back up for Hemo and Xray Live images. These LCD's have a fixed content.

Main characteristics of back-up displays are:

- 21.3 inch, 2 Megapixel color LCD display
- Max. resolution: 1600x1200
- Brightness: 450 Cd/m2
- Contrast ratio : 550:1
- Wide viewing angle (approx. 170 degrees)
- Constant brightness stabilization control
- Independently selectable brightness settings for monochrome and color images
- Independently selectable lookup table for gray-scale, color and DICOM transfer function

FCV0587, "XPer Live/Ref Slaving" required when displaying X-Ray Live as back-up.

15 ****NCVB591** **2ND REF for FlexVision XL** **1**

2nd REF for FlexVision XL is optional on FlexVision XL. Second Ref images will be displayed on the large screen monitor.

16 ****980406041009** **Rad Shield w/ Arm (Contoured) 61X76** **1**

Contoured Rad Shield with Arm rest. 61X76

17 ****980406190009** **PIVOTING TABLE-MOUNTED RADIATION SHIELD** **1**

Table-mounted radiation shield for additional protection of physician and staff against scatter radiation. The shield consists of two protective parts: a lower shield and an upper shield. The shield is specially designed for use with the AD5 patient table.

The table mounted radiation shield provides the following features:

- Mounting to either the right orleft tableaccessory rails;
- Pivoting into the required working position;
- Pivoting into the parking underneath the tabletop facilitating patient preparation;
- The upper shield can be positioned upright providing optimal protection or can be folded down for free access to the patient.

Line #	Part #	Description	Qty

The table mounted radiation shield includes:

- Lower shield measuring 70 cm high 80 cm wide 0.5 mm Pbequivalence;
- Upper shield measuring 40 cm high 50 cm wide 0.5 mm Pbequivalence;
- Mounting clamp;

Docking device for wall mounting.

18 ****989801220012** **Cable Spooler** **1**

19 ****989801220273** **Ceiling Track w/Column & Handle Ext** **1**

Mavig 2.5m Ceiling Track with Ceiling trolley, 360 degree column, and brake handle extension.

20 ****989801220279** **LED Single Color Exam Lamp** **1**

LED Single Color M LED130F
Examination Lamp

Portegra2 Extension/Spring Arm Combination with M LED 130F,
Single Color, incl. Power Supply

Light in new dimension LED lamps support your daily operations through innovative technology and design. In addition to advantages provided by MAVIG with all light equipment, LED technology offers the following enhanced features:

- Faceted multi-lens system
- In-depth illumination
- Superior color rendition
- Extension arm 750mm
- Spring arm 900mm
- LED-Examination-light
- Operating voltage is 24V DC. The lamp is supplied with a transformer, should it be used with 230V.

Technical data LED 130F:

- Light intensity at 1 meter distance: 60.000 Lux
- Color rendering index: Ra = 95
- Focusable: yes
- Focusable size of the light field: 14-25 cm
- Color temperature: 4500 Kelvin
- Electronic light intensity control at the lamp head: standard dimming range: 50 - 100 %
- Temperature increase in head area: 0.5° C
- Mains: 230 V / 60 Hz

Line #	Part #	Description	Qty

- Power consumption: 28 W
- Number of LEDs: 19
- Life-span of the LEDs: > 40.000 h
- Diameter of the lamp head: 33 cm
- Working distance: 70 - 140 cm
- Height Adjustment: 117 cm

21 ****989801220375** **Black Anti-fatigue Floor Mat w/logo.** **1**

Black Anti-fatigue Floor Mat with Philips Logo

36" x 60"

22 ****989600213942** **AD5 TO XPER TABLE ADAPT. PLATE** **1**

23 ****989801220281** **25 kVA Fluoro only UPS - UPC** **1**

25 kVA Fluoroscopy Only Solution, Release 8.2 Ready.
This system includes the following components:

25 kVA UPS

- 480v AC 3 phase input; 480v AC 3 phase output
- Fully rated Static Bypass Switch
- Input Isolation Transformer; Output AutoTransformer
- Dimensions: 36.3D x 20"W x 59.8H"
- Weight: 998 lbs (approximate).

Universal Power Controller (UPC)

- Combines the Battery Cabinet and Universal Transfer Switch Functions.
- Provides 12.5 Minutes of runtime at full load on battery
- Provides all interconnections to fully integrate into CV Lab.
- All previous 480V system functionality retained from previous separate component design.
- All connections are via external terminal blocks, rear access.
- All breakers are externally accessible from front.
- Isolated compartments for Battery and Switch sections.
- Fully ETL tested and certified UL, cUL and CSA Compliant.
- Dimensions: 31.5"D x 17.2"W x 59.8"H
- Weight: 1020 lbs (approximate).

DC Power Supply

- Artesyn/Emerson Part Number 73610129
- Single Unit Included for Mono Plane Systems
- Dimensions: 13.9" L x 6" W x 3" H
- Weight: 40 lbs (approximate).

Line #	Part #	Description	Qty

Wiring Harness

- Complete Harness connecting UPC and UPS to MA Cabinet, includes control and Auxiliary connections and wire sizes per schematics. 50ft UPC to MA and 15ft UPC to UPS.
- Shipping Dimensions: Approx 31"L x 28"W x 22"D
- Weight: 140 lbs (approximate).

R8.2.1 UPS Control Kit

- Knife Switch rated 100A at 600V
- 120V rated Aux Switch Contacts
- Wall Mounted NEMA Enclosure
- Dimensions: 20"Hx 15"W x 8"D
- Weight: 25lbs

Included in UPC:

- Contactor MC3

24 **SP003** **Installation Labor** **1**

Weekend delivery and first weekend labor.

25 **SP005** **Contract Labor** **1**

Remove and dispose of existing Lab 3 imaging equipment.

100241 Allura Xper FD10

NET PRICE $1,067,683.20

Buying Group: VIZIENT SUPPLY LLC Contract #: XR0312 CV

Addt'l Terms:

Each Quotation solution will reference a specific Buying Group/Contract Number representing an agreement containing discounts, fees and any specific terms and conditions which will apply to that single quoted solution. If no Buying Group/Contract Number is shown, Philips' Terms and Conditions of Sale will apply to the quoted solution.

Each equipment system listed on purchase order/orders represents a separate and distinct financial transaction. We understand and agree that each transaction is to be individually billed and paid.

Price above does not include any applicable sales taxes.

The preliminary delivery request date for this equipment is:_____.

If you do not issue formal purchase orders indicate by initialing here_____.

Tax Status:

Taxable_____ Tax Exempt_____

If Exempt, please indicate the Exemption Certification Number:_____, and attach a copy of the certificate.

Delivery/Installation Address:

_____

_____

_____

Invoice Address:

_____

_____

_____

Contact Phone #:

_____

Contact Phone #:

_____

Purchaser approval as quoted:

_____

Date:

_____

Title:

_____

This quotation is signed and accepted by an authorized representative in acknowledgement of the system configuration, terms and conditions stated herein.

OPTIONS

SELECTION OF ANY OPTION WILL INCREASE THE CONTRACT PRICE BY THE AMOUNT SHOWN IN THE PRICE COLUMN. OPTIONAL EQUIPMENT PRICING VALID ONLY IF PURCHASED IN CONJUNCTION WITH EQUIPMENT QUOTED.

Line #	Part #	Description	Qty	Each	Price	Initial
1	**FCV0604	DoseAware Bundle	1	$23,236.80	$23,236.80	_____

DoseAware is a unique solution providing staff working in an X-Ray environment with direct, real time dose feedback, enabling them to optimize their behaviour and reduce exposure to scattered dose. The DoseAware bundle comprises:

- 1 BaseStation Package
- 10 PDMs
- DoseManager
- 2 PDM racks.

Base Station Package

The Base Station is the heart of the DoseAware system. It offers Online View, which displays real time dose rate and immediate dose data for any Personal Dose Meter (PDM) in range. The Walk-Up View enables easy access to personal dose history and PDM settings.
The Base Station has a touch screen interface and wireless communication with the PDM. The PDM dose information is stored within the Base Station and can be retrieved by the DoseAware Dose Manager software via a standard network interface to complete the DoseAware system with archiving and reporting functions.
The Base Station package includes also:

- a cradle and the DoseView software package that can be installed on a local PC (not included), which has Windows XP or Vista as operating system.
- Mounting material for the Base Station, facilitating mounting on a wall or on a Philips Monitor Ceiling Suspension or a Philips mobile C-arm system.

10 Personal Dose Meters
The Personal Dose Meter (PDM) is a small and easy to wear active X-ray dose meter intended to measure and store received X-ray dose of staff, present in an X-ray room during radiation. The PDM has build-in radio-frequency wireless communication (868.3 Mhz for Europe version, 915 Mhz for USA version) to connect to the DoseAware Base Station for real time dose-rate indication and has a long battery life for maintenance-free usage. In addition it can be personalized to increase interest and awareness. The PDM not only records warning level profiles every second for a total of 3600 sec (cyclic overwritten), but also stores accumulated dose data every hour for maximum 5 years. A clip and a lanyard holder are included to facilitate easy wearing.

The PDM can be configured via the cradle, DoseView, and Dose Manager Software.

Dose Manager Package

The Dose Manager is a software program that serves as archive and reporting facility for all dose data of the DoseAware system. It allows tracking of multiple PDM's at a location.

Core functionality is:

OPTIONS

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Line #	Part #	Description	Qty	Each	Price	Initial

- Store and manage dose history for multiple PDM's
- Collect all dose history from connected Base Stations via the network
- Browse dose history of PDM's as graph or table
- Export dose data for personal analysis with other software tools, like Windows Excel
- Create and print reports of dose history

2 ****989801220158** **Mark 7 Arterion, Table Mount** **1** **$27,360.00** **$27,360.00** _____

The Mark 7 Arterion Injection System is the latest in MEDRAD's "Mark" series of angiographic injectors. Compared to earlier systems, the Mark 7 Arterion injector head is lighter and easier to use so you can focus more on the patient.
The clear and intuitive user interface guides you through proper set-up, and highlights the information you need to perform safe procedures.
Unique to the market, the front load system simplifies set-up and makes for a cleaner tear down.
The clear syringe provides a higher level of confidence that you are ready to inject.

Made from a clear material, the Mark 7 Arterion syringe (Catalog ART 700 SYR) allows you to easily view the inside of the syringe for smoother purging of air. And MEDRAD's famous fluid dots are still there to help-round for fluid, oval for air.
The table mount injector solution ensures the contrast injector is conveniently placed and always available when it is needed. It provides a clean workspace without occupying valuable floor space.
System includes:

- Table Mount
- display control panel
- 6 ft. coiled hand switch
- operation manual (CD)
- 10 ft. head cable
- syringe heat maintainer
- imaging system interface cable for the Allura / Allura Xper
- consumables starters kit

For the MEDRAD Mark7 Injector system Philips is only the distributor. MEDRAD provides the service as well as the application support of both versions unless stated differently in the Philips Service Agreement

System Specifications:

- Flow Rate 0.1-45.0 ml/s in 0.1 ml increments
- 0.1-59.9 ml/m in 0.1 ml increments
- Volume 1-150 ml in 1 ml increments
- Pressure Limit 100-1200 psi in 1 psi increments
- (150ml syringe) 689-8273 kPa in 1 kPa increments
- Rise Time 0.0-9.9 seconds in 0.1 increments
- Delay Time 0.0-99.9 seconds in 0.1 increments

OPTIONS

SELECTION OF ANY OPTION WILL INCREASE THE CONTRACT PRICE BY THE AMOUNT SHOWN IN THE PRICE COLUMN. OPTIONAL EQUIPMENT PRICING VALID ONLY IF PURCHASED IN CONJUNCTION WITH EQUIPMENT QUOTED.

Line #	Part #	Description	Qty	Each	Price	Initial
		• Fill Speed 1-20 ml/s • Fill Volume 1-150 ml • Syringe Size 150 ml • Syringe Heat Maintainer 35 °C (95 °F) ± 5 °C (9 °F) • Protocol Memory 40 Protocols • Injection Memory History				
3	**989801220357	**Volcano CORE IVUS - Cardiac Bundle** CORE Precision Guided Therapy System CORE CPU, Operator's Manual, Power Transformer, Cable Pre-Install Kit, Connection Box, two (2) Standard Controller and one (1) bedrail mount, 19"NEC Monitor Kit, Phased Array PIM Body, FFR functionality, DICOM Network Connection, ChromaFlo Functionality. -Includes VH IVUS End User License Agreement The customer agrees that use of the VH IVUS Software is subject to the terms of the End User License Agreement. A copy of the End User License Agreement is also available from your VOLCANO representative or online at www.volcanocorp.com/products/pdf-files/sofware-support-vh-ivus.pdf iFR Hyperemia-Free Lesion Assessment Modality CORE Interface, Operator's Manual. Customer agrees that use of the iFR Application Software License Application with interface to CORE is subject to the terms of the End User License Agreement. A copy of the End User License Agreement is also available from your VOLCANO representative or online at www.volcanocorp.com CORE Control Pad Bedside touchscreen controller offering system control from the sterile field	1	$97,800.00	$97,800.00	_____

PHILIPS PRODUCT WARRANTY

CARDIOVASCULAR (CV) SYSTEMS

This product warranty document is an addition to the terms and conditions set forth in the quotation to which this warranty document is attached. The terms and conditions of the quotation are incorporated into this warranty document. The capitalized terms herein have the same meaning as set forth in the quotation.

TWELVE-MONTH SYSTEM WARRANTY
Philips warrants to Customer that the Philips Vascular and Cardiac Systems (the "System") as delivered to Customer will perform in substantial compliance with its performance specifications for a period of twelve (12) months upon first patient use. Any glassware or flat detectors provided with the System is subject to special warranty terms set forth below.

PLANNED MAINTENANCE
During the warranty period, Philips personnel will schedule planned maintenance visits, in advance, at a mutually agreeable time on weekdays, between 8:00 A.M. and 5:00 P.M. local time, excluding Philips observed holidays.

SYSTEM UPGRADES
Any commercially available upgrade to the System which is hereafter installed by Philips during the original term of the System warranty shall be subject to the warranty terms contained in the first paragraph of this warranty, except that such warranty shall expire on the later of: a) upon termination of the initial twelve (12) month warranty period for the System on which the upgrade is installed or b) after ninety (90) days for parts only from the date of installation.

MRC X-RAY TUBES
Philips warrants to Customer, for the warranty periods further specified in this section, that the Philips X-Ray tube will be substantially free from defects in material and manufacturing workmanship, which impair performance under normal use as specified in Philips product descriptions and specifications.

The warranty period for MRC tubes provided with Customer's purchase of a new or refurbished X-ray system shall be the shorter of thirty-six (36) months after installation or thirty-eight (38) months after date of shipment from Philips. The warranty period for purchases of replacement tubes shall be the shorter of twelve (12) months after installation or fourteen (14) months after date of shipment from Philips.

MRC TUBE WARRANTY EXCLUSION
The above warranty shall not apply to X-ray tubes outside the United States and Canada. Philips' obligations under the product warranty do not apply to any product defects resulting from: improper or inadequate maintenance or calibration by Customer or its agents; Customer or third party supplied software, interfaces, or supplies; use or operation of the product other than in accordance with loss, or damage in transit; improper site preparation; unauthorized maintenance or Philips' applicable product specifications and written instructions; abuse, negligence, accident, modifications to the product; or, to viruses or similar software interference resulting from the connection of the product to a network.

MRC TUBE WARRANTY REMEDIES
If a tube is found to fail during the warranty period, and if, in the best judgment of Philips, the failure is not due to neglect, accident, improper installation, use contrary to instructions, or the exclusions stated above, Philips' tube warranty liability hereunder is limited to, at Philips option, the repair or replacement of the tube. Any replacement tube would have a warranty period equal to the balance of the warranty period left on the tube replaced.

IMAGE INTENSIFIER TUBES
Philips warrants the image intensifier tubes provided with the System, if any, will be free from defects in material and manufacturing workmanship for twenty-four (24) months. Claims must be made within twenty-four (24) months after installation or twenty-seven (27) months after date of shipment from Philips, whichever occurs first. If an image intensifier tube fails to meet this warranty, as Customer's sole and exclusive remedy, upon return of the tube, Philips will provide a prorated credit towards the purchase of a replacement tube from Philips as follows:

USAGE				CREDIT
0	to within	12	months	100%
12	to within	13	months	50%
13	to within	14	months	46%
14	to within	15	months	42%
15	to within	16	months	37%
16	to within	17	months	33%
17	to within	18	months	29%
18	to within	19	months	25%
19	to within	20	months	21%
20	to within	21	months	17%
21	to within	22	months	12%
22	to within	23	months	8%
23	to within	24	months	4%

Tubes received by Philips under this warranty that are found to meet all test specifications will be returned to the Customer and the warranty will continue as of the original date of installation. Examination of the returned tube may necessitate its destruction, but Philips' liability shall, in any case be limited to repair or replacement as aforesaid, only if in its sole opinion the tube has been properly used, installed and applied and has not been subjected to neglect, accident, or improper installation, or use. Transportation charges and risk of loss, both ways, of returned or replaced tubes shall be at the expense of the Customer.

DYNAMIC FLAT DETECTORS
Philips warrants the flat detectors provided with the System, if any, will be free from defects in material and manufacturing workmanship for twelve (12) months. Claims must be made within twelve (12) months after installation or fifteen (15) months after date of shipment from Philips, whichever occurs first. If a detector fails to meet this warranty, as Customer's sole and exclusive remedy, upon return of the detector, Philips will provide Customer a replacement detector at no additional charge.

SYSTEM SOFTWARE AND SOFTWARE UPDATES
The software provided with the System will be the latest version of the standard software available for that System as of the 90th day prior to the date the System is delivered to Customer. Updates to standard software for the System that do not require additional hardware or equipment modifications will be performed as a part of normal warranty service during the term of the warranty.

All software is and shall remain the sole property of Philips or its software suppliers. Use of the software is subject to the terms of a separate software license agreement. Customer must sign all such license agreements prior to or upon the delivery of the product. No license or other right is granted to Customer or to any other party to use the software except as set forth in the license agreements.

Any Philips maintenance or service software and documentation provided with the product and/or located at Customer's premises is intended solely to assist Philips and its authorized agents to install and to test the System, to assist Philips and its authorized agents to maintain and to service the System under a separate support agreement with Customer, or to permit Customer to maintain and service the System. Customer agrees to restrict the access to such software and documentation to Philips' employees and those of its authorized agents, and to authorized employees of Customer only.

WARRANTY LIMITATIONS
Philips' obligations under the System warranty are limited, at Philips' option, to the repair or the replacement of the System or a portion thereof, or to a credit or refund of a portion of the purchase price paid by Customer. Any refund or credit will be paid to Customer when the System is returned to Philips. Certain of the parts used in the manufacture or installation of, or in the replacement parts for, this System may contain refurbished components. If such components are used, they will be subject to the same quality control and inspection procedures as all other components in the System. Any System warranty is made on condition that Philips receives written notice of a System defect during the warranty period, and within thirty (30) days following the discovery of the defect by Customer. Philips' obligations under the System warranty do not apply to any System defects resulting from: improper or inadequate maintenance or calibration by Customer or its agents; Customer or third party supplied software, interfaces, or supplies; use or operation of the product other than in accordance with loss, or damage in transit; improper site preparation; unauthorized maintenance or Philips' applicable product specifications and written instructions; abuse, negligence, accident, modifications to the System; or to viruses or similar software interference resulting from the connection of the product to a network. Philips does not provide a warranty for any such third party products furnished to Customer by Philips; however, Philips shall use reasonable efforts to extend to Customer the third party warranty for the product. The obligations of Philips described above are Philips' only obligations and Customer's sole and exclusive remedy for a breach of a System warranty. Repairs or replacement parts do not extend the term of this warranty.

THE WARRANTIES SET FORTH IN THIS WARRANTY DOCUMENT WITH RESPECT TO THE SYSTEM (INCLUDING THE SOFTWARE PROVIDED WITH THE SYSTEM), GLASSWARE, AND DETECTORS ARE THE ONLY WARRANTIES MADE BY PHILIPS IN CONNECTION WITH THE SYSTEM, SOFTWARE, GLASSWARE, DETECTORS, AND THE TRANSACTIONS CONTEMPLATED BY THE QUOTATION, AND ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

ACCESS TO SYSTEM
Philips shall have full, free and safe access to the System and Customer's operation, performance and maintenance records for the System, on each scheduled or requested warranty service visit. Philips shall also have access to and use of any machine, service, attachment, features or other equipment required to perform the necessary service contemplated herein at no charge to Philips. Customer waives warranty service if it does not provide such access to the System and Customer's records. Should Philips be denied access to the System and Customer's records at the agreed upon time, a charge equal to the appropriate hourly rate will be accepted by Customer for "waiting time."

WARRANTY SERVICE
In the event it is not possible to accomplish warranty service within normal working hours (8:00 A.M. to 5:00 P.M., Monday through Friday, excluding Philips observed holidays), or in the event Customer specifically requests that warranty service be performed outside of Philips normal working hours, Customer agrees to pay for such services at Philips standard service rates in effect. Maintenance Agreements are available for extended coverage.

TRANSFER OF SYSTEM
In the event Customer transfers or relocates the System, all obligations under this warranty will terminate unless Customer receives the prior written consent of Philips for the transfer or relocation. Upon any transfer or relocation, the System must be inspected and certified by Philips as being free from all defects in material, software and workmanship and as being in compliance with all technical and performance specifications. Customer will compensate Philips for these services at the prevailing service rates in effect as of the date the inspection is performed. Any System which is transported intact to pre-approved locations and is maintained as originally installed in mobile configurations will remain covered by this warranty.

CONDITIONS
This warranty is subject to the following conditions: the System (a) is to be installed by authorized Philips representatives (or is to be installed in accordance with all Philips installation instructions by personnel trained by Philips), (b) is to be operated exclusively by duly qualified personnel in a safe and reasonable manner in accordance with Philips written instructions and for the purpose for which the products were intended, (c) is to be maintained and in strict compliance with all recommended and scheduled maintenance instructions provided with the System, and (d) Customer is to notify Philips immediately in the event the System at any time fails to meet its printed performance specifications.

LIMITATIONS OF LIABILITY AND DISCLAIMERS
The liability, if any, of Philips AND ITS AFFILIATES for damages whether arising from breach of the terms in the quotation, breach of warranty, negligence, indemnity, strict liability or other tort, or otherwise with respect to the products and services is limited to an amount not to exceed the price of the product or service giving rise to the liability.

IN NO EVENT SHALL PHILIPS OR ITS AFFILIATES BE LIABLE FOR ANY INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, OR THE COST OF SUBSTITUTE PRODUCTS OR SERVICES WHETHER ARISING FROM BREACH OF THE TERMS IN THIS QUOTATION, BREACH OF WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHER TORT. PHILIPS SHALL HAVE NO LIABILITY FOR ANY GRATUITOUS ADVICE PROVIDED TO THE CUSTOMER.

FORCE MAJEURE
Philips and Customer shall each be excused from performing its obligations arising from any delay or default caused by events beyond its reasonable control including, but not limited to: acts of God, acts of third parties, acts of the other party, acts of any civil or military authority, fire, floods, war, embargoes, labor disputes, acts of sabotage, riots, accidents, delays of carriers, subcontractors or suppliers, voluntary or mandatory compliance with any government act, regulation or request, shortage of labor, materials or manufacturing facilities.

Philips system specifications are subject to change without notice Document Number 4535 983 03234 999

Non Disclosure Agreement for Philips Confidential Pricing Information

The parties specified below agree to the following terms:

A. Philips

Name	Philips Healthcare, a division of Philips Electronics North America Corporation
Address	22100 Bothell-Everett Highway, Bothell, WA 98021 United States of America

B. Company

Name	MOSES H CONE HEALTH SYSTEM
Address	1200 N ELM ST GREENSBORO, NC 27401-1004

C. Confidential Information

Authorized Purpose	To evaluate Philips' confidential information relating to pricing for imaging equipment ("Pricing") in connection with the potential purchase of such imaging equipment.
Period	Begins on the date Pricing is first disclosed and continues for 5 years from date Pricing is last disclosed.

D. Philips Contact

Name	Brett Kimball
Title	
Telephone	
Fax	
e-mail	
Signature	

Company Contact

Name	
Title	
Telephone	
Fax	
e-mail	
Signature	

1. The following terms and conditions (the "Agreement") apply to Pricing disclosed by Philips and its Affiliates ("Philips") to Company and its Affiliates ("Company"), in connection with the Authorized Purpose.

   (a) Subject to Philips' prior written consent, Company may disclose, or request that Philips disclose, Pricing to Company's Affiliates that need to know the Pricing for carrying out the Authorized Purpose, provided they are advised of and agree to be bound by this Agreement. Company is responsible for any breach of this Agreement by its Affiliates.

   (b) An Affiliate is any corporation, company, or other entity, that: (i) is under the Control of a party hereto; or (ii) has Control of a party hereto; or (iii) is under common Control with a party hereto. For this purpose "Control" means that more than fifty percent (50%) of the controlled entity's shares or ownership interest representing the right to make decisions for such are owned or controlled, directly or indirectly, by the controlling entity.

2. Philips may disclose Pricing to Company with respect to the Authorized Purpose in writing, orally, or otherwise. All information is assumed to be Pricing, and confidential, if the confidential or proprietary nature is reasonable under the circumstances.

3. All Pricing disclosed by Philips shall remain Philips' the property. Company does not, by implication, estoppel, or otherwise, acquire any intellectual property right, title, or ownership, nor a license to any such intellectual property right, with respect to any Pricing disclosed by Philips hereunder.
   ALL PRICING IS PROVIDED ON AN "AS IS" BASIS, WITHOUT ANY WARRANTY WHATSOEVER. PHILIPS SHALL HAVE NO LIABILITY WHATSOEVER RESULTING FROM THE USE OF THE INFORMATION PROVIDED.

4. Company shall:
   (a) not use the Pricing for any purpose other than the Authorized Purpose;
   (b) not disclose the Pricing to any third party;
   (c) protect the Pricing against disclosure in the same manner and with the same degree of care with which Company protects its own confidential information but not less than a reasonable degree of care; and
   (d) limit circulation of the Pricing to Company's employees as have a need to know in connection with the Authorized Purpose.

   These obligations shall survive the termination of this Agreement. Philips may terminate this Agreement at any time by means of a written notice to Company. Company shall return to Philips, or certify destruction of, all Pricing, immediately upon termination or expiration of this Agreement.

5. Information disclosed by Philips to Company pursuant to this Agreement shall not be confidential to the extent that the information:
   (a) is or becomes part of the public domain without violation of this Agreement or any other obligation of confidentiality;
   (b) is known by Company prior to disclosure by Philips;
   (c) is lawfully obtained by Company from a third party without any breach of confidentiality or violation of law; or
   (d) is developed by Company completely independently of any such disclosure by Philips.

6. If Company is required, pursuant to administrative or judicial action or subpoena, to disclose the Pricing, Company shall use its best efforts to maintain the confidentiality of the Pricing, e.g. by asserting in such action any applicable privileges. Immediately after gaining knowledge or receiving notice of such action or subpoena, Company shall notify Philips and give Philips the opportunity to seek any other legal remedies so as to maintain such Pricing in confidence, including a reasonable protective order.

7. Company may not transfer or assign any or all of its rights and/or obligations or delegate the performance of any or all of its obligations under this Agreement, directly or indirectly, through acquisition, merger or otherwise, without the prior written consent of Philips. Any transfer, assignment or delegation in contravention of the foregoing shall be void.

8. Company shall not disclose, export or release the Pricing in contravention of any applicable laws or regulations.

9. This Agreement shall be governed and construed in accordance with the laws of the State of New York, without giving effect to its conflict of laws provisions.

10. This Agreement contains the entire understanding of the parties and supersedes any previous understandings or agreements with respect to the subject matter hereof. This Agreement may be amended only in writing signed by authorized representatives of each party.