North Carolina Department of Health and Human Services
Division of Health Service Regulation

Pat McCrory
Governor

Richard O. Brajer
Secretary DHHS

Mark Payne
Health Service Regulation

August 25, 2016

Dee Jay Zerman
211 Friday Center Drive
Suite G015
Chapel Hill, NC 27517

Exempt from Review – Replacement Equipment

Record #:	**2037**
Facility Name:	UNC Hospitals
FID #:	923517
Project Description:	Replace cardiac electrophysiology (EP) equipment
County:	Orange

Dear Ms. Zerman:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of August 19, 2016, the above referenced proposal is exempt from certificate of need review in accordance with G.S 131E-184(a)(7). Therefore, you may proceed to acquire, without a certificate of need, a Philips Allura Xper FD10 Single Plane cardiac EP equipment, EP lab and other associated equipment to be located in Lab D on UNC Hospital's main campus. This determination is based on your representations that the existing lab was damaged by fire, smoke and water and cannot and will not be used anywhere in North Carolina.

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.

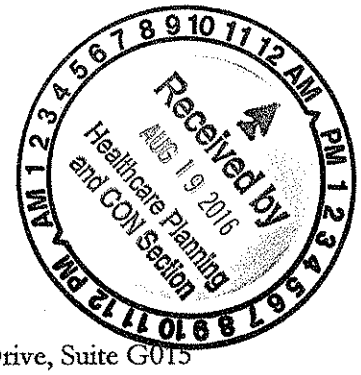
Sincerely,

Bernetta Thorne-Williams
Project Analyst

Martha J. Frisone
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

Record # 2037



Hedrick Building
211 Friday Center Drive, Suite G015
Chapel Hill, NC 27517

August 19, 2016

Martha Frisone, Assistant Chief
Healthcare Planning and Certificate of Need Section
Division of Health Service Regulation, DHHS
Mail Service Center 2704
Raleigh, NC 27699-2704

RE: Replacement Exemption Request / Replacement of EP lab "D", control room and associated equipment pursuant to NCGS § 131E-184(a)(7) / UNC Hospitals / Orange County

Dear Ms. Frisone:

As we have previously discussed, UNC Hospitals experienced a fire in the EP Lab "D" within the main hospital on July 13, 2016. The equipment vendors have advised us that because of the fire, smoke and water damage, the EP lab, control room, and associated support equipment that were in those spaces can no longer be used for safe patient care. Therefore, the EP Lab "D", control room, and associated support equipment must be replaced.

Initially, we explored the idea of leasing a temporary replacement EP Lab to be brought in from another state, and placed in a modular building on our existing mobile pad. This arrangement would have had to last 4-6 months until all of the EP Lab "D" items were replaced and would cost a minimum of $34,000 per month plus other upfit costs. Originally we were told the temporary unit could be immediately available, but later found it may take several months for delivery.

As we looked in to the situation further, state requirements dictate that even the temporary EP Lab be fully sprinklered, which would add even more upfit time, more cost, and then time for inspections. Anesthesia requirements would also require connecting gas lines to the temporary modular lab from inside the hospital, as well as the installation of a nurse call system. All of these requirements combine to make a lengthy and complicated process that would take many months, further reducing the amount of time we'd actually be using the temporary leased EP Lab.

In addition, the use of a leased lab on the mobile pad located outside the hospitals back entrance, disrupts the usual flow of the EP service, requires more patient transportation, and adds time on to procedures as the staff must adjust to the temporary lab's physical layout and design. Thus, it was decided that leasing a temporary replacement EP Lab would not be the most effective interim alternative.

Due to the fire and loss of EP Lab "D", patient care was disrupted, procedures had to be rescheduled, and a backlog of cases initially developed. To accommodate patient needs, the hours of service were expanded to include evenings and weekend as required. While we can continue to operate in this manner temporarily, long-term altered hours and operations are not desirable.

Thus, we are requesting a determination that the replacement of the EP Lab "D" equipment is exempt from review pursuant to NCGS §131E-184(a)(7). Also, in conformance with NCGS §131E-184(a), our initial contact with the CON Section (Martha Frisone, Lisa Pittman and Fatimah Wilson on 7/14/16) concerning the fire and pending need for replacement, combined with this written request, serves as prior written notice of intent to replace the damaged EP Lab "D" system. If possible, an expedited review would be appreciated allowing replacement as quickly as possible. As explained above, it has taken some time to formulate our most effective solution and compile the required information.

Following is the equipment comparison table as required in previous CON replacement requests. We are supplying the following information that the CON Section previously requested in the past as a part of its general information request for an equipment replacement exemption.

1. A comparison of the existing and replacement equipment, using the format in the following table:

Equipment Comparison

Linear Accelerator	*Existing Damaged Equipment*	*Replacement Equipment*
Type of Equipment (List each component – see table which follows)	Philips Allura Xper FD10 Single Plane, software, associated equipment and control station	Philips Allura Xper FD10 Single Plane, software, associated equipment and control station
Manufacturer of Equipment	Philips	Philips
Tesla Rating for MRIs	NA	NA
Model Number	Allura Xper FD 10	Allura Xper FD 10
Serial number	965	Unknown
Provider's Method of Identifying Equipment	By model and serial number(s)	By model and serial number(s)
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/ VIN #	NA	NA
Mobile Tractor Serial Number/ VIN #	NA	NA
Date of Acquisition of Each Component	Late 2012	TBD
Does Provider Hold Title to Equipment or Have a Capital Lease?	Owns	UNCH will own
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.) See Exhibit 12 for certified cost estimate.	$1,865,000	$1,920,358

Total Cost of Equipment	$1,059,171	$1,053,363.60 for EP plus other equipment costs of $641,374.92
Fair Market Value of Equipment	Was $1,059,171; now $0	$1,053,363.60 for EP plus other equipment costs of $641,374.92
Net Purchase Price of Equipment	$1,059,171	$1,053,363.60 for EP plus other equipment costs of $641,374.92
Locations Where Operated	UNC Hospitals	UNC Hospitals
Number of Days In Use/To be Used in N.C. Per Year	365	365
Percent of Change in Patient Charges (by Procedure)	NA	No change
Percent of Change in Per Procedure Operating Expenses (by Procedure)	NA	No change
Type of Procedures Currently performed on Existing Equipment	EP procedures	NA
Type of Procedures New Equipment is Capable of Performing	NA	EP procedures

Following is a detailed list identifying the medical equipment needing replacement in order to make the EP Lab operational. See attached Exhibits 1 through 6 for copies of valid quotes.

EP Lab	$1,053,363.60
Ablation	$27,500.00
Ultrasound	$122,750.00
BMC RPG	$4,987.50
CryoConsole	$179,215.00
Cardiac Mapping System	$299,300.00
ForceFxca Bovie	$7,622.42
	$1,694,738.52

2. A description of the basic technology and functions of the existing and replacement equipment, including the diagnostic and treatment purposes for which the equipment is used or capable of being used.

Response: Electrophysiology includes a range of procedures for the treatment of atrial fibrillation, supraventricular tachycardia, and ventricular tachycardia, including cardioversion, diagnostic EP, catheter ablation, implantable pacemaker devices, convergent electrophysiology procedures, and pacemaker and electrode lead extractions. The current equipment and the replacement equipment perform the same general basic functions. The existing damaged Phillips Allura Xper FD10, associated equipment and controls will be replaced with a new Phillips Allura Xper FD10, associated equipment and controls. See equipment comparison chart above. UNC Hospitals does not intend to increase patient charges or current per procedure operating expenses, which is well within the 10% threshold for the first 12 months after its use as contained 10A NCAC 14C .0303 Replacement Equipment. Based on this and other information included in this request, the replacement equipment is comparable medical equipment as defined in 10A NCAC 14C .0303.

3. Brochures or letters from the vendors describing the capabilities of the existing equipment and the replacement equipment.

Response: A copy of the original quote and specifications for the existing Philips Allura Xper FD10 are included in Exhibit 7. A copy of new quote and the specifications for the proposed Philips Allura Xper FD10 are attached as Exhibit 1. Exhibits 2 through 6 contain valid quotes and specifications for the other supporting equipment and console that also require replacement as identified above.

4. A copy of the purchase order for the existing equipment, including all components and original purchase price.

Response: A copy of the original brochure and the original quote for the existing Phillips Allura Xper FD10 are included in Exhibit 7.

5. A copy of the title, if any, for the existing equipment or the capital lease for the existing equipment.

Response: Not applicable. The existing equipment does not have a title and is not leased.

6. If the replacement equipment is to be leased, a copy of the proposed lease that transfers substantially all the benefits and risks inherent in the ownership of the equipment to the lessee of the equipment, in accordance with criteria in Generally Accepted Accounting Principles (GAAP).

Response: Not applicable. The equipment will be purchased.

7. If the replacement equipment is to be purchased, a copy of the proposed purchase order or quotation, including the amount of the purchase price before discounts and trade-in allowance.

Response: See Exhibits 1 through 6 for copies of all quotes.

8. A letter from the person taking possession of the existing equipment that acknowledges the existing equipment will be permanently removed from North Carolina, will no longer be exempt from requirements of the North Carolina Certificate of Need law, and will not be used in North Carolina without first obtaining a new certificate of need.

Response: See Exhibit 11 for a copy of a confirmation letter from Philips.

9. Documentation that the existing equipment is currently in use and has not been taken out of service.

Response: UNC Hospitals' equipment is currently in use as indicated and certified on the most recent Licensure Renewal Application form. The equipment was in use until it caught fire on July 13, 2016. Exhibit 8 contains photos of the damage. See Exhibit 9 for copies of pages from the 2016 Licensure Renewal Application pertaining to EP equipment. Exhibit 7 contains a copy of the Exempt from Review determination dated November 1, 2012 issued by the CON Section; the existing Philips Allura Xper FD10 was that approved replacement.

Although the projected total capital project cost is less than $2M, the following additional information regarding this replacement is being provided in support of this request and to provide additional clarity:

The EP Lab is part of UNC Hospitals' Heart & Vascular Center within the main hospital and on the main campus of the University of North Carolina Hospitals at Chapel Hill, all of which have the same physical address of 101 Manning Drive in Chapel Hill. Exhibit 10 contains a map of the UNC Hospitals' main campus and the buildings. The approximate location of EP room, associated equipment and control room within the existing hospital foot print is identified on the map. A floor plan of the EP Lab "D" is also provided. The Cardiac Services Department is part of UNC Hospitals which is a licensed health service facility (DHSR Acute Care License No. H0157).

The building from which UNC Hospitals provides clinical patient services and exercises financial and administrative control over the entire facility is co-located on the UNC Hospitals main campus. These offices are physically located on the 3rd floor of the Med Wing E, connected to the original main hospital building. The locations of the financial officer and administrative officer are also indicated the map in Exhibit 10.

Please do not hesitate to contact me at 984-974-1243 if you need any additional information. Thank you for your prompt consideration of this matter.

Sincerely,

Dee Jay Zerman

Dee Jay Zerman
System Director of Regulatory Planning
UNC HCS

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

PHILIPS

Quotation #: 1-1HA8DD1	**Rev:** 4	**Effective From:** 28-Jul-16	**To:** 26-Sep-16

Presented To:
UNIVERSITY NORTH CAROLINA HOSPITAL
101 MANNING DR
CHAPEL HILL, NC 27514-4220

Tel:

Alternate Address:

Presented By:
Bethann Griffith-Subik
Account Manager
Tel: (919) 677-9046
Fax: (919) 677-9047

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

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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	$1,053,363.60
		Equipment Total:	$1,053,363.60

Solution Summary Detail

Product	Qty	Each	Monthly	Price
100241 Allura Xper FD10	1	$1,053,363.60		$1,053,363.60

Buying Group: **MEDASSETS SUPPLY CHAIN SYSTEMS INC.** **Contract #:** **MS03221**

Addt'l Terms: **Product Terms and Conditions of Sale (T&C) not printed with this solution. Refer to Contract # noted above for applicable T&C details. If Service Agreement is quoted its T&C of Sale are printed**

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	NNAE863 AlluraXper_FD10 Ceiling
1	NNAE463 Single Phase UPS
1	NCVB875 EP Cockpit XL
4	FCV0587 Xper Live/Ref Slaving
1	NCVA092 Lab Reporting
1	NCVA086 Rotational Scan
1	NCVA783 Pivot for table base.
1	NCVA791 Xper Table Tilt
1	NCVB882 Cradle extension
1	FCV0510 Long mattress cardio
2	FCV0017 CABLE CARRIER CS
1	NCVA566 Interventional Hardw.(RT prep)
1	NCVA590 Real time image link
1	NCVC409 EP Navigator R5
1	NCVC419 3D EP Rotational Scan R5
1	NCVB294 Set of 2 additional 21in. LCDs
20	FCV0563 Personal Dose Meter (1 piece)
4	FCV0566 Personal Dose Meter rack
1	FCV0567 Base Station Package
2	989801256034 iXR Full Travel Package OffSite
3	980306640009 Black Anti-Fatigue Floor Mat w/ Blue Logo
1	980406190009 PIVOTING TABLE-MOUNTED RADIATION SHIELD
1	989801220070 Carrot C-Com Intercom
1	NCVC005 Equipment Rack DVI
1	989600207421 Equipment rack Predelivery set
1	NCVC413 Electrical Accessory kit OSC
1	NCVC414 Pre-Install Bracket
1	NCVC415 Pneumatic Regulator
1	FCV0727 Riser Oxygen DISS connection
1	FCV0728 Riser Vacuum DISS connection
1	FCV0729 Riser MedAir DISS connection
1	989801220281 25 kVA Fluoro only UPS - UPC
1	989600213942 AD5 TO XPER TABLE ADAPT. PLATE

Quote Summary

100241 Allura Xper FD10

Qty	Product

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: Product Terms and Conditions of Sale (T&C) not printed with this solution. Refer to Contract # noted above for applicable T&C details. If Service Agreement is quoted its T&C of Sale are printed

Line #	Part #	Description	Qty	Each	Price
1	**NNAE863	AlluraXper_FD10 Ceiling	1	$680,903.10	$680,903.10

The Allura Xper FD10 (Ceiling) single-plane cardiovascular system is comprised of a ceiling mounted G-arm stand and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures.

The Allura Xper 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 Allura Xper FD10 Stand

The ceiling suspended geometry segment is comprised of the following features:

- A motorized, ceiling suspended Poly Diagnost G-arm, which can be ceiling rotated to allow a three-sided patient approach at maximum free floor space with full body coverage.
- All stand movements are motorized. The motorized and manual parking movement consists of ceiling rotation and a longitudinal movement. The counterbalanced Dynamic Flat Detector can also be positioned manually or motorized. Angulation and rotation of the Poly-Diagnost G-arm are 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 provides motorized base rotation at 12 degrees per second 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 in the head position (orientated parallel to the table) 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 per second
  - angulation speed up to 18 degrees second
- 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 Allura Xper 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 Allura Xper 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 Allura Xper 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 Allura Xper 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 Allura 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 (NCVA081)

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.

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 Quantification Software 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 Systems

Essentials 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

100241 Allura Xper FD10

Line #	Part #	Description	Qty	Each	Price
2	**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.

3	**NCVB875	**EP Cockpit XL**	1	$150,526.90	$150,526.90

EP cockpit XL for Allura Xper mono-plane system with large 58-inch high resolution color LCD screen in the Exam Room
EP cockpit XL is an integrated EP lab solution supporting an efficient working environment, integrated workflow and enabler for complex procedures.
The EP cockpit XL provides the ability to:
• Reduce the amount of cables, keyboards and displays in the Exam Room and Control Room
• Display information from up to 8 sources simultaneously (incl. third party systems) on the Philips large 58-inch high resolution color LCD screen in the Exam Room.
• Resize & enlarge information at any stage during the case on the Philips large 58-inch high resolution color LCD screen in the Exam Room.
• Select, customize & save viewing lay-outs of the Philips large 58-inch high resolution color LCD screen via the Allura Xper table-side module
• Display information (incl. third party systems) on any of the Philips ultra high-brightness 21-inch color LCD displays in the Control Room.
• Operate connected equipment (incl. third party systems) via the Allura Xper module in the Control Room.
• Select a predefined display setup and keyboard/mouse configuration, or save a custom configuration as a new preset configuration.
• Store any image on any screen and/or all images on all screens as a DICOM Secondary Capture image.

The EP cockpit XL consists of:

OmniSwitch
The OmniSwitch is a 15 channel video-switch and 8 channel keyboard/mouse switch, operated from the Allura Xper Module in the Control Room and/or from the Allura Xper table-side module.
The OmniSwitch allows the user to direct the video output of all connected medical equipment to the Philips large 58-inch high resolution color LCD screen in the Exam Room (up to 8 sources simultaneously) and to the Philips ultra high-brightness 21-inch color LCD displays in the Control Room (6 or 7 displays).
The OmniSwitch allows the user to switch keyboard/mouse control for the connected medical equipment.
The OmniSwitch can be connected to up to 8 medical equipment systems. These systems can be selected and controlled with 1 or 2 keyboard/mouse combinations in the Control Room.

Medical grade, large screen high resolution color LCD display in the Exam Room
This display support the image quality requirements for monochrome X-ray images, color EP signals as well as other images and replace all displays normally delivered with an Allura Xper system for the Exam Room.
Main characteristics are:
• 58-inch, 8 Megapixel color LCD display
• Native resolution: 3840x2160
• Brightness: max 700 Cd/m2 (typical)
• 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 58-inch color LCD screen control
- Resize & enlarge information at any stage during the case via the Allura Xper table-side module in the Exam Room and/or the Allura Xper module in the Control Room.
- Select, customize & save viewing lay-outs via the Allura Xper table-side module in the Exam Room
- Select, customize & save viewing lay-outs via Allura Xper module in the Control Room

Ultra high-brightness, medical grade, color LCD displays
A total of 6 x ultra high-brightness, medical grade, color LCD displays are provided with EP cockpit XL for use in the Control Room.
These displays support the image quality requirements for monochrome X-ray images, color EP signals as well as other images and replace all displays normally delivered with an Allura Xper system.
Main characteristics are:
- 21.3 inch, 2 Megapixel color LCD display
- Display resolution (up to) : 1600x1200
- Input resolution (up to) : 1920x1200
- Brightness: 550 Cd/m2
- Contrast ratio : 800:1
- 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

Monitor ceiling suspension
A Monitor ceiling suspension for use in the Exam Room carry the large 58-inch color LCD screen, providing highly flexible viewing capabilities.
The monitor ceiling suspension is height-adjustable and moveable along ceiling rails. It can be positioned on both sides of the table and replaces the Allura monitor ceiling suspension.
Note: Two 21" additional displays (same as used in Control Room) are optional and located on top of the monitor ceiling suspension frame which carry the large 58-inch color LCD screen.

Control Room set-up
The 6 x ultra high-brightness color LCD displays, the 2x keyboard/mouse combination and Allura Xper module are designed to support an efficient workflow within the Control Room.
Equipment connected to EP cockpit XL can be operated via the Allura Xper module.
Display information (incl. third party systems) on any of the Philips ultra high-brightness 21-inch color LCD displays in the Control Room.
Note: The Allura Xper module is delivered with EP cockpit XL (EP cockpit)

Snapshot functionality
The snapshot function allows the user to store/save a screen-capture of any image on any EP cockpit 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

Wall Connection Boxes
A total of 9 x Wall Connection Boxes are provided with EP cockpit XL.

Line #	Part #	Description	Qty	Each	Price

Through Wall Connection Boxes a wide range of 3rd party equipment can be connected to the EP cockpit XL OmniSwitch.
The Wall Connection Boxes provides galvanically isolated connections: Video (DVI), Network (RJ45) and Keyboard/mouse (USB) .
The Wall Connection Boxes can be located in the Technical Room, Control Room and/or Exam Room.
In case of an Equipment Rack: 1 x Wall Connection Box is permanently placed on the Equipment Rack.

Notes:
Life-supporting equipment cannot be connected to the Wall Connection Boxes
EP cockpit XL displays are not powered by an Uninterruptible Power Supply. Equipment that requires a (fail-safe) power connection (UPS) for the video output need an additional display connected to that equipment's UPS.
Medical equipment with dedicated keyboards or displays should not be connected without consent of the manufacturer. Please contact your 3rd party equipment vendor for information and clearance.

Compatibility
EP cockpit XL is compatible with:
Allura Xper FD10 series from Release 7.6 onwards
Allura Xper FD20 series from Release 7.6 onwards

Clinical Education Program for EP Cockpit

CV EP Cockpit OnSite Education:

Clinical Education Specialists will provide sixteen (16) hours of CV EP Cockpit OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment installation date (or purchase date if sold separately).Ref# 263-100615

4	**FCV0587	Xper Live/Ref Slaving	4	$2,006.90	$8,027.60

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	**NCVA092	Lab Reporting	1	$1,245.50	$1,245.50

Lab Reporting allows the user to generate and print simple reports in modality stand-alone situations. The user is able to incorporate free text and clinical images. The reporting functionality is suited for local printing and email. Part of the report is generated automatically from administrative data (e.g. patient/exam data hospital name) and required data (e.g. run-log dose information and event-log).

6	**NCVA086	Rotational Scan	1	$14,231.60	$14,231.60

Rotational Scan provides real-time 3D impressions of complex vasculature and the coronary artery tree. It acquires multiple projections with just one contrast injection.

Rotational Scan can be used during screening procedures to quickly determine the optimal projection for the study as the angle (rotation/angulation) of the projection is indicated on each image.

Compared with traditional angiography Rotational Scan can save considerable time dose and

contrast while providing image detail required for diagnostic and therapeutic decisions.

Rotational Scan is possiblewith the Allura Xper systems in the side position (ceiling mounted systems) and in the head position which provides the flexibility to perform procedures virtually from head to toe.

With Allura Xper FD20

C-arm in side position:

- Max. rotation speed: 30°
- Max. rotation angle: 180°

C-arm in head position:

- Max. rotation Speed: 55°
- Max. rotation Angle: 305°

With Allura Xper FD10:

Poly G in side position (ceiling version):

- Max. rotation Speed: 30°
- Max. rotation Angle: 90°

Poly G in head position:

- Max. rotation Speed: 55°
- Max. rotation Angle: 240°

Maximum speeds are given by the framespeed specifications of the system configuration.

The speed and range of rotation are the highest available (see table). The very high speed allows using less contrast whereas the very wide rotation range provides a complete evaluation of the anatomy.

The stand is designed forvery high mechanical stability. It offers precise positioning and high reproducibility assuring you of high quality images and excellentstudies.

Operation of Rotational Scan is extremely easy. The procedure is selected set up and executed virtually within a matter of seconds supporting the highest patient throughput. A set of dedicated acquisition programs is available on the Xper Module and can be selected at the touch of a button. The rotation endand start positions are easily selected. The procedure is controlled from theexposure hand

- or foot-switch.

7 ****NCVA783** **Pivot for table base.** **1** **$4,841.00** **$4,841.00**

100241 Allura Xper FD10					
Line #	**Part #**	**Description**	**Qty**	**Each**	**Price**

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

8	****NCVA791**	**Xper Table Tilt**	**1**	**$19,852.80**	**$19,852.80**

This innovating SyncraTilt enhances the accuracy and efficiency of gravity-oriented procedures. It is available as an option for the Xper table in Allura Xper series systems.

SyncraTilt is ideal for interventional, myelography, phlebography and head down procedures because it provides more precise imaging of contrast medium, blood, or objects in the body.

With SyncraTilt, the isocentre is automatically located at the isocentre of rotation and angulation of the stand. If the longitudinal position of the stand changes, the tilt isocentre is changed to match with the new stand position. As a result, the region of interest is always centred

As the table tilts, the X-ray beam automatically coordinates to the movement.

The table floats even when tilted, and the region of interest can be followed by panning the tabletop.

When combined with the Bolus Chase option, SyncraTilt enables phlebography to be performed with a head-up tilted patient.

The option provides:

- maximum tilt range:
- 17 degrees (head down) to +17 degrees (head up).
- tilt speed: 2 degrees/sec
- automatic safeguarding system with manual override
- panning range in tilted plane: equal to the standard
- tabletop specifications (longitudinal 120cm, lateral 35cm)
- easy to use controls
  Comprising:
  - Tilt drive with user controls

Compatible with:
. Xper table in Allura Xper FD series Rel 3 onwards (monoplane versions) and Rel 2 onwards (biplane verions)
. Bolus Chase
. Pivot for table base
. swivel for table base

100241 Allura Xper FD10					
Line #	**Part #**	**Description**	**Qty**	**Each**	**Price**
9	****NCVB882**	**Cradle extension**	**1**	**$15,646.30**	**$15,646.30**
	This extension provides the possibility to cradle the table top. This allows optimal positioning of the patient for f.i. more invasive (surgical) or guided puncture procedures. Functionality: . isocentric cradle with maximum cradle range: -15 degrees to +15 degrees for the full tilt range cradle speed: 3 degrees/sec . automatic safeguarding system with manual override . easy to use controls				
10	****FCV0510**	**Long mattress cardio**	**1**	**$582.80**	**$582.80**
	Patient mattress, thickness 70 mm, length 3165 mm, width 500 mm				
11	****FCV0017**	**CABLE CARRIER CS**	**2**	**$277.30**	**$554.60**
	Additional carrier for suspension of cable hose from X-ray tube assembly or TV monitor.				
12	****NCVA566**	**Interventional Hardw.(RT prep)**	**1**	**$7,097.00**	**$7,097.00**
	The interventional hardware is a special platform designed for the Philips interventional software Integris 3D-RA, StentBoost and/or Allura 3D-CA The Interventional Hardware comprises at least: • Dell Workstation • 2048 MB memory • Primary hard disk for the Operating system • Secondary 72 GB hard disk for application data • Internal CD-ROM • External DVD writer • Operating Software • Microsoft Windows XP Professional UK Operating System Conditionally: • Integris 3D-RA Calibration Tool Kit • Grids for pincushion distortion and focus shift calibration • Phantom for geometry calibration • Phantom for user validation • Allura 3D-CA • Phantom for geometry calibration • StentBoost • Phantom for user validation Compatible with: · Integris series with connectivity release · Allura Xper series				
13	****NCVA590**	**Real time image link**	**1**	**$13,451.40**	**$13,451.40**

Line #	Part #	Description	Qty	Each	Price

Real Time digital image link to an off-line Allura Interventional Hardware station. This applies on the applications 3D-RA, StentBoost and 3D-CA on the Interventional Hardware. This dedicated digital link sends raw or processed image data (depending on the application) real time during monoplane exposures to the connected Interventional Hardware station, to allow instant results of the applicable reconstruction after the exposure run.

In biplane systems, this digital link is available for the frontal channel only.

14	**NCVC409	EP Navigator R5	1	$66,335.80	$66,335.80

EP navigator facilitates catheter navigation in ablation procedures, by providing a three-dimensional (3D) overlay of the real patient anatomy onto live fluoroscopic images. The 3D anatomy is registered to the fluoroscopy and shows the position of all catheters in relation to the anatomy. EP navigator follows the rotation of the C-arc and the movement of the table.

The 3D anatomy is obtained using an intra-procedural 3D rotational scan or a pre-procedural cardiac CT or MR scan, from which the cardiac structures (left atrium, right atrium, left ventricle, right ventricle, aorta, coronary sinus, and trachea) are segmented. Automatic segmentation is provided for the left atrium and trachea. User-aided segmentation is possible for other anatomic structures.

In addition to the overlay functionality onto live fluoroscopic images, the segmented 3D rotational scan, CT or MR anatomy from EP navigator can be seamlessly transferred to a compatible mapping system. This allows navigating catheters on images with real 3D anatomical detail without using X-ray.

Using the Endo View function, the endocardial surface can be visualized, providing a view of important anatomical structures such as, in the left atrium, the pulmonary veins and the ridge to the left atrial appendage. The Point Tagging function allows the placement of tag markers on the surface of the anatomy, to mark sites of interest such as ablation lesions. Using the snapshot functionality, a screen image of the live screen can be made, perfectly suitable for reporting or teaching purposes

Comprehensive parts coverage for EP Navigator including replacement. Labor will be provided if the base plan includes labor coverage or if labor is purchased as an option. If not, labor will be available for purchase at preferred labor rate.

Comprehensive parts coverage for EP Navigator including replacement. Labor will be provided if the base plan includes labor coverage or if labor is purchased as an option. If not, labor will be available for purchase at preferred labor rate.

Clinical Education Program for EP Navigator

CV EP Navigator OnSite Education:

Clinical Education Specialists will provide sixteen (16) hours of CV EP Navigator OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 230-100615

15	**NCVC419	3D EP Rotational Scan R5	1	$53,067.70	$53,067.70

Line #	Part #	Description	Qty	Each	Price

3D EP rotational scan reconstructs three-dimensional (3D) cardiac anatomy from a rotational angiography. It provides real-time and 3D anatomic detail during the intervention, in the EP lab itself.

When used as an overlay onto live fluoroscopic images, this 3D anatomy is used in EP navigator as a roadmap to guide catheter navigation. Alternatively, the segmented 3D anatomy can be transferred to a compatible mapping system to navigate catheters on images with real 3D anatomical detail without using X-ray.

The 3D EP rotational scan features a unique reduced angular rotation range in head and nurse position to simplify the workflow, e.g. not interfere with anesthesia logistics. All EP navigator functions, such as Endo View and Point Tagging, are available when using 3D EP rotational scan

16 ****NCVB294** **Set of 2 additional 21in. LCDs** **1** **$10,584.40** **$10,584.40**

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.

17 ****FCV0563** **Personal Dose Meter (1 piece)** **20** **$1,541.60** **$30,832.00**

Personal Dose Meter.
The Personal Dose Meter (PDM) is a small and easy to wear active Xray dose meter intended to measure
and store received Xray dose of staff, present in an Xray room during radiation. The PDM has build-in
wireless communication 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 and DoseView (and the optional Dose Manager) software for
the following attributes:

Line #	Part #	Description	Qty	Each	Price

- Full name (max 40 bytes)
- Display user name (max 16 bytes)
- User group from list
- PDM ID (max 16 characters)
- Position on body
- Date & time = Real Time Clock, synchronized with local time, and being the clock master for the DoseAware system. With each
- connection PDM => Base Station => Dose Manager the timing is synchronized automatically.
- Date of PDM assignment to a person
- Dose history reset
- Sleep mode On/Off
- Annual dose limit

The PDM has following specifications:

Operational unit:	HP10
Dose range:	1µSv – 10 Sv
Dose resolution:	1 µSv
Dose uncertainty:	5% or 1 µSv
Dose rate range:	10 µSv/hr - 50 mSv/hr (3 nSv/s - 15 µSv/s)
Response time:	< 4 s, 40 µSv/hr – 100 µSv/hr; < 1 s above 100 µSv/hr
Energy dependency X-, Gamma-rays:	N40-N160 (33keV – 118 keV)
Average battery life:	3 – 5 years, depending on daily use
Weight:	30 gr
Dimensions:	45 x 45 x 10 mm (w x h x d)
Personalization:	8 inlays with colour
Communication radio:	Center frequency 868.3 Mhz for Europe version 915 Mhz for USA version

18	**FCV0566	**Personal Dose Meter rack**	4	$103.40	$413.60

This stainless steel rack facilitates storage of up to 5 ea Personal Dose Meters.
Intended to be mounted on a wall.
Dimensions: 40 x 19 x 6 cm (W x H x D)
Weight: 0,4 kg

19	**FCV0567	**Base Station Package**	1	$12,906.20	$12,906.20

The Base Station is the heart of the DoseAware system that helps staff, wearing a PDM in the Xray
room, by seeing the level of received Xray dose, to increase awareness and to stimulate taking measures
to reduce received dose.
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 optional DoseAware

100241 Allura Xper FD10					
Line #	**Part #**	**Description**	**Qty**	**Each**	**Price**

Dose
Manager software via a standard network interface to complete the DoseAware system with archiving
and reporting functions.
The Online screen shows up to eight PDM's in range simultaneously. For each PDM the name is shown
next to a bar graph that displays real time the actual measured dose rate level separated in three colored
zones: green, orange, red.
These colours symbols:
Green: the user is in the comfort zone, aware of radiation, adequate precautions have been taken
Red: the user is out of the comfort zone, precautions (like distance, shuttering, lead protection, Xray filters, fluoro flavor, position in the room, applied projection) can be taken to reduce received radiation.
The max dose rate of each zone is marked in µSv/h on top of the scale. In addition the dose rate peek
level of the actual Xray exposure is displayed as a single block, that is kept visible for max 10 sec after exposure end.
The touch screen also allows access to data stored in the PDM in range. The Walk-up view can show all
configured attributes of the PDM, the actual battery status, and personal dose overviews (accumulated
dose per hour, per day, per week and over the year as percentage of the annual dose limit)

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.

The compact cradle connects a PDM to a PC via a USB 2.0 port. In combination with the DoseView package it offers PDM-user setting management (password protected administrative function) and dose data read-out/analysis. It shows similar dose history views as the Base Station, but "off-line" via the PC and with more details, as long as the PDM is in the cradle. As the cradle takes over battery power supply, it's also an easy way to verify battery status if the PDM seems to have empty battery. (like no connection with Base Station)
Specifications of the Base Station:

- Dimensions: 30 x 25 x 6 cm (W x H x D)
- Weight: 1.45 kg
- Display: 10.4 " touch screen, 640 x 480 pixels
- Memory: 512 Mb
- Storage: all dose-rate/sec and accumulated dose/hr that are received from PDM's in range. The memory size accommodates f.i250 PDM's with 50 hours dose rate history each.
- Power Supply: via adapter, 90-264 VAC, 24 W
- Communication: wireless radio communication with PDM's (see PDM spec) Ethernet 10/100 Mbits/s port for the Dose Manager connection

20	****989801256034**	**iXR Full Travel Package OffSite**	**2**	**$2,330.00**	**$4,660.00**

Line #	Part #	Description	Qty	Each	Price

Includes one (1) participant's airfare from North American customer location to Cleveland, Ohio, with lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process.

Note: Cancellation/rescheduling policy strictly enforced.

Education expires one (1) year from equipment installation date (or purchase date if sold separately).

21	**980306640009	**Black Anti-Fatigue Floor Mat w/ Blue Logo**	3	$188.00	$564.00

Blue Anti-Fatigue Floor Mat w/ Logo

22	**980406190009	**PIVOTING TABLE-MOUNTED RADIATION SHIELD**	1	$2,636.70	$2,636.70

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.

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.

23	**989801220070	**Carrot C-Com Intercom**	1	$16,450.00	$16,450.00

C-Com is a state-of-the-art digital wireless communication system specifically suited for medical environments. Compared to conventional systems that include central microphones and overhead speakers, C-Com dramatically reduces noise and distraction, enhances patient comfort and synchronizes clinical activities.

- The C-Com System includes (4) wireless headsets.
- The C-Com System is part of the Carrot Advanced Tool Set and not intended for diagnostic use.
- Whisper-sensitive military spec directional microphones
- Extremely comfortable headsets ensure flawless audio fidelity and precise communication.
- Physician instructions and collaborative communication are distributed to all team members

3 year warranty

24	**NCVC005	**Equipment Rack DVI**	1	$15,853.10	$15,853.10

100241 Allura Xper FD10

Line #	Part #	Description	Qty	Each	Price

The Equipment Rack for EP cockpit allows users of the Philips Allura Xper[Clarity] system to organize all the equipment used in an EP Lab on one moveable rack and removes cable clutter through a cable conduit. This provides a much "cleaner" organized look for the busy EP Lab. The ceiling-mounted Equipment Rack, located in the Exam Room, can support 3rd party equipment. Cabling for this equipment is guided up through the ceiling mounted suspension. It can be moved by swiveling the ceiling mounted boom. The Equipment Rack can be positioned within a circular range of 1.6 meters.

The Equipment Rack consists of:

- 5 shelves and 1 drawer with flexible mounting position and can support 150kg of equipment weight.
- An infusion extension rod
- An extension arm with a standard VESA mounting plate, on which different types of equipment can be mounted
- A Wall Connection Box (1 of the standard EP cockpit Wall Connection Boxes) with Power (230V, 50Hz), Grounding, Network (RJ45), Keyboard/mouse (USB) and Video (DVI) connections
- 10 country-specific power connectors
  Note: For USA/Canada 16 country specific power connectors
- 4 Ethernet network connectors
- Ergonomically operating handles with electric brakes
- Standard gas outlets for O2, NO2, and Vacuum

Notes:

- Life-supporting equipment cannot be connected to the Equipment Rack.
- Medical equipment with dedicated keyboards or displays should not be connected without consent of the manufacturer. Please contact your 3rd party equipment vendor for information and clearance.
- Please contact 3rd party equipment vendor for information and clearance in case of cable routing through equipment rack.
- The Wall Connection Box can be used to connect 3rd party equipment that complies with the following requirements:
- Qualified medical electrical equipment [IEC 60601-1]
- IEC 950 only if connected to an EP cockpit Wall Connection Box mains (230V) connection in the Control Room or otherwise isolated from hospital mains according IEC60601-1.
- Connected to the same earth as the Philips Protective Conductor Bar (PPCB).
- Can be operated with a standard AT 101-key US English keyboard connected through a USB connection.
- Provide video-output that matches the display range of the Color monitor that is used for display. Standard VESA video formats up to 1920x1200 are supported

25	**989600207421	**Equipment rack Predelivery set**	1	$1,344.20	$1,344.20

Pre-delivery for Equipment Rack.

26	**NCVC413	**Electrical Accessory kit OSC**	1	$329.00	$329.00
27	**NCVC414	**Pre-Install Bracket**	1	$79.90	$79.90
28	**NCVC415	**Pneumatic Regulator**	1	$136.30	$136.30
29	**FCV0727	**Riser Oxygen DISS connection**	1	$159.80	$159.80
30	**FCV0728	**Riser Vacuum DISS connection**	1	$159.80	$159.80

Line #	Part #	Description	Qty	Each	Price
		100241 Allura Xper FD10			
		Refers to the type of gas connection and gas needed for the Equpment rack. This is a DISS connector for Vacuum suction.			
31	**FCV0729	**Riser MedAir DISS connection**	1	$159.80	$159.80
		Refers to the type of gas connection and gas needed for the Equpment rack. This is a DISS connector for Medical Air.			
32	**989801220281	**25 kVA Fluoro only UPS - UPC**	1	$47,705.00	$47,705.00

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).

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).

100241 Allura Xper FD10					
Line #	**Part #**	**Description**	**Qty**	**Each**	**Price**
		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			
33	****989600213942**	**AD5 TO XPER TABLE ADAPT. PLATE**	**1**	**$2,025.70**	**$2,025.70**

********PROMOTIONS********

Promotion Name	Description
EP Cockpit Promotion, 2016-Q3	Philips is pleased to offer this special promotional discount of $40,000 with the purchase of EP Cockpit. To be eligible for this promotion, orders must be received by September 30, 2016.
EP Navigator Promotion 2016-Q3	Philips is pleased to offer this special promotional discount of $40,000 with the purchase of EP Navigator. To be eligible for this promotion, orders must be received by September 30, 2016.
Mono Closer 2016-Q3	Philips is pleased to offer this special promotional discount of $50,000 with the purchase of a monoplane Allura system. To be eligible for this promotion, orders must be received by September 30, 2016.

100241 Allura Xper FD10

LIST PRICE	$2,512,540.00
DISCOUNT	$1,459,176.40
	$0.00
NET PRICE	$1,053,363.60

Buying Group: MEDASSETS SUPPLY CHAIN SYSTEMS INC. Contract #: MS03221

Addt'l Terms: Product Terms and Conditions of Sale (T&C) not printed with this solution. Refer to Contract # noted above for applicable T&C details. If Service Agreement is quoted its T&C of Sale are printed

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.

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	UNIVERSITY NORTH CAROLINA HOSPITAL
Address	101 MANNING DR CHAPEL HILL, NC 27514-4220

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	Bethann Griffith-Subik
Title	
Telephone	(919) 677-9046
Fax	(919) 677-9047
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.

Exhibit 2

Boston Scientific
Advancing science for life

Boston Scientific Corporation
Electrophysiology Group
4100 North Hamline Avenue
Arden Hills, MN 55112
www.Bostonscientific.com

CONFIDENTIAL

July 25, 2016

Brenda McClure
University of North Carolina Hospital
101 Manning Dr
Chapel Hill, NC 27514

Account #24451

We are pleased to present the following Capital Equipment Agreement (Cash Option) for the **Maestro 4000™ Cardiac Ablation System and iLab™ Intracardiac Ultrasound System.**

Please carefully review this entire Agreement and, if all terms are acceptable to you, sign it and return to me at BSCEPCorpSalesOps@bsci.com along with the required Purchase Orders by within 90 days from the date of this agreement.

If you have any questions, please don't hesitate to contact your Boston Scientific Sales Representative, John Sankel, at (800)-CARDIAC. We look forward to your response.

Regards,

Jenna Czech
EP Contract Analyst

By signing below, the parties acknowledge and accept all terms and conditions of the Agreement.

TERMS OF PAYMENT:

Net 30 Days
Boston Scientific

SUBMITTED BY: _____
(signature)

NAME: Andrew Johnson

TITLE: Manager, CRV Pricing and Contracting
Boston Scientific

DATE: _____

DELIVERY SUBJECT TO AVAILABILITY:

To Hospital

CUSTOMER'S ACCEPTANCE

BY: _____
(signature)

NAME: _____

TITLE: _____

DATE: _____

The Agreement ("Agreement") including the attached schedules, is effective as of last date of countersignature, ("Effective Date") by and between Boston Scientific Corporation ("Boston Scientific" or "we" or "us" or "our") and University of North Carolina Hospital ("Customer" or "you" or "your") and includes the capital equipment in the table below:

Capital Equipment & Service Plan Purchase Price Overview

You have agreed to purchase the following capital equipment at the below listed prices and in accordance with the Terms and Conditions herein. To the extent your purchase includes certain Equipment that requires additional Terms and Conditions, such Terms and Conditions are added for the particular Equipment in the sections that follow. In each case, such Terms and Conditions are in addition to the General Terms listed on the following page, which apply to all Equipment.

Description	Price
Maestro 4000™ Cardiac Ablation System - Equipment Package	$27,500.00
iLab™ Intracardiac Ultrasound System - Equipment Package	$122,750.00
Total Package Price	**$150,250.00**

Schedule A
The following General Terms & Conditions apply to your purchase

1. **Purchase and Sale.** In consideration of and subject to the mutual covenants and obligations set forth in this Agreement, you shall purchase from us the Equipment, software license(s) (as applicable), and services described herein.

2. **Price; Title; Purchase Order and Payment Terms.** As payment in full for the Equipment, software license (as applicable), and services reflected herein, you shall pay to us the net due reflected on this Agreement within 30 days of invoice. The price includes delivery, and if applicable, on-site installation of the Equipment, and the Standard Warranty described in Section 5 below. Title to the Equipment shall pass to you when the net due has been paid in full.

   Upon execution of this Agreement, you agree to issue a Purchase Order (P.O.) reflecting the pricing of all items you choose to purchase, as referenced above. No Equipment will be shipped or services delivered prior to receipt of the appropriate P.O.
   Payment terms shall be Net 30 days from date of invoice. Any amounts not paid within 30 days of invoice shall accrue interest at the rate of 1-1/2% per month until paid, but in no event more than the maximum rate permitted by law.

   We shall add to all charges any sales, excise, use or other taxes or fees, now in effect or hereafter levied, which we may be required to pay or collect in connection with this Agreement.

3. **Proper Reporting.** You agree to: (i) properly report all products, pricing and discounts received from us on your claims for payment and cost reports; (ii) retain a copy of this Agreement, together with the invoices for purchase and documentation accompanying such invoices; and (iii) permit agents of the U.S. Department of Health and Human Services or any state Medicaid agency access to such records upon request.

4. **Limit on Liability.** THE ONLY WARRANTY BEING GIVEN TO YOU HEREUNDER IS THAT WHICH IS PROVIDED IN THE APPROVED LABELING OF THE PURCHASED EQUIPMENT. WE EXPRESSLY DISCLAIM ALL OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HANDLING AND STORAGE OF THE EQUIPMENT AS WELL AS OTHER FACTORS RELATING TO THE PATIENT, DIAGNOSIS, TREATMENT, SURGICAL PROCEDURES, AND OTHER MATTERS BEYOND OUR CONTROL MAY DIRECTLY AFFECT THE EQUIPMENT AND RESULTS OBTAINED FROM IT. WE SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF EQUIPMENT. WE NEITHER ASSUME, NOR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US, ANY OTHER OR ADDITIONAL LIABILITY OR RESPONSIBILITY IN CONNECTION WITH EQUIPMENT.

5. **One Year Standard Warranty.** We shall repair or replace, at our option, any part of the Equipment that we determine becomes defective within one year of delivery (or if applicable, installation). Software updates, if applicable, are included with your purchase as part of the one year standard warranty. You shall be responsible for the ongoing support and maintenance of the Equipment not covered by this one year standard warranty and after the time of the standard warranty has expired. No preventive maintenance is included, except where noted. Service for the Equipment is provided during normal working hours (8:00 a.m. to 5:00 p.m., Monday through Friday, except on our declared holidays) and consists of on-call remedial maintenance and repair or replacement of unserviceable or defective components. The one year standard warranty does not cover: (A) any intentional or grossly negligent acts or omissions by you or your employees or agents; (B) attempts to repair, service or access the internal components of the Equipment made by persons other than our authorized personnel, without our prior written approval; (C) misuse of the Equipment, including, without limitation, use of the Equipment for any application or function for which it was not designed; (D) damage to the Equipment from use of operating supplies, consumable parts or cleaning materials, not approved by us; (E) damage caused by any hardware or software not manufactured and installed by us that is installed on the Equipment; (F) damage resulting from the transportation or storage by you or other causes within your reasonable control; or (G) **disposable items or accessories, including but not limited to catheters, cables, tubing, motor drive covers, introducers, etc.** (Note: specific warranty terms for particular accessories may apply). In the event of any of the foregoing, we will have the right, in our sole discretion, to declare the warranty void. You shall grant us full and free access to the Equipment to perform maintenance service and will be charged for time waiting for Equipment access (after a 30-minute grace period). All services or charges (including travel time) not covered by the one year standard warranty will be billed to you at our then current rates.

6. **No Network Liability.** You expressly acknowledge that in no respect shall the integration or use of Equipment in connection with your internal network shall create liability for us related to network functionality or security. You remain fully responsible for the functionality and security of your internal network.

7. **Patient Identifying Information.** To the extent the Equipment displays, stores, or otherwise makes accessible any patient's Protected Health Information ("PHI" as defined in HIPAA), you agree to remove such PHI prior to our servicing the Equipment.

8. **Confidential Information:** Certain confidential business information (including, without limitation, this Agreement, its terms and the negotiations leading to this Agreement) will not be disclosed to any third party without the prior written approval of the non-disclosing party, provided that such information may be disclosed to physicians, accountants, attorneys, and auditors who have agreed in writing not to use, disclose, or rely on that information for any purpose other than advising the disclosing party.

9. **Software License(s) (as applicable).** The Equipment is provided to you as part of a system which, in addition to the Equipment and related documentation, may include our software and software licensed to us by third parties (collectively the "System"). To the extent the System (or Systems) contains software; such software is licensed only and not sold to you. The software license is subject to certain limitations, e.g. you are permitted to use the software in clinical applications to diagnose and treat human patients, but you are not permitted, and you may not permit others, to make copies of the software, sublicense the software, reverse engineer the software, make derivative works, use the software for unauthorized activity, or otherwise use or exploit the software except as explicitly permitted by this agreement.

   a. **Limited License Grant.** Subject to the terms and conditions of this Agreement, Boston Scientific grants Customer a non-exclusive, non-transferable, non-sublicensable license to access and use the System, and all applicable accompanying documentation and user guides, for the sole purpose of diagnosis and treatment of human patients consistent with approved indications for use. Any use of the System not expressly permitted in this Agreement is prohibited.

   b. **Use Restrictions**: Except as expressly permitted in this Agreement, Customer will not, and will not allow or authorize any third party to: (i) allow use of or access to the System, or sublicense, lease, (including operation of a time sharing service or service bureau), transfer or assign its rights to access and use the System, in whole or in part, to a third party, ; (ii) alter, enhance, make derivative works, or otherwise modify the System; (iii) disassemble, decompile, reverse engineer or otherwise attempt to derive the source code System; (iv) operate the system for any activity other than diagnosing and treating human patients (v) remove or destroy any proprietary markings, confidential legends or any trademarks, trade names or brand names of Boston Scientific or its suppliers placed upon or contained within the System; (vi) post or transmit into the System any information which would violate any applicable local, provincial or federal law; (vii) post or transmit into the System any information or software which contains a virus, Trojan horse, worm or other harmful component; or (viii) upload, post, publish, or transmit into the System any information that violates the intellectual property rights, privacy rights or any other rights of a third party.

   c. **Data Protection and Usage.** Customer may be provided with a login and password to access the System. Customer agrees to keep the any login and password information secret and take all necessary precautions to safeguard their confidentiality. Boston Scientific may collect and use data for purposes of administering and use of the System, operating the System, enabling Customer to follow-up with Boston Scientific for complaint handling, for global regulatory reporting, and for statistical purposes, all on the understanding that no sensitive personal data shall be collected from Customer.

   d. **License Termination.** This license may be terminated for material breach.

   e. **Transfers.** If Customer wishes to assign or otherwise transfer this license or any of its rights or obligations under this Agreement, to anyone, Customer must obtain Boston Scientific's prior written consent, which will not be unreasonably withheld, provided that it will be reasonable to withhold consent if the assignee or transferee is a competitor (or agent thereof) of Boston Scientific or its affiliates. Boston Scientific may assign or transfer this Agreement or any of its rights or obligations hereunder, to any of its affiliates without any notice to or consent of Customer. Any attempted assignment or transfer not expressly permitted by the foregoing will be void.

10. **Notices.** All notices and other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given, made, and received only when (i) delivered personally, by messenger, or by recognized courier service such as Federal Express, (ii) sent by electronic facsimile with proof of confirmation, or (iii) four days following the day when deposited in the U.S. Mail by registered or certified mail, postage prepaid, return receipt requested, addressed as set forth below for us; and for you, to the address listed on page one (1) of this Agreement:

If to Boston Scientific:
Boston Scientific Corporation
Attn: Business Operations Manager
150 Baytech Drive
San Jose, CA 95134-2302

With a copy to:
Boston Scientific Corporation
Attn: Sr. Corporate Counsel
4100 Hamline Ave. N
St. Paul, MN 55112

11. **Miscellaneous.**

a. This Agreement constitutes the entire agreement between the parties with respect to the purchase of the Equipment and supersedes and replaces all prior agreements, oral or written, between the parties relating thereto.

b. The relationship between us and you is that of independent contractors and not that of principal and agent, employer and employee, partners or joint ventures.

c. This Agreement shall be construed and enforced in accordance with the laws of the State in which you are incorporated without reference to its conflicts of laws provisions. If any provision or portion hereof is determined to be unenforceable by a court of competent jurisdiction, such provision or portion shall be modified to give the fullest possible effect to such provision and the remainder of this Agreement shall remain in full force and effect, provided that its general purposes remain reasonably capable of being effected.

d. Each party represents that (i) such party has the full right, power and authority to enter into this Agreement and be bound by its terms, and to perform its duties hereunder, and (ii) that such party's execution and delivery of this Agreement, and the consummation of the transactions described in this Agreement, do not violate or conflict with any agreement or obligations of such party to any other person or entity.

e. Terms and conditions in any P.O. or other document issued by you in response to and/or related to this Agreement shall not be deemed to be a part of this Agreement, nor operate to modify any term or condition contained in this Agreement, and shall not be binding upon us.

f. Neither Party may assign, transfer, convey, sublet or otherwise dispose of any of its right, title or interest in this Agreement without the prior written approval of the other party; provided however, we may assign this Agreement to any of our affiliated entities without your consent. For purposes of this Agreement, affiliated entities shall mean an entity that owns or controls, is owned or controlled by, or is under common ownership or controlled by us. Subject to the limitations expressed herein, this Agreement will be binding upon and inure to the benefit of the parties hereto, their successors, legal representatives, and permitted assigns.

g. Sections 4 through 8 and those provisions of this Section 9 and 11 that are enduring in nature shall survive termination of this Agreement for any reason.

12. **Training.** Training opportunities (in-service, etc.) vary depending on the Equipment you have purchased. Please contact your Boston Scientific sales representative to discuss training options.

a. Coinciding with the schedule for the delivery or installation of your Equipment (as applicable), on-site training is provided by a highly qualified Boston Scientific Clinical Specialist to enhance the proficiency of your users. Your training is comprehensive and requires that you make a commitment to have staff available for all training hours. Case support training will require you to have pre-scheduled cases to aid in the training process. Any additional training required beyond the initial on-site training will be available at the current training rates.

We recognize that training and support does not end with the delivery or installation of your Equipment. To optimize the efficiency and accuracy of your Equipment, we offer follow-up training and technical support through the purchase of extended support plans. Additional training beyond can be scheduled at current training rates.

❖ Section 1 – Maestro 4000™ Cardiac Ablation System Pricing & Terms of Sale

Equipment Pricing

Description	Item	Part No.	Qty	Price
Maestro 4000™ Cardiac Ablation System	1	M00440000	1	Included
Maestro 4000™ Pod	2	M00440100	2	Included
Maestro 4000™ Controller Foot Switch	3	M004218500	1	Included
Maestro 4000™ Controller to Remote Cable (20 ft.)	4	M0046610	1	Included
Total Price				**$27,500.00**

Terms & Conditions

The following additional terms & conditions apply specifically to Maestro 4000™ Cardiac Ablation System.

1. Cables. Warranty on cables is limited to 90 days.

❖ Section 2 – iLab™ Intracardiac Ultrasound Imaging System Pricing & Terms of Sale

Equipment Pricing

Description	Item	Part No.	Qty	Price
iLab™ Intracardiac Ultrasound Imaging System Cart	1	M004EPIL20CART0	1	Included
iReview Software	2	H74900134010	1	Included
Total Package Price				**$122,750.00**

Terms & Conditions

The following additional terms & conditions apply specifically to iLab™ Intracardiac Ultrasound Imaging System.

1. Cables. Warranty on cables is limited to 90 days.

Exhibit 3

Quote Number: 9900

Baylis MEDICAL

Quotation

Customer:
UNC HOSPITALS
Attn: Accounts Payable
Shared Service Center Suite 100
4400 Emperor Blvd
Durham NC 27703

Teresa Root Phone: 919-957-5792
Fax: 919-966-6848

Quote Date: 10-Aug-2016
Expiry Date: 9-Oct-2016

Terms: Net 30 days
F.O.B: Origin
Freight: Prepay and add to invoice
Sales Person: Will Clouse
wclouse@baylismedical.com

Line	Part Number	Description	Qty	UOM	Unit Price	Discount	Ext Price
1	RFP-100A	BMC Radiofrequency Puncture Generator	1	PC	19,950.00	14,962.50	4,987.50

Baylis Medical Company Inc.
5959 Trans-Canada Highway
Montreal, QC, H4T 1A1, Canada
Tel: (514) 488-9801 / Fax: (514) 488-7209
www.baylismedical.com

Total Value Discounted
14,962.50 USD

Total: 4,987.50 USD

Applicable sales taxes may be added

Note: *Freight Charges will be prepaid and applied to customer invoice at time of shipment*

This quote may include a discount, including but not limited to a bundled discount, as indicated above. Any such discounts may be reportable to governmental authorities. The value of the discount may be apportioned amongst the various products included in this quote.

By accepting this quote and issuing a related Purchase Order, Customer agrees to transfer any Customer RFP-100-115 RF puncture generators to Baylis and to permit Baylis' personnel access to Customer's facility(ies) to remove any such RFP-100-115 generators from such facilities. No credit, discount or other consideration will be provided for returning the RFP-100-115 generators.

Exhibit 4

Medtronic

July 26, 2016

UNC Health Care System
Customer # 1107445
101 Manning Drive
Chapel Hill, NC 27514

To Whom It May Concern:

In order that your facility may continue to provide its patients and physicians the most advanced medical technology while controlling the economic impact to the institution, Medtronic USA, Inc. ("Medtronic") is pleased to offer the attached proposal.

We are driven by companywide goals for continual quality improvement because of our uncompromising commitment to meeting customer needs. The goals of Customer-Focused Quality are drawn from our mission "to strive without reserve for the greatest possible reliability and quality in our products...." Our commitment to this mission has enabled us to improve teamwork around the world; accelerate product development cycles to bring technology to patients faster; introduce new therapies for previously unmet medical needs; and create greater satisfaction for medical professionals and patients. Customer-Focused Quality is the critical factor in Medtronic's success, and it is our leadership strategy.

This document contains proprietary information that is not to be used by or shared with any third parties, except where such disclosure is required by law, nor is it to be used outside of the context of this agreement between Medtronic and your facility.

If there are any questions, feel free to contact your local sales representative, Ann Munoz, at (919) 349-9575. We look forward to your business and will work hard to exceed your expectations. On behalf of Medtronic, thank you for the opportunity to submit this proposal.

Sincerely,

MEDTRONIC USA, INC.

Jon Moesler
Senior Contract Analyst
Medtronic USA, Inc.

Medtronic USA, Inc. 8200 Coral Street NE Mounds View, MN 55112 **("Medtronic")**	**UNC Health Care System** 101 Manning Drive Chapel Hill, NC 27514 **("Customer")**

Medtronic USA, Inc. ("Medtronic" or "Contractor") offers to sell the products ("Products") (as defined in Exhibit A) to UNC Health Care System ("Customer") in accordance with the terms and conditions of this Agreement.

By signing below, the parties indicate their agreement to be bound by the terms and conditions outlined in this Agreement. This Agreement will be effective when signed by both parties, which may be done in one or more counterparts, each of which shall be deemed an original and which together shall constitute one and the same Agreement.

Medtronic USA, Inc
Signature
Print Name
Title
Date

UNC Health Care System
Signature
Print Name
Title
Date

Service Contract:

Upon expiration of warranty, we recommend the purchase of an annual Service Contract. If purchased prior to the expiration of the warranty period, the Service Contract will commence the day following the expiration of the warranty period.

Contractual Signature:

The undersigned acknowledges to have received and understands the information on Medtronic USA - AF Solutions' Service Agreements and DOES NOT wish to purchase a Service Agreement at this time.

Please initial: _____

By signing above, you agree that this offer and Medtronic USA - AF Solutions' Terms and Conditions, a copy of which is attached hereto (collectively, this "Offer") constitute the entire agreement between you and Medtronic USA - AF Solutions with respect to the purchase and sale of Medtronic USA – AF Solutions' products and services (the "Products") and supersedes all prior agreements, understandings, negotiations and discussions, whether written or oral. There are no conditions, covenants, agreements, representations, warranties or other provisions, express or implied, collateral, statutory or otherwise, relating to the subject matter hereof except as provided in this Offer. No amendment or waiver of any provision of this Offer shall be binding on either party unless consented to in writing by such party.

Furthermore, whether or not you sign above, by sending to Medtronic USA - AF Solutions any purchase order, written acknowledgement or other similar document (together with all other documents relating thereto, an "Order") with respect to the order of any Products, you shall be deemed to have accepted this Offer and to have agreed to purchase the Products on the terms and conditions of this Offer. For greater certainty, and without limiting the foregoing, no provisions of any Order, which are inconsistent with or in addition to the provisions of this Offer shall be binding upon Medtronic USA - AF Solutions unless consented to in writing by Medtronic USA - AF Solutions.

Console Purchase Details:

REF #	Description	List Price	Price	QTY	Extended Price
Console					
106A3	CryoConsole	$195,000	$175,000	1	**$175,000**
Reusable Accessories - Opening Order					
2037A	Auto Connection Box	$675	$675	2	$1,350
104FS	Footswitch	$1,150	$1,150	1	$1,150
2035W	ECG Cable	$110	$110	2	$220
1035CW	White Scavenging Hose 6.0m / 20ft	$250	$250	1	$250
103N2	N_2O Refrigerant Tank (full)	$300	$300	4	$1,200
1038N	North American Power Cord	$45	$45	1	$45
1036W	Wrench	$0	$0	1	$0
	CryoConsole Operator's Manual for REF 106A3	$0	$0	1	$0
CryoConsole					$175,000
Accessories					$4,215
Total					***$179,215***
Discount if PO is received by July 28, 2016					*($9,215)*
Invoice Amount*					***$170,000***

*All pricing is quoted in US dollars. Does not include any applicable sales tax.

Medtronic USA - AF Solutions' Terms and Conditions will apply to all purchases in this agreement. Medtronic USA - AF Solutions warrants all parts of the Cardiac CryoAblation System sold hereunder to be free from defects in materials and workmanship under normal usage for a period of twelve (12) months from the date of installation. This warranty covers all parts, labor and ancillary costs needed to repair the console during the warranty period.

Exhibit A

Terms and Conditions of Sale:

CVG Standard Terms and Conditions of Sale / UNC Hospitals Terms and Conditions

1. Product Purchase and Prices. During the term of this Agreement, Customer may purchase the products in Exhibit B (the "Products") from Medtronic at the prices indicated therein subject to these terms.

2. Term/Termination. The term of this Agreement (the "Term") shall be for a two year period from the date it is signed by authorized representatives of each party. Upon expiration of the Term, the pricing and terms of this Agreement will remain in effect until either a new contract is executed by the parties or a party terminates the agreement as provided herein. This Agreement may be terminated by either party upon written notice to the other party as follows:

(a) Effective immediately, if the other party has become insolvent, has filed for bankruptcy, or has been debarred or excluded from participating in federal health care programs;

(b) Effective 30 calendar days after written notice of breach of a material term of this Agreement or a Product Schedule, unless such breach is fully remedied within that 30 day period; or

(c) Effective 60 days after the date of notice of termination without cause.

3. Payment Terms. Payment terms are NET 60 days from date of invoice.

4. Delivery. All Products will be shipped F.O.B. Destination. Unless otherwise specified, Medtronic will pay the freight charge for second day delivery and actual shipping and handling charges may be added to each invoice. Additional charges related to special shipment and/or air shipment requested by Customer shall be prepaid by Medtronic, invoiced to Customer, and a reasonably shipping and handling charge may be added to each invoice for Products shipped in that manner.

5. Confidentiality. UNC Health Care agrees that the pricing and terms of this Agreement are proprietary and confidential information and shall not be disclosed to any third party or otherwise made public, without prior written authorization of Medtronic, except where such disclosure is required by law. *Trade Secrets Designated by the Contractor*. For purposes of this Agreement, the term "Trade Secrets" is restricted solely to information provided by the Contractor that satisfies the definition of trade secret set out in N.C.G.S. § 66-152, and it does not include Contractor price information under any circumstances. The Contractor represents that any information disclosed to UNC Health Care that it has designated as trade secret meets the requirements of N.C.G.S. § 66-152. UNC Health Care, as an agency of the State of North Carolina, may serve as custodian of the Contractor's confidential information and not as an arbiter of claims against the Contractor's assertion of confidentiality. Insofar as is permitted by law and regulatory or accrediting agencies, UNC Health Care will maintain the confidentiality of the Contractor's confidential information and information that Contractor has represented in good faith as meeting the requirements of N.C.G.S. § 66-152. Notwithstanding, if an action is brought pursuant to the North Carolina Public Records Act, N.C.G.S. § 132 (North Carolina Public Records Act)., or other authority, to compel UNC Health Care to disclose information the Contractor has designated as confidential or trade secret, the Contractor agrees that it will intervene in the action through its counsel and participate in defending UNC Health Care, including any public official(s) or public employee(s). The Contractor agrees that it shall hold UNC Health Care and any official(s) and individual(s) harmless from any and all damages, costs, and attorneys' fees awarded against UNC Health Care in such an action. UNC Health Care agrees to promptly notify the Contractor in writing of any action seeking to compel the disclosure of the contractor's confidential information. UNC Health Care shall have the right, at its option and expense, to participate in the defense of such an action through its counsel. UNC Health Care shall have no liability to the contractor with respect to the disclosure of the Contractor's confidential information ordered by a court of competent jurisdiction pursuant to N.C.G.S.§ 132-9 or other applicable law, or required by law or regulatory or accrediting agencies.

UNC Health Care System Confidential Information Protected by Law. For purposes of this Agreement, "UNC Health Care System confidential information" shall include certain classes of information whose confidentiality UNC Health Care System is obligated by federal or state law to protect, including patient information and employee information of which UNC Health Care System is custodian. The Contractor agrees to hold UNC Health Care System confidential information in strictest confidence and (a) to use any UNC Health Care System confidential information disclosed to it solely for the purpose required in connection with the business relationship of the parties as expressed in this Agreement; (b) not to disclose any UNC Health Care System confidential information to any person or entity other than its agents, employees, or representatives who have a need to know such information and in accordance with the provisions of this Section and in accordance with the Contractor's obligations under state and federal law; (c) not to reproduce, distribute, or otherwise disseminate UNC Health Care System confidential information; and (d) to return UNC Health Care System confidential information to UNC Health Care System upon its request; provided, however, Medtronic shall have no obligation to return or destroy any electronic records, including electronically archived records.

6. Product Training and Support.

(a) Training on Products. Medtronic provides instruction, education, and training on the safe and effective use of its Products to health care providers, including those who may not use the product but recommend it.

(b) In-service Training. Medtronic shall, at its expense, make available to Customer appropriate in-service training on the safe and effective use of Medtronic Products purchased under this Agreement.

(c) Additional Training. Certain of Customer's employees and non-employee medical personnel may be eligible to participate in other training opportunities that are offered, from time to time, by Medtronic. Such training opportunities are generally comprised of instruction on the safe and effective use and management of products and therapies; indications for products and therapies; patient selection criteria; training on product-related disease states and the appropriate and efficient use of the products in the continuum of patient care. Training may also include quality aspects of products, design characteristics and properties and other science surrounding the use of products to the extent it provides health care professionals information on how to use the products safely and effectively; as well as training and information on reimbursement of products to identify appropriate coverage, coding or billing of products and procedures using those products as well as information to support the accurate and responsible billing to government health care programs.

(d) Training Costs. To accommodate training schedules, timing, location of attendees and the availability of adequate training facilities, Medtronic may, where necessary and otherwise consistent with its policies, cover travel expenses for attendees such as airfare, lodging, meals and transportation in connection with the types of training opportunities described in this section. To the extent possible Medtronic will make payment directly to the vendors providing the services, but in some cases reimbursement may be provided directly to attendees.

7. Warranty.

With respect to the CryoConsole and the associated reusable accessories, subject to the limitations herein, Medtronic warrants all parts sold hereunder to be free from defects in materials and workmanship under normal usage for a period of twelve (12) months from the date of installation. This warranty covers all parts, labor and ancillary costs needed to repair the console during the warranty period.

NOTWITHSTANDING THE FOREGOING, ELECTRICAL UMBILICAL AND COAXIAL UMBILICAL CABLES ARE INDICATED FOR "SINGLE USE ONLY" AS PER THE CRYOCONSOLE OPERATORS MANUAL AND ARE NOT INTENDED FOR RESTERILIZATION. USE OF RESTERILIZED CABLES IN PROCEDURES VOIDS THE WARRANTY PROVIDED HEREIN WITH RESPECT TO DISPOSABLE PRODUCTS USED IN CONNECTION WITH, OR WARRANTY CLAIMS OTHERWISE ARISING OUT OF, SUCH PROCEDURES.

NOTWITHSTANDING THE FOREGOING, TO QUALIFY FOR THE WARRANTY PROVIDED HEREIN, THE CRYOCONSOLE MUST BE USED IN ACCORDANCE WITH LABELING AND NOT ALTERED OR SUBJECTED TO MISUSE, ABUSE, ACCIDENT, OR IMPROPER HANDLING.

Customer is solely responsible for obtaining nitrous oxide gas and gas suppliers suitable for use with the Medtronic Cyroablation System based on the information provided by Medtronic, including in the labeling, guidelines, specifications, operator manuals, and instructions for use. Customer must also use only Medtronic-provided gas tanks with the CryoConsole. ANY ASSISTANCE BY MEDTRONIC IN CONNECTION WITH THE NITROUS OXIDE GAS OR GAS SUPPLIERS WILL BE AT MEDTRONIC'S SOLE DISCRETION AND UNLESS REQUIRED BY APPLICABLE LAW WILL NOT CREATE ANY ADDITIONAL WARRANTY OR LIABILITY ON THE PART OF MEDTRONIC WITH RESPECT TO CUSTOMER'S USE OF SUCH NITROUS OXIDE GAS OR GAS SUPPLIERS. FAILURE TO FOLLOW MEDTRONIC'S INSTRUCTIONS OR LABELING, INCLUDING THOSE RELATED TO THE SPECIFICATION FOR AND USE OF THE NITROUS OXIDE AND GAS TANKS, MAY RESULT IN DAMAGE TO OR INOPERABILITY OF THE CRYOCONSOLE, CATHETERS, AND OTHER COMPONENTS OF OR ACCESSORIES TO THE MEDTRONIC CRYOABLATION SYSTEM AND VOIDS ANY ASSOCIATED WARRANTIES.

UNLESS PROHIBITED BY APPLICABLE LAW, EXCEPT AS IS EXPRESSLY SET FORTH IN THE PRECEDING PARAGRAPH AND AS SET FORTH ABOVE, MEDTRONIC EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WHETHER AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY

OTHER MATTER. UNLESS PROHIBITED BY APPLICABLE LAW, THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE EXCLUSIVE REMEDIES AVAILABLE TO CUSTOMER FOR BREACH OF WARRANTY. UNLESS PROHIBITED BY APPLICABLE LAW, MEDTRONIC SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL OR CONSEQUENTIAL OR PUNITIVE DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF WARRANTY, OTHER CONTRACT, TORT, OR OTHERWISE.

8. Treatment of Discounts. The parties intend to establish a business relationship in which any rebates, discounts, payments and credits that may be provided to Customer comply with the exceptions to the Medicare and Medicaid Anti-Kickback statute set forth at 42 U.S.C. § 1320a-7b(b)(3) and the "Safe Harbor" regulations regarding discounts set forth in 42 C.F.R. § 1001.952(h); and the parties believe that the relationship contemplated by this Agreement is in compliance with those requirements. As to such discounts and rebates, the parties agree to fulfill their obligations under the Safe Harbor and the Customer agrees to report the discounts and rebates to its state or federal payors in accordance with the requirements of the Medicare/Medicaid Anti-Kickback Statute and Regulations and any applicable state or federal laws or regulations.

9. Access to Records. To the extent applicable, the North Carolina State Auditor and the using agency's internal auditors shall have reasonable access to persons and records as a result of all contracts or grants entered into by State agencies or political subdivisions in accordance with General Statute 147-64.7 and Session Law 2010-194, Section 21.

10. Limitation of Liability. Unless prohibited by applicable law, in no event shall a party be liable to the other party for special, incidental, consequential, punitive or indirect damages in connection with the creation, existence, or performance of this Agreement or any Product Schedule.

11. Modification/Waiver. This Agreement may be amended, changed, or modified only by mutual written agreement of the parties. This Agreement may not be amended by an agreement required by Customer for Medtronic's representatives to gain access to Customer's facility. No waiver of a breach by a party will be a waiver of any subsequent breach.

12. Entire Agreement. This Agreement, including the exhibits, sets forth the entire agreement of the parties regarding the sale and purchase of the Products.

13. Compliance with Laws: Each Party shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to its performance of this Agreement, including those of federal, state, and local agencies having jurisdiction and/or authority, and, specifically including the Health Insurance Portability and Accountability Act of 1996 and its accompanying regulations ("HIPAA").

14. Equal Employment Opportunity and Facilities Access: During the performance of this contract [or purchase order], the contractor/vendor agrees to comply with all Federal, state and local laws respecting discrimination in employment and non-segregation of facilities including, but not limited to, requirements set out at 41 CFR §§60-1.4, 60-300.5 and 60-741.5, which equal opportunity clauses are hereby incorporated by reference.

15. Medicare Record Access: In compliance with 42 U.S.C. 1395x (v)(1)(i) and implementing regulations, the Contractor agrees, until the expiration of four (4) years after the services are furnished under this Agreement, to allow the Secretary of the Department of Health and Human Services and the Comptroller General access to this Agreement, all applicable purchase orders, and to the books, documents and records of Contractor necessary to verify the nature and extent of the costs of this Agreement. The Contractor further agrees that if any of the duties of this Agreement are carried out by a subcontractor of the Contractor, such subcontract will contain a clause to the effect that, until the expiration of four (4) years after the services are furnished under such subcontract, the Secretary of the Department of Health and Human Services and the Comptroller General will have access to such subcontract and to the books, documents and records of the subcontractor necessary to verify the nature and extent of the costs of such subcontract. This Section will survive the expiration or termination of this Agreement.

16. Severability: In the event that any provision of this Agreement is held to be invalid or unenforceable, the remainder of this Agreement will remain in full force and effect.

17. Indemnity: Medtronic agrees to indemnify, defend and hold harmless Hospital, its employees or agents ("Indemnitees") against any claims, actions, losses, suits, judgments, awards, and expenses (hereinafter "Claims") associated thereto for personal injury, property damage or death to any third party, made or instituted by a third party against Indemnitees to the extent said Claims are caused by the malfunction or defect of the Medtronic Product purchased under the terms of this Agreement (the "Product") (hereinafter said Claims are referred to as the "Indemnifiable Claims"). Indemnitees agree to notify Medtronic as soon as it becomes aware of any Claim, in which it is alleged that the loss was caused by the malfunction or defect of the Product, and to cooperate with and authorize Medtronic to carry out the sole investigation, management and defense of any such Indemnifiable Claim. Medtronic agrees, at its expense, to provide attorneys to defend any such Indemnifiable Claims brought or filed against Indemnitees, whether or not such Indemnifiable Claims are rightfully brought or filed. Indemnitees agree they will not compromise or settle any Indemnifiable Claims without the prior written consent of Medtronic.

Medtronic's obligations set forth in the preceding paragraph shall not apply to any liability arising out of or attributable to: (a) any negligence, willful misconduct, gross negligence, or criminal acts by Indemnitees; (b) any modification made to any Product by Indemnitees; or (c) any actions taken or statements made by Indemnitees that constitute the unauthorized practice of medicine.

Indemnitees shall promptly notify Medtronic, in writing, after learning of a Claim that may be covered by this Indemnity. Such notice shall describe with reasonable specificity the factual basis for the claim and the amount of the claim, if known, and shall include a copy, if available, of all pleadings or other writings setting forth the claims. Indemnitees agree and understand that failing to provide the required notice to Medtronic or settling or compromising any Indemnifiable Claims without Medtronic's prior consent or failing to cooperate with or authorize Medtronic to investigate, manage or defend an allegedly Indemnifiable claim shall constitute prejudice to Medtronic and shall void Medtronic's obligation to indemnify, defend and hold Indemnitees harmless with respect to such Claim.

18. Advertising: The parties shall not use the award of this Agreement or participation in this agreement as part of any news release or commercial advertising without the prior written consent of the other party.

19. Governing Law: This Agreement is made under and shall be governed and construed in accordance with the laws of the State of North Carolina.

20. Taxes: Any sales and use taxes shall be invoiced as a separate item. UNC Health Care System shall not be responsible for any other taxes, including but not limited to, personal property tax and income tax assessed on Medtronic or the services, goods, hardware, software, and/or equipment provided under this Agreement.

21. FORCE MAJURE: Neither party will be responsible for any failure or delay in its performance under this Agreement due to causes beyond its reasonable control, including, but not limited to, governmental laws and regulations, lockout, riot, war, fire, acts of God, accident, failure or breakdown of components necessary for order completion.

22. ASSIGNMENT: Neither party may assign this Agreement without the written agreement of the other party, which consent shall not be unreasonably withheld, which shall not be unreasonably withheld; except that Medtronic may assign this Agreement to a wholly-owned or commonly controlled affiliate upon notice to Customer.

ST. JUDE MEDICAL

EnSite Velocity ™ Cardiac Mapping System
Capital Purchase Agreement
Teaching Institution

This Agreement is entered into by and between St. Jude Medical S.C., Inc. d/b/a St. Jude Medical, U.S. Division ("USD"), a Minnesota Corporation with its principal place of business in Austin, Texas and University of North Carolina Hospitals, Chapel Hill, NC, Customer Number 1000010265 ("Account"). The foregoing will be collectively referenced herein as "the Parties". This Agreement will be effective upon full execution by authorized signatories of the Parties.

Offer is valid through December 10, 2016.

PURCHASE TERMS AND CONDITIONS

Account will issue one purchase order ("P.O.") in the amount of $299,300 (plus any applicable shipping and taxes) covering the cost of the Products detailed in the table below at the quantities set forth therein.

PRODUCT DESCRIPTION	Order No.	Qty	List Price	Teaching Institution Customer Price
EnSite Velocity™ Cardiac Mapping System Advanced electrophysiology mapping system creates non-fluoroscopic 3D images of the heart chamber(s) through the use of either EnSite NavX™ Visualization and Navigation Technology or the non-contact EnSite Array™ catheter. System provides diagnostic tools which represent the anatomy of the cardiac chamber and electro-anatomical information (e.g. activation maps, voltage maps) as well as tracks the real-time location of electrophysiology catheters within the cardiac structure. System also assists in recording the location of ablation lesions as applied by an ablation generator. Includes one (1) full System upgrade, but only if a full commercial System upgrade release occurs within twelve (12) months of the Effective Date of the Agreement. (USD makes no representations or warranties herein that a full commercial upgrade release will, in fact, occur within the 12-month period.) Display Workstation (DWS5; Most current version) with quad dual core processors running most current version of operating system software. o High Definition 24" Widescreen Monitor for use by Workstation operator o (1) High Definition 24" Widescreen Monitor for physician viewing (may be replaced with 21" monitor at no cost) o (1) Mobile cart - Included optional accessory o (1) Printer - Included optional accessory o (1) Monitor stand - Included optional accessory o (2) Fiber optic cables for connection of the EnSite Velocity System DWS and/or remote monitor EnSite Amplifier Subsystem o 128 channel amplifier o (1) GenConnect™ interface module for connection to a St. Jude Medical Ampere™ generator or IBI1500T9 ablation generator. o (1) GenConnect™ interface module for connection to an alternative manufacturer's ablation generator. Brand will be determined at pre-	EE3000-V	1	$324,900	$180,000

installation. ○ (1) RecordConnect™ cable interface for connection to a recording system. Brand will be determined at pre-installation. ○ (1) NavLink™ module for connection of NavX surface electrode patches ○ (1) ArrayLink™ module for connect of the EnSite Array™ catheter ○ (1) CathLink™ module - Included optional accessory ○ (1) Mobile cart - Included optional accessory ○ (2) Rail clamps for connecting ArrayLink or CathLink to patient table - Included optional accessory ○ All cables, power cords, keyboards, etc. for above Includes initial one year Assurance PLUS Plan (1) Anti Fatigue Mat Instructions for Use (IFU) EnSite Connect™ Remote Access for real time technical support through a secure broadband connection. Does not include initial stocking order of EnSite NavX patches or EnSite Array catheters				
WorkMate™ Claris™ Recording System 56 with EP-4 Cardiac Stimulator High-performance electrophysiology recording system for collecting, displaying and storing data from multiple sources within the electrophysiology (EP) lab. ▪ **Signal Clarity** - Unique ClearWave™ signal acquisition technology enables diagnosis with amplified confidence. With fast post-pacing recovery, high sample rates, and low baseline ablation noise, the electrograms displayed on the high-resolution WorkMate Claris System assist with fast and accurate diagnosis. ▪ **Enhanced Integration** - Seamless connections among multiple IT systems and platforms are designed to increase operator efficiency without sacrificing patient care. ▪ **Increased Efficiency** - Key user interface and hardware design improvements enable both current users and those new to the WorkMate Claris System to quickly become proficient with its setup and operation. TECHNICAL DESCRIPTION ***Advanced Display Workstation*** ▪ DVD-RW Drive ▪ Mouse, Custom Keyboard ▪ Basic Image Capture System (2 Black & White Inputs) ▪ Network Connection to Hospital System ▪ Inbound/Outbound Data Interface ○ Allows the WorkMate™ Claris™ System to connect to an external data source, archival of signals to a hospital file server ▪ Display of Signal FFT Data ▪ Ablation Data Interface (RF & Cryo) ▪ Integrated cardiac stimulator control software ***Amplifier with ClearWave™ Technology*** ▪ Up to 448 Channel Display capability ▪ 56 Intracardiac Electrode Inputs ▪ 4 Analog Input Channels ▪ 4 Analog Output Channels ▪ 4 Physiologic Input Channels ▪ 12 Surface ECG Channels ▪ Catheter Interface Module(s) ***Miscellaneous*** ▪ (4) 24" High Resolution 16:9 aspect ratio Widescreen Monitors ▪ (1) Color Printer ▪ WorkMate™ Claris™ 12 Lead ECG Cable ▪ Cables ▪ (1) Anti Fatigue Mat ***Cardiac Stimulator*** ▪ Integrated EP-4 Four Channel Cardiac Stimulator ▪ Stimulator Touch Screen Control	H700123	1	$250,000	$115,000

Physiologic Pressure Monitoring • (1) Pressure Transducer Cable (Up to 4 pressure Channels) ***Carts*** • (1) Primary Workstation Cart - 48" • (1) Bedside Slave Cart - 24" ***Warranty Information for* WorkMate™ Claris™ *only*** • 1 Year Warranty on Hardware and Software Upgrades • 90 Day Warranty on Cables and Batteries				
WorkMate™ Additional Slave Monitor Kit	WM-SMK-110	1	$4,000	$2,800
56 Pin Cath Junction Bx w/ Safety Socket	100034292	1	$1,900	$1,500

SALES CONTACT INFORMATION

Sales Rep: David Johnson Tel: 919-522-7878	**To Order:** St Jude Medical **Toll Free: 800-374-8038** Toll Free Fax: 800-374-2505

CUSTOMER SERVICE

USD provides 24-hour customer service. For general questions and questions about orders, contact our Customer Service department:

Phone: 855-4stjude
Mail: One Lillehei Plaza
St. Paul, MN 55117
Email: USDCSCapital@sjm.com
Fax: 952-933-0307

Customer Service is open from 7:00 a.m. to 6:30 p.m. U.S. Central time, Monday through Friday, except holidays.

To, contact your **local sales representative** or for urgent issues outside of Customer Service business hours, call 800-PACE-ICD (800-722-3423).

PURCHASE ORDER REQUIREMENTS

Account agrees to issue, or to have its authorized agent issue, USD a purchase order ("P.O.") reflecting the contract number referenced herein and the purchase value referenced above for the Products (plus any applicable shipping and taxes) promptly upon execution of this Agreement. No Products will be shipped and no services will be performed prior to receipt of this P.O. In the event a third-party authorized agent of Account issues the P.O. on Account's behalf, Account hereby guarantees payment upon default of any such agent.

SUBMISSION OF PURCHASE ORDER ABSENT A FULLY EXECUTED AGREEMENT

The terms and conditions set forth in this Agreement constitute an offer from USD to Account relative to Account's purchase of the products covered hereby from USD. In the event that Account submits a purchase order to USD for the products referenced herein without signing this Agreement, the submission of such purchase order shall constitute Account's acceptance of the terms and conditions herein.

SHIPPING

FOB Destination, freight pre-paid and included. EnSite Velocity System shipping charge is $975.

PAYMENT TERMS

Net 30 days from date of invoice.
USD accepts payment via wire transfers, Automated Clearing House (ACH) and checks.

SERVICE AND SUPPORT COMMITMENT

The Parties agree that consistent and superior service is necessary to ensure the implementation of this Agreement occurs without incident. USD agrees to provide well trained and competent staff to support cases, and clinics which utilize the Products represented in this Agreement. As such, the Parties agree to the following service commitment deliverables:

- EnSite Velocity System support will be provided for each EnSite Array™ catheter case subject to availability. It is recommended that at least seventy-two (72) hours notice is given to USD staff through the national case scheduling system at 1-800-374-8038, option #3. The absence of this minimum advance notice will not constitute failure to support on the behalf of USD.
- The EnSite NavX™ platform is based on conventional sequential mapping; therefore, case support can be expected until the Account physicians are proficient. This proficiency typically occurs with the successful completion of 12 to 15 procedures.

USD agrees to use commercially reasonable efforts to ensure that the above listed commitment deliverables are met; however, in the event that a Field Clinical Engineer ("FCE") is unable to provide support as listed above, the Parties hereto agree that this will not constitute a breach of this Agreement by USD.

ADDITIONAL INITIAL SERVICE AND INSTALLATION TERMS

The Product Assurance Plus Warranty Coverage is effective from the completion of installation or first clinical use, whichever occurs first and extends for a period of 12 months thereafter. If following installation of the Product and for its first sixty (60) days of use, the System becomes inoperable for one (1) day or longer and has to be repaired and/or components replaced, USD will extend the warranty thirty (30) days beyond the standard twelve (12) month period.

ACCOUNT'S OBLIGATIONS

Account shall, at its expense provide all necessary labor and materials for plumbing service, carpentry work, conduit wiring, power switches, network ports and other preparations required for such installations and connection. All such labor and materials shall be completed and available at the time of delivery of the Products by USD. Additionally, Account shall provide free access to the installation site and, if necessary, safe and secure space thereon for storage of Products and equipment prior to installation by USD. Account shall be responsible, at its sole cost and expense, for obtaining all permits, licenses and approvals required by any federal, state or local authority in connection with the installation and operation of the Products, including but not limited to any certificate of need and zoning variances. Account shall provide at its sole cost and expense, that its premises are free of asbestos, hazardous conditions and any concealed, unknown or dangerous conditions and that all site requirements are met.

MAINTENANCE; ALTERATIONS

(a) Should Account need to move the Products to a different location from that where originally placed, Account agrees, to contact USD for assistance with such relocation. Relocations services shall be subject to an additional service charge.
(b) Account will at all times operate the Products in accordance with the Products Instructions for Use (the "IFU") provided to Account by USD and use reasonable care to prevent the Products from being damaged while the Products are in Account's possession and control.
(c) Account will be responsible for the cost of any repairs to the Products as a result of Account's failure to use the Products in accordance with the IFU, or Account's failure to use reasonable care to prevent the Products from being damaged while the Products are in Account's possession and control.
(d) Account will not, without the prior written consent of USD, make any changes or substitutions to the Products. Any and all replacement parts, accessories, authorized changes and/or substitutions for the Products shall become part of the Products and subject to the terms of this Agreement.

INSTALLATION

USD will provide installation services to Account as part of this agreement and at no additional charge, subject to the fulfillment of the provisions set forth in section "ACCOUNT'S OBLIGATIONS" above. The Products covered herein shall be installed by and at the expense of USD except that USD shall not provide site preparation services as defined under section "ACCOUNT'S OBLIGATIONS" unless otherwise agreed to in writing by USD for an additional charge. Installation services shall be included in the purchase price and performed by qualified and trained technical personnel, provided that the installation can be performed during normal business hours. Any overtime charges or other special expenses shall be an additional charge to the prices herein. Installation includes travel and lodging for USD staff to Account's location within the United States. Installation date will be coordinated with Account and total time to install system is not expected to exceed two (2) business days. Should installation time be extended due to factors out of USD's control but within Account's control (e.g. room is not made available on agreed upon date), then Account will be subject to an additional service charge. Installation services include, but are not limited to, the following:
(a) Uncrating and assembly of Products

(b) Placement of Products in Account's desired location
(c) Initial functional testing of Products
(d) Account will be provided a copy of the Installation Report

Installation does not include the running of cables through conduit.

NOTICES

All notices required or permitted under this Agreement shall be sufficient if sent via U.S. mail or express courier delivery to such party at the address set forth in this Agreement, or at such other address as such party may designate to the other party in writing from time to time. Any notice mailed via U.S. mail shall be effective three days after it has been duly addressed and postmarked via the U.S. postal service. Any notice provided to Account or USD shall be directed to the following.

University of North Carolina Hospitals Attention: Director of Purchasing 4400 Emperor Blvd. Durham, NC 27703	St. Jude Medical S.C., Inc. Attention: Contract Operations 6300 Bee Cave Road Bldg Two, Suite 100 Austin, Texas 78746

COMPLIANCE WITH LAWS

(a) Both Parties shall, in connection with this Agreement, comply with all applicable federal and state laws, regulations, and other authorities, specifically including but not limited to the federal health care program anti-kickback law, 42 U.S.C. § 1320a-7b(b) ("Anti-Kickback Law").

(b) Account hereby acknowledges its legal obligations to fully and accurately report the discounts and/or rebates it receives under all applicable federal and state laws, regulations, and other authorities, specifically including but not limited to the Anti-Kickback Law. As part of the cost reporting process or otherwise, Account may be obligated to report and provide information concerning any discounts, rebates, or other price reductions provided under this Agreement pursuant to 42 U.S.C. section 1320a-7b(b)(3)(A) (the discount exception to the Anti-Kickback Law) and/or 42 C.F.R. § 1001.952(h)(the discount safe harbor to the Anti-Kickback Law), other federal or state laws, or agreement with third party payers. Account should retain this Agreement and any other documentation of discounts, rebates, or other price reductions and make such information available to federal or state health care programs upon request.

(c) USD shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and the performance of this Agreement, including those of federal, state, and local agencies having jurisdiction and/or authority, and, specifically including the Health Insurance Portability and Accountability Act of 1996 and its accompanying regulations ("HIPAA").

INDEMNIFICATION

(a) USD and Account shall indemnify, hold harmless and defend each other, all of each other's parent and affiliated entities ("Entities"), and each others' and their respective Entities' employees, trustees, directors, officers, agents, assigns, patients, insurers and users of the purchased products from and against all actions, suits, liability, claims, fines, damages, losses and expenses (including reasonable attorney's fees through trial and upon appeal) related to or arising out of: a) the injury of any person or the injury or destruction of any property arising out of and caused by the grossly negligent acts or omissions of such party, any of its employees, subcontractors or authorized agents (collectively "Staff"); b) the material breach by such party of the terms and conditions of this Agreement; c) violation of any law by such party or its Staff; and d) as to USD's indemnification obligations only, the infringement of any patent by reason of the sale or use of any Products purchased or furnished hereunder.

(b) The indemnified party shall give the indemnifying party prompt notice of any claim that could give rise to a claim for indemnity under this Agreement and the indemnified party shall cooperate with the indemnifying party in the defense of any claim for which indemnity is provided. The indemnifying party shall be permitted to defend the claim and make all decisions thereto, including but not limited to hiring counsel of its choosing. The indemnifying party shall also have the sole right to settle any indemnified legal claim provided that it obtains a complete release for the indemnified party. This Section shall survive the termination or expiration of this Agreement for any reason.

CONFIDENTIALITY

The pricing, terms and conditions offered herein is confidential and proprietary and Account shall not disclose such pricing, terms or conditions to any third party, excepting to its accountants and attorneys, unless required to do so by law. The confidentiality requirement includes the prohibition of disclosure, whether blinded as to its source or otherwise, to any group purchasing organization, consultant, online comparative source, subcontractor, or temporary employee which may, from time to time, be retained by Account for the purpose of rendering a service. This confidentiality requirement is not only specific to the proposal herein but also to any resultant agreement to purchase. With any breach of this confidentiality requirement, the non-breaching party may rescind or terminate the proposal immediately and may seek any and all remedies available to it as a result of this breach including injunctive relief and damages.

DEFAULT
Any of the following events or conditions shall constitute an Event of Default: (a) if Account defaults in its performance of any of its obligations under this Agreement, upon notice and a fifteen (15) day opportunity to cure; (b) if Account ceases doing business as a going concern; (c) if Account becomes insolvent or makes an assignment for the benefit of its creditors; (d) if a petition or proceeding is filed by or against Account under any bankruptcy or insolvency law; or (e) if a receiver, trustee, conservator, or liquidator is appointed for Account or any of its properties.

Upon the occurrence of any one or more Events of Default, USD will have the right to exercise any one or all of the following remedies (which shall be cumulative), simultaneously or serially, and in any order: (a) to terminate this Agreement; (b) with or without notice, demand or legal process, to retake possession of any or all of the Products (and Account authorizes and empowers USD to enter upon the premises during reasonable business hours wherever the Products may be found) and peaceably retake such Products; or (c) to pursue any other remedy permitted at law or in equity.

ASSIGNMENT
Account shall not assign or pledge this Agreement, in whole or in part, nor shall Account sublet or lend any item of Products without prior written consent of USD. Any such attempt by Account to sublet or lend any Products, or assign or pledge this Agreement shall be null and void and of no effect against USD.

NON-WAIVER
No waiver of any of Account's obligations, conditions or covenants shall be effective unless contained in a writing signed by USD. Failure to exercise any remedy which USD may have shall not constitute a waiver of any obligation with respect to which Account is in default.

GOVERNING LAW AND VENUE
This Agreement shall be interpreted and governed by the substantive and procedural laws of the State of North Carolina. The Parties hereto both consent to the jurisdiction of North Carolina courts to resolve any dispute arising from this Agreement.

SEVERABILITY
In the event any sections, sentences, clauses or phrases of this Agreement shall be found to be invalid, void, and/or unenforceable, for any reason, neither the Agreement generally nor the remainder of this Agreement shall, as a result, be rendered invalid, void, and/or unenforceable.

HEADINGS
The section headings set forth in this Agreement are for purposes of convenience only and shall have no bearing whatsoever on the interpretation or actual content of this Agreement.

REMEDIES
In the event of a breach of this Agreement, the Parties acknowledge that the other party will have available to it all available remedies in law or equity, specifically including, without limitation, monetary damages and/or entitlement as a matter of course to an injunction or similar equitable relief, without bond or with a nominal bond if allowed by law.

OWNERSHIP AND INSURANCE LIABILITY
Account assumes ownership of the Products described in this Agreement, and resultant liability and responsibility for insuring said Products, in accordance with the FOB shipping terms set forth herein.

CONFIDENTIALITY:
Trade Secrets Designated by the USD. For purposes of this Agreement, the term "Trade Secrets" is restricted solely to information provided by USD that satisfies the definition of trade secret set out in N.C.G.S. § 66-152, and it does not include USD's price information under any circumstances. However, University of North Carolina Hospitals agrees to maintain the confidentiality of USD's pricing information to the extent permitted by law. USD warrants that it has formed a good faith opinion, having received such necessary or proper review by counsel and other knowledgeable advisors, that any information disclosed to University of North Carolina Hospitals that it has designated as trade secret or confidential meets the requirements of N.C.G.S. § 66-152. University of North Carolina Hospitals, as an agency of the State of North Carolina, may serve as custodian of the USD's confidential information and not as an arbiter of claims against USD's assertion of confidentiality. Insofar as is permitted by law and regulatory or accrediting agencies, University of North Carolina Hospitals will maintain the confidentiality of information warranted in good faith by USD as meeting the requirements of N.C.G.S. § 66-152. Notwithstanding, if an action is brought pursuant to N.C.G.S. § 132-9 (North Carolina Public Records Act) or other authority to compel University of North Carolina Hospitals to disclose information USD has designated as confidential or trade secret, USD agrees that it will intervene in

the action through its counsel and participate in defending University of North Carolina Hospitals, including any public official(s) or public employee(s). USD agrees that it shall hold University of North Carolina Hospitals and any official(s) and individual(s) harmless from any and all damages, costs, and attorneys' fees awarded against University of North Carolina Hospitals in such an action. University of North Carolina Hospitals agrees to promptly notify USD in writing of any action seeking to compel the disclosure of USD's confidential information. University of North Carolina Hospitals shall have the right, at its option and expense, to participate in the defense of such an action through its counsel. University of North Carolina Hospitals shall have no liability to USD with respect to the disclosure of USD's confidential information ordered by a court of competent jurisdiction pursuant to N.C.G.S.§ 132-9 or other applicable law, or required by law or regulatory or accrediting agencies.

UNC Health Care Confidential Information Protected by Law. For purposes of this Agreement, "UNC Health Care confidential information" shall include certain classes of information whose confidentiality UNC Health Care is obligated by federal or state law to protect, including patient information and employee information of which UNC Health Care is custodian. USD agrees to hold UNC Health Care confidential information in strictest confidence and (a) to use any UNC Health Care confidential information disclosed to it solely for the purpose required in connection with the business relationship of the parties as expressed in this Agreement; (b) not to disclose any UNC Health Care confidential information to any person or entity other than its agents, employees, or representatives who have a need to know such information and in accordance with the provisions of this Section and in accordance with USD's obligations under state and federal law; (c) not to reproduce, distribute, or otherwise disseminate UNC Health Care confidential information; and (d) to return UNC Health Care confidential information to UNC Health Care upon its request or upon the termination of this Agreement, whichever occurs first.

USD agrees to incorporate all of the confidentiality protections described in this Section into all contracts it enters into with third parties for purposes of carrying out its obligations under this Agreement. USD warrants that its obligations regarding UNC Health Care confidential information will be made known to and honored by its agents, employees, and representatives; by its third-party contractors and their agents, employees, and representatives; and by any subsidiary company, parent company, or company related to such party by common ownership, and its agents, employees, and representatives. USD agrees to require each of its employees or agents who will provide services to UNC Health Care hereunder to sign the UNC Health Care Confidentiality Statement one time upon initiation of servicing and in accordance with UNC's credentialing requirement, and any other document that UNC Health Care may need to protect particular confidential information, prior to beginning to provide services under this Agreement, and to retain UNC Health Care confidential information in strict confidence.
USD further agrees to indemnify and hold harmless UNC Health Care and its affiliates, officers, and directors, from any costs, claims, liability or damage, including reasonable attorneys' fees and court costs that are caused by or arise out of any disclosure of UNC Health Care confidential information by USD or any of its employees, agents, and representatives, or by any of the entities referenced above in this paragraph

The obligations of USD and its employees, agents, and representatives, and any subsidiary company, parent company, or company related to such party by common ownership, and its agents, employees, and representatives, under this Section shall survive the expiration, termination, or cancellation of this Agreement and/or the business relationship of the parties, and shall continue to bind these entities. Except under the conditions specified in this Section, UNC Health Care confidential information shall not be disclosed at any time following the execution of this Agreement.

EQUAL EMPLOYMENT OPPORTUNITY AND FACILITIES ACCESS: During the performance of this contract [or purchase order], USD/vendor agrees to comply with all Federal, state and local laws respecting discrimination in employment and non-segregation of facilities including, but not limited to, requirements set out at 41 CFR §§60-1.4, 60-300.5 and 60-741.5, which equal opportunity clauses are hereby incorporated by reference.

ACCESS TO PERSONS AND RECORDS: The State Auditor and the using agency's internal auditors shall have access to persons and records as a result of all contracts or grants entered into by State agencies or political subdivisions in accordance with General Statute 147-64.7 and Session Law 2010-194, Section 21 (i.e., the State Auditors and internal auditors may audit the records of USD during the term of the contract to verify accounts and data affecting fees or performance).

MEDICARE RECORD ACCESS: In compliance with 42 U.S.C. 1395x (v)(1)(I) and implementing regulations, USD agrees, until the expiration of four (4) years after the services are furnished under this Agreement, to allow the Secretary of the Department of Health and Human Services and the Comptroller General access to this Agreement, all applicable purchase orders, and to the books, documents and records of USD necessary to verify the nature and extent of the costs of this Agreement. USD further agrees that if any of the duties of this Agreement are carried out by a subcontractor of USD, such subcontract will contain a clause to the effect that, until the expiration of four (4) years after the services are furnished under such subcontract, the Secretary of the Department of Health and Human Services and the Comptroller General will have access to such subcontract and to the books, documents and records of the subcontractor necessary to verify the nature and extent of the costs of such subcontract. This Section will survive the expiration or termination of this Agreement.

NONINFRINGEMENT: USD represents and warrants to Account that, during the term of this Agreement, the products or services being provided do not infringe any patent, copyright, trademark, trade secret or other intellectual property rights of any third party. Account shall promptly notify USD of any infringement claim and provide USD with a copy of any pleadings. The selection of counsel, the conduct of the defense of any lawsuit and any settlement shall be within the sole control of USD and at USD's expense. USD also agrees to indemnify and hold Account harmless from any damages or expenses (including attorneys fees) incurred by Account in any claim or lawsuit arising out of or related to USD's alleged infringement of a third party's intellectual property rights. USD may, at its option and expense, procure for Account the right to continue using the allegedly infringing product, replace it with a non-infringing item, modify it so it becomes non-infringing, or require Account to return all copies of the allegedly infringing product to USD and grant Account a pro rata refund for the fees on a five (5) year straight line depreciation schedule from the product installation date and terminate any applicable support services.

ADVERTISING: USD shall not use the award of this Agreement or its participation in this agreement as part of any news release or commercial advertising without the prior written consent of Account

EXPENSES
Expenses incurred by USD for its employees who provide services on the premises of Account with the written agreement of the parties must be pre-approved and incurred and reimbursed in accordance with the Expense Addendum, attached hereto as Exhibit A, and the terms of which are incorporated herein by reference. Invoices submitted to Account for expenses incurred by USD's employees accompanied by supporting documentation, if complete and undisputed, will be paid within forty five (45) days of Account's receipt.

ENTIRE AGREEMENT
This Agreement and any documents incorporated specifically by reference represent the entire agreement between the parties and supersede all prior oral or written statements or agreements. Any Request for Proposal and any addenda thereto are incorporated herein by reference as though set forth verbatim. USD's proposal is incorporated herein by reference only to the extent that USD's proposal is not in conflict with the Request for Proposal, any addendum thereto, or these General Contract Terms and Conditions.

AMENDMENTS
This Agreement may be amended only by written amendments duly executed by Account and USD.

INDEPENDENT CONTRACTOR
USD shall be considered to be an independent Contractor and as such shall be wholly responsible for the work performed and for the supervision of its employees. USD represents that it has, or will secure at its own expense, all personnel and equipment required in performing the services under this Agreement. Such employees shall not be employees of, or have any individual contractual relationship with Account.

INDEMNITY
As a condition of this order and fulfilling any part of it, USD agrees to indemnify and hold harmless Account, including its trustees, officers, directors, employees and agents, from any claim, damage, liability, injury expense or loss arising out of directly or indirectly, USD's performance or nonperformance (including performance or nonperformance of any subcontractors) under this Agreement. USD agrees to indemnify and hold harmless Account against all liability to third parties (other than liability solely the fault of Hospitals) arising from or in connection with any defect in the goods and/or actual or claimed violation of the third party's trade secrets, trademark, copyright or patent rights in connection with the sale and/or use of the goods. This indemnity obligation will survive the expiration or termination of this contract by either party.

TERMINATION
Either party may terminate this Agreement at any time without cause by giving the other party sixty (60) days prior notice in writing. In the event of such cancellation by Account, the services will be prorated and the remaining balance shall be refunded to Account in the form of a credit memo. Any discounts extended to Account in the original agreement that were based upon reaching a complete and/or full term will be deducted from the credit amount provided to Account.

IMMUNIZATION: USD will ensure that each employee or subcontractor assigned to Account's facility will have all immunization and health requirements met according to Account's Infection Control and Screening Program, Occupational Health Service (summarized on Exhibit B). In addition, USD shall verify that each employee or subcontractor provided to Account undergoes the same pre-employment/placement drug and health screening which is required of permanent staff of Account. Exhibit B includes health screening criteria and job categories of permanent staff for whom communicable disease screening is required.

St. Jude Medical S.C., Inc. **Account**

By:_____
Signature

Printed Name:_____

Title:_____

Business Phone # of Signatory:_____

Date:_____

By:_____
Signature

Printed Name:_____

Title:_____

Business Phone # of Signatory:_____

Date:_____

Exhibit A
Expense Addendum

Expenses

Only those expense items listed below may be reimbursed by ACCOUNT. Any expense items in addition to those identified below must be approved by ACCOUNT prior to being incurred.

USD and its employees will provide supporting documentation for all expenses for which reimbursement is sought from ACCOUNT. Any expenses for which reimbursement is sought that are not accompanied by supporting documentation when initially submitted will not be reimbursed.

All invoices and supporting documentation are subject to audit by UNC Hospitals' Fiscal Services Division before payment will be made.

Transportation

ACCOUNT will reimburse transportation expenses incurred by USD and each of its employees who is assigned to provide services to ACCOUNT. Transportation expenses are those which are incurred during USD's travel from its primary place of business to and from ACCOUNT or another location designated in writing by ACCOUNT. Transportation expenses are those which are incurred during an employee's travel from his/her home to and from ACCOUNT (or another location designated in writing by ACCOUNT). For purposes of this document, home is defined as an employee's primary place of residence.

ACCOUNT will not reimburse transportation expenses incurred by the family members of USD and its employees.

ACCOUNT will reimburse the fare incurred by USD and its employees during transportation to and from UNC Hospitals and the UNC-CH School of Medicine (or another location designated in writing by ACCOUNT) via taxi, van, or shuttle service.

ACCOUNT will reimburse the parking fees at UNC Hospitals and the UNC-CH School of Medicine (or another location designated in writing by ACCOUNT) and at airports incurred by USD and its employees during the engagement.

Any traffic fines incurred by USD and its employees are the responsibility of the driver and will not be reimbursed by ACCOUNT.

By air

USD and its employees will avail themselves of the lowest available round-trip coach airfare for travel to Raleigh Durham International Airport. USD and its employees will use best efforts to make travel arrangements so as to take advantage of a 21-day advance purchase or other discount promotional rate offered by an airline.

By car

USD and its employees will use best efforts to rent a car from the agency which offers the lowest available rate for a compact car (or larger if needed) or another discount promotional rate.

ACCOUNT will reimburse mileage incurred in travel from USD's primary place of business, or an employee's home, to and from UNC Hospitals and the UNC-CH School of Medicine (or another location when designated in writing by ACCOUNT) when a personal car is used.

Lodging

ACCOUNT will reimburse lodging expenses at local motels and/or rental apartments, whichever is most economical, for USD and its employees during the engagement.

Motel

USD and its employees will book motel accommodations at motels at which UNC Hospitals and/or the UNC-CH School of Medicine receive a discounted rate, unless USD will receive a lower rate at those motels or another motel.

Apartment rental

Exhibit B
UNCH Immunization and Health Requirements for Contract Employees in Clinical Facilities

Contract employees in UNC Health Care facilities will comply with the entire OHS policy. All contract employees with signs or symptoms of an infectious disease or exposure to communicable diseases should see their occupational health physician or local physician before providing services.

Tuberculosis

Annual training for all persons regarding the prevention of tuberculosis as mandated by the Occupation Safety and Health Administration (OSHA) (Federal Register 1994;59:54242-54303).

Initial and annual tuberculin skin test and evaluation as recommended by the Centers for Disease Control and Prevention (CDC) and mandated by OSHA. Tuberculin testing should be done by the Mantoux method using a 5-TU TST (record date placed, date read, signature of MD or RN who administered and interpreted the TST, and induration in mm).

Evaluation of all personnel exposed to tuberculosis as recommended by the CDC and mandated by OSHA.

Bloodborne Pathogens

Annual training for all persons with reasonably anticipated exposure to blood or body fluids regarding the prevention of bloodborne pathogens as mandated by OSHA (Federal Register) 1991;56:64175-64182) and UNC Health Care Exposure Control Plan for Bloodborne Pathogens.

Each person with reasonably anticipated exposure to blood or body fluids must be offered hepatitis B immunization as recommended by the CDC and mandated by OSHA. Persons refusing immunization must sign an informed refusal form as mandated by OSHA. Immunity should be assured for persons taking the vaccine by obtaining a quantitative anti-HBsAg titer 1-2 months after the 3rd dose of hepatitis B vaccine. Persons with an inadequate titer (i.e., <10 mIU/mL) should be offered 3 additional doses of hepatitis B vaccine and be retested for immunity using a quantitative test.

Evaluation (including provision of post-exposure prophylaxis within a few hours) of all personnel exposed to blood or contaminated body fluids as recommended by the CDC and mandated by OSHA.

Measles
All employees born after 1957 shall be immunized against measles unless immunization is contraindicated (severe febrile illness; pregnant females or women who may become pregnant within one month; immunocompromised as a result of immunodeficiency diseases, leukemia, lymphoma, generalized malignancy, therapy with corticosteroids, alkylating drugs, antimetabolites or irradiation; anaphylactic reaction to eggs; anaphylactic reaction to neomycin; reception within previous 3 months of immunoglobulin, whole blood or other antibody-containing products; other condition listed in manufacturer's package insert), or they can demonstrate immunity against rubeola. Immunity may be demonstrated by any of the following means:

Serologic evidence of immunity (written documentation required). For all personnel born >1957, serologies may be provided by the employee at his/her expense.

Immunization with 2 doses of measles vaccine (MMR preferred) on or after first birthday, doses at least 4 weeks apart.

Adults born before 1957 generally are considered immune to measles. During outbreaks, health care facilities should recommend that unvaccinated health care personnel born before 1957, who lack laboratory evidence of measles or laboratory confirmation of disease, receive 2 doses of MMR vaccine.

Mumps
All employees born after 1957 shall be immunized against mumps unless immunization is contraindicated (severe febrile illness; pregnant females or women who may become pregnant within one month; immunocompromised as a result of immunodeficiency diseases, leukemia, lymphoma, generalized malignancy, therapy with corticosteroids, alkylating drugs, antimetabolites or irradiation; anaphylactic reaction to eggs; anaphylactic reaction to neomycin; reception within previous 3 months of immunoglobulin, whole blood or other antibody-containing products; other condition listed in manufacturer's package insert), or they can demonstrate immunity against mumps. Immunity may be demonstrated by any of the following means:

Serologic evidence of immunity (written documentation required). For all personnel born >1957, serologies may be provided by the employee at his/her expense.

Immunization with 2 doses of mumps vaccine (MMR preferred) on or after first birthday.

Adults born before 1957 generally are considered immune to mumps. During outbreaks, health care facilities should recommend that unvaccinated health care personnel born before 1957, who lack laboratory evidence of mumps or laboratory confirmation of disease, receive 2 doses of MMR vaccine.

Rubella
All personnel must have demonstrated immunity against rubella (unless there is a medical contra-indication to immunization). Immunity may be demonstrated by any of the following means:

Serologic evidence of immunity (written documentation required). For all personnel born >1957, serologies may be provided by the employee at his/her expense. All personnel born >1957 are provided one dose of rubella vaccine unless contraindicted.

Immunization with 1 dose of rubella vaccine (MMR preferred) on or after first birthday.

For women of childbearing age, regardless of birth year, rubella immunity should be determined (unless there has been no menses for a period of 2 years or history of hysterectomy or bilateral oophorectomy) and women should be counseled regarding congenital rubella syndrome. Women who do not have evidence of immunity should receive MMR vaccine upon completion or termination of pregnancy.

Varicella
All personnel must have demonstrated immunity against varicella (unless there is a medical contra-indication to immunization). Immunity may be demonstrated by any of the following means:

History of varicella or zoster.

Serologic evidence of immunity (written documentation required).

Immunization with 2 doses of varicella vaccine on or after first birthday, doses at least 4 weeks apart.

If negative or uncertain history, a titer will be drawn to establish immune status. Those with a negative titer are required to receive 2 doses of varicella vaccine unless medically contraindicated. Documentation of 2 doses of Varivax spaced at least 4 weeks apart is acceptable for immunity.

Annual influenza immunization is mandatory as of July 2012.

Tetanus/diphtheria/pertussis (Tdap)
Tdap will be given to all personnel (as per the most recent Advisory Committee on Immunization Practices (ACIP) recommendations) unless medically contraindicated or the employee has documentation of Td or Tdap within the previous 2 years. Following a primary series, boosters should be administered every 10 years per ACIP (Advisory Committee on Immunization Practices). Post-exposure prophylaxis for tetanus with Td or Tdap should be provided per CDC/ACIP guidelines. Tdap will be provided to health care workers as per the most recent ACIP Guideline.

Exhibit 6

COVIDIEN

Quotation

Date 8/16/2016

Account #: 544066

Account: UNC Hospitals Cath Lab
101 Manning Dr
Chapel Hill, NC 27514

Attention: Brenda McClure

Quantity	Units Per Box	Catalog No.	Product Description		Box Price		Extended Price
1	1	FORCEFXCS	FORCE FX-C-S	$	7,115.20	$	7,115.20
1	1	UC8009	CART UNIVERSAL	$	507.22	$	507.22
0	0	E6009	FOOTSWITCH	$	107.59	$	-
0	0	E6008	FOOTSWITCH STANDARD	$	337.46	$	-
					(Subtotal)	$	7,622.42
					TOTAL		7622.42

Sincerely, Peter Charalidis Rep, Surgical Solutions Group, Covidien

Prices, terms and conditions are per Covidien contract and Covidien's Direct Policies and Procedures. Terms and conditions subject to Covidien credit approval.
Purchase Orders should be made out to Covidien Sales LLC, 15 Hampshire St., Mansfield, MA 02048.
Facility agrees to properly disclose and reflect any discount in costs claimed or charges made to federal health care programs in accordance with the provisions of 42 U.S.C. § 1320a-7b(b)(3)(A) and/or 42 C.F.R. §1001.952(h)(1) and any other relevant federal and state health care rules and regulations.
Sales tax and freight are not included in this quote.

CAPITAL ORDER PO'S MAY BE EMAILED TO PETER.CHARALIDIS@COVIDIEN.COM

Covidien terms:
Quote Effective for 60 days
Payment Terms: Net 30 days
Delivery schedule to be furnished upon order placement
FOB, Shipping Point, Prepay and Add

Exhibit 7

North Carolina Department of Health and Human Services
Division of Health Service Regulation
Certificate of Need Section
2704 Mail Service Center • Raleigh, North Carolina 27699-2704
http://www.ncdhhs.gov/dhsr/

Drexdal Pratt, Director

Beverly Eaves Perdue, Governor
Albert A. Delia, Acting Secretary

Craig R. Smith, Section Chief
Phone: (919) 855-3873
Fax: (919) 733-8139

November 1, 2012

Dee Jay Zerman, Associate Director
Planning & Program Development
University of North Carolina Hospitals
101 Manning Dr., Suite 6021, East Wing
Chapel Hill, NC 27514

Exempt from Review
Facility: UNC Hospitals, Chapel Hill
Project Description: Replacement of EP Lab Machine
County: Orange
FID #: 090274

Dear Ms. Zerman:

The Certificate of Need Section (CON Section) received your letter of October 25, 2012 regarding the above referenced proposal. Based on the CON law in effect on the date of this response to your request, the proposal described in your correspondence is not governed by, and therefore, does not currently require a certificate of need. However, please note that if the CON law is subsequently amended such that the above referenced proposal would require a certificate of need, this determination does not authorize you to proceed to develop the above referenced proposal when the new law becomes effective.

It should be noted that this determination is binding only for the facts represented by you. Consequently, if changes are made in the project or in the facts provided in your correspondence referenced above, a new determination as to whether a certificate of need is required would need to be made by the Certificate of Need Section. Changes in project include, but are not limited to: (1) increase in capital cost; (2) acquisition of medical equipment not included in the original cost estimate; (3) modifications in the design of the project; (4) Change in location; and (5) any increase in the number of square feet to be constructed.

In addition, you should contact the Construction Section of the DHSR Section to determine if they have any requirements for development of the proposed project. Please contact the CON Section if you have any questions. Also, in all future correspondence you should reference the Facility I.D. # (FID) if the facility is licensed.

Sincerely,

F. Gene DePorter, Project Analyst
Certificate of Need Section

Craig R. Smith, Chief
Certificate of Need Section

cc: Construction Section, DHSR

UNC HOSPITALS

October 23, 2012

Mr. F. Gene DePorter
Certificate of Need Section
Division of Facility Services, DHHS
2704 Mail Services Center
Raleigh, NC 27699-2704

RE: Request for Exemption / Replacement of EP Lab Machine / UNC Hospitals

Dear Mr. DePorter:

UNC Hospitals is planning to replace the EP Lab machine and is requesting a determination that the replacement of this equipment is exempt from review pursuant to 131E-184(7). The existing lab was placed in service in 2003, and is used on a daily basis. The equipment is aging out and requires frequent repairs. This in turn leads to long delays, and patient, staff and physician dissatisfaction issues.

We are supplying the following information that the CON Section has requested in the past as a part of its general information request for an equipment replacement.

1. A comparison of the existing and replacement equipment, using the format in the following table:

Equipment Comparisons

EP Lab D	*Existing Equipment*	*Replacement Equipment*
Type of Equipment (List each component)	Toshiba Infinix CS Single Plane	Phillips Allura Xper FD10 Single Plane
Manufacturer of Equipment	Toshiba	Philips Medical Systems
Tesla Rating for MRIs	Not applicable	Not applicable
Model Number	Infinix CS	Allura Xper FD10
Serial number	3562022	To be determined
Provider's Method of Identifying Equip	By model & serial #s	By model & serial #s
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	Not applicable	Not applicable
Mobile Tractor Serial Number/VIN #	Not applicable	Not applicable
Date of Acquisition of Each Component	2003	To be 2012/2013
Does Provider Hold Title to Equipment or Have a Capital Lease?	UNC Hospitals owns the equipment	UNC Hospitals will own the equipment

Specify if Equipment Was/Is New or Used When Acquired	New	Will be new
Total Capital Cost of Project (Including Construction, etc.) <See Attachments 1, 2, 3 and 4>	Estimated $851,935. Actual records are not available - records are not kept more than 5 years.	$1,865,000 includes $1,059,171 for all equip and $805,829 for renovation and other costs.
Total Cost of Equipment	$851,935	$1,059,171 (unit plus lights)
Fair Market Value of Equipment	Not available	$1,059,171
Net Purchase Price of Equipment	$851,935	$1,059,171
Locations Where Operated	UNC Hospitals	UNC Hospitals
Number of Days In Use/To be Used in N.C. Per Year	365 days	365 days
Percent of Change in Patient Charges (by Procedure)	*NA*	No change
Percent of Change in Per Procedure Operating Expenses (by Procedure)	*NA*	No change
Type of Procedures Currently performed on Existing Equipment	EP procedures	*NA*
Type of Procedures New Equipment is Capable of Performing	*NA*	EP procedures

2. A description of the basic technology and functions of the existing and replacement equipment, including the diagnostic and treatment purposes for which the equipment is used or capable of being used.

Response: The existing Toshiba Infinis CS Single Plane will be replaced with a Phillips Allura Xper FD10 Single Plane. Both systems are used to perform EP procedures. The replacement lab will provide state-of-the-art imaging for EP procedures.

3. Brochures or letters from the vendors describing the capabilities of the existing equipment and the replacement equipment.

Response: A copy of the exact specifications for the Philips Allura Xper FD10 is attached as Exhibit 3. A copy of a exact specifications for the lights are attached as Exhibit 4.

4. A copy of the purchase order for the existing equipment, including all components and original purchase price.

Response: A copy of the original purchase order and quote is not available. UNC Hospitals only retains such documentation for 5 years. We were unable to locate any information on this unit.

5. A copy of the title, if any, for the existing equipment or the capital lease for the existing equipment.

Response: Not applicable. The equipment does not have a title and will not be leased.

6. If the replacement equipment is to be leased, a copy of the proposed lease that transfers substantially all the benefits and risks inherent in the ownership of the equipment to the lessee of the equipment, in accordance with criteria in Generally Accepted Accounting Principles (GAAP).

Response: Not applicable. The replacement equipment will not be leased.

7. If the replacement equipment is to be purchased, a copy of the proposed purchase order or quotation, including the amount of the purchase price before discounts and trade-in allowance.

Response: A copy of the quote received from Phillips for the replacement EP unit is in Attachment 3 and from Maquet for the replacement lights is in Attachment 4.

8. A letter from the person taking possession of the existing equipment that acknowledges the existing equipment will be permanently removed from North Carolina, will no longer be exempt from requirements of the North Carolina Certificate of Need law, and will not be used in North Carolina without first obtaining a new certificate of need.

Response: The vendor, Phillips, will take possession of the unit and remove it from the site as Phillips installs the replacement unit. The unit will be taken out of state by Phillips and will not be used in NC without obtaining certificate of need approval.

9. Documentation that the existing equipment is currently in use and has not been taken out of service.

Response: This unit is identified on the most recent 2012 Licensure Renewal Application form on file with DFS on page 7 as fixed EP equipment.

Also, in Attachment 1, is a completed 'Proposed Total Capital Cost of Project' form which projects the total capital cost of this replacement project to be $1,865,000 for the Phillips Allura Xper FD10. The total capital cost includes all costs required to make the unit operational. Since the room already exists, equipment and furniture will be reused. Beyond the items included in this estimate, no additional renovations, equipment or furniture will be required for this project.

Attachment 2 contains the certified cost estimate for construction/renovation costs from the engineer for this project, William T. Highsmith.

Should you require any additional information regarding the replacement of this equipment, please do not hesitate to contact me at 919-966-1129 or 5620.

Sincerely,

Dee Jay Zerman

Dee Jay Zerman, Associate Director
Planning & Program Development

Attachment #1

Attachment 1

PROJECT CAPITAL COST

A. Site Costs		
(1) Full purchase price of land # Acres _____ Price per acre _____	$	
(2) Closing costs	$	
(3) Site inspection and survey	$	
(4) Legal Fees and Subsoil Investigation	$	
(5) Site preparation costs [Include]		
(6) Other	$	
(7) Subtotal Site Costs		$
B. Construction Contract(s)		
(8) Cost of Materials [Include]		
General Requirements		
Concrete/Masonry		
Woods/Doors & Windows/Finishes		
Thermal & Moisture Protection		
Equipment/Specialty Items		
Mechanical/Electrical		
Subtotal Cost of Materials	$447,257	
(9) Cost of Labor	$149,086	
(10) Other (Specify) – Construction Contingency		
(11) Subtotal construction contract(s)		$596,343
C. Miscellaneous Project Costs		
(12) Building purchase	$	
(13) Fixed Equipment Purchase/Lese	$	$1,059,171
(14) Movable Equipment Purchase/Lease	$	
(15) Furniture	$	
(16) Landscaping	$	
(17) Consultant fees (Architect & engineering)	$	$120,750
(18) Financing costs (bond, loan, etc.)	$	
(19) Interest during construction	$	
(20) Other (Project Contingency @ 5%)	$	$88,736
(21) Subtotal Miscellaneous Project Costs		
D. Total Capital Cost of the Project [sum of A-C]		$1,865,000

I assure that, to the best of my knowledge, the above capital costs for the proposed project are complete and correct and that it is my intent to carry out the proposed project as described.

Associate Director of Planning
(Title & Signature of Office Authorized to Represent Provider/Company)

SKINNER
LAMM
HIGHSMITH

October 9, 2012

Ms. Cleopatrice Robinson
Facilities Construction Engineer
UNC Hospitals
101 Manning Drive
9th Floor Plant Engineering Design Office
Chapel Hill, NC 27514

Re: UNC Hospitals
Proposed EP Lab D

Dear Ms. Robinson,

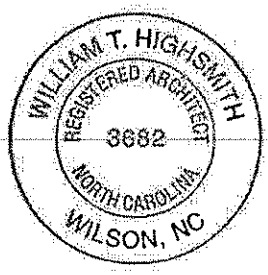
I have reviewed the scope of work and estimated construction costs for the proposed EP Lab D project. The proposed project will be designed and built in compliance with all applicable federal, state and local ordinances and requirements for licensed acute care hospitals. The proposed project will also be designed and specified to meet North Carolina Building Code, National Fire Protection Association Standards, and the American with Disabilities Act. The construction cost estimate is based on preliminary concept plans. This estimate reflects the total site work, construction cost, and other items necessary to complete the proposed project. Please see the attached table.

In my opinion, the total estimated construction cost is $596,343, not including contingency. This estimate is based on comparable recent project costs. The estimate includes inflation factors and assumes a target bid date of December, 2012.

I certify that I am a Licensed Architect in the State of North Carolina. I also certify that to the best of my knowledge, the above construction related costs of the proposed project are complete and correct and are based on several recent projects, of similar program and design, we have completed in North Carolina.

Yours truly,

William T. Highsmith, AIA, LEED AP
President
NC License Number 3682



Attachments

www.slharch.com

702 W Broad St
PO Box 669
Wilson, NC 27894
T 252-291-4127
F 252-291-1070

William T. Highsmith
President
G. Barry Lamm
Benjamin A. Skinner, III
Bradley W. Farlow

Attachment 3

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-WAMACF	**Rev:** 6	**Effective From:** 19-Oct-12	**To:** 27-Dec-12

Presented To:

UNIVERSITY OF NORTH CAROLINA HEALTH CARE SYSTEM
101 MANNING DR
CHAPEL HILL, NC 27514

Tel:

Alternate Address:

Presented By:

Bethann Griffith-Sublk
Account Manager
Tel: (919) 677-9046
Fax: (919) 677-9047

Steve Weiss
Regional Manager
Tel: (678) 924-6087
Fax: (678) 924-6003

Date Printed: 19-Oct-12

Submit Orders To:
22100 BOTHELL EVERETT HWY
BOTHELL WA 98021
Tel: (888) 564-8643
Fax:(425) 458-0390

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
	100213 Allura Xper FD10	1	$1,018,330.64
		Equipment Total:	$1,018,330.64

Solution Summary Detail

Product	Qty	Each	Monthly	Price
100213 Allura Xper FD10	1	$1,018,330.64		$1,018,330.64

Buying Group: **MEDASSETS SUPPLY CHAIN SYSTEMS INC** **Contract #:** **Multi Modality GB Q4 12**

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

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	**NNAE226	Allura Xper FD10 C Rel. 8.1	1

The Allura Xper FD10 (Ceiling) single-plane cardiovascular system is comprised of a ceiling mounted G-arm stand and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures.

The Allura Xper 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 Allura Xper FD10 Stand

The ceiling suspended geometry segment is comprised of the following features:

- A motorized, ceiling suspended Poly Diagnost G-arm, which can be ceiling rotated to allow a three-sided patient approach at maximum free floor space with full body coverage.
- All stand movements are motorized. The motorized and manual parking movement consists of ceiling rotation and a longitudinal movement. The counterbalanced Dynamic Flat Detector can also be positioned manually or motorized. Angulation and rotation of the Poly-Diagnost G-arm are 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 provides motorized base rotation at 12 degrees per second 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 in the head position (orientated parallel to the table) 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 per second
  - angulation speed up to 18 degrees second
- 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 Allura Xper 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 Velara CFD generator comprises:

- Voltage range is 40 - 125 kV.
- Maximum current 1250 mA at 80 kV
- Maximum continuous power for fluoroscopy: 2 kW for 8 hours, 2.4 kW for 0.5 hour.
- Program selection
- Acquisition frame rates 3.75, 7.5, 15, 30 frames per second
- Pulsed fluoroscopy frame rates 3.75, 7.5, 15, 30 frames per second.
- Minimum exposure time of 1 ms.
- Automatic kV and mA control for optimal image quality prior to run to safe dose
- 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 Allura Xper 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 Allura Xper 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 Allura Xper FD10 comprises the following components in order to display the clinical images in the control and examination rooms:

Displays

Examination Room

Two 18-inch monochrome LCD monitors

- 18-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 18-inch monochrome LCD monitor

- 18-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 Allura 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

Xres Image Processing and SPIRIT

- Xres is a multi-resolution spatial temporal noise reduction and edge enhancement filter. It exploits the full benefits of the digital detector to enhance sharpness and contrast and to reduce noise in the clinical images. The settings for both Xres and SPIRIT can be customized with regard to the image quality.
- SPIRIT harmonizes the background of clinical image to provide excellent visualization of coronary arteries projected in complex projections, such as arteries projected over the diaphragm or spine.

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 (NCVA081)

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.

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 allow s for reviewing of patient's:

- Previous examination cases
- Review of other DICOM XA or DICOM SC studies.

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.

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 Systems

Essentials 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. 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

Line #	Part #	Description	Qty

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).**

The above education entitlements expire one (1) year from equipment delivery date. Ref# 106107-071214

2 ****NCVB875** **EP Cockpit XL** 1

EP cockpit XL for Allura Xper mono-plane system with large 56-inch high resolution color LCD screen in the Exam Room
EP cockpit XL is an integrated EP lab solution supporting an efficient working environment, integrated workflow and enabler for complex procedures.
The EP cockpit XL provides the ability to:
Reduce the amount of cables, keyboards and displays in the Exam Room and Control Room
Display information from up to 8 sources simultaneously (incl. third party systems) on the Philips large 56-inch high resolution color LCD screen in the Exam Room.
Resize & enlarge information at any stage during the case on the Philips large 56-inch high resolution color LCD screen in the Exam Room.
Select, customize & save viewing lay-outs of the Philips large 56-inch high resolution color LCD screen via the Allura Xper table-side module
Display information (incl. third party systems) on any of the Philips ultra high-brightness 21-inch color LCD displays in the Control Room.
Operate connected equipment (incl. third party systems) via the Allura Xper module in the Control Room.
Select a predefined display setup and keyboard/mouse configuration, or save a custom configuration as a new preset configuration.
Store any image on any screen and/or all images on all screens as a DICOM Secondary Capture image.
The EP cockpit XL consists of:
Omniswitch
The Omniswitch is a 15 channel video-switch and 8 channel keyboard/mouse switch, operated from the Allura Xper Module in the Control Room and/or from the Allura Xper table-side module.
The Omniswitch allows the user to direct the video output of all connected medical equipment to the Philips large 56-inch high resolution color LCD screen in the Exam Room (up to 8 sources simultaneously) and to the Philips ultra high-brightness 21-inch color LCD displays in the Control Room (6 or 7 displays).
The Omniswitch allows the user to switch keyboard/mouse

Line #	Part #	Description	Qty

control for the connected medical equipment.
The Omniswitch can be connected to up to 8 medical equipment systems.
These systems can be selected and controlled with 1 or 2 keyboard/mouse combinations in the Control Room.
Medical grade, large screen high resolution color LCD display in the Exam Room
This display support the image quality requirements for monochrome X-ray images, color EP signals as well as other images and replace all displays normally delivered with an Allura Xper system for the Exam Room.
Main characteristics are:
• 56 inch, 8 Megapixel color LCD display
• Native resolution: 3840x2160
• Brightness: max 450 Cd/m2 (typical)
• Contrast ratio : 1200:1 (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 56-inch color LCD screen control
• Resize & enlarge information at any stage during the case via the Allura Xper table-side module in the Exam Room and/or the Allura Xper module in the Control Room.
• Select, customize & save viewing lay-outs via the Allura Xper table-side module in the Exam Room
• Select, customize & save viewing lay-outs via Allura Xper module in the Control Room
Ultra high-brightness, medical grade, color LCD displays
A total of 6 x ultra high-brightness, medical grade, color LCD displays are provided with EP cockpit XL for use in the Control Room.
These displays support the image quality requirements for monochrome X-ray images, color EP signals as well as other images and replace all displays normally delivered with an Allura Xper system.
Main characteristics are:
• 21.3 inch, 2 Megapixel color LCD display
• Display resolution (up to) : 1600x1200
• Input resolution (up to) : 1920x1200
• Brightness: 550 Cd/m2
• Contrast ratio : 800:1
• 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
Monitor ceiling suspension
A Monitor ceiling suspension for use in the Exam Room carry the large 56-inch color LCD screen, providing highly flexible viewing capabilities.
The monitor ceiling suspension is height-adjustable and moveable along ceiling rails. It can be positioned on both sides of

Line #	Part #	Description	Qty

the table and replaces the Allura monitor ceiling suspension.
Note: Two 21" additional displays (same as used in Control Room) are optional and located on top of the monitor ceiling suspension frame which carry the large 56-inch color LCD screen.
Control Room set-up
The 6 x ultra high-brightness color LCD displays, the 2x keyboard/mouse combination and Allura Xper module are designed to support an efficient workflow within the Control Room.
Equipment connected to EP cockpit XL can be operated via the Allura Xper module.

Note: The Allura Xper module is delivered with EP cockpit XL (EP cockpit)

Display information (incl. third party systems) on any of the Philips ultra high-brightness 21-inch color LCD displays in the Control Room.
Snapshot functionality
The snapshot function allows the user to store/save a screen-capture of any image on any EP cockpit display as a DICOM Secondary Capture image to a connected PACS.
The snapshot function allows the user to store/save a screen-capture of any image on any EP cockpit 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 seperate DICOM Secondary Capture images
Wall Connection Boxes
A total of 9 x Wall Connection Boxes are provided with EP cockpit XL.
Through Wall Connection Boxes a wide range of 3rd party equipment can be connected to the EP cockpit XL Omniswitch.
The Wall Connection Boxes provides galvanically isolated connections: Video (DVI), Network (RJ45) and Keyboard/mouse (USB) .
The Wall Connection Boxes can be located in the Technical Room, Control Room and/or Exam Room.
In case of an Equipment Rack: 1 x Wall Connection Box is permanently placed on the Equipment Rack

Notes:
Life-supporting equipment can not be connected to the Wall Connection Boxes
EP cockpit XL displays are not powered by an Uninterruptible Power Supply. Equipment that requires a (fail-safe) power connection (UPS) for the video output need an additional display connected to that equipment's UPS.
Medical equipment with dedicated keyboards or displays should not be connected without consent of the manufacturer. Please contact your 3rd party equipment vendor for information and clearance.
Compatibility

Line #	Part #	Description	Qty
		EP cockpit XL is compatible with: Allura Xper FD10 series from Release 7.6 onwards Allura Xper FD20 series from Release 7.6 onwards	
		Allura Xper FD20 series from Release 7.6 onwards	
3	**NCVB158	**No existing Philips room**	1
4	**NCVB120	**Ceiling height < 290cm, >270cm**	1
5	**FCV0587	**Xper Live/Ref Slaving**	4
		Xper Live/Ref Slaving The Xper Live/Ref Slaving will enable the option to slave the Live or Ref video source from the Allura Xper. The total amount of Xper Live/Ref Slaving that can be selected is max 4. Xper Live/Ref Slaving is possible: - In Control Room icw FCV0011(B/W monitor in Control Room) - In Philips MCS (additional monitor excluded from this option) - Icw FCV0519 1 or 2 MCS from Skytron/Steris	
6	**FCV0589	**Legacy Video Convertor**	8
		Legacy Video Convertor The Legacy Video Cenvertor enables conversion from VGA towards DVI. The Legacy Video Convertor enables conversion from VGA towards DVI for supported input resolutions, as listed in the table below. Signal type Native resolution Image Aspect Ratio VGA 640x480 4:3 SVGA 800x600 4:3 XGA 1024x768 4:3 SXGA 1280x1024 5:4 SXGA+ 1400x1050 4:3 UXGA 1600x1200 4:3 WXGA 1280x800 16:10 (8:5) WSXGA 1440x900 16:10 (8:5) WSXGA+ 1680x1050 16:10 (8:5) WUXGA 1920x1200 16:10 (8:5) 2K 2048x1080 19:10 TV1080I/P 1920x1080 16:9 TV 480I 720x480 4:3 TV 480P 704x480 4:3 TV 576I 720x576 4:3 TV 576P 704x576 4:3 TV 720P 1280x720 16:9	
7	**NCVA089	**RIS / CIS DICOM interface**	1

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 ortosearch fora 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 withDICOM Work List Management and Modality Performed Procedure Step.

8 **NCVA092 **Lab Reporting** 1

Lab Reporting allows the user to generate and print simple reports in modality stand-alone situations. The user is able to incorporate free text and clinical images. The reporting functionality is suited for local printing and email. Part of the report is generated automatically from administrative data (e.g. patient/exam data hospital name) and required data (e.g. run-log dose information and event-log).

9 **NCVA086 **Rotational Scan** 1

Rotational Scan provides real-time 3D impressions of complex vasculature and the coronary artery tree. It acquires multiple projections with just one contrast injection.

Rotational Scan can be used during screening procedures to quickly determine the optimal projection for the study as the angle (rotation/angulation) of the projection is indicated on each image.

Compared with traditional angiography Rotational Scan can save considerable time dose and contrast while providing image detail required for diagnostic and therapeutic decisions.

Rotational Scan is possiblewith the Allura Xper systems in the side position (ceiling mounted systems) and in the head position which provides the flexibility to perform procedures virtually from head to toe.

With Allura Xper FD20

C-arm in side position:

- Max. rotation speed: 30°
- Max. rotation angle: 180°

C-arm in head position:

- Max. rotation Speed: 55°
- Max. rotation Angle: 305°

With Allura Xper FD10:

Poly G in side position (ceiling version):

- Max. rotation Speed: 30°
- Max. rotation Angle: 90°

Poly G in head position:

- Max. rotation Speed: 55°
- Max. rotation Angle: 240°

Maximum speeds are given by the framespeed specifications of the system configuration.

The speed and range of rotation are the highest available (see table). The very high speed allows using less contrast whereas the very wide rotation range provides a complete evaluation of the anatomy.

The stand is designed forvery high mechanical stability. It offers precise positioning and high reproducibility assuring you of high quality images and excellentstudies.

Operation of Rotational Scan is extremely easy. The procedure is selected set up and executed virtually within a matter of seconds supporting the highest patient throughput. A set of dedicated acquisition programs is available on the Xper Module and can be selected at the touch of a button. The rotation endand start positions are easily selected. The procedure is controlled from theexposure hand

- or foot-switch.

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 **NCVA791 **Xper Table Tilt** 1

This innovating SyncraTilt enhances the accuracy and efficiency of gravity-oriented procedures. It is available as an option for the Xper table in Allura Xper series systems.

SyncraTilt is ideal for interventional, myelography, phlebography and head down procedures because it provides more precise imaging of contrast medium, blood, or objects in the body.

With SyncraTilt, the isocentre is automatically located at the isocentre of rotation and angulation of the stand. If the longitudinal position of the stand changes, the tilt isocentre is changed to match with the new stand position. As a result, the region of interest is always centred

As the table tilts, the X-ray beam automatically coordinates to the movement.

The table floats even when tilted, and the region of interest can be followed by panning the tabletop.

When combined with the Bolus Chase option, SyncraTilt enables phlebography to be performed with a head-up tilted patient.

The option provides:

- maximum tilt range:
- 17 degrees (head down) to +17 degrees (head up).
- tilt speed: 2 degrees/sec
- automatic safeguarding system with manual override
- panning range in tilted plane: equal to the standard
- tabletop specifications (longitudinal 120cm, lateral 35cm)
- easy to use controls
  Comprising:
  - Tilt drive with user controls

Compatible with:
. Xper table in Allura Xper FD series Rel 3 onwards (monoplane versions) and Rel 2 onwards (biplane verions)
. Bolus Chase
. Pivot for table base
. swivel for table base

12 **NCVB882 Cradle extension 1

This extension provides the possibility to cradle the table top.
This allows optimal positioning of the patient for f.i. more invasive (surgical) or guided puncture procedures.
Functionality:
. isocentric cradle with maximum cradle range: -15 degrees to +15 degrees for the full tilt range
cradle speed: 3 degrees/sec
. automatic safeguarding system with manual override
. easy to use controls

13 **FCV0510 Long mattress cardio 1

Patient mattress, thickness 70 mm, length 3165 mm, width 500 mm

14 **FCV0017 CABLE CARRIER CS 2

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

15 **FCV0565 Personal Dose Meter(10 pieces) 2

This package includes ten equal pieces of Personal Dose Meters.

The Personal Dose Meter (PDM) is a small and easy to wear active Xray dose meter intended to measure
and store received Xray dose of staff, present in an Xray room during radiation. The PDM has build-in
wireless communication 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 and DoseView (and the optional Dose Manager) software for
the following attributes:

- Full name (max 40 bytes)
- Display user name (max 16 bytes)
- User group from list
- PDM ID (max 16 characters)
- Position on body
- Date & time = Real Time Clock, synchronized with local time, and being the clock master for the DoseAware system. With each
- connection PDM => Base Station => Dose Manager the timing is synchronized automatically.
- Date of PDM assignment to a person
- Dose history reset
- Sleep mode On/Off
- Annual dose limit

The PDM has following specifications:

- Operational unit: HP10
- Dose range: 1µSv – 10 Sv
- Dose resolution: 1 µSv
- Dose uncertainty: 5% or 1 µSv
- Dose rate range: 10 µSv/hr – 50 mSv/hr (3 nSv/s – 15 µSv/s)
- Response time: < 4 s, 40 µSv/hr – 100 µSv/hr; < 1 s above 100 µSv/hr
- Energy dependency X-, ?-rays: N40-N160 (33keV – 118 keV)
- Average battery life: 3 – 5 years, depending on daily use
- Weight: 30 gr
- Dimensions: 45 x 45 x 10 mm (w x h x d)
- Personalization: 8 Inlays with colour
- Communication radio: Center frequency 868.3 Mhz for Europe version
  915 Mhz for USA version

16 ****FCV0566** **Personal Dose Meter rack** **4**

This stainless steel rack facilitates storage of up to 5 ea Personal Dose Meters.
Intended to be mounted on a wall.
Dimensions: 40 x 19 x 6 cm (W x H x D)
Weight: 0,4 kg

17 ****FCV0567** **Base Station Package** **1**

Line #	Part #	Description	Qty

The Base Station is the heart of the DoseAware system that helps staff, wearing a PDM in the Xray
room, by seeing the level of received Xray dose, to increase awareness and to stimulate taking measures
to reduce received dose.
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 optional DoseAware Dose
Manager software via a standard network interface to complete the DoseAware system with archiving
and reporting functions.
The Online screen shows up to eight PDM's in range simultaneously. For each PDM the name is shown
next to a bar graph that displays real time the actual measured dose rate level separated in three colored
zones: green, orange, red.
These colours symbols:
Green: the user is in the comfort zone, aware of radiation, adequate precautions have been taken
Red: the user is out of the comfort zone, precautions (like distance, shuttering, lead protection, Xray filters, fluoro flavor, position in the room, applied projection) can be taken to reduce received radiation.
The max dose rate of each zone is marked in µSv/h on top of the scale. In addition the dose rate peek
level of the actual Xray exposure is displayed as a single block, that is kept visible for max 10 sec after exposure end.
The touch screen also allows access to data stored in the PDM in range. The Walk-up view can show all
configured attributes of the PDM, the actual battery status, and personal dose overviews (accumulated
dose per hour, per day, per week and over the year as percentage of the annual dose limit)

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.

The compact cradle connects a PDM to a PC via a USB 2.0 port. In combination with the DoseView package it offers PDM-user setting management (password protected administrative function) and dose data read-out/analysis. It shows similar dose history views as the Base Station, but "off-line" via the PC and with more details, as long as the PDM is in the cradle. As the cradle takes over battery power supply, it's also an easy way to verify battery status if the PDM seems to have empty battery. (like no connection with Base Station)
Specifications of the Base Station:

- Dimensions: 30 x 25 x 6 cm (W x H x D)
- Weight: 1.45 kg

Line #	Part #	Description	Qty

- Display: 10.4 " touch screen, 640 x 480 pixels
- Memory: 512 Mb
- Storage: all dose-rate/sec and accumulated dose/hr that are received from PDM's in range. The memory size accommodates f.i250 PDM's with 50 hours dose rate history each.
- Power Supply: via adapter, 90-264 VAC, 24 W
- Communication: wireless radio communication with PDM's (see PDM spec) Ethernet 10/100 Mbits/s port for the Dose Manager connection

18 ****NCVB240** **Integr EPcockpit XL and EPnav** 1

This extension enables the use of EP navigator (NCVB180) inside the integrated EP cockpit platform. There is no need for additional hardware on top of this extension.

19 ****NCVB991** **EP Navigator R4** 1

EP navigator facilitates catheter navigation in ablation procedures, by providing a three-dimensional (3D) overlay of the real patient anatomy onto live fluoroscopic images. The 3D anatomy is registered to the fluoroscopy and shows the position of all catheters in relation to the anatomy. EP navigator follows the rotation of the C-arc and the movement of the table.

The 3D anatomy is obtained using an intra-procedural.3D rotational scan or a pre-procedural cardiac CT or MR scan, from which the cardiac structures (left atrium, right atrium, left ventricle, right ventricle, aorta, coronary sinus, and trachea) are segmented. Automatic segmentation is provided for the left atrium and trachea. User-aided segmentation is possible for other anatomic structures.

In addition to the overlay functionality onto live fluoroscopic images, the segmented 3D rotational scan, CT or MR anatomy from EP navigator can be seamlessly transferred to a compatible mapping system. This allows navigating catheters on images with real 3D anatomical detail without using X-ray.

Using the Endo View function, the endocardial surface can be visualized, providing a view of important anatomical structures such as, in the left atrium, the pulmonary veins and the ridge to the left atrial appendage. The Point Tagging function allows the placement of tag markers on the surface of the anatomy, to mark sites of interest such as ablation lesions. Using the snapshot functionality, a screen image of the live screen can be made, perfectly suitable for reporting or teaching purposes.

Clinical Education Program for EP Navigator

CV EP Navigator OnSite Education: Clinical Education Specialists will provide sixteen (16) hours of CV EP Navigator OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 230-100615

20 ****NCVB992** **3D EP Rotational Scan** 1

Line #	Part #	Description	Qty

3D EP rotational scan reconstructs three-dimensional (3D) cardiac anatomy from a rotational angiography. It provides real-time and 3D anatomic detail during the intervention, in the EP lab itself.

When used as an overlay onto live fluoroscopic images, this 3D anatomy is used in EP navigator as a roadmap to guide catheter navigation. Alternatively, the segmented 3D anatomy can be transferred to a compatible mapping system to navigate catheters on images with real 3D anatomical detail without using X-ray.

The 3D EP rotational scan features a unique reduced angular rotation range in head and nurse position to simplify the workflow, e.g. not interfere with anesthesia logistics. All EP navigator functions, such as Endo View and Point Tagging, are available when using 3D EP rotational scan.

21 ****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.

22 ****NCVA165** **1st Xper Module in Exam.Room** **1**

23 ****NCVA169** **2nd Xper Mod. in Control Room** **1**

24 ****NCVA856** **No room prepared for IVUS** **1**

25 ****NCVC005** **Equipment Rack DVI dual link** **1**

The Equipment Rack for EP cockpit allows users of the Philips Allura Xper system to organize all the equipment used in an EP Lab on one moveable rack and removes cable clutter through a cable condult. This provides a much "cleaner" organized look for the busy EP Lab.
The ceiling-mounted Equipment Rack, located in the Exam Room, can support 3rd party equipment. Cabling for this equipment is guided up through the ceiling mounted suspension. It can be moved by swiveling the ceiling mounted boom. The Equipment Rack can be positioned within a circular range of 1.6 meters.
The Equipment Rack consists of:

Line #	Part #	Description	Qty

• 5 shelves and 1 drawer with flexible mounting position and can support 225kg of equipment weight.
• An infusion extension rod
• An extension arm with a standard VESA mounting plate, on which different types of equipment can be mounted
• A Wall Connection Box (1 of the standard EP cockpit Wall Connection Boxes) with Power (230V, 50Hz), Grounding, Network (RJ45), Keyboard/mouse (USB) and Video (DVI) connections
• 10 country-specific power connectors
• 4 Ethernet network connectors
• Ergonomically operating handles with pneumatic brakes
• Standard gas outlets for O2, NO2, and Vacuum
Notes:
• Life-supporting equipment cannot be connected to the Equipment Rack.
• Medical equipment with dedicated keyboards or displays should not be connected without consent of the manufacturer. Please contact your 3rd party equipment vendor for information and clearance.
• Only EP cockpit-compatible configurations of Carto and EPWorkmate should be connected. Customers are requested to contact their local Biosense Webster or EPMedSystems representative for further information on compatibility.
• The Wall Connection Box can be used to connect 3rd party equipment that complies with the following requirements:
• Qualified medical electrical equipment [IEC 60601-1]
• IEC 950 only if connected to an EP cockpit Wall Connection Box mains (230V) connection in the Control Room or otherwise isolated from hospital mains according IEC60601-1.
• Connected to the same earth as the Philips Protective Conductor Bar (PPCB).
• Can be operated with a standard AT 101-key US English keyboard connected through a USB connection.
• Provide video-output that matches the display range of the Color monitor that is used for display. Most display formats up to 1600x1200 are supported.

26	****NCVA830**	**US Standard**	**1**
27	****NCVB770**	**Unknown (for quoting purposes)**	**1**
28	****989600207421**	**Equipment rack Predelivery set**	**1**

Pre-delivery for Equipment Rack.

29	****989801292102**	**CV Full Travel Pkg OffSite**	**2**

Includes one (1) participant's airfare from North American customer location to Cleveland, Ohio, with lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced.

Education expires one (1) year from equipment installation date (or purchase date if sold separately).

30	****980306640009**	**Blue Anti-Fatigue Floor Mat w/ Logo**	**3**

Line #	Part #	Description	Qty
		Blue Anti-Fatigue Floor Mat w/ Logo	
31	**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.

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.

32	**989801220070	**Carrot C-Com Intercom**	1

C-Com is a state-of-the-art digital wireless communication system specifically suited for medical environments. Compared to conventional systems that include central microphones and overhead speakers, C-Com dramatically reduces noise and distraction, enhances patient comfort and synchronizes clinical activities.

- The C-Com System includes (5) wireless headsets.
- The C-Com System is part of the Carrot Advanced Tool Set and not intended for diagnostic use.
- Whisper-sensitive military spec directional microphones
- Extremely comfortable headsets ensure flawless audio fidelity and precise communication.
- Physician instructions and collaborative communication are distributed to all team members

1 year warranty

33	**989600213942	**AD5 TO XPER TABLE ADAPT. PLATE**	1
34	**SP059B**	**Universal Power Supply**	1

Philips Power Solutions UPS for FD10 system.

35	**SP019**	**Trade In Allowance**	1

Customer represents and warrants that (i) Customer has, and shall have when title passes, good and marketable title to the equipment being traded in and (ii) has the authority to effect such trade in.

180213 Allura Xper FD10

Line #	Part #	Description	Qty

Product: Toshiba CATH LAB
Serial Number: 1-1EUVTY
Manufacturer: TOSHIBA AMERICA MEDICAL SYSTEMS

Trade-In authorization number: 27801

Trade-In Value: $0.00

De-install Date: 1/15/2013

Customer will be trading-in equipment that is described on the attached System Disclosure Form (the "Trade-In"), which Trade-In the parties agree (i) will be removed on the De-install Date and (ii) is currently in the condition as represented on the System Disclosure Form. In addition, the parties agree as follows:

1. Customer represents and warrants that Customer has good and marketable title to the Trade-In as of the date of this Quotation and will have good and marketable title when Philips removes the Trade-In from Customer's site (the "Removal Date");
2. Title to the Trade-In shall pass from Customer to Philips on the Removal Date, unless otherwise agreed by Philips and the Customer;
3. Notwithstanding anything to the contrary in any Business Associate Addendum, Customer represents and warrants that as of the Removal Date all Protected Health Information will have been de-identified or removed from the Trade-In;
4. Philips may test and inspect the Trade-In prior to de-installation. If the condition of the Trade-In is not substantially the same on the Removal Date (ordinary wear and tear excepted) as it is identified on the System Disclosure Form, then Philips may reduce the price quoted for the Trade-In;
5. If the removal date is delayed until after the De-Install Date, unless Philips causes the delay, then Philips may reduce the price quoted for the Trade-In by six percent (6%) per month.
6. Philips is responsible for normal de-installation costs of the Trade-In.
7. The trade-in value will not include costs associated for any facility modifications and/or rigging required for de-installation and must be accounted for separately.
8. Customer is responsible for all plumbing necessary to properly drain coolant from chiller system and cap the lines.
9. Prior to the Removal Date, Customer shall remove from the room all equipment that is not being de-installed.

36 **SEBLRSVNP1** **Customer Note** 1

Hospital will supply contrast media injector.

**********PROMOTIONS**********

Promotion Name	Description
MedAssets Q412 EP Cockpit	This special promotion provides EP Cockpit at a greatly reduced price for MedAssets/Broadlane customers. All orders for this promotion must be received on or before December 31, 2012
MedAssets Q412 EP Navigator	This special promotion provides EP Navigator at a greatly reduced price for MedAssets/Broadlane customers. EP Navigator is an interventional tool for fusing CT images with live xray. This helps physicians when doing A-Fib ablation planning. All orders for this promotion must be received on or before December 31, 2012.
Mono Closer Q4, 2012	All orders for this promotion must be received on or before December 28, 2012.

NET PRICE $1,018,330.64

Buying Group: MEDASSETS SUPPLY CHAIN SYSTEMS INC Contract #: Multi Modality GB Q4 12

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:

_____

_____

_____

Contact Phone #:

_____

Purchaser approval as quoted:

_____

Title:

_____

Invoice Address:

_____

_____

_____

Contact Phone #:

_____

Date:

_____

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

Philips Standard Terms and Conditions of Sale

The products and services listed in the quotation are offered by Philips Healthcare, a division of Philips Electronics North America Corporation ("Philips") only under the terms and conditions described below.

1. Price; Taxes. The purchase price stated in the quotation does not include applicable sales, excise, use, or other taxes in effect or later levied. Customer shall provide Philips with an appropriate exemption certificate reasonably in advance of the date the product is available for delivery otherwise, Philips shall invoice Customer for those taxes, and Customer shall pay those taxes in accordance with the terms of the invoice.

2. Cancellation. Philips' cancellation policies are set forth in the applicable schedule attached to these Terms and Conditions of Sale.

3. Payment Terms.
3.1 Unless otherwise specified in the quotation, Philips will invoice Customer, and Customer will immediately pay such invoice on receipt for each product in accordance with the payment terms set forth in the applicable schedule attached to these Terms and Conditions of Sale:
3.2 Orders are subject to Philips' on-going credit review and approval.
3.3 Customer shall pay interest on any amount not paid when due at the maximum rate permitted by applicable law. If Customer fails to pay any amount when due, in addition to any other rights or remedies available to Philips at law or in equity, Philips may discontinue the performance of services, discontinue the delivery of the product, or deduct the unpaid amount from any amounts otherwise owed to Customer by Philips under any agreement with Customer. In any action initiated to enforce the terms of the quotation following a Customer default or product cancellation under an order arising from the quotation, Philips shall be entitled to recover as part of its damages all costs and expenses, including reasonable attorneys' fees, in connection with such action.
3.4 Credit Card. Philips, at its discretion, will accept a credit card for payment on orders with a net value of $50,000 or less.

4. Trade - In. If Customer will be trading-in any equipment ("Trade-In"), then:
4.1 Customer represents and warrants that Customer has good and marketable title to such Trade-In;
4.2 Title to the Trade-In shall pass from Customer to Philips upon Philips making the new equipment available for first patient use. Removal of the Trade-In from Customer's site shall occur no later than the date Philips makes the new product available for first patient use, unless otherwise agreed in writing between Philips and the Customer; and
4.3 Notwithstanding anything to the contrary in any Business Associate Addendum ("BAA"), Customer represents and warrants that Customer has removed or de-identified all Protected Health Information ("PHI") from the Trade-In equipment as of the date the equipment is removed. To the extent Customer has not done so, Customer agrees to reimburse Philips for any out-of-pocket costs Philips incurs to remove or de-identify PHI from the Trade-In.
4.4 If (a) the condition of the Trade-In is not substantially the same when Philips removes the Trade-In (ordinary wear and tear excepted) as it was when Philips quoted the Trade-In value; or (b) Customer delays the removal of the Trade-In, then Philips may reduce the price quoted for such Trade-In or cancel the Trade-In and Customer will pay the adjustment amount within thirty (30) days of receipt of invoice.
4.5 If Philips does not receive possession of the Trade-In, Philips will charge Customer, and Customer will pay within thirty (30) days of receipt of invoice, the amount of the Trade-In allowance.
4.6 Evidence that Customer intends to trade in an asset as part of the purchase or lease of any product(s) shall be in the form of, but not limited to: (a) receiving a trade in quote and/or authorization from Philips on the value of the asset to be traded in; (b) providing Philips with serial numbers of assets to be traded in; and/or, (c) providing Philips with a de-installation date to remove an existing asset in order to install Philips quoted equipment.

5. Leases. If Customer desires to convert the purchase of any product to a lease, Customer will arrange for the lease agreement and all other related documentation to be reviewed and approved by Philips not later than ninety (90) days prior to the date of the availability for delivery of major components of the product. The Customer is responsible for converting the transaction to a lease, and is required to secure the leasing company's approval of all of these Terms and Conditions of Sale. No product will be delivered to the Customer until Philips has received copies of the fully executed lease documents and has approved the same.

6. Security Interest. Customer hereby grants to Philips a purchase money security interest in the products until all payments have been made. Customer shall sign any financing statements or other documents necessary to perfect Philips' security interests in the products. Where permitted by applicable law, Customer's signature on the quotation or on a purchase order issued as a result of the quotation gives Philips the right to sign on Customer's behalf and file any financing statement or other documents to perfect Philips' security interest in the product.

7. Shipment and Risk of Loss.
7.1 The applicable schedule attached to these Terms and Conditions of Sale shall apply for delivery.
7.2 Title to any product (excluding software), and the risk of loss or damage to any product shall pass to the Customer F.O.B. destination. Customer shall obtain and pay for insurance covering such risks at destination.

8. Installation, Site Preparation, Remote Services.
8.1 **Installation.** Customer shall provide Philips full and free access to the installation site and suitable and safe space for the storage of the products before installation. Customer shall advise Philips of conditions at or near the site, including any hazardous materials, that could adversely affect the installation or pose a health or safety risk to Philips' personnel, and shall ensure that those conditions are corrected and hazardous materials removed, and that the site is fully prepared and available to Philips before installation work begins. Customer shall ensure, at no charge to Philips, that there are no obstacles preventing Philips from moving the product from the entrance of the Customer's premises to the installation site. Customer shall be responsible, at its expense, for rigging, the removal of partitions or other obstacles, and restoration work. The products will be installed during normal working hours. Philips will unpack the product, construct applicable pads (if required for certain products), connect the product to a safety switch or breaker to be installed by the Customer, and calibrate and test the product. If local labor conditions, including but not limited to a requirement to utilize union labor, require the use of non-Philips employees to participate in the installation of the product, then such participation of non-Philips employees shall be at Customer's expense. In such case, Philips will provide engineering supervision during the installation.

8.2 **Site Preparation.** Except where Philips has agreed in writing to provide construction services for a fee pursuant to a construction agreement and scope of work signed by Customer, Customer shall be responsible, at its expense, for the preparation of the installation site where the product will be installed including any required structural alterations. Customer shall provide any and all plumbing, carpentry work, conduit, wiring including communications and/or computer wiring, network equipment, power supply, surge suppression and power conditioning (except to the extent they are expressly included in the quotation), fire protection and environmental controls, ground fault and isolation system, and other fixtures and utilities required to properly attach, install, and use the product. Site preparation shall be in compliance with all safety, electrical, RF or magnetic shielding and acoustical suppression and building codes relevant to the product and its installation and use. The sufficiency of any installation site plans shall be the responsibility of Customer. Customer, at its expense, shall obtain all permits and licenses required by federal, state, or local authorities in connection with the installation and operation of the product, including any certificate of need and zoning variances. PHILIPS MAKES NO WARRANTY AND ASSUMES NO LIABILITY FOR THE FITNESS OR ADEQUACY OF THE SITE IN WHICH THE PRODUCT IS TO BE INSTALLED OR USED. CUSTOMER INDEMNIFIES PHILIPS AGAINST ANY CLAIMS, INCLUDING SUBROGATION CLAIMS, ARISING FROM CUSTOMER'S SITE PREPARATION RESPONSIBILITIES.

8.3 **Remote Services Network ("RSN").** Customer will (a) provide Philips with a secure location at Customer's premises to store one Philips RSN router (or a Customer-owned router acceptable to Philips at Customer's option) for connection to the equipment and to Customer's network; and (b) at all times during the warranty period provide Philips with full and free access to the router and a dedicated broadband Internet access node, including but not limited to public and private interface access, suitable to establish a successful connection to the products through the Philips RSN and Customer's network for Philips' use in remote servicing of the product, remote assistance to personnel that operate the products, updating the products software, transmitting automated status notifications from the product and regular uploading of products data files (such as but not limited to error logs and utilization data for improvement of Philips products and services and aggregation into services). Customer's failure to provide such access at the scheduled time will constitute Customer's waiver of the scheduled planned maintenance service and will void support or warranty coverage of product malfunctions until such time as planned maintenance service is completed or RSN access is provided. Customer agrees to pay Philips at the prevailing demand service rates for all time spent by Philips service personnel waiting for access to the products.

9. Product Warranty.

9.1 If a separate product warranty page prints as part of this quotation, that product warranty applies to your purchase and is incorporated herein; otherwise Section 9.2-9.7 shall apply.

9.2 **Hardware/Systems.** Philips warrants to Customer that the Philips equipment (including its operating software) will perform in substantial compliance with its performance specifications in the documentation accompanying the products, for a period of 12 months beginning upon availability for first patient use.

9.3 **Stand-alone Licensed Software.** For a period of ninety (90) days from the date Philips makes Stand-alone Licensed Software available for first patient use, such Stand-alone Licensed Software shall substantially conform to the technical user manual that ships with the Stand-alone Licensed Software. "Stand-alone Licensed Software" means sales of Licensed Software without a contemporaneous purchase of a server for the Licensed Software. If Philips is not the installer of the Stand-alone Licensed Software, the foregoing warranty period shall commence upon shipment.

9.4 If the start of the installation is delayed for any reason beyond the control of Philips for more than thirty (30) days following the date that Philips notifies Customer that the major components of the product are available for delivery, the warranty period begins on the thirty-first (31st) day following that date.

9.5 Philips' sole obligations and Customer's exclusive remedy under any product warranty are limited, at Philips' option, to the repair or the replacement of the product or a portion thereof within thirty (30) days after receipt of written notice of such material breach from Customer ("Product Warranty Cure Period") or, upon expiration of the Product Warranty Cure Period, to a refund of a portion of the purchase price paid by the Customer, upon Customer's request. Any refund will be paid to the Customer when the product is returned to Philips. Warranty service outside of normal working hours (i.e, 8:00 A.M. to 5:00 P.M., Monday through Friday, excluding Philips' observed holidays), will be subject to payment by Customer at Philips' standard service rates.

9.6 This warranty is subject to the following conditions: the product (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; and (c) is to be maintained and in strict compliance with all recommended and scheduled maintenance instructions provided with the product; and Customer is to notify Philips immediately if the product at any time fails to meet its printed performance specifications. Philips' obligations under any product warranty do not apply to any product defects resulting from improper or inadequate maintenance or calibration by the Customer or its agents; Customer or third party supplied interfaces, supplies, or software including without limitation loading of operating system patches to the Licensed Software and/or upgrades to anti-virus software (except DAT file changes) running in connection with the Licensed Software without prior validation approval by Philips; use or operation of the product other than in accordance with Philips' applicable product specifications and written instructions; abuse, negligence, accident, loss, or damage in transit; improper site preparation; unauthorized maintenance or modifications to the product; or viruses or similar software interference resulting from connection of the product to a network. Philips does not provide a warranty for any third party products furnished to Customer by Philips under the quotation; however, Philips shall use reasonable efforts to extend to Customer the third party warranty for the product. The obligations of Philips described herein and in the applicable product-specific warranty document are Philips' only obligations and Customer's sole and exclusive remedy for a breach of a product warranty.

9.7 THE WARRANTIES SET FORTH HEREIN AND IN PHILIPS' WARRANTY DOCUMENT WITH RESPECT TO A PRODUCT (INCLUDING THE SOFTWARE PROVIDED WITH THE PRODUCT) ARE THE ONLY WARRANTIES MADE BY PHILIPS IN CONNECTION WITH THE PRODUCT, THE SOFTWARE, AND THE TRANSACTIONS CONTEMPLATED BY THE QUOTATION, AND ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, WHETHER WRITTEN, ORAL, STATUTORY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Philips may use refurbished parts in the manufacture of the products, which are subject to the same quality control procedures and warranties as for new products.

10. Philips Proprietary Service Materials. 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 products or to assist Philips and its authorized agents to maintain and to service the products under warranty or a separate support agreement with Customer. Customer agrees to restrict access to such software and documentation to Philips' employees and those of Philips' authorized agents only and to permit Philips to remove its Proprietary Service Materials upon request.

11. Patent Infringement Claims.
11.1 Philips shall indemnify, defend, and hold harmless Customer against any new claim that a Philips Product provided in the quotation infringes, misappropriates, or violates any third party intellectual property right, whether patent, copyright, trademark, or trade secret, provided that Customer: (a) provides Philips prompt written notice of the claim; (b) grants Philips full and complete information and assistance necessary for Philips to defend, settle, or avoid the claim; and (c) gives Philips sole control of the defense or settlement of the claim.
11.2 The provisions of this section shall not apply if the product is sold or transferred.
11.3 If (a) a Philips' Product is found or believed by Philips to infringe such a claim; or, (b) Customer has been enjoined from using the Philips Product pursuant to an injunction issued by a court of competent jurisdiction, Philips may, at its option, (i) procure the right for Customer to use the product, (ii) replace or modify the product to avoid infringement, or (iii) refund to Customer a portion of the product purchase price upon the return of the original product. Philips shall have no obligation for any claim of infringement arising from: Philips' compliance with Customer's designs, specifications, or instructions; Philips' use of technical information or technology supplied by Customer; modifications to the product by Customer or its agents; use of the product other than in accordance with the product specifications or applicable written product instructions; use of the product with any other product; if infringement would have been avoided by the use of a current unaltered release of the products; or use of the Philips Product after Philips has advised Customer, in writing, to stop use of the Philips Product in view of the claimed infringement. Philips will not be liable for any claim where the damages sought are based directly or indirectly upon the quantity or value of products manufactured by means of the products purchased under this quotation, or based upon the amount of use of the product regardless of whether such claim alleges the product or its use infringes or contributes to the infringement of such claim. The terms in this section state Philips' entire obligation and liability for claims of infringement, and Customer's sole remedy in the event of a claim of infringement.

12. Limitation of Liability. THE TOTAL LIABILITY, IF ANY, OF PHILIPS AND ITS AFFILIATES FOR ALL DAMAGES AND BASED ON ALL CLAIMS, WHETHER ARISING FROM BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING FROM A PRODUCT, LICENSED SOFTWARE, AND/OR SERVICE IS LIMITED TO THE PRICE PAID HEREUNDER FOR THE PRODUCT, LICENSED SOFTWARE, OR SERVICE.
THIS LIMITATION SHALL NOT APPLY TO:
(a) THIRD PARTY CLAIMS FOR BODILY INJURY OR DEATH CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT;
(b) CLAIMS OF TANGIBLE PROPERTY DAMAGE REPRESENTING THE ACTUAL COST TO REPAIR OR REPLACE PHYSICAL PROPERTY DAMAGE;
(c) OUT-OF-POCKET COSTS INCURRED BY CUSTOMER TO PROVIDE PATIENT NOTIFICATIONS, REQUIRED BY LAW, TO THE EXENT SUCH NOTICES ARE CAUSED BY PHILIPS' UNAUTHORIZED DISCLOSURE OF PHI; and,
(d) FINES/PENALTIES LEVIED AGAINST CUSTOMER BY GOVERNMENT AGENCIES CITING PHILIPS' UNATHORIZED DISCLOSURE OF PHI AS THE BASIS OF THE FINE/PENALTY. ANY SUCH FINES OR PENALTIES SHALL CONSTITUTE DIRECT DAMAGES.

13. DISCLAIMER. 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, BUSINESS INTERRUPTION, LOSS OF DATA, OR THE COST OF SUBSTITUTE PRODUCTS OR SERVICES WHETHER ARISING FROM BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHER TORT.

14. Confidentiality. Each party shall maintain as confidential any information furnished or disclosed to one party by the other party, whether disclosed in writing or disclosed orally, relating to the business of the disclosing party, its customers and/or its patients, and the quotation and its terms, including the pricing terms under which Customer has agreed to purchase the products. Each party shall use the same degree of care to protect the confidentiality of the disclosed information as that party uses to protect the confidentiality of its own information, but in no event less than a reasonable amount of care. Each party shall disclose such confidential information only to its employees having a need to know such information to perform the transactions contemplated by the quotation. The obligation to maintain the confidentiality of such information shall not extend that (a) is or becomes generally available to the public without violation of this Agreement or any other obligation of confidentiality or (b) is lawfully obtained by the receiving Party from a third party without any breach of confidentiality or violation of law.

15. Compliance with Laws & Privacy.
15.1 Each party shall comply with all laws, rules, and regulations applicable to the party in connection with the performance of its obligations in connection with the transactions contemplated by the quotation, including, but not limited to, those relating to affirmative action, fair employment practices, FDA, Medicare fraud and abuse, and the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"). Health care providers are reminded that if the purchase includes a discount or loan, they must fully and accurately report such discount or loan on cost reports or other applicable claims for payment submitted under any federal or state health care program, including but not limited to Medicare and Medicaid, as required by federal law (see 42 CFR 1001.952[h]).
15.2 In the course of providing project implementation related services and/or warranty services to Customer, hereunder, it may be necessary for Philips to have access to, view and/or download computer files from the products that might contain Personal Data. "Personal Data" means information relating to an individual, from which that individual can be directly or indirectly identified. Personal Data can include both personal health information (i.e. images, heart monitor data, and medical record number) and non-health information (i.e. date of birth, gender). Philips will process Personal Data only to the extent necessary to perform and/or fulfill its project implementation related service, warranty service and/or warranty obligations hereunder.
15.3 It is Customer's responsibility to notify Philips if any portion of the order is funded under the American Reinvestment and Recovery Act ("ARRA"). To ensure compliance with the ARRA regulation, Customer shall include a clause stating that the order is funded under ARRA on its purchase order or other document issued by Customer.

16. Excluded Provider. Philips represents and warrants that Philips, its employees and subcontractors, are not debarred, excluded, suspended or otherwise ineligible to participate in a federal health care program, nor have they been convicted of any health care related crime for the products and services provided under this Agreement (an "Excluded Provider"). Philips shall promptly notify Customer when it becomes aware that Philips or any of its employees or subcontractors, providing services hereunder, have become an Excluded Provider whereupon Customer may terminate this order by express written notice for product and services not yet shipped or rendered.

17. General Terms. The following additional terms shall be applicable to the purchase of a product:
17.1 **Force Majeure.** Each party shall be excused from performing its obligations (except for payment 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 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.
17.2 **Bankruptcy.** If Customer becomes insolvent, is unable to pay its debts when due, files for bankruptcy, is the subject of involuntary bankruptcy, has a receiver appointed, or has its assets assigned, Philips may cancel any unfulfilled obligations, or suspend performance; however, Customer's financial obligations to Philips shall remain in effect.
17.3 **Assignment.** Customer may not assign any rights or obligations in connection with the transactions contemplated by the quotation without the prior written consent of Philips, which consent shall not be unreasonably withheld, and any attempted assignment without such consent shall be of no force or effect.
17.4 **Export.** Customer shall assume sole responsibility for obtaining any required export authorizations in connection with Customer's export of the products from the country of delivery.
17.5 **Governing Law.** All transactions contemplated by the quotation shall be governed by the laws of the state where the equipment will be installed, without regard to that state's choice of law principles, and expressly excluding application of the Uniform Computer Information Transactions Act ("UCITA"), in any form. EACH PARTY, KNOWINGLY AND AFTER CONSULTATION WITH COUNSEL, FOR ITSELF, ITS SUCCESSSORS' AND ASSIGNS, WAIVES ALL RIGHT TO TRIAL BY JURY OF ANY CLAIM ARISING WITH RESPECT TO THIS AGREEMENT OR ANY MATTER RELATED IN ANY WAY THERETO.
17.6 **Entire Agreement.** These Terms and Conditions of Sale, the terms and conditions set forth in the quotation and the applicable Philips' product-specific warranty document constitute the entire understanding and agreement by and between the parties with respect to the transactions contemplated by the quotation, and supersede any previous understandings or agreements between the parties, whether written or oral, regarding the transactions contemplated by the quotation. The pricing in the quotation is based upon the terms and conditions in the quotation. No additional terms, conditions, consents, waivers, alterations, or modifications shall be binding unless in writing and signed by the parties. Customer's additional or different terms and conditions, whether stated in a purchase order or other document issued by Customer, are specifically rejected and shall not apply to the transactions contemplated by the quotation.
17.7 **Headings.** The headings in the quotation are intended for convenience only and shall not be used to interpret the quotation.
17.8 **Severability.** If any provision of the quotation is deemed to be illegal, unenforceable, or invalid, in whole or in part, the validity and enforceability of the remaining provisions shall not be affected or impaired, and shall continue in full force and effect.
17.9 **Notices.** Notices or other communications shall be in writing, and shall be deemed served if delivered personally, or if sent by facsimile transmission, by overnight mail or courier, or by certified mail, return receipt requested and addressed to the party at the address set forth in the quotation.
17.10 **Performance.** The failure of Customer or of Philips at any time to require the performance of any obligation will not affect the right to require such performance at any time thereafter. Course of dealing, course of performance, course of conduct, prior dealings, usage of trade, community standards, industry standards, and customary standards and customary practice or interpretation in matters involving the sale, delivery, installation, use, or service of similar or dissimilar products or services shall not serve as references in interpreting the terms and conditions of the quotation.
17.11 **Obligations.** Customer's obligations are independent of any other obligations the Customer may have under any other agreement, contract, or account with Philips. Customer will not exercise any right of offset in connection with the terms and conditions in the quotation or in connection with any other agreement, contract, or account with Philips.
17.12 **Additional Terms.** The Product specific schedules listed below are incorporated herein as they apply to the equipment listed on the quotation and their additional terms shall apply solely to Customer's purchase of the products specified therein.
If any terms set forth in a schedule conflict with terms set forth in these Terms and Conditions of Sale, the terms set forth in the schedule shall govern:
(a) Schedule 1: Xcelera, Xper IM, Cardiovascular Information System (CVIS) and TraceMasterVue EKG Storage System (TMV) Products.

LICENSED SOFTWARE

1. License Grant.
1.1 Subject to any usage limitations for the Licensed Software set forth on the product description of the quotation, Philips grants to Customer a nonexclusive and non-transferable right and license to use the computer software package ("Licensed Software") in accordance with the terms of the quotation. The License shall continue for as long as Customer continues to own the product, except that Philips may terminate the License if Customer is in breach or default. Customer shall return the Licensed Software and any authorized copies thereof to Philips immediately upon expiration or termination of this License.
1.2 The License does not include any right to use the Licensed Software for purposes other than the operation of the product. Customer may make one copy of the Licensed Software in machine-readable form solely for backup purposes. Philips reserves the right to charge for backup copies created by Philips. Except as otherwise provided under section 1.6, Customer may not copy, reproduce, sell, assign, transfer, or sublicense the Licensed Software for any purpose without the prior written consent of Philips. Customer shall reproduce Philips' copyright notice or other identifying legends on such copies or reproductions. Customer will not (and will not allow any third party to) decompile, disassemble, or otherwise reverse engineer or attempt to reconstruct or discover the product or Licensed Software by any means whatsoever.
1.3 The License shall not affect the exclusive ownership by Philips of the Licensed Software or of any trademarks, copyrights, patents, trade secrets, or other intellectual property rights of Philips (or any of Philips' suppliers) relating to the Licensed Software.
1.4 Customer agrees that only authorized officers, employees, and agents of Customer will use the Licensed Software or have access to the Licensed Software (or to any part thereof), and that none of Customer's officers, employees, or agents will disclose the Licensed Software, or any portion thereof, or permit the Licensed Software, or any portion thereof, to be used by any person or entity other than those entities identified on the quotation. Customer acknowledges that certain of Philips' rights may be derived from license agreements with third parties, and Customer agrees to preserve the confidentiality of information provided by Philips under such third party license agreements.
1.5 The Licensed Software shall be used only on the product(s) referenced in the quotation.
1.6 Customer may transfer the Licensed Software in connection with sale of the product to a healthcare provider who accepts all of the terms and conditions of this License; provided that Customer is not in breach or default of this License, the Terms and Conditions of Sale, or any payment obligation to Philips.

2. Modifications.
2.1 If Customer modifies the Licensed Software in any manner, all warranties associated with the Licensed Software and the products shall become null and void. If Customer or any of its officers, employees, or agents should devise any revisions, enhancements, additions, modifications, or improvements in the Licensed Software, Customer shall disclose them to Philips, and Philips shall have a non-exclusive royalty-free license to use and to sub-license them.
2.2 The Licensed Software is licensed to Customer on the basis that (i) Customer shall maintain the configuration of the products as they were originally designed and manufactured and (ii) the product includes only those subsystems and components certified by Philips. The Licensed Software may not perform as intended on systems modified by other than Philips or its authorized agents, or on systems which include subsystems or components not certified by Philips. Philips does not assume any responsibility or liability with respect to unauthorized modification or substitution of subsystems or components.

071612 (Rev I)

Schedule 1
Interventional X-Ray (IXR), Diagnostic X-Ray (DXR), Computed Tomography (CT), Magnetic Resonance (MR), Positron Emission Tomography (PET), Nuclear Medicine (NM), Radiation Oncology (PROS), Women's Healthcare (WHC), and Ultrasound (US) products (including Image Guided Intervention and Therapy (IGIT) Products)

1. Payment Terms.
Unless otherwise specified in the quotation, Philips will invoice Customer, and Customer will pay such invoice on receipt, as follows:
1.1 For Interventional X-Ray (IXR), Diagnostic X-Ray (DXR), Computed Tomography (CT), Magnetic Resonance (MR), Positron Emission Tomography (PET), Nuclear Medicine (NM), Radiation Oncology (PROS), and Women's Healthcare (WHC):
(a) 10% of the purchase price shall be due with Customer's acceptance of the quotation.
(b) 70% of the purchase price shall be due on delivery of the major components of the product. Product installation will not begin until Customer has paid this portion of the purchase price.
(c) 20% of the purchase price shall be due when the product is available for first patient use. Available for first patient use means the product has been installed and substantially meets Philips' published specifications.
1.2 For Ultrasound(US) products (including IGIT Products):
(a) 100% of the purchase price shall be due thirty (30) days from Philips' invoice date.
1.3 If the start of the installation is delayed for any reason beyond the control of Philips for more than thirty (30) days following the date that Philips notifies customer that the major components of the product are available for delivery, the unpaid portion of the purchase price shall be due on the thirty-first (31st) day following such date.

2. Cancellation. The quotation is subject to change or withdrawal prior to written acceptance by Customer. All purchase orders issued by Customer are subject to acceptance by Philips. If Customer cancels an order prior to product shipment, Customer shall pay a cancellation charge of fifteen percent (15%) of the net order price. Orders are non-cancellable for products shipped.

3. Delivery.
3.1 Philips will use reasonable efforts to ship the product to the Customer by: (a) by the mutually agreed upon shipment date; or (b) by the date stated in the quotation; or (c) as otherwise agreed in writing. Philips will ship the product according to Philips' standard commercial practices. Philips will deliver the equipment during normal working hours, 8:00 - 5:00 PM, in the time zone where the Customer is located. Philips may make partial shipments. Philips will pay shipping costs associated with product shipment.
3.2 Prior to the shipment of any product, Philips may change the construction or the design of the product without notice to the Customer so long as the function, footprint, and performance of the product are not substantially altered.
3.3 If Customer requests a delay in the date major components of the product are available for delivery, then Philips will place the product in storage and the unpaid portion of the purchase price shall be due. Customer will reimburse Philips for all storage fees incurred upon receipt of invoice.

4. Additional Customer Installation Obligations for Magnetic Resonance.
4.1 Customer shall provide any and all Site preparation and shall be in compliance with all RF or magnetic shielding and acoustical suppression and building codes relevant to the product and its installation and use.
4.2 Customer's contractor or Customer's architect is required to provide detailed information on the proposed Helium Exhaust Pipe for their MRI system prior to installation to ensure safety specifications are being met.
Required Details include:
(a) Architectural drawing or sketch with complete dimensions including lengths, bending radii, bending angles, and pipe diameters for entire Helium Exhaust Pipe run from RF enclosure to discharge location.
(b) Completed Helium Exhaust Pipe Verification Checklist (Provided by Local Philips Project Manager)
(c) Picture showing the area where the Helium Exhaust Pipe will discharge.
4.3 Magnets will not be released for delivery unless and until Helium Exhaust Pipe details are provided for verification and have been confirmed to meet all life safety specifications.

5. Additional Terms Related to Sales of IGIT Products.
5.1 As part of installation, Philips will connect the IGIT product to such DICOM compatible scanners as Customer may designate (in writing), including CT and MR scanners and, if ultrasound navigation is included in the product, an IU22 ultrasound system.
5.2 If Customer requires that Philips connect the IGIT product to more than two (2) scanners or other devices, then Philips shall invoice Customer and Customer shall pay for installation services at Philips' then-current daily service rate. Additionally, Customer shall (a) make the scanner(s) the Customer has designated available to Philips' installation representative, (b) create and provide a data set of the installation phantom on or before the installation date, and (c) have its IT representative available to assist in connecting the IGIT product to Customer's DICOM devices during the agreed installation time. If such installation and connection is delayed due to Customer failing in its obligations described in this section, then Philips may invoice Customer and Customer shall pay either for (a) any time that Philips spends waiting at the site for such obligation to be fulfilled, at Philips' then-current service rate, or (b) reasonable travel expenses if Philips has to reschedule such installation.
5.3 Training on the IGIT Product is not included with the purchase of the IGIT product unless it is separately identified on the quotation.

6. Additional Terms Related to Sales of the IntelliSpace Breast Solution, including the MammoDiagnost VU.
6.1 **Installation.** Philips will install the IntelliSpace Breast Solution and perform installation tests on the application running with the hardware provided as part of the solution, including the MammoDiagnost VU. Philips also configures and provides interfaces to the equipment and information systems set forth in a statement of work signed by Philips and the Customer. Interfaces set forth in Subsection 6.2 below are Customer's responsibility and are not part of Parts Installation deliverables.
6.2 **Customer's Interface Obligations for Third Party RIS and MIS Applications.** Customer is responsible to develop and implement interfaces from the Licensed Software running on the client workstation to any third party Radiology Information System ("RIS") or Mammography Information System ("MIS") or to contract with the RIS and/or MIS vendor to have them perform these interface obligations on Customer's behalf. Interfacing the solution from the solutions server is not permitted. Philips shall provide Customer an API toolkit for the Licensed Software to aide Customer to perform such interface tasks. The successful and reasonably timely completion of these projects takes good faith efforts on the part of both Philips and Customer, especially when Customer has third party interfaces to develop and implement. A project implementation plan is based on completion dates mutually agreed by the parties that should be

reflective of the obligations of both parties. These dates are entered into the project implementation plan for this solution (the "Project Implementation Plan"). In the event Customer has not fulfilled its interface obligations by the dates set forth in the Project Implementation Plan, Customer will sign Philips' acceptance (MDIR) document for the Philips deliverables sold and pay the final payment described in Subsection 1.1(c), provided that Philips has installed the Philips deliverables and provided the interfaces Philips is responsible for pursuant to Subsection 6.1, and that the Philips deliverables substantially meet Philips' published specifications.

6.3 **Prior Validation of Operating System Updates and/or Upgrades.** Patches introduced by operating system oem's or upgrades to anti-virus software can impact the performance and functionality of the applications that run on them and affect patient safety. Philips shall perform validation testing of certain Microsoft operating systems and MacAfee anti-virus software during the warranty period. Philips shall have no obligation to validate any other third party operating system or anti-virus software. Customer shall not install or use (a) operating system patches, updates or upgrades; (b) anti-virus updates (except to the DAT files, i.e., virus definitions); or, (c) upgrades to anti-virus search engines, collectively (a)-(b) prior to validation testing and approval by Philips ("Unauthorized Updates"). Philips shall have no liability, including, without limitation, for warranty claims, arising from use of the Licensed Software with Unauthorized Updates. In the event Philips discovers that Customer is using an Unauthorized Update with the Licensed Software, Philips shall have the right to require Customer to roll back to the most recently validated versions of operating systems and anti-virus, prior to performing any support.

6.4 **Customer's Network Connectivity Obligations.** Customer must have network connectivity between the IntelliSpace Breast solution server, the client workstation, and the optional DynaCAD server of not less than 1GB/s, and all three systems must be on the same subnet. A connection of no less than 100 MB/s is required between the IntelliSpace Breast solution and the hospital network. However for optimal performance a 1GB/s network between the IntelliSpace Breast and the hospital network is recommended.

6.5 **RSN Warranty Condition Requirement.** As a condition to receiving warranty service on this solution, Customer agrees it shall use Philips Remote Service Network ("RSN") service to enable Philips to access the system to perform its support obligations.

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

Exhibit 8

EP Lab D Fire

UNC HEALTH CARE SYSTEM

EP Lab – D Water Clean Up

Exhibit 9

~~DEC 16 2015~~

DEC 16 2015

North Carolina Department of Health and Human Services
Division of Health Service Regulation
Acute and Home Care Licensure and Certification Section
1205 Umstead Drive, 2712 Mail Service Center
Raleigh, North Carolina 27699-2712
Telephone: (919) 855-4620 Fax: (919) 715-3073

For Official Use Only
License # H0157 Medicare # 340061
FID #: 923517
PC 15 Date 12/17/15

License Fee: $15,597.50

2016
HOSPITAL LICENSE
RENEWAL APPLICATION

Legal Identity of Applicant: University of North Carolina Hospitals at Chapel Hill
(Full legal name of corporation, partnership, individual, or other legal entity owning the enterprise or service.)

Doing Business As
(d/b/a) name(s) under which the facility or services are advertised or presented to the public:

PRIMARY: University of North Carolina Hospitals
Other: UNC Hospitals;
Other:

Facility Mailing Address: 101 Manning Dr
Chapel Hill, NC 27514

Facility Site Address: 101 Manning Dr
Chapel Hill, NC 27514
County: Orange
Telephone: ~~(919)966-4131~~ (984)974-5111
Fax: ~~(919)966-3709~~ (984)974-7772

Administrator/Director: Gary L Park
Title: President
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Chief Executive Officer: GARY L. PARK **Title:** PRESIDENT
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Name of the person to contact for any questions regarding this form:

Name: DEE JAY ZERMAN **Telephone:** 984-974-1210

E-Mail: DJ.ZERMAN@UNCHEALTH.UNC.EDU

PAID
CK NO. 617105
DATE 12-16-15
$15,597.50

7. Specialized Cardiac Services (for questions, call 855-3865 [Healthcare Planning])

(a) Cardiac Catheterization	Diagnostic Cardiac Catheterization ICD-9 37.21, 37.22, 37.23, 37.25 - **	Interventional Cardiac Catheterization ICD-9 00.66, 99.10, 36.06, 36.07, 36.09; 35.52, 35.71, 35.96
1. Number of Units of Fixed Equipment	3 ADULT + 1 PEDIATRIC	
2. Number of Procedures* Performed in Fixed Units on Patients Age 14 and younger	88	93
3. Number of Procedures* Performed in Fixed Units on Patients Age 15 and older	1460	1069
4. Number of Procedures* Performed in Mobile Units	Ø	Ø
	Electro-physiology ICD-9 37.26, 37.27, 37.34, 37.70, 37.71, 37.72, 37.73, 37.74, 37.75, 37.76, 37.77, 37.79, 37.80, 37.81, 37.82, 37.83, 37.85, 37.86, 37.87, 37.89, 37.94, 37.95, 37.96, 37.97, 37.98, 37.99, 00.50, 00.51, 00.52, 00.53, 00.54	
5. Number of Units of Fixed Equipment	2	
6. Number of Procedures on Dedicated EP Equipment	907	

*A **procedure** is defined to be one visit or trip by a patient to a catheterization laboratory for a single or multiple catheterizations. Count each visit once, regardless of the number of diagnostic, interventional, and/or EP catheterizations performed within that visit.

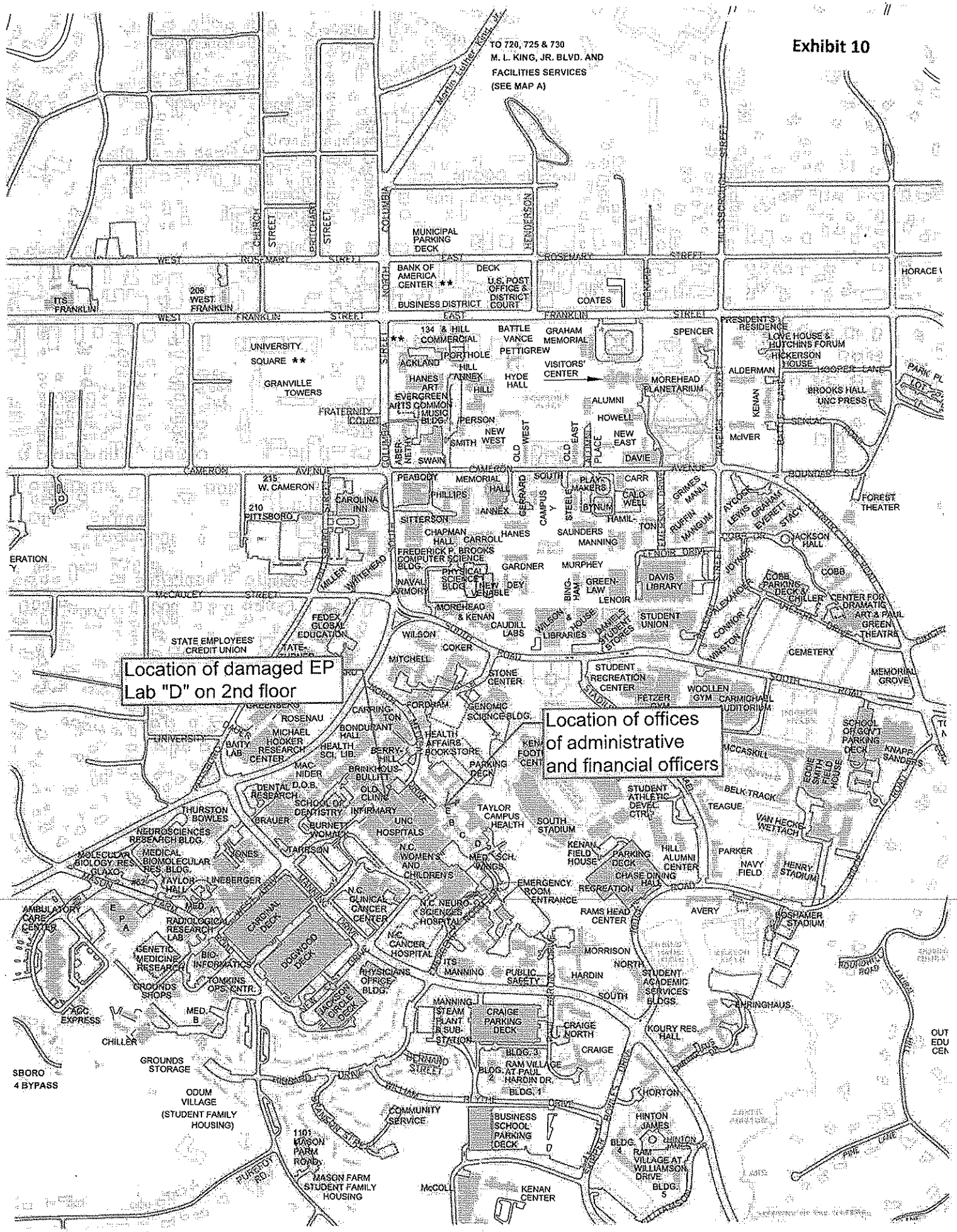
Name of Mobile Vendor: REMOVED 9/14/12

Number of 8-hour days per week the mobile unit is onsite: 0 8-hour days per week.
(Examples: Monday through Friday for 8 hours per day is 5 8-hour days per week. Monday, Wednesday, & Friday for 4 hours per day is 1.5 8-hour days per week)

(b) Open Heart Surgery	Number of Machines/Procedures
1. Number of Heart-Lung Bypass Machines	4
2. Total Annual Number of Open Heart Surgery Procedures Utilizing Heart-Lung Bypass Machine	407
3. Total Annual Number of Open Heart Surgery Procedures done without utilizing a Heart-Lung Bypass Machine	124
4. Total Open Heart Surgery Procedures (2. + 3.)	531
Procedures on Patients Age 14 and younger	
5. **Of total in #2**, Number of Procedures on Patients Age 14 & younger	88
6. **Of total in #3**, Number of Procedures on Patients Age 14 & younger	33

** DOES NOT INCLUDE 709 DIAG. CATHS PERFORMED ON SAME DAY AS INTERVENTIONAL CATS (27 AGE 0-14 & 682 AGE 15+)

Exhibit 10


TO 720, 725 & 730
M. L. KING, JR. BLVD. AND
FACILITIES SERVICES
(SEE MAP A)
Location of damaged EP Lab "D" on 2nd floor
Location of offices of administrative and financial officers
MUNICIPAL PARKING DECK
BANK OF AMERICA CENTER
U.S. POST OFFICE & DISTRICT COURT
BUSINESS DISTRICT
COATES
UNIVERSITY SQUARE
GRANVILLE TOWERS
FRATERNITY COURT
HANES ART CENTER
EVERGREEN ARTS COMMON
MUSIC BLDG.
PERSON
SMITH
NEW WEST
SWAIN
HILL ANNEX
HYDE HALL
VISITORS' CENTER
GRAHAM MEMORIAL
PETTIGREW
BATTLE VANCE
SPENCER
MOREHEAD PLANETARIUM
ALUMNI
HOWELL
NEW EAST
DAVIE
PRESIDENT'S RESIDENCE
LOVE HOUSE & HUTCHINS FORUM
HICKERSON HOUSE
ALDERMAN
McIVER
BROOKS HALL UNC PRESS
FOREST THEATER
CAROLINA INN
PEABODY
MEMORIAL HALL
PHILLIPS
SITTERSON
CHAPMAN HALL
CARROLL
HANES
SAUNDERS
MANNING
GARDNER
MURPHEY
DAVIS LIBRARY
LENOIR
PLAY MAKERS
CAROLINA
BYNUM
HAMILTON
RUFFIN
MANGUM
GRIMES
MANLY
AYCOCK
LEWIS
GRAHAM
EVERETT
STACY
JACKSON HALL
COBB
COBB PARKING DECK & CHILLER
CENTER FOR DRAMATIC ART & PAUL GREEN THEATRE
FREDERICK P. BROOKS COMPUTER SCIENCE BLDG.
PHYSICAL SCIENCE BLDG.
NAVAL ARMORY
VENABLE
DEY
BINGHAM
GREEN-LAW
MOREHEAD & KENAN
CAUDILL LABS
WILSON & HOUSE LIBRARIES
DANIELS STUDENT STORES
STUDENT UNION
FEDEX GLOBAL EDUCATION
STATE EMPLOYEES' CREDIT UNION
WILSON
COKER
MITCHELL
STONE CENTER
STUDENT RECREATION CENTER
FETZER GYM
WOOLLEN GYM
CARMICHAEL AUDITORIUM
CEMETERY
MEMORIAL GROVE
CARRINGTON
FORDHAM
GENOMIC SCIENCE BLDG.
ROSENAU
BONDURANT HALL
HEALTH AFFAIRS BOOK STORE
MICHAEL HOOKER RESEARCH CENTER
HEALTH SCI. LIB.
BERRY-HILL
BAITY LAB
MAC NIDER
BRINKHOUS-BULLITT
PARKING DECK
KENAN FOOTBALL CENTER
SCHOOL OF GOV'T PARKING DECK
KNAPP-SANDERS
MCCASKILL
EDDIE SMITH FIELD HOUSE
BELK TRACK
TEAGUE
VAN HECKE-WETTACH
STUDENT ATHLETIC DEVEL. CTR.
DENTAL D.O.B. RESEARCH
OLD CLINIC
INFIRMARY
SCHOOL OF DENTISTRY
THURSTON BOWLES
BRAUER
BURNETT WOMACK
UNC HOSPITALS
TAYLOR CAMPUS HEALTH
SOUTH STADIUM
NEUROSCIENCES RESEARCH BLDG.
MOLECULAR BIOLOGY RES. CLUSTER
MEDICAL BIOMOLECULAR RES. BLDG.
JONES
TARRSON
N.C. WOMEN'S AND CHILDREN'S
MERRITT SCH. WINGS
KENAN FIELD HOUSE
PARKING DECK
HILL ALUMNI CENTER
PARKER
NAVY FIELD
HENRY STADIUM
CHASE DINING HALL
TAYLOR
LINEBERGER
EMERGENCY ROOM ENTRANCE
RECREATION
AMBULATORY CARE CENTER
RADIOLOGICAL RESEARCH LAB
CARDINAL DECK
N.C. CLINICAL CANCER CENTER
N.C. NEURO SCIENCES HOSPITAL
RAMS HEAD CENTER
AVERY
BOSHAMER STADIUM
GENETIC MEDICINE RESEARCH
BIO-INFORMATICS
DOGWOOD DECK
N.C. CANCER HOSPITAL
MORRISON
NORTH
SOUTH
HARDIN
STUDENT ACADEMIC SERVICES BLDGS.
ENRINGHAUS
TOMKINS OPS. CNTR.
GROUNDS SHOPS
PHYSICIANS OFFICE BLDG.
ITS MANNING
PUBLIC SAFETY
MANNING STEAM PLANT & SUB-STATION
CRAIGE PARKING DECK
CRAIGE NORTH
CRAIGE
KOURY RES. HALL
ACC. EXPRESS
CHILLER
GROUNDS STORAGE
MED. B
MED. A
RAM VILLAGE BLDG. 3
RAM VILLAGE AT PAUL HARDIN DR. BLDG. 2
BLDG. 1
HORTON
HINTON JAMES
RAM VILLAGE AT WILLIAMSON DRIVE BLDG. 5
COMMUNITY SERVICE
BUSINESS SCHOOL PARKING DECK
ODUM VILLAGE (STUDENT FAMILY HOUSING)
1101 MASON FARM ROAD
MASON FARM STUDENT FAMILY HOUSING
KENAN CENTER
McCOLL
SBORO 4 BYPASS
OUT EDU CEN
208 WEST FRANKLIN
ITS FRANKLIN
WEST FRANKLIN STREET
EAST FRANKLIN STREET
WEST ROSEMARY STREET
EAST ROSEMARY STREET
CAMERON AVENUE
215 W. CAMERON
210 PITTSBORO
MCCAULEY STREET
COLUMBIA STREET
CHURCH STREET
FRIDAY STREET
HENDERSON STREET
MARTIN LUTHER KING, JR.
PINE LANE
PURITAN RD.

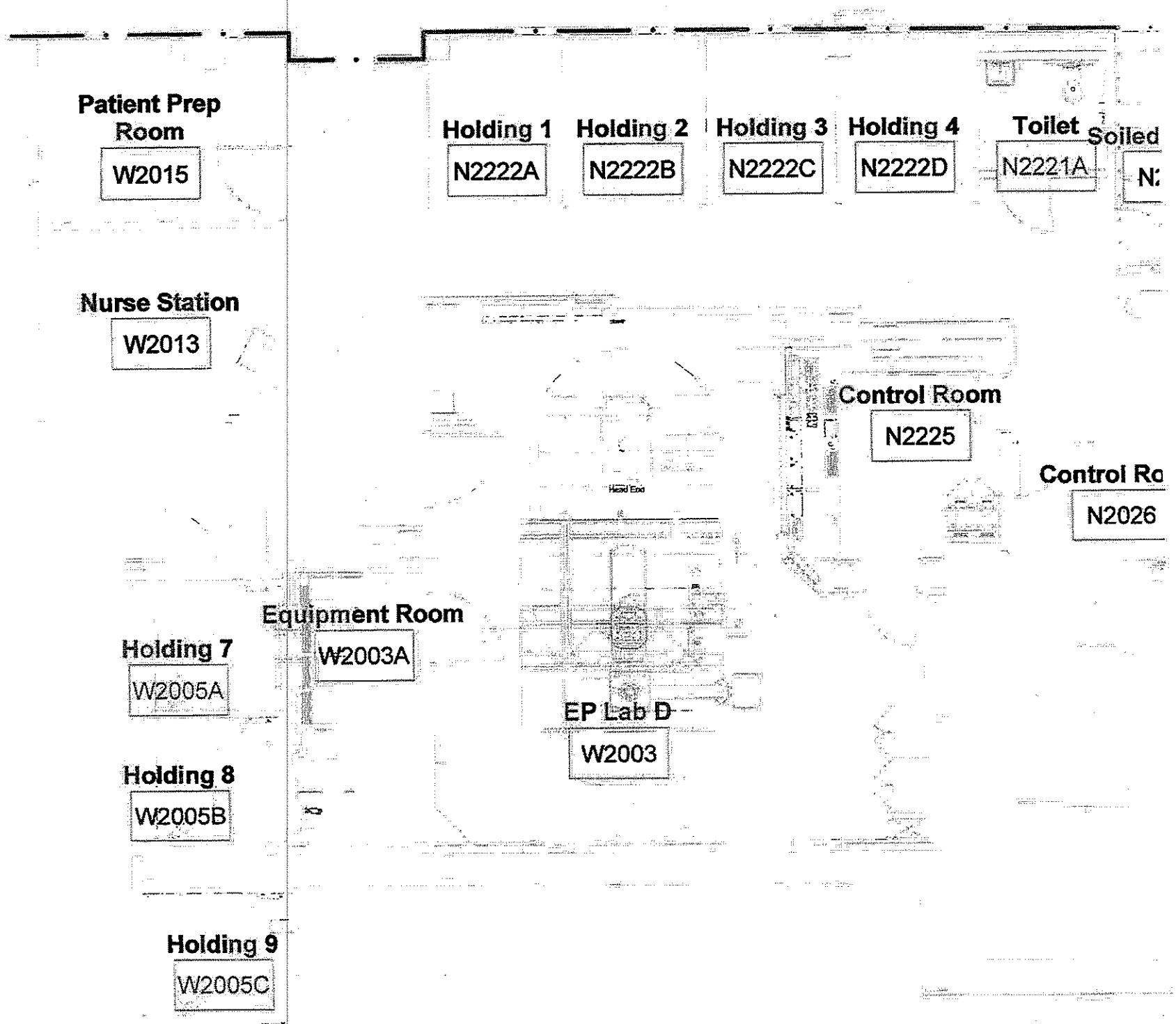

Patient Prep Room
W2015
Holding 1
N2222A
Holding 2
N2222B
Holding 3
N2222C
Holding 4
N2222D
Toilet
N2221A
Soiled
N:
Nurse Station
W2013
Control Room
N2225
Control Ro
N2026
Head End
Equipment Room
W2003A
Holding 7
W2005A
EP Lab D
W2003
Holding 8
W2005B
Holding 9
W2005C

Exhibit 11

PHILIPS

Philips Healthcare

August 19, 2016

UNC Hospitals
101 Manning Drive
Chapel Hill, NC 27514-4220

To Whom It May Concern:

This letter is to confirm that the 2013 Philips Allura Xper FD10 CV Lab, lab "D" site ID 58545249, located at 101 Manning Drive, Chapel Hill, NC was de-installed and removed from the premises and state of NC on July 31, 2016. The equipment will not be placed into service in the state of NC without proper CON and state approvals.

Sincerely,

Brian Scott

Brian T. Scott
Region Director, Healthcare Alliances
Philips Healthcare

2805 Bards Court, Matthews, NC 28105
Tel: (704) 473-1924
eFax: (855) 263-4781
Email: brian.t.scott@philips.com

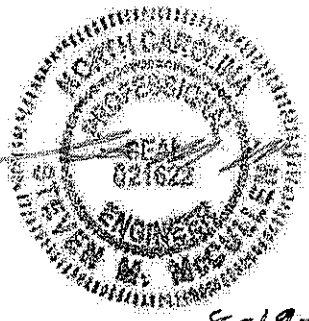
Exhibit 12

PROPOSED TOTAL CAPITAL COST OF PROJECT

A. **Site Costs**				
(1) Full purchase price of land		$0		
Acres _____ Price per Acre $_____				
(2) Closing costs		$0		
(3) Site Inspection and Survey		$0		
(4) Legal fees and subsoil investigation		$0		
(5) Site Preparation Costs				
Soil Borings	$0			
Clearing - Earthwork	$0			
Fine Grade for Slab	$0			
Roads - Paving	$0			
Concrete Sidewalks	$0			
Water and Sewer	$0			
Footing Excavation	$0			
Footing Backfill	$0			
Termite Treatment	$0			
Other (Specify)	$0			
Sub-Total Site Preparation Costs		$0		
(6) Other (Specify)		$0		
(7) **Sub-Total Site Costs**			$0	
B. **Construction Contract**				
(8) Cost of Materials				
General Requirements	$22,747			
Concrete/Masonry	$0			
Woods/Doors & Windows/Finishes	$10,649			
Thermal & Moisture Protection	$0			
Equipment/Specialty Items	$0			
Mechanical/Electrical	$29,579			
Other ()	$10,747			
Sub-Total Cost of Materials		$73,723		
(9) Cost of Labor		$28,819		
(10) Other: Construction Contingency		$10,000		
(11) Sub-Total Construction Contract			$112,542	
C. Miscellaneous Project Costs				
(12) Building Purchase		$0		
(13) Fixed Equipment Purchase		$1,694,739		
(14) Movable Equipment Purchase		$0		
(15) Furniture		$624		
(16) Landscaping		$0		
(17) Consultant Fees				
Architect and Engineering Fees	$7,335			
Legal Fees	$0			
Market Analysis	$0			
Other (Specify)	$105,118			
Sub-Total Consultant Fees		$112,453		
(18) Financing Costs (e.g. Bond, Loan, etc.)		$0		
(19) Interest During Construction		$0		
(20) Other: Project Contingency		$0		
IT Costs		$0		
(21) Sub-Total Miscellaneous			$1,807,816	
(22) Total Capital Cost of Project (Sum A-C above)				$1,920,358

I certify that, to the best of my knowledge, the above construction related costs of the proposed project named above are complete and correct.

Signature of Licensed Architect or Engineer



8-19-16