NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK PAYNE • Director, Division of Health Service Regulation

VIA EMAIL ONLY

December 12, 2022

Elizabeth V. Kirkman
Elizabeth.Kirkman@atriumhealth.org

Exempt from Review – Replacement Equipment

Record #:	**4077**
Date of Request:	December 2, 2022
Facility Name:	Atrium Health Pineville
FID #:	110878
Business Name:	The Charlotte-Mecklenburg Hospital Authority
Business #:	1770
Project Description:	Replace and relocate existing cardiac catheterization equipment
County:	Mecklenburg

Dear Ms. Kirkman:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that the above referenced project is exempt from certificate of need review in accordance with G.S. 131E-184(f). Therefore, you may proceed to acquire without a certificate of need the Philips Azurion 7 M20 system to replace the GE Innova 2121 system (serial #607650BU9) and relocate it to renovated space adjacent to the current location. You may also keep the existing GE Innova 2121 (serial #607650BU9) in its current location. This determination is based on your representations that the existing unit has a fair market value of less than $2,108,000, which is below the statutory threshold for major medical equipment and thus would not require a certificate of need to acquire, and that the existing equipment will no longer be used for cardiac catheterization procedures.

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,

Julie M. Faenza

Julie M. Faenza
Project Analyst

Micheala Mitchell

Micheala Mitchell
Chief

cc: Acute and Home Care Licensure and Certification Section, DHSR
Radiation Protection Section, DHSR

Construction Section, DHSR

December 2, 2022

Ms. Micheala Mitchell, Chief
Healthcare Planning and Certificate of Need Section
Division of Health Service Regulation
N.C. Department of Health & Human Services
809 Ruggles Drive
Raleigh, NC 27603

RE: Exemption Request for The Charlotte-Mecklenburg Hospital Authority d/b/a Atrium Health Pineville ("AH Pineville") to Replace and Relocate Cardiac Catheterization Equipment

Dear Ms. Mitchell:

The Charlotte-Mecklenburg Hospital Authority d/b/a Atrium Health Pineville ("AH Pineville"), seeks to acquire a Philips Azurion 7 M20 system ("Replacement Equipment"). Please see Attachment A for a copy of AH Pineville's current hospital license. The Replacement Equipment will replace a GE Innova 2121 system ("Existing Equipment") that was acquired in 2012. The Existing Equipment is currently housed in Cardiac Catheterization Lab #3 in room 1101 on the first floor of AH Pineville's main hospital building located at 10628 Park Road, Charlotte, NC 28203 (see Attachment B). The Replacement Equipment will be relocated to adjacent, renovated space within the invasive cardiology suite on the first floor of AH Pineville's main hospital building (see Attachment B).

As part of this project, AH Pineville plans to renovate and reconfigure an existing staff lounge and conference room in order to accommodate the Replacement Equipment and necessary support space. The conference room will remain in its existing location but will be reconfigured into a smaller footprint. The staff lounge will be relocated to vacant space elsewhere on the first floor (see Attachment B).

The purpose of this letter is to provide the Agency with notice and to request a determination that AH Pineville's purchase and relocation of the Replacement Equipment is exempt from Certificate of Need ("CON") review under the replacement equipment exemption provisions contained in Session Law 2013-360, Section 12G.3(b) and Session Law 2013-363, Section 4.6 (which are codified at N.C. Gen. Stat. 131E-184(f)(1)-(3)).

The General Assembly has chosen to exempt certain, otherwise reviewable events from CON review. Among those exemptions is the acquisition of "replacement equipment," defined as follows in the CON law:

> "Replacement equipment" means equipment that costs less than two million dollars ($2,000,000) and is purchased for the sole purpose of replacing comparable medical equipment currently in use which will be sold or otherwise disposed of when replaced.

See N.C. Gen. Stat. 131E-176(22a). Under the new provisions found at N.C. Gen. Stat. 131E-184(f)(1)-(3), the CON law provides:

> (f) The Department shall exempt from certificate of need review the purchase of any replacement equipment that exceeds the two million dollar ($2,000,000) threshold set forth in G.S. 131E-176(22) if all of the following conditions are met:
>
> (1) The equipment being replaced is located on the main campus.
> (2) The Department has previously issued a certificate of need for the equipment being replaced. This subdivision does not apply if a certificate of need was not required at the time the equipment being replaced was initially purchased by the licensed health service facility.
> (3) The licensed health service facility proposing to purchase the replacement equipment shall provide prior written notice to the Department, along with supporting documentation to demonstrate that it meets the exemption criteria of this subsection.

See Session Law 2013-360, Section 12G.3(b) and Session Law 2013-363, Section 4.6. The term "main campus" was defined in Session Law 2013-360, Section 13G.3(a) (codified N.C. Gen. Stat. 131E-176(14n)) as follows:

> (14n) "Main campus" means all of the following for the purposes of G.S. 131E-184(f) and (g) only:
>
> a. The site of the main building from which a licensed health service facility provides clinical patient services and exercises financial and administrative control over the entire facility, including the buildings and grounds adjacent to that main building.
> b. Other areas and structures that are not strictly contiguous to the main building but are located within 250 yards of the main building.

The Existing Equipment is currently located in Cardiac Catheterization Lab #3 in room 1101 on the first floor of AH Pineville's main hospital building (see Attachment B). The main hospital building, located at 10628 Park Road in Charlotte, is the site from which AH Pineville exercises financial and administrative control over the entire facility. AH Pineville's Facility Executive's office is located on the ground floor of the main hospital building. Please see a copy of AH Pineville's license in Attachment A.

In addition to the foregoing, AH Pineville's proposal qualifies for this exemption based on the following information:

A. Cost of the Replacement Equipment

The purchase price of the Replacement Equipment is $2,092,182 ($1,950,752 Philips Azurion 7 M20 system and freight + $141,430 tax). The projected total cost of this project is $5,230,700 and includes the cost to acquire, install and make operational the Replacement Equipment. Attachment C provides the quote for the Replacement Equipment. The total capital cost worksheet is provided in Attachment D.

B. Equipment Being Replaced is Located on the Main Campus

The Existing Equipment is currently located in Cardiac Catheterization Lab #3 in room 1101 on the first floor of AH Pineville's main hospital building. The Replacement Equipment will be relocated to adjacent, renovated space within the invasive cardiology suite on the first floor of AH Pineville's main hospital building (see Attachment B).

C. Certificate of Need Issued for Equipment Being Replaced

This proposal also fits within the exemption criterion in Section 131E-184(f)(2) because the Agency issued a Certificate of Need (CON) for the Existing Equipment. Pursuant to CON Project ID #F-7979-07, two cardiac catheterization labs were approved to relocate from CMC – Mercy (now known as Atrium Health Mercy) to CMC – Pineville (now known as Atrium Health Pineville) for a total of no more than three cardiac catheterization labs at AH Pineville (see Attachment E). In 2011, an exemption request was filed to replace existing cardiac catheterization equipment that was approved to relocate to AH Pineville pursuant to CON Project ID #F-7979-07 ("2011 Exemption"). The replacement equipment identified in the 2011 Exemption request was a GE Innova 2121, which is the Existing Equipment identified in this exemption request. The Agency approved the 2011 Exemption on November 16, 2012. Please see Attachment F for a copy of the 2011 Exemption as well as the Agency's approval.

D. Comparable Equipment

The CON rule codified as 10A N.C.A.C. 14C.0303 (the "Regulation") defines "comparable medical equipment" in subsection (c) as follows:

> "Comparable medical equipment" means equipment which is functionally similar and which is used for the same diagnostic or treatment purposes.

AH Pineville intends to use the Replacement Equipment for substantially the same cardiac catheterization procedures for which it currently uses the Existing Equipment. The Existing Equipment is a GE Innova 2121 that was purchased in 2012. The Existing Equipment has been used for cardiac catheterization and EP procedures since it was acquired.

The Replacement Equipment will perform all procedures currently performed on the Existing Equipment. Although it possesses some expanded capabilities due to technological improvements, the Replacement Equipment will perform the same cardiac catheterization procedures (see Attachment G for the Equipment Brochure). The Replacement Equipment is therefore "comparable medical equipment" as defined in Subsection (c).

Furthermore, AH Pineville does not intend to increase patient charges or per procedure operating expenses within the first 12 months after equipment acquisition. For further equipment comparison, please refer to Attachment H, the Equipment Comparison Chart.

Subsection (d) of the regulation further provides:

(1) it has the same technology as the equipment currently in use, although it may possess expanded capabilities due to technological improvements; and
(2) it is functionally similar and is used for the same diagnostic or treatment purposes as the equipment currently in use and is not used to provide a new health service; and
(3) the acquisition of the equipment does not result in more than a 10.0 percent increase in patient charges or per procedure operating expenses within the first twelve months after the replacement equipment is acquired.

The Replacement Equipment will meet all three of tests set out in Subsection (d). The Replacement Equipment satisfies the technology and functionality tests in Subsection (1) and (2) as discussed above and identified in the Comparison Chart (Attachment H). Moreover, AH Pineville represents the use of the Replacement Equipment will not result in the types of expense or charge increases described in Subsection (d)(3).

Documentation provided in Attachment I indicates that 1,834 procedures were performed from November 2021 to October 2022 on the Existing Equipment.

E. Existing Equipment

The original purchase price of the Existing Equipment, which is currently located in room 1101 on the first floor of AH Pineville's main hospital building, was $1,128,852 (see Attachment J for the original quote for the Existing Equipment). The purchase price of the Existing Equipment was less than $2,108,000 when it was purchased brand new in 2012, therefore the current fair market value (FMV) of the Existing Equipment -- which is now ten years old -- must also be less than $2,108,000. AH Pineville proposes to retain the Existing Equipment since the value of this equipment is less than $2,108,000 and does not trigger the CON reviewability threshold for "major medical equipment" under N.C.G.S 131E-176(14o).

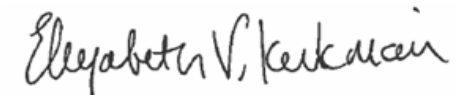
The Existing Equipment will remain in its current location in room 1101 on the first floor of AH Pineville's main campus but will no longer be one of AH Pineville's three licensed cardiac catheterization labs. As such, the retained Existing Equipment will only be used for EP procedures; it will not be used for cardiac catheterization.

CONCLUSION:

Based on the foregoing information, AH Pineville hereby requests that the Agency provide a written response confirming that the acquisition and relocation of the Replacement Equipment and the retention of the Existing Equipment to perform EP procedures only described herein is exempt from CON review. If the Agency needs additional information to assist in its consideration of this request, please let us know.

Thank you for your consideration of this notice.

Sincerely,



Elizabeth V. Kirkman
Assistant Vice President
Atrium Health Enterprise Strategy Partners

Attachments

Attachment A

State of North Carolina

Department of Health and Human Services
Division of Health Service Regulation

Effective January 01, 2022, this license is issued to

The Charlotte Mecklenburg Hospital Authority

to operate a hospital known as

Atrium Health Pineville

located in Charlotte, North Carolina, Mecklenburg County.

This license is issued subject to the statutes of the State of North Carolina, is not transferable and shall remain in effect until amended by the issuing agency.

Facility ID: 110878

License Number: H0042

Bed Capacity: *307*

General Acute 278, Rehabilitation 29 ,

Dedicated Inpatient Surgical Operating Rooms: 3
Dedicated Ambulatory Surgical Operating Rooms: 0
Shared Surgical Operating Rooms: 10
Dedicated Endoscopy Rooms: 2

Authorized by:

Secretary, N.C. Department of Health and Human Services

Director, Division of Health Service Regulation

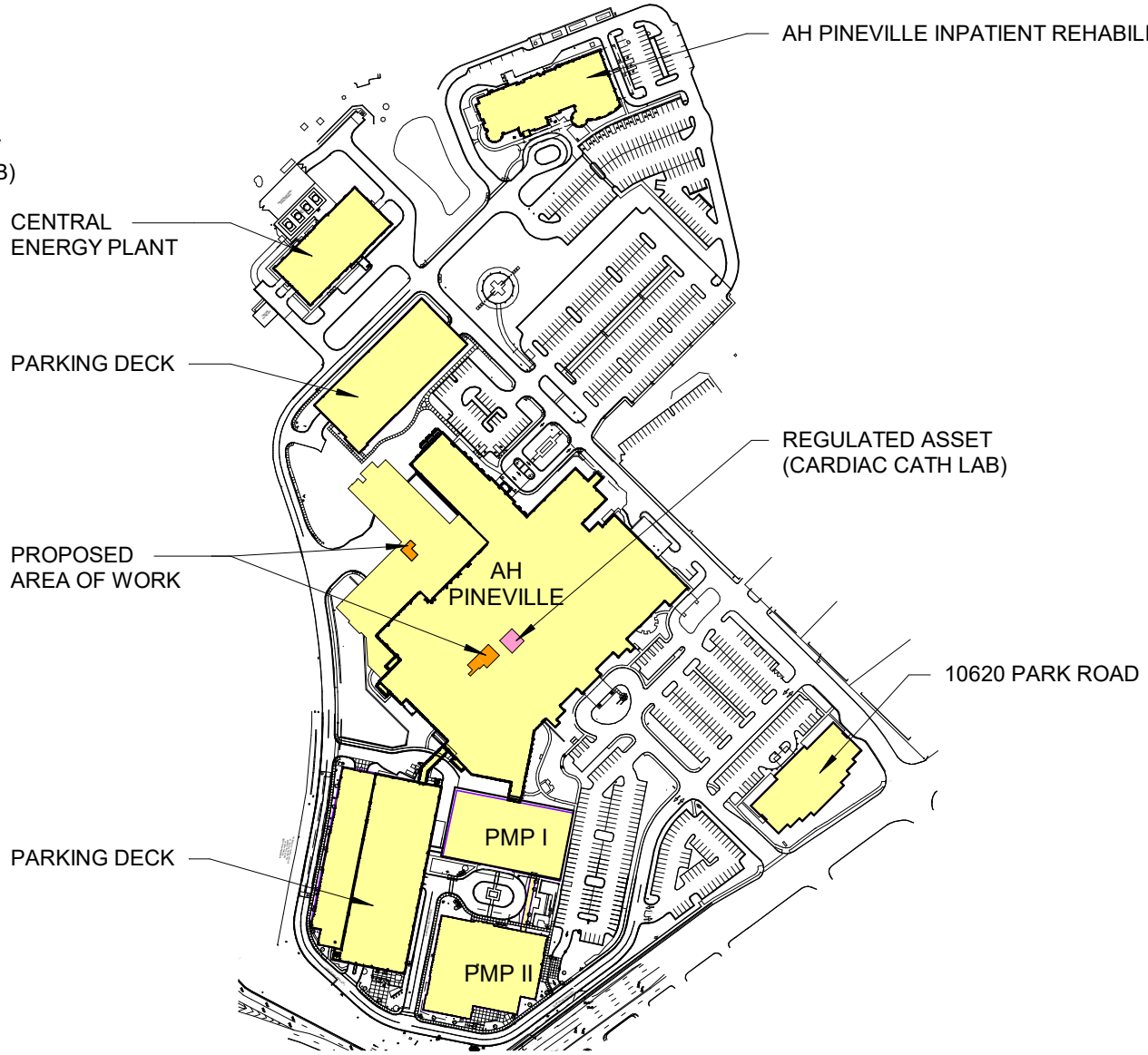
Attachment B

SITE PLAN COLOR KEY

EXISTING BUILDING

RENOVATION

REGULATED ASSET
(CARDIAC CATH LAB)



Site Plan

Cardiac Cath Lab #3 Replacement & Relocation

Atrium Health

10/31/2022

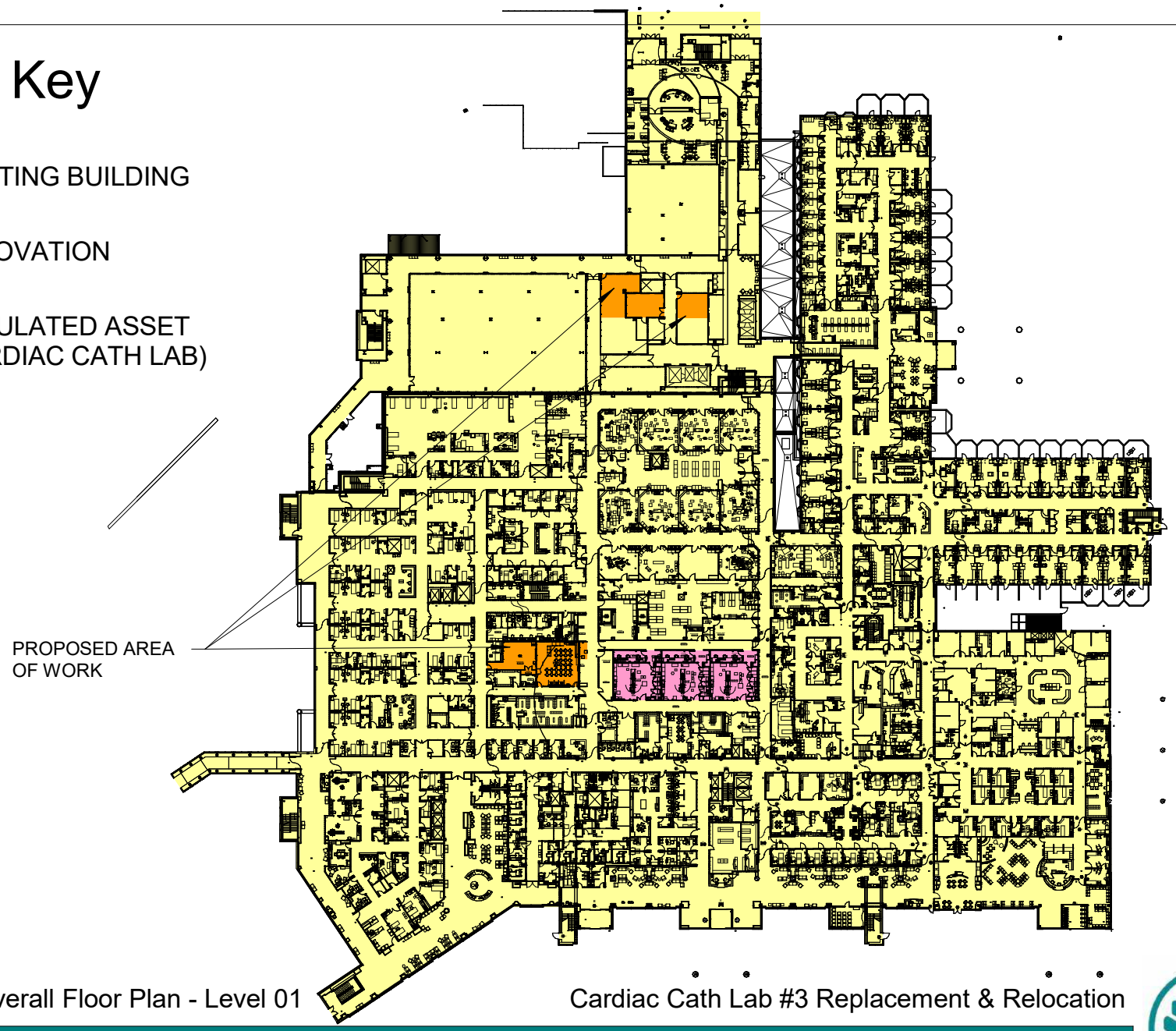
Atrium Health Pineville

Color Key

EXISTING BUILDING

RENOVATION

REGULATED ASSET
(CARDIAC CATH LAB)



Existing Overall Floor Plan - Level 01

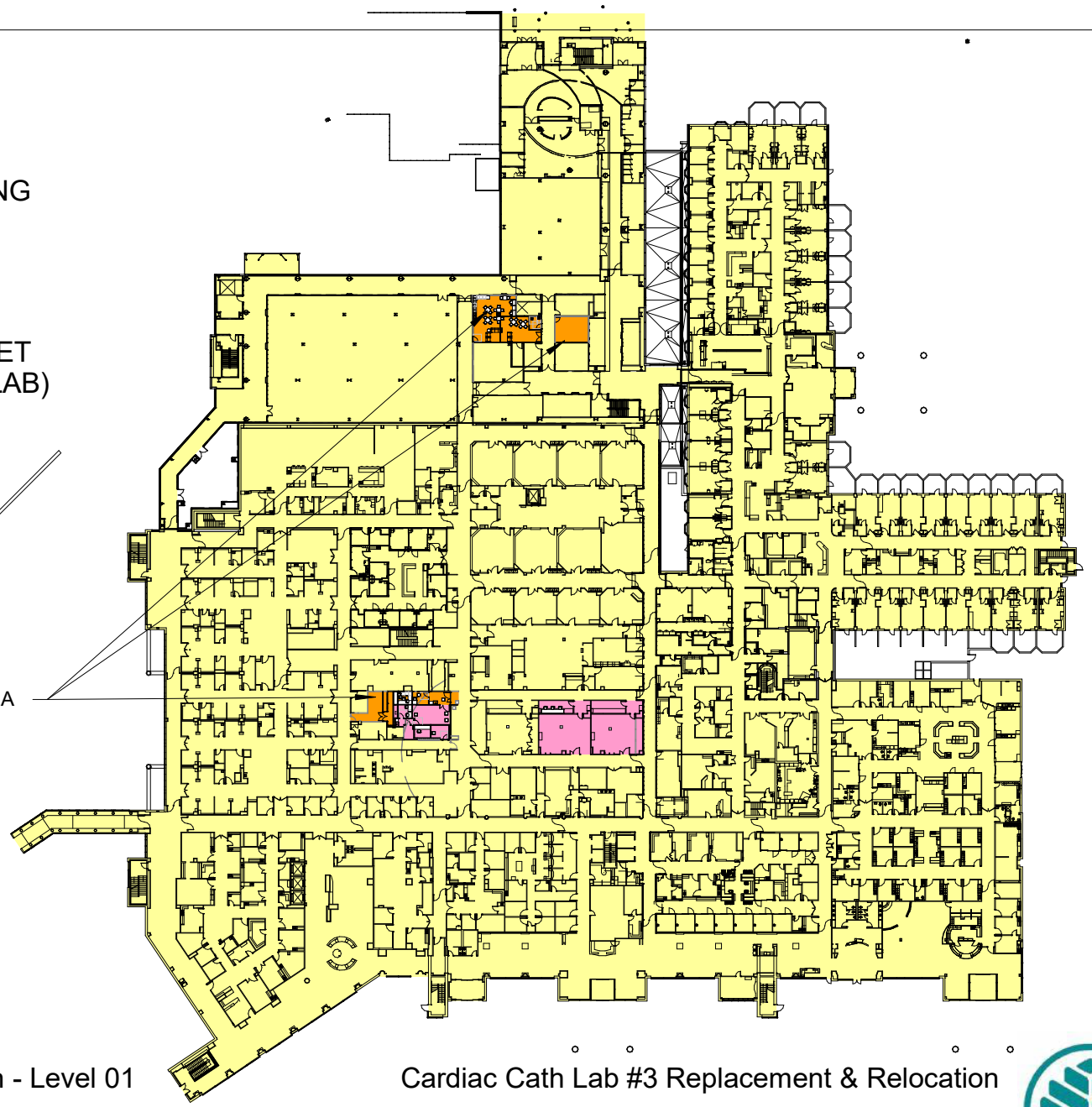
Cardiac Cath Lab #3 Replacement & Relocation

Color Key

EXISTING BUILDING

RENOVATION

REGULATED ASSET
(CARDIAC CATH LAB)



Proposed Overall Floor Plan - Level 01

Cardiac Cath Lab #3 Replacement & Relocation

Atrium Health

11/18/22

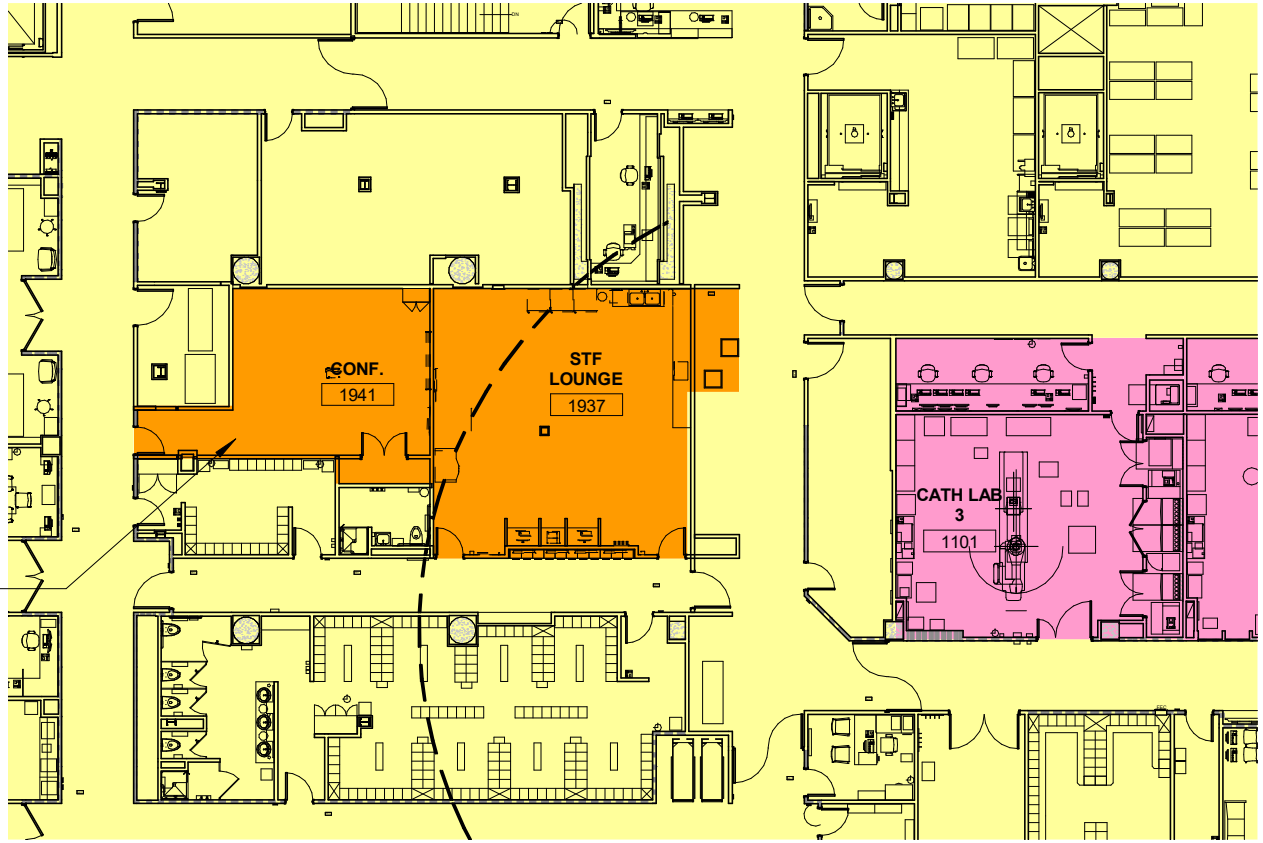
Atrium Health Pineville

Color Key

EXISTING BUILDING

RENOVATION

REGULATED ASSET
(CARDIAC CATH LAB)



PROPOSED
AREA OF
WORK

Existing Enlarged Floor Plan - Level 01 - Cath Lab

Cardiac Cath Lab #3 Replacement & Relocation

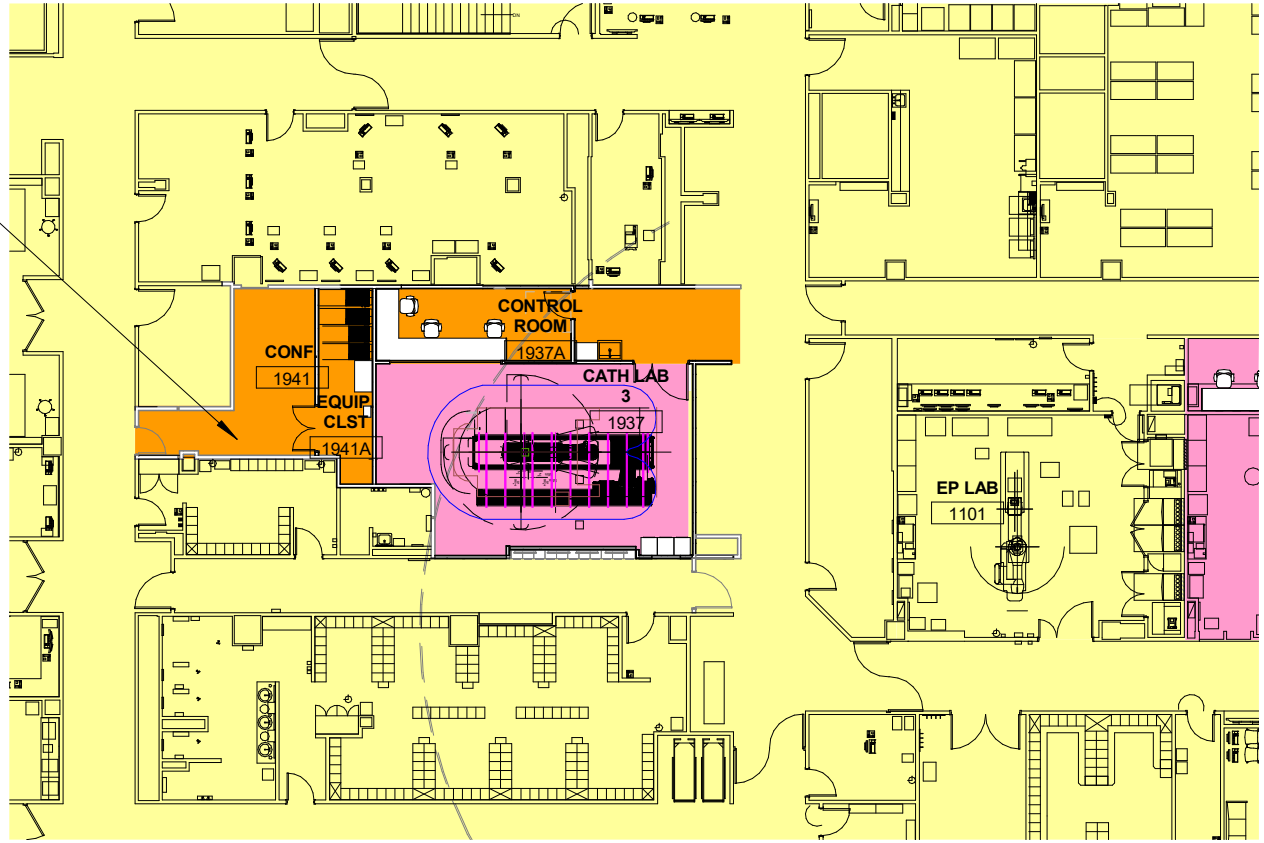
Color Key

EXISTING BUILDING

RENOVATION

REGULATED ASSET
(CARDIAC CATH LAB)

PROPOSED
AREA OF
WORK

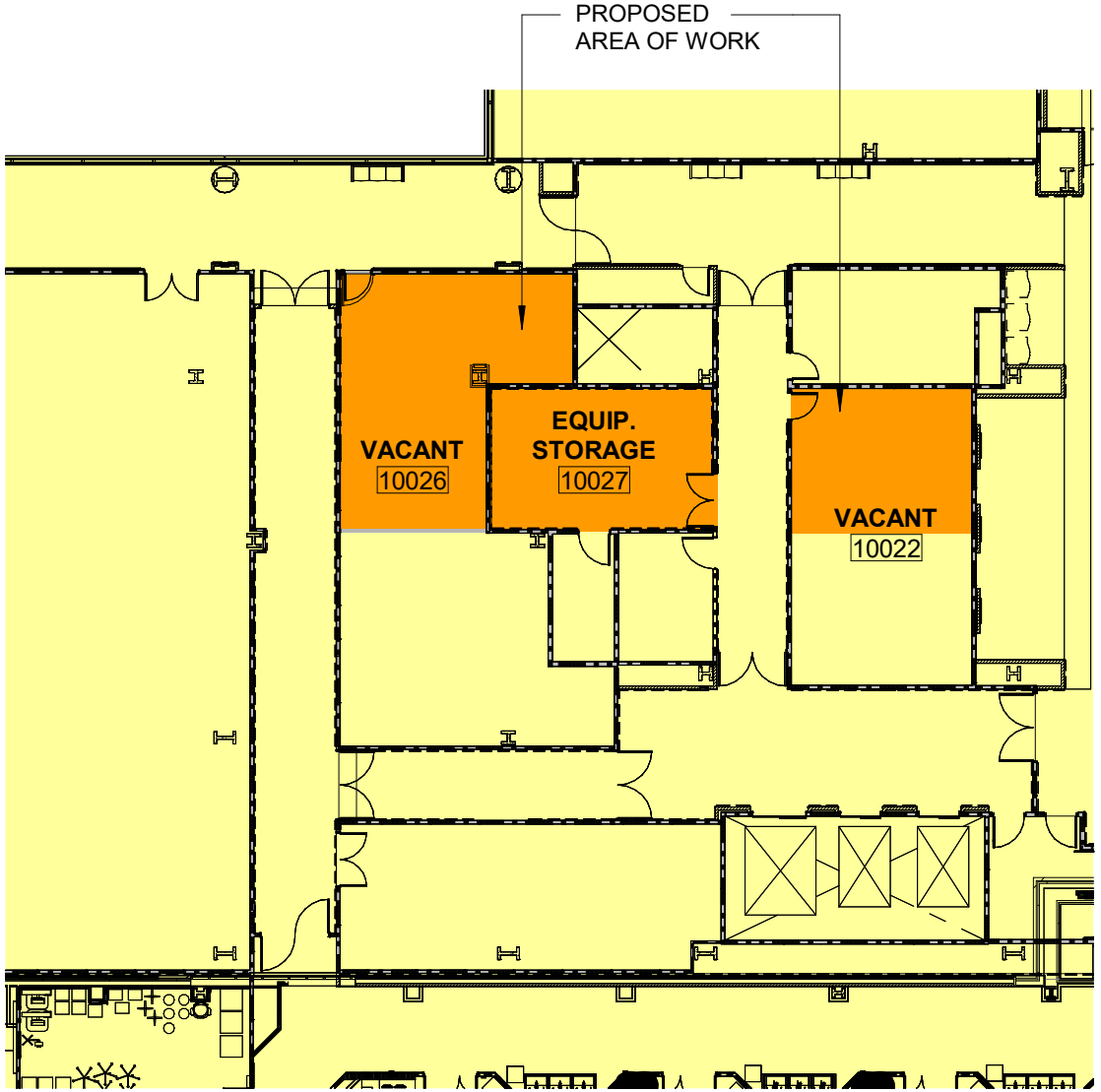


Enlarged Proposed Plan - Level 01 - Cath Lab

Cardiac Cath Lab #3 Replacement & Relocation

COLOR KEY

- EXISTING BUILDING
- RENOVATION
- REGULATED ASSET (CARDIAC CATH LAB)



Existing Enlarged Floor Plan - Level 01 - Staff Lounge

Cardiac Cath Lab #3 Replacement & Relocation

Atrium Health

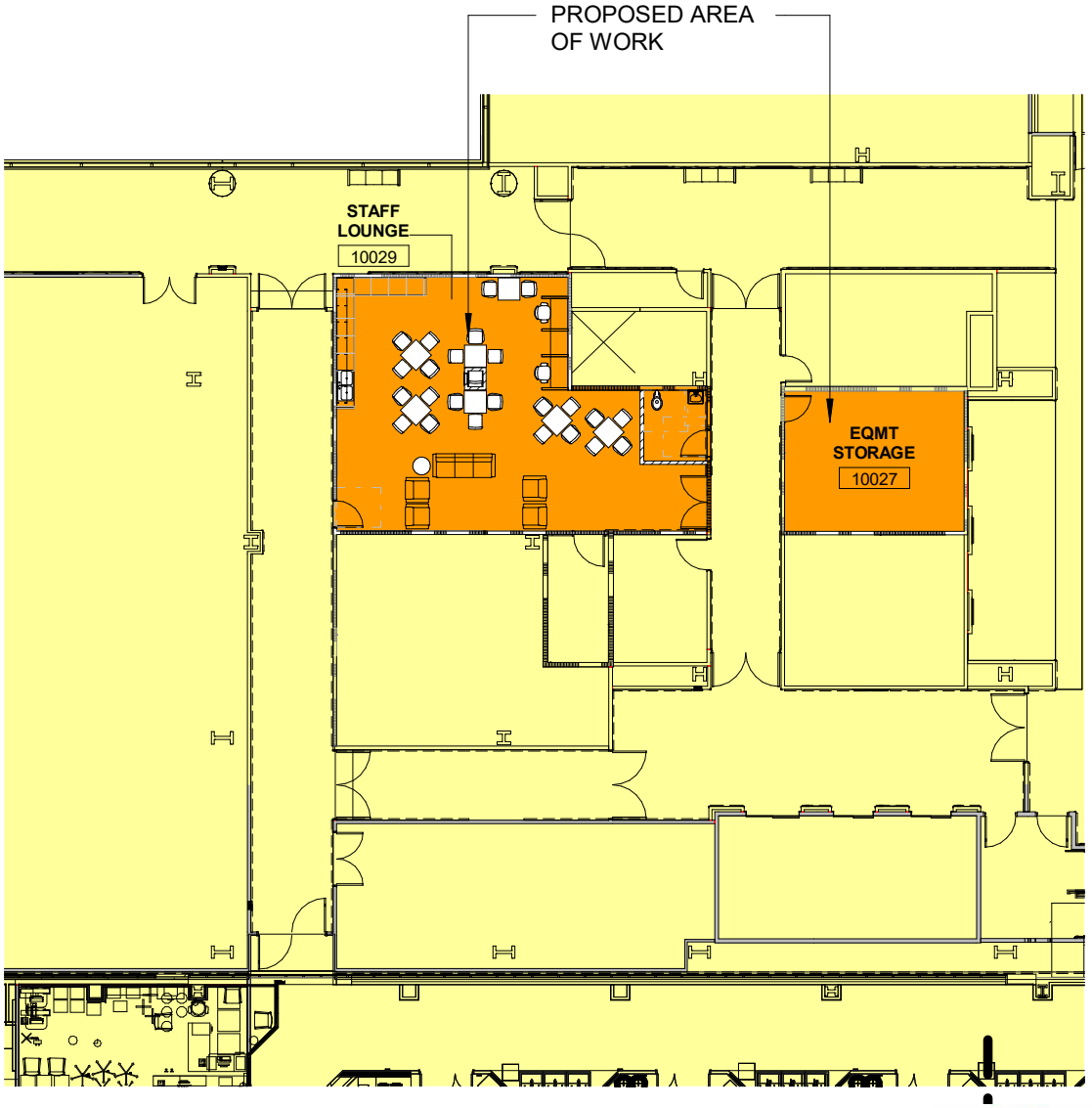
11/18/22

Atrium Health Pineville

Color Key

EXISTING BUILDING

RENOVATION



Enlarged Proposed Plan - Level 01 - Staff Lounge

Cardiac Cath Lab #3 Replacement & Relocation

Atrium Health

11/18/22

Atrium Health Pineville

Attachment C

PHILIPS HEALTHCARE
A division of Philips North America LLC
414 Union St, 2nd Floor
Nashville, TN 37219

PHILIPS

Quotation #: 1-2ZACZXK	**Rev:** 6	**Effective From:** 25-Sep-22	**To:** 24-Nov-22

Presented To:

CHARLOTTE-MECKLENBURG HOSPITAL AUTHORITY
DBA ATRIUM HEALTH
920 CHURCH ST N
CONCORD, NC 28025-2927

Tel:

Alternate Address:

Presented By:

(OPEN) (OPEN)
Account Manager
Tel:
Fax: (855) 600-4137

Regional Manager
Tel:
Fax:

Date Printed: 25-Sep-22

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
	100237 Azurion 7 M20	1	$1,672,887.00
	102503 IntraSight	1	$277,865.40
		Equipment Total:	$1,950,752.40

Solution Summary Detail

Product	Qty	Each	Monthly	Price
100237 Azurion 7 M20	1	$1,672,887.00		$1,672,887.00

Buying Group: **PREMIER HEALTHCARE ALLIANCE** **Contract #:** **PP-IM-280**

Addt'l Terms: **The specific Premier Contract # referenced above represents the applicable Premier agreement with Philips containing discounts, fees and any specific terms and conditions applying to any Product identified as part of this quoted Solution. Philips Standard Terms and Conditions of Sale attached to the Quote Solution will also apply to the extent they do not expressly conflict with the terms and conditions of the referenced Premier Contract**

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

102503 IntraSight	1	$277,865.40	$277,865.40

Buying Group: **PREMIER HEALTHCARE ALLIANCE** **Contract #:** **PP-IM-280**

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Quote Summary

100237 Azurion 7 M20

Qty	Product
1	NNAT129 Ceiling Rails FlexArm 4300 mm
1	NNAT134 Stentboost Live bundle
1	NNAT219 Azurion. 7 C20 Flex Arm
8	FCV0588 FCV0588 - Isolated Wall Connection Box
1	FCV0812 FCV0812 - live/ref slaving for ER
1	NCVC265 Prep table for Table Mount inj
1	NCVC542 NCVC542 - Dynamic Coronary Roadmap
2	FCV0824 video WCB on rear side 1st MCS
1	FCV0807 live/ref slaving for CR
1	FCV0809 addl 27" LCD Exam Room
1	NCVD226 Hybrid kit for FlexArm
1	NCVA082 Intercom
1	NCVD069 ClarityIQ.
1	NCVA101 peripheral X-ray filter
1	NCVD061 optional ref monoplane
1	NCVD099 Quantitative Coronary Analysis
1	NCVA694 Subtracted Bolus Chase
1	NCVA197 pedestal
1	NCVA783 table pivot option
1	NCVA695 FD Rotational Angio
1	NCVD379 StentBoost Subtract
1	NCVC199 Wireless footswitch: mono-plane version
1	NCVD138 table tilt option
1	NCVD080 3rd touch screen module
1	NCVD074 60Fr/sec extension (mono)
1	NCVD076 extension to 30Fr/sec (mono)
1	NCVB882 Cradle extension
1	NCVD078 FD Dual Fluoro monoplane
1	NCVD137 CardiacSwing
1	NCVD177 NCVD177 - IW Hardware (FlexSpot)
1	NCVA258 CO2 VIEW TRACE
1	NCVD211 FlexVision XL HD boom solution
1	FCV0510 Long mattress cardio

Quote Summary

100237 Azurion 7 M20

Qty	Product
1	FCV0816 table accessory rail
1	FCV0817 Accessory rail + cable ext.kit
1	NCVB951 Vascular Stentboost
1	NCVC846 SmartCT Angio
1	NCVC852 SmartCT Vessel Analysis
1	989600213942 Surface mounted adaptor plate AD5 to AD7 table
4	459801079651 Cabinet Rear Cover
1	459801252071 PRE INSTALLATION KIT 1100mm 1F/4F
1	989801229902 Low Load Fluoro (LLF) UPS - 5
1	989801220158 Mark 7 Arterion, Table Mount
1	989801220375 Black Anti-fatigue Floor Mat w/logo.
1	989801220388 Lower Body Protection
1	989801220406 Hybrid Central Axis w Contour Rad Shield
1	989801220403 Hybrid Central Axis with 5MC Lamp
1	NNAE596 IXR StentBoost Imaging Systems OnSite Education
1	NNAE597 IXR Dynamic Coronary Roadmap OnSite Education
1	NNAT060 SmartCT Angio Ent
1	NNAT259 Azurion Follow Up Educ Pkg
1	FCV8053 Advanced Room Solutions Plus
1	SP059Q Clinical Services Flex Account

Options

Qty	Product
1	NCVD058 FlexSpot
1	NCVD059 FlexSpot secondary monitor
1	NCVD064 extension to FlexVision Pro
1	NCVD072 SmartMask Monoplane
1	NCVD097 DVD writer
1	NCVD081 Touch Screen Module Pro

Quote Summary

102503 IntraSight

Qty	Product
1	NNAW511 IntraSight 7

100237 Azurion 7 M20

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: The specific Premier Contract # referenced above represents the applicable Premier agreement with Philips containing discounts, fees and any specific terms and conditions applying to any Product identified as part of this quoted Solution.

Line #	Part #	Description	Qty	Each	Price
1	****NNAT129**	**Ceiling Rails FlexArm 4300 mm**	**1**	**$5,674.50**	**$5,674.50**

Ceiling Rails FlexArm 4300 mm

CEILING RAILS FLEXARM 4300
CEILING RAIL FLEXARM INTERFACE SET 4300

2	****NNAT134**	**Stentboost Live bundle**	**1**	**$0.00**	**$0.00**

StentBoost Live

When inserting a stent in complex cardiac vasculature, inexact positioning and under deployment are always a challenge. StentBoost Live allows physicians to improve the visualization of balloons and stents in coronary arteries on-the-fly to clarify the situation at any moment during an intervention. The user simply presses and holds the foot pedal to boost visualization during the cine run. He can use StentBoost Live to check the position of a device in real-time and confirm stent expansion while the balloon markers are still in place. He can then take any corrective action immediately if required.

To do this, StentBoost Live automatically detects the balloon markers in each acquired image. The detected markers are aligned with the markers found in previous image(s) and temporal and spatial filtering is applied to enhance all radiopaque material in close proximity to the markers. All of this occurs in a few hundreds of milliseconds to produce an enhanced visualization in real-time.

StentBoost Live can be applied to any cine run acquisition and at least four frames of images are required.
StentBoost Live features include:
• Automatic marker detection
• Real-time image enhancement during the StentBoost Live run
• Immediately after acquiring the StentBoost Live run, the run is automatically looped three times to allow for further review
• StentBoost Live functionality is fully integrated in the interventional X-ray system
• Image snapshots or movies can be archived to any DICOM compatible PACS. These include DICOM XA and DICOM SC

Note: when ordering Dynamic Coronary Roadmap and/or StentBoost Live for a non-FlexVision system a single dedicated color monitor must be added to the MCS.

3	****NNAT219**	**Azurion. 7 C20 Flex Arm**	**1**	**$772,596.00**	**$772,596.00**

Azurion 7 C20 FlexArm

Innovative solution that provides virtually unlimited imaging and staff positioning flexibility to perform a wide range of open and minimally invasive procedures in a single room.

100237 Azurion 7 M20

Line #	Part #	Description	Qty	Each	Price

Key benefits

Improved visualization of anatomies in 2D and 3D

Improved staff positioning freedom

Improved workflow for radial access cases on fully extended arms without moving the patient
Patient movement can be reduced or even eliminated

Advanced infection management and clean floor design

Increased lab utilization with procedure-based workflows
Multi-purpose design supports multiple specialties now and in the future

Efficient use of lab/OR space

More independent control for physician from table side

Intuitive user interaction for an easy to use, easy to learn system

Designed to optimize workflows for multiple specialties

With our Live Image Guidance we aim to remove barriers to safer, effective and reproducible treatments, delivering clinical value where its needed most - at the point of patient treatment. Intelligent and intuitive integration of live imaging, patient information, and procedure-based applications optimize real time therapy guidance.

The Philips Azurion 7C20 system with FlexArm is an innovative solution that frees up new ways to grow and improve your interventional and surgical care. This ceiling-mounted system provides virtually unlimited imaging flexibility for diverse procedures and exceptional positioning freedom for medical teams. With the full flexibility and compact set-up of the
FlexArm stand you are provided with a highly cost-effective and future proof investment.

Empowered by SmartMove technology, the FlexArm stand moves on no less than 8 separate axes to deliver excellent imaging results, without the need to move the patient table. Teams can choose the best position to perform complex interventions and freely access the patient. Less movement can also enhance the patient experience. All imaging and parking movements can be easily controlled at tableside with the intuitive controller. Whether you angulate or rotate, the SmartMove technology maintains accurate image alignment on the patient to support consistent image quality.

With Philips Azurion 7C20 with FlexArm, you gain the positioning freedom and workflow efficiency to create a multi-purpose treatment environment where you can seamlessly perform open, minimally invasive and hybrid procedures, ranging from EVAR stenting or TAVI to open surgery. This exceptional versatility helps your Azurion 7C20 room deliver long-term economic value.

Perform smooth radial access cases on fully extended arms without table pivots. Easily do 2D or 3D imaging from head to toe on either side of the table. Confidently carry out new and complex procedures as your clinical demands evolve.

The system uses a range of Procedure Cards to help optimize and standardize system set-up for your cases, from routine to mixed procedures. It has been specifically designed to save time by enabling the interventional team to work on all activities in the exam room - and at one or more work spots in the control room at the same time - without interrupting each other. This leads to higher throughput and faster exam turnover and contributes to quality of care.

To improve dose management, Philips Zero dose positioning enables you to move the stand and table to the region of interest shown on the last clinical image hold before a new acquisition is started, without any radiation.

By working around you, Philips Azurion with Mozart helps you optimize your suite performance and deliver superior care.

Azurion 7 C20 FlexArm clinical use

The Philips Azurion series (within the constraints of the operating room table used) is intended to be used to perform:

Image guidance in diagnostic, interventional and minimally invasive surgical procedures for the following clinical application areas: vascular, non-vascular, cardiovascular and neuro procedures.

Cardiac imaging applications, including diagnostics, interventional and minimally invasive surgical procedures.

3D image acquisitions at the head, nurse and physician positions of the table (0, +90 and -90 degrees).

Image guided navigation at seven positions (0, +/- 45 degrees, +/- 90 degrees, +/- 135 degrees), allowing staff to take the most optimal work positions during procedures.

Imaging for all procedures while keeping the head-end of the table available for anesthesia. If no imaging is needed, the system can be parked away from the table to create a normal operating area for open surgery and allow medical teams to make full use of the lab.

The Azurion 7 C20 with FlexArm comprises five functional building blocks:

1. Geometry

2. X-ray generation

3. Image detection

4. User interface

5. Viewing

Each functional building block is explained in further detail including accessories.

1. Geometry

A. Azurion 7 C20 with FlexArm

The ceiling mounted Philips Azurion stand provides an extremely strong and stable support for the FlexArm, a flexible arm that rotates on 8 axes, and supports the C-arm. The FlexArm geometry consists of a ceiling mounted carriage, a flexible geometry arm, and a C-arm with a rotatable image beam. This provides the following advantages:

The ceiling carriage and flexible arm allow the system to be steered over the patient using a joystick.

The system can be parked in a standby position away from the table, giving physicians all the space they need around the patient. It can be easily moved into working position whenever needed.

The ceiling carriage and flexible arm allow the system to be moved around the patient and be brought in from any position without disturbing staff or equipment

When a minimally invasive procedure has to convert to open surgery, the system can be easily moved out of the way.

The compact form of Philips Azurion with FlexArm takes up a limited amount of space around the table to limit its impact on the workflow of the physicians and staff in the room.

The FlexArm option is available for two different ceiling heights: 270 cm and 290 cm. The X-ray tube and the flat detector are integrated into the C-arm and the Image Beam Rotation feature continually aligns and rotates the image beam so it remains centered over the patient as the C-

arm is moved. This provides a compact assembly completely free from the floor that offers maximal positioning flexibility and unrestricted access to the patient. The stability of the stand provides excellent reproducibility of projections, required, for example in subtracted imaging procedures and advanced 3D imaging. The flexible arm can be rotated and moved longitudinally and laterally, allowing three-sided patient access and total body coverage from both sides of the table.

C-arm rotation around the patient table: from +135 to -135 degrees

FlexArm coverage: Y stroke: 285, 460 or 635 cm depending on the chosen rail length. X-stroke: 236 cm

3D acquisitions can be made at the head of the table at 0 degrees (propeller rotation) and at the nurse/physician positions at +/- 90 degrees (roll rotation). The FlexArm roll rotation speed has been increased to provide 5.2 second rotational scans, which reduces artifacts from patient movements.

FlexArm ceiling rails are not part of the core block and should be ordered separately. They can be delivered separately and earlier as required.

B. Patient Support

The patient support provides very light manual float movement, even for heavy patients, thanks to the mono-bearing technology. The long flat carbon fiber tabletop provides ample space to place e.g. catheters and endovascular tools. On customer request, the standard table top can be replaced by a table top for neuro procedures. This table top has a smaller width at the head end for better imaging results in neuro procedures.

Table top length of 319 cm including OR rails (316 cm excluding OR rails), width of 50 cm (neuro table top is 45cm at head end)

Metal-free cantilever 125 cm

Floating table-top movement of 120 cm longitudinal and +/- 18 cm transversal

Motorized height adjustment range is 74 -102 cm for a table without swivel nor cradle/tilt.
Maximum cantilever of 223 cm -, for full patient coverage

Table tilt +17 /-17 degrees (optional)

Table cradle +15 / -15 degrees (optional)

Pivot range 270 degrees (-90 to +180 or +90 to -180 degrees), table can be locked at any position and has stops at 0, +/-13, +/- 90 and +/- 180 (optional)

Table swivel, 78.2 cm longitudinal displacement, motorized (optional).

Maximum load: 275 kg (up to 250 kg patient weight plus 25kg accessories or 225kg patient weight plus 50kg accessories) plus 500 N for CPR in any longitudinal position of the table top.

The Philips Azurion system can be fitted with a comprehensive set of accessories to help you perform your procedures as conveniently as possible. Included are:

Cerebral filter

Drip stand

Rail accessory clamp

Set of cable holders

Patient straps

Arm Support Board
Set of Elbow Supports

Head Support

Lower Body Protection

Black anti-fatigue floor mat w/logo

Mattress

The mattress is a slow recovery foam mattress with a density of 58 kg/m3. The mattress has a thickness of 7 cm and adapts to the body shape of the patient. It makes the pressure being divided equally and it recovers when the patient is taken off the mattress. The light yellow cover is easy to clean. Patients are more relaxed due to the comfort of this mattress.

Prep Table for Volcano

Prep Table for Volcano prepares the table with the cabling needed for an integrated version of the Volcano IntraSight system. This preparation will facilitate the installation of the integrated system and reduce the cable clutter around the table. The user interface can be placed on the table OP

rails, while the Volcano IntraSight unit is typically placed in the control room. The Volcano IntraSight Bedside Utility Box (BUB) that is used to connect the IVUS and FFR PIM cables can be stored on the Auxiliary OP-Rail mounted at the foot of the table base.

The Prep Table for Volcano option cannot be purchased in combination with Swivel AND Prep Table for Table Mount Injector.

Content: OP rail at table foot Cables

2. X-ray Generation

A. Generator

The 7 C20 with FlexArm system comprises an integrated, micro-processor controlled Certeray generator based on high frequency converter technique. The user interface control of this X-ray Generator is incorporated in the touch screen module, review module, and the on-screen displays. The Certeray generator comprises:

X-ray generator 100 kW

Voltage range is 40 - 125 kV

Maximum current 1000 mA at 100 kV

Maximum continuous power for fluoroscopy: 1.5 kW

Program selection:

Pulsed X-ray up to 3.75, 7.5, 15, 30 (optional), 60 (optional) frames/s for digital dynamic exposures

Pulsed X-ray for pulsed fluoroscopy (30 | 15 | 7.5 | 3.75 | 1.875 | 1.0 | 0.5 img/s (non-Clarity settings))

Minimum exposure time of 1 ms

ECG triggered acquisition: allows acquiring one exposure for each QRS peak with selectable delay time (optional)

Automatic kV and mA control for excellent image quality prior to run to save dose

X-ray tube load incorporated in the Certeray generator

Pulsed X-ray for (subtracted) acquisition up to 12 frames/s for vascular applications

B. X-ray tube

The 7 C20 with FlexArm system has the Maximus ROTALIX Ceramic grid switch tube assembly MRC200+ GS 0407 integrated.

The MRC 200+ GS 04 07 tube assembly and cooling unit CU 3101 for cardiovascular systems comprises:

0.4/0.7 mm nominal focal spot values maximal 30 and 65 kW short time load

Grid switching at pulsed fluoroscopy and low load exposure (to eliminate soft radiation and improve image quality)

Continuous loadability: 3400 W (at 21 degrees C room temperature) / 4000 W (= Max assembly continuous heat dissipation)

Application of SpectraBeam dose management

Tube housing is oil cooled with thermal safety switch

Maximum anode cooling rate of 1820 kHU/min
Anode heat storage capacity of 6.4 [MHUeff]

C. System intrinsic

Fully digital imaging chain in maximizing the utilization and technology of the x-ray generator, x-ray tube, flat detector and image processing.

Customizable EPX protocols to each application according to user preferences for different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, and adaptive harmonization).

Built-in SpectraBeam filtering of low energy radiation to improve image quality and dose efficiency with MRC200+ X-ray tubes.

Pre-filters of 0.2, 0.5 and 1.0 mm CU equivalent.

Automatic cardiac wedge positioning.

X-ray depth collimator with single semi-transparent wedge filter with manual and automatic positioning.

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.

Xper Fluoro Storage, a grab function allows storage and archiving of both a fluoro image or the last 20 seconds of fluoroscopy run. These images or runs can be archived and reviewed as a regular run.

D. User selections

Removable anti-scatter grid to lower x-ray dose for pediatrics (grid ratio 12:1).

ECG triggered acquisition, offering the possibility to acquire images at the same phase of the heart cycle. This applies to the low dose fluoro and exposure program for EP applications. This allows patient dose reduction by lowering the pulse rate to 1 pulse per heart and let the physician still focus on relevant items (optional).

Three programmable fluoroscopy modes can be selected from the control module. Each mode has a different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, and adaptive harmonization).

The acquisition segment coordinates the parameters for automatic exposure control, ensuring excellent X-ray tube loading for top image quality. Different programs can be selected via the touch screen module and/or via the review module. Several exposure techniques are provided for different types of examination:

Serial imaging for DA and DSA with automatic exposure setting.

Single shot mode, acquisition frame rates: 0.5 to 12 images/s at 2048 x 2048, 14 bit matrix.

Roadmap Pro can be selected from the control module.

In the first Roadmap phase a vessel map is created by live fluoroscopy or by selecting an exposure image (SmartMask) with a vessel map which, in the second Roadmap phase, is superimposed with subtracted live fluoroscopy.

Roadmap Pro features Smart Settings in special clinical modes that are optimized to visualize special materials such as coils and glue.

Acquisition runs can be done without losing the vessel map of Roadmap Pro.

Live processing of the vessel map, the device map and the landmark map can be done on the touch screen module.

Field of View (FoV) can be altered during the second phase.

Xres for vascular procedures is standard part of Roadmap Pro.

E. User dose awareness

DoseWise program: Philips DoseWise program is a set of techniques, programs and practices built into the X-ray system that enables excellent image quality during each interventional application, while at the same time reducing x-ray dose at every opportunity. The DoseWise comprises of three building blocks to help manage x-ray dose without compromising diagnostic quality: system intrinsic, user selection and awareness.

On-system monitor display provides and displays body zone specific Air Kerma data (10 zones for cardiac applications) in numeric and graphical bars.

Graph displays the accumulated Air Kerma dose for the particular body zone of the actual projection

When the accumulated Air Kerma dose of the particular body zone reaches the critical skin dose level of 2 Gy, it will be indicated on the display and made visible to the x-ray operator.

Radiation Dose Structured Report

Collection of dose relevant parameters and settings and export to a DICOM database (e.g. PACS) (dose information is sent in MPPS message not as Radiation Dose Structure report), 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. Also, typical system usage can be extracted from the data, helping to identify root causes behind deviations and measures to improve.

Analysis of individual patient cases: using dose levels and system usage per procedure

Alerting for high dose cases, timely identifying patients at risk or deterministic effects, for proper follow-up.

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.

3. Image Detection

The system has a 20 inch flat panel image detector. This detector can be rotated over 90 degrees from portrait to landscape and vice versa.

The image chain with the 20 inch flat panel image detector comprises the following:

A 30 cm by 40 cm (20 in.) diagonal 8 mode Dynamic Flat Detector subsystem for fluoroscopy and cine-fluorography.

8 modes 30*38/30*30/26*26/22*22/19*19/16*16/13.5*13.5/11*11 cm, Dynamic Flat Detector

48, 42, 37, 31, 27, 22, 19, 15 cm (19, 17, 14.4, 13, 10.5, 8, 7, 6 inch) diagonal formats

The outer detector physical housing is 36 x 47.2 cm
The digital output of the Flat detector is 1904*2586 pixels at 16 bit depth.

The pixel pitch is 154 micron by 154 micron

The DQE (0) is >77% providing high conversion of X-ray into a digital image, while maintaining a high MTF.

Philips Azurion offers a storage capacity of (optionally extendable) of 50,000 images at matrix size of 1024 x 1024, in 8 or 10 bit depth. With a matrix size of 2048 x 2048 this is 12,500 images. Maximum number of examinations is 999, with no limit to the maximum number of images per examination.

Xres is a multi-resolution spatial temporal noise reduction and edge enhancement filter for interventional applications. Xres exploits the full benefits of dynamic digital flat detector imaging to enhance sharpness and contrast and has been designed to reduce noise in fluoroscopy and exposure runs. The settings for Xres Cardio can be customized to improve image quality.

Xres is a Philips unique image processing algorithm developed at Philips Research for medical applications. Xres is used with Philips MR and US scanners next to Philips Azurion systems.

4. User Interface

User Interface in Examination Room

The User Interface comprises a variety of User Interface modules in the Examination Room. There is the On-Screen Display, the touch screen module, Viewpad and the control modules.

The On-Screen Display is positioned on the left side of the live/ref monitor. The following system information is displayed:

X-ray indicator

X-ray tube temperature condition

Gantry position in rotation and angulation

Source Image Distance

Table height

Table top tilt and cradle angle, if applicable

Detector field size display

General System messages

Selected Frame speed

Fluoroscopy mode

Integrated fluoroscopy time

Skin Dose: dose rate during X-ray, cumulated dose when no X-ray

Dose Area Product: dose rate during X-ray, cumulated dose when no X-ray

Graphical bars for Body Zone specific dose-rate and accumulated skin dose levels, related to the 2 Gy level (for cardiac applications)

Stopwatch

Touch screen module

The touch screen module is provided for use at either the tableside or in the control room. The touch screen module has a touch screen, which can be operated when covered with sterile covers. The touch screen module includes multi-modality function that allows control of (depending on configuration):

Compatible other equipment (e.g. IntraSight, CX50, Interventional Tools, EchoNav, DoseAware, Philips Hemo system)

Monitor layout (Flexvision, switchable viewing)

X-Ray settings (Collimation, Projections, Table, Series and Processing)

Quantitative Analysis (optional) User can only start QA from the touch screen module. No controls

Viewpad

The Viewpad contains the preprogrammed function settings. The system is provided with two 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 Viewpad function from live to reference monitor

Laser pointer, intended to point at regions of interest on the image monitors

LED indication of laser pointer on/off and battery low

Subtraction on/off

Remasking

Landmarking

Control module

The control module can be positioned at three sides of the patient table, while keeping the button operation intuitively logical. The control module single-plane provides the following functionality:

Tabletop float

Table height position

Table tilt angle if function is applicable

Source Image Distance selection

Gantry positioning

Gantry rotation in an axis perpendicular to the floor

Store and recall of two scratch gantry positions including SID

Geometry reset button, which resets stand and table to a factory-default starting position

Emergency stop button

Execute button of the Automatic Positioning Control (APC) if applicable

Unlocking button for table pivot function (if option is installed)

Table tilt and cradle controls (if option is installed)

Fluoroscopy Flavor selection defined per setting

Shutters and Wedge positioning

Manual or automatic semi-transparent wedge filter

Xper Fluoro Storage

Selection of the Detector field size

Reset of the fluoroscopy buzzer

Roadmap Pro activation if function is available

The control module is provided with a protection bar. This removable bar protects the buttons from unintended control.

Access flat detector rotation

User Interface in Control Room

The control room comprises a review module, data color monitor and review monitor. The data and review functions are controlled by a single keyboard and mouse. The review module offers the basic functions for review. The most prominent functions can be controlled by the push of a button. The review module comprises the following functionality:

Power on/off

File and run cycle

File, Run, and Image stepping

Run and file overview

Reset fluoroscopy timer

Enable/disable X-ray

Geo disable

Acquisition monitor. A standard keyboard and mouse control the user interface. The acquisition monitor is intended to follow live case in the ER. System information is displayed on the bottom of the monitor:

Stopwatch and Time

System guidance information

Dose Area Product (DAP) and Skin Dose, as dose rate during X-ray and cumulative dose at no X-ray

Frame speed settings, fluoroscopy mode, and accumulated Fluoroscopy time

Exposure and fluoroscopy settings as Voltage (kV), Current (mA) and time (ms)

Geometry information as rotation, angulation, and SID

The acquisition monitor is designed for standard workflow based on scheduling, preparation, acquisition, review, report, and archive.

Scheduling

In the scheduling page it is possible to add new patients (either querying from RIS/CIS or by creating patient locally). The patients can be listed and selected per date, physician, and intervention type. Previous DICOM patient studies can be uploaded with the DICOM Query Retrieve function in the Philips Azurion system. 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, like acquisition file, reference file, and QA results file.

Procedure Cards

Procedure Cards provide the information of room and patient preparation for each individual physician. Procedure Cards are customizable per setting and allow each physician to provide their own room protocols. Procedure Cards is intended to make hard copies of the protocol instructions redundant.

Acquisition

The acquisition page contains information on the currently selected patient.

Reviewing

The review page allows for reviewing of patients:

Previous examination cases

Review of other DICOM XA or DICOM SC studies.

Archiving

Clinical studies can be archived to a CD/DVD, USB or a PACS. The archive process can be completely automated and customized with settings. Parameters like multiple destinations, archive formats can be selected to the individual needs and wishes for programming under the settings.

With Philips Azurion the control room comprises of an acquisition monitor and a review monitor. The review monitor is a 24 inch color TFT-LCD medical grade monitor.

The Graphical User Interface on the Review monitor has the following features and possibilities:

Step through file, run, or images

File, and run overview

Contrast, brightness, and edge enhancement settings

Flagging of runs or images for transfer

Applying text annotation in images

DICOM printing if available

Executing Quantitative Analysis Packages if available

Subtraction functionality

This system is delivered with printed instructions for use and/or electronic instructions for use, as well as a quick start leaflet. A printed paper instructions for use can also be ordered at no additional cost.

5. Viewing

A. Viewing in Examination room

Philips Azurion systems come with one 27 inch high brightness color medical grade LCD monitor for clinical image display in the Examination room. This LCD monitor is intended for viewing in the examination room and is designed for medical applications. The monitor is used for combined viewing of live images and reference display. Selection and storing of live to reference monitor is controlled by the infra-red remote-control viewpad or via touch screen module.

The On-Screen Display provides status information on stand rotation-angulation, table height, 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 Air Kerma dose.

The main characteristics are:

27 inch high brightness color TFT-LCD display

Native format 1920x1080 Full HD

10 bit gray-scale resolution with gray-scale correction

Wide viewing angle (approx. 178 degrees)

High brightness (max 650 Cd/m2, default 400 Cd/m2)

Long term luminance stability through backlight stabilization circuit

Automatic brightness control with backlight sensor
Control functions on side

User programmable and standard reference setting

On-Screen Display

Internal selectable lookup table for gray-scale transfer function, including DICOM

Internal power supply (100-240 VAC)

Integrated LCD protection screen

Unless otherwise stated, with FlexArm an integration kit HD is supplied for a Monitor Ceiling Suspension (MCS) containing crucial parts for operating the equipment.

B. Viewing in Control room

Philips Azurion includes two 24 inch high brightness color LCD monitors. The color monitors are for acquisition and reviewing display.

The main characteristics for color monitor are:

24 inch color TFT-LCD display

Native format 1920x1080 Full HD

High brightness (max 400 Cd/m2, default 350 Cd/m2)

Wide viewing angle (approx. 178 degrees)

Long term luminance stability through backlight stabilization circuit

Automatic brightness control with backlight sensor
Control functions on side

User programmable and standard reference setting

On-Screen Display

Internal selectable lookup table for gray-scale transfer function, including DICOM

Internal power supply (100-240 VAC)

Integrated USB hub

A Philips Azurion system includes the DICOM Image Interface which enables the export of clinical images to a DICOM destination like a CD-Medical station or a PACS server. 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 DICOM Image Interface transfers through its fast Ethernet link, making images available on-line within seconds. The archive process can be configured by X-ray settings. The images are sent out either in the background, or manually upon completion of the examination. The export format is configurable in 512x512 or 1024x1024 matrix in 8 or 12 bit depth. The examination can be sent to multiple destinations for archiving and reviewing purposes. The 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.

Security

The Philips Azurion system runs on the Windows 10 Operating system and offers features such as OS Hardening, AppLocker, & BitLocker functionality

Remote service

Access to the system from a Remote location is possible via network or modem connection. Remote access to a system can shorten the time needed for e.g. changing system settings or problem diagnosis.

Environmental

At Philips Healthcare, we feel the responsibility towards society and the environment. The latest 7 C20 with FlexArm system is a perfect example of our EcoVision program. By examining every aspect of the 7 C20 with FlexArm design and development through a green eye, we reduced the products environmental impact.

Full System APC

Store and recall stand-related positions

Helps to save time and manage X-ray dose with automatic positioning

Positioning the X-ray system to visualize relevant anatomy from different perspectives can involve a great deal of time and many scout images during interventional procedures. To help save time and manage X-ray dose while working, the Automatic Position Controller (APC) provides an easy way for interventional team members to store and recall stand & table related positions. Operators can select a sequence from a pre-defined list or from positions stored during a procedure or use an image to define the position to be recalled.

Specifications

Different modes of Automatic Positioning Control for system are defined:

Sequence: for recalling a list of user customizable positions of the stand Store / Recall: for storing and recalling stand positions during system use. Image Reference: an image is used to determine the stand & table position that has to be recalled Image Reference 3D: an image from a 3D work spot is used to recall. The operator can define a new point of the table (longitudinal, lateral and height) as the new iso-center and recall this table position.

Quantitative Vascular Analysis

Key benefits

Allows quantitative assessment of different size vessels such as aortic and peripheral Aids confident decision making for device selection, approach angles and follow-up Designed for efficiency with single click functions and fast results

Easily obtain objective assessment of aortic and peripheral vasculature

To support decision-making and allow quantitative assessment of vasculature during vascular interventions, the 2D quantitative vascular analysis option supports quantification such as aortic and peripheral artery dimensions of about 5 to 50 mm from 2D angiographic images. With one click, the relevant segment is detected and a visualization of the obstruction, healthy vessel, reference diameter, stenosis diameter and plaque area is created.

Specifications:

Automated vessel segmentation Diameter measurement along selected segment Automated obstruction analysis Stenosis diameter, stenosis length % stenosis diameter, % stenosis area Automated and manual calibration routines Store result page

Analysis of the targeted vessel segment has been simplified with the single click function. Position the mouse on or close to the steno tic area and click once to detect the relevant segment. The visualization shows the obstruction, healthy vessel, reference diameter, stenosis diameter and plaque area.

RIS/CIS Interface

This package allows communication of the X-ray system with a local information system (CIS or RIS).

Key benefits

Reduce errors in patient information Facilitate X-ray dose management

Reduce data errors and facilitate X-ray dose management

Connecting the X-ray system with your local information system (CIS or RIS) helps streamline exam workflow and promote radiation management. The RIS/CIS DICOM interface package allows your X-ray system to communicate with a local CIS or RIS information system. The interface uses the DICOM Worklist Management (DICOM WLM) and Modality Performed Procedure Step (DICOM MPPS) standards.

If a hospital has an X-ray system and an information system it can receive patient and examination request information from the information system and report examination results to:

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

Specifications

Upon request from the X-ray system the complete worklist with all relevant patient and examination data is returned from the IS to the X-ray system. For each patient the following information will be shown on the -ray system 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 X-ray system in case of an emergency or in case the local Information System connection is down.

On request of the clinical user the X-ray system 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 X-ray system DICOM Conformance Statement. The interface requires an EasyLink (hardware and software) if the RIS/CIS is not compliant with DICOM WLM and DICOM MPPS.

Contrast Injector Interface

Simplify contrast injection timing and enhance imaging results

The Contrast Injector Interface allows the injection of contrast to be coupled to the start of X-ray acquisition. This simplifies contrast injection timing during interventions.

Specifications

The Contrast Injector Interface allows injection of contrast coupled to the start of X-ray acquisition, controlled by the X-ray ON button. The timing of the X-ray start related to the contrast injection is programmable.

Pan Handle

An optional extension of the control possibilities for floating movements of the table top in cardio vascular and neuro systems.

Key benefits

- Flexible positioning during cardio and neuro procedures
- Flexible positioning during cardio and neuro procedures

To allow more flexible positioning during cardio and neuro procedures, the pan handle option can be used to perform floating table movements. The pan handle provides a solid grip of the tabletop

and can release and apply the tabletop brakes. It can be attached anywhere along the tabletop and accessory rails without affecting the floating range.

Specifications

- Pan handle with cable and connector
- Table-top attachment clamp
- Accessory-rail attachment clamp

Marker tool

Marker tool allows you to easily mark areas of interest on a 2D image. Clear and precise markings on the image as the marking scales with the image when its zoomed or panned

Key benefits

- Allows you to mark areas of interest to on a image during your procedure (e.g. to indicate where to put stent/grafts)

Enhance functionality on the touch screen module This option extends the functionality of the touch screen module, allowing markings on images. Affordable alternative vs expensive 3rd party applications

Specifications - Enhance functionality on the TSM - Provides intuitive zooming an panning functionality (also during fluoroscopy) - Turns the touchscreen into the marking device in order to improve communication during the procedure

Hemo on TSM

Control Xper Flex Cardio from table side

Key benefits Helps to perform a complete hemodynamic study from tableside. Optimizes workflow in the interventional lab by seamlessly integrating Xper Flex Cardio with the X-ray system.

The touch screen module interface acts as a remote control to the Xper Flex Cardio system. The "Hemo" menu on the touch screen module contains a subset of the Xper Flex Cardio features. Changes selected on the touch screen module will be displayed on the Xper Flex Cardio system. Specifications Now you can perform common FlexCardio features at table side: SNAP (Auto record) Obtain/Capture and store hemodynamic waveforms and ECG's Cardiac Output measurements Monitor scale and sweep speed FFR measurements NIBP measurement

Clinical Education Program for Azurion System:

The purchase of the Azurion System includes a StartRight entitlement pool that allows for the customized delivery of educational events to improve staff time to proficiency, knowledge on system features, and improve overall lab efficiency. For new users, the recommended series of educational events includes:

Essentials Offsite Education: Philips will provide one (1) Cardiovascular Technologist, Registered Technologiss, Registered Nurse, or other system operators 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 information. **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 Azurion system and the EPN workstation. 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.**

Essentials Virtual Training: Philips will provide an IGT virtual course enrollment for up to two (2) technologists as selected by customer. These provide a comprehensive and clinically relevant education to enhance operational efficiency and high-quality patient care. All courses have been approved via ASRT. Due to ASRT guidelines Continuing Education Credits will only be awarded to students who attend the entire course. No partial credits are available. Choose from:

Azurion FlexArm Essentials Virtual: This virtual offering is approximately 8 hours in length and may be spanned over multiple days. This modular training approach is broken out by topic with multiple Q&A sessions to address questions. This course consists of virtual instructor led training on a fully-operational Philips Azurion 7 Series with FlexArm system with imaging performed on phantoms. The course topics covered include, but are not limited to: procedure workflow, such as patient scheduling, and development of procedure cards, image acquisition, post-processing, study archiving, bolus chase, and rotational angiography and system customizations.

Azurion Cardiac Essentials Virtual: This virtual offering is approximately 8 hours in length and may be spanned over multiple days. This modular training approach is broken out by topic with multiple Q&A sessions to address questions. This course is ideal for staff who have a focus in Cardiac imaging and includes virtual instructor led training on a fully-operational Philips Azurion system with imaging performed on phantoms. The course topics covered include, but are not limited to: procedure workflow, such as patient scheduling, and development of procedure cards, image acquisition, quantitative analysis, cardiac swing, stentboost, study archiving, bolus chase for peripheral imaging, and system customizations.

Azurion Vascular/IR Essentials Virtual: This virtual offering is approximately 8 hours in length and may be spanned over multiple days. This modular training approach is broken out by topic with multiple Q&A sessions to address questions. This course is ideal for staff who have a focus in Vascular imaging and includes virtual instructor led training on a fully-operational Philips Azurion system with imaging performed on phantoms. The course topics covered include, but are not

Line #	Part #	Description	Qty	Each	Price

limited to: procedure workflow, such as patient scheduling, and development of procedure cards, image acquisition, quantitative analysis, measurements, bolus chase for peripheral imaging, 3DRA, XperCT, Interventional Tools Workstation, post processing and study archiving, and system customizations.

Introductory e-Learning: Introductory electronic learnings are provided on the Philips Learning Center educational portal. These courses introduce the Philips IGT systems. Course topics include system startup and shutdown, system functionalities, helpful quick-steps and more. The modules will provide the technologist familiarity with the workflow and software prior to onsite training. It is recommended that this online self-paced learning be completed prior to the onsite applications training. The eLearning modules can be accessed by technologists as needed for reference and refresher.

Pre-Training Onsite Education: Philips Education Specialists will provide twenty -four (24) hours of pre-training applications for up to (8) students selected by customer, including technologists from night/weekend shifts if necessary. This training will be coordinated to provide instruction on the operation of the FlexArm C-Arm prior to the Go Live handover date of the entire Azurion Imaging System. **In the event that a Maquet OR table** with 24 hours of pre training has also been purchased this FlexArm 24 hour training will be used as a post-handover follow up session. No CEU credits will be available for this session. Please refer to guidelines for more information. **Note: The equipment must be entirely operational. Philips personnel are not responsible for actual patient contact or operation of the equipment during the education sessions except to demonstrate proper equipment operation.**

Initial Handover OnSite Education: The primary Philips Education Specialists will provide twenty-four (24) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 24 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 (IGT Addl OnSite Clin Educ 24h).**

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

4	****FCV0588**	**FCV0588 - Isolated Wall Connection Box**	**8**	**$2,592.00**	**$20,736.00**

Isolated Wall Connection box to support the display of an external video source on a monitor in the examination room

Many interventional facilities use video to record and stream images from other modalities on the interventional X-ray suite for training or presentation purposes. The Video Wall Connection Box facilitates connection of the video source via a standard DVI cable/connector and lossless transfer of the video signal over the approximate 30 meter long cable. It can be mounted in the examination room or in the control room, depending on the location of the video source.

Specifications The quantity of the VWCB's has to be calculated as follows: - For each video signal via MultiVision: 1 VWCB (max = 4) - For each video signal to FlexVision XL on Cardio System: 1 VWCB (max = 9) - For each video signal to FlexVision XL on Vascular System: 1 VWCB (max = 8) - For each 3rd party video signal directly connected to an LCD in the MCS: 1x VWCB Note: No VWCB is required in case a video signal is connected directly to a dedicated LCD from the

Line #	Part #	Description	Qty	Each	Price

following sources: 1) Live/ref Slaving 2) Interventional HW (XtraVision), IntelliSpace Portal, Philips Xcelera (only if workstations are powered by Philips X-ray system) 3)XperIM

- Easily stream video to other locations
- Stream video from other modalities on the interventional X-ray suite
- Connect external video in the exam room

5 ****FCV0812** **FCV0812 - live/ref slaving for ER** **1** **$6,147.00** **$6,147.00**

Live/ref slaving for Exam Room. Having patient data and clinical information easily available on screen can enhance decision making and efficiency during interventions The total amount of live/ref slaving that can be selected is max 5, minus the number of FCV0807 Live/ref slaving for CR. If the customer chooses for FlexSpot, then the total amount of live/ref slaving that can be selected is max 3, minus the number of FCV0807 Live/ref slaving for CR Specifications: - Live/ref slaving for ER is possible - On Philips MCS (additional monitor excluded from this option) - In combination with FCV0519 1 or 2 MCS from Skytron/Steris

- Easily display any data or clinical information needed to work efficiently
- Simplify workflow with flexible viewing control
- The live/ref slaving enables the option to slave the Live and Ref video source from the X-ray system

6 ****NCVC265** **Prep table for Table Mount inj** **1** **$7,825.50** **$7,825.50**

This is only applicable when the Mark 7 Arterion Table Mount injector will be ordered locally. Prepared for Table Mount Injector prepares the XperTable with the cabling needed for a Table Mount install of the MEDRAD Mark 7 Arterion injector head. This preparation will facilitate the install of the Table Mount injector system. It will save an estimated 4 - 8 hours of installation time. The injector base unit can be placed in the technical room, and User Interface and display can be placed in the control room or on the wall of the exam room.

The prepared for Table mount injection table option cannot be purchased in combination with the Swivel AND prepared for Volcano Core option.

7 ****NCVC542** **NCVC542 - Dynamic Coronary Roadmap** **1** **$27,828.00** **$27,828.00**

When advancing guidewires and devices through the vasculature during percutaneous coronary interventions, it’s important to understand the relationship between the device and the anatomy. Navigation is based on the physician's knowledge of the patient's anatomy, shown on angiograms and live fluoroscopic images. As the physician works, small shots of contrast agent are applied to check the device position, on the live fluoro image with the anatomical reference provided by the previously acquired angiogram.

Dynamic Coronary Roadmap combines the live fluoro and angiogram image into a single adaptive roadmap image, which provides immediate feedback on the position of the device and its relationship to the anatomy to guide navigation. Dynamic Coronary Roadmap features include: - Automatic creation and storage of a dynamic roadmap from each acquired coronary angiogram. Only one roadmap per projection is stored; - Automatic overlay of the dynamic roadmap on live fluoroscopy; - Automatic guidance to reach projections for which a roadmap is available; - The Dynamic Coronary Roadmap functionality is fully integrated in the interventional X-ray system; -

Line #	Part #	Description	Qty	Each	Price

Image snapshots or movies can be archived to any DICOM compatible PACS. These include DICOM XA and DICOM SC.

Note: when ordering Dynamic Coronary Roadmap and/or StentBoost Live for a non-FlexVision system a single dedicated color monitor must be added to the MCS. Dynamic Coronary Roadmap is a Medical Device as defined in Regulation (EU) 2017/745 (EU-MDR)

8 ****FCV0824** **video WCB on rear side 1st MCS** **2** **$6,111.00** **$12,222.00**

Isolated Wall Connection box on the rear side of the monitor ceiling suspension to support the display of an external video source on a monitor in the examination room.

Key benefits

• Easily connect external video in the exam room

Specifications

A wall connection box to connect external video (input only), USB and Ethernet. One or two WCB's (option) can be attached on the rear side of the 1st MCS with a bracket. A cable box (also attached to rear side of 1st MCS) can be used to store connected equipment cables. A maximum of two WCBs/cable boxes can be attached.

9 ****FCV0807** **live/ref slaving for CR** **1** **$6,147.00** **$6,147.00**

Live/ref slaving for Control Room

Key benefits

• Easily display any data or clinical information needed to work efficiently

Simplify workflow with flexible viewing control

Having patient data and clinical information easily available on screen can enhance decision making and efficiency during interventions.
Live/ref slaving will enable the option to slave the Live and Ref video source from the X-ray system. The total amount of live/ref slaving that can be selected is max 3.

Specifications

Live/ref slaving for CR is possible:
- In Control Room in combination with FCV00806 (Addl 24'' LCD Control Room)
- In Examination Room in combination with FCV0806 (Addl 24'' LCD Control Room) as a standalone option and not on MCS or boom. For live/ref slaving to monitors on MCS or boom use FCV0812 Live/ref slaving for ER.

10 ****FCV0809** **addl 27" LCD Exam Room** **1** **$3,969.00** **$3,969.00**

Additional 27 inch high brightness color medical grade LCD monitor.

Key benefits

• Enhance visibility for a variety of procedures

Get a wider view of the situation

Mix and match the widescreen monitors to make efficient use of your lab space. Each monitor can display input from different sources so you can see just what you need for different phases and types of procedures. The high definition color widescreen monitors enhance the visibility of fine details and vital signs.

Specifications

This LCD monitor is intended for viewing in the Examination Room and is designed for medical applications.

Line #	Part #	Description	Qty	Each	Price

The main characteristics are:
- 27 inch high brightness color TFT-LCD display
- Native format 1920x1080 Full HD
- Two DVI inputs to display one or two channels (dual view)
- 10 bit gray-scale resolution with gray-scale correction
- Wide viewing angle (approx. 178 degrees)
- High brightness (max 650 Cd/m2, default 400 Cd/m2)
- Long term luminance stability through backlight stabilization circuit
- Automatic brightness control with backlight sensor
- Control functions on side
- User programmable and standard reference setting
- On Screen Display
- Internal selectable lookup table for gray-scale transfer function, including DICOM
- Internal power supply (100-240 VAC)
- Integrated LCD projection screen

11	**NCVD226	Hybrid kit for FlexArm	1	$33,538.50	$33,538.50

The Hybrid OR Ceiling kit is a set of materials and adaptations to cope with the stricter cleaning and sterility requirements in modern Hybrid OR environments. It supports undisturbed laminar airflow.

Key benefits
- Supports sterility and easy cleanability of moving ceiling parts
- Height adjustable carriage top cover to improve air flow and eliminate air jet effects

The ceiling mounted FlexArm supports optimal utilization of your lab by allowing procedure-based workflow. To support the high sterility and cleanability standards in the Hybrid OR, the top of the moving parts of the ceiling rails has been specially designed to cope with the higher sterility and laminar airflow compatibility requirements in modern Hybrid ORs.

Specifications
The Hybrid OR ceiling kit for FlexArm includes a closed cable duct and a carriage cover.

Cable duct
- Closed duct to keep out dust
- Easy to clean stainless steel belt
- Seal strip affixed to duct maintains a tight seal
- High quality, specially designed rail guide materials, result in low friction and no/low noise

Carriage cover
- Carriage cover for top of ceiling rails prevents jet air effects to eliminate laminar airflow disturbances
- Closes off top of rail carriage
- Cover can also be added after installation of stand

12	**NCVA082	Intercom	1	$2,128.50	$2,128.50

- Enhance communication between exam room and control room

Enhance communication
The remote intercom is used to communicate between the examination and control room. A separate intercom can be connected to the system and placed in the preferred working position in the control room or examination room. The listen function can be selected separately on each intercom. Activating the talk function on a selected intercom automatically disables this function on the other intercom.

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Line #	Part #	Description	Qty	Each	Price
13	****NCVD069**	**ClarityIQ.**	**1**	**$124,875.00**	**$124,875.00**

Significantly lower dose- across clinical areas, patients and operators.

Key benefits
• High-quality imaging at low dose levels
• Enhanced work environment for staff through active management of scatter radiation
• Expands treatment options – enables longer procedures to treat obese and high-risk patients with confidence

See with confidence every time
Interventions are becoming increasingly complex, which lengthens fluoroscopy time and increases the need for high resolution imaging. New devices can be more difficult to visualize, making it harder to position them precisely. The prevalence of patients with a high BMI can also require increased dose levels to visualize anatomy. All of these factors inspired us to completely redefine the balance in interventional X-ray with AlluraClarity.

AlluraClarity with its unique ClarityIQ technology gives you exceptional live image guidance during treatment. What's more, you can confidently manage low X-ray dose levels without changing your way of working. In short, you can see what you have to regardless of patient size.

Specifications
ClarityIQ technology is the foundation of Philips X-ray systems with AlluraClarity. It offers:
- Noise and artefact reduction, also on moving structures and objects
- Image enhancement and edge sharpening
- Automatic real-time patient and table motion correction on live images
- A flexible digital imaging pipeline from tube to display that is tailored for each application area
- Over 500 clinically fine-tuned system parameters making it possible to filter out more X-ray radiation and use smaller focal spot sizes and shorter pulses with the grid switching technology of Philips MRC tube and accompanying generator

Pulsed X-ray for pulsed fluoroscopy
25 | 12.5 | 6.25 | 3.125 | 2.5 | 1.25 | 0.625 img/s

14	****NCVA101**	**peripheral X-ray filter**	**1**	**$2,349.00**	**$2,349.00**

• Obtain uniform density of lower peripheral areas

Enhance consistency of lower peripheral images
To help clinicians obtain consistent images of lower peripheral anatomy, this option provides a set of flexible X-ray filters. They provide uniform density in angiographic examinations of the lower peripheral area.

15	****NCVD061**	**optional ref monoplane**	**1**	**$5,310.00**	**$5,310.00**

Additional Ref2 and Ref3 viewport

Key benefits
• Easily display any data or clinical information needed to work efficiently

Simplify workflow with flexible viewing control
Having patient data and clinical information easily available on screen can enhance decision making and efficiency during interventions. Optional ref monoplane offers an additional video output of the X-ray system offering an additional Ref2 and Ref3 viewport on one LCD monitor. Combined with the Dual Fluoro license this enables users to zoom live images during acquisition, while having the Dual Fluoro image visible on the Ref3 viewport.

16	****NCVD099**	**Quantitative Coronary Analysis**	**1**	**$7,807.50**	**$7,807.50**

Line #	Part #	Description	Qty	Each	Price

Key benefits
• Allows quantitative quantification of coronary artery dimensions
• Aids confident decision making for device selection, approach angles and follow-up
• Designed for efficiency with single click functions and fast results

Easily obtain objective assessment of coronary artery
To support decision making and allow assessment of vasculature during cardiac interventions, the 2D quantitative coronary analysis supports quantification of coronary artery dimensions of about 1 to 6 mm from 2D angiographic images. With one click, the relevant segment is detected and a visualization of the obstruction, healthy vessel, reference diameter, stenosis diameter and plaque area is created.

Specifications
• Automated segmentation of selected coronary
• Diameter measurement along the selected segment
• Automated obstruction analysis
• Stenosis diameter, stenosis length
• % stenosis diameter, % stenosis area
• Automated and manual calibration routines
• Store result page

Analysis of the targeted vessel segment has been simplified with the single click function. Position the mouse on or close to the stenotic area and click once to detect the relevant segment. The visualization shows the obstruction, healthy vessel, reference diameter, stenosis diameter and plaque area.

17	****NCVA694**	**Subtracted Bolus Chase**	**1**	**$22,351.50**	**$22,351.50**

Helps to visualize vessel structures when blood flow is difficult to estimate.

Key benefits
• Bolus Chase improves results in case of challenging step movements, a mismatch between blood flow and selected program, or lack of real-time image information.

During digital acquisition in non-subtracted mode with uninterrupted real-time image display, the contrast bolus is followed (chased) interactively by a motorized table scan movement using a hanbd-hold speed controller to adapt the speed of the table scan to the contrast flow. With biplane systems, this Bolus Chase is applied with the lateral channel.

Specifications
• Framespeed can be adapted.
• Bolusrun is followed with a maskrun, using the same speed curve and framespeed that was generated during the bolusrun.
• Viewing is possible in the subtracted and non-subtracted mode. If subtracted viewing is not required, the maskrun can be skipped.
• Subtracted Bolus Chase gives fast, accurate results high patient throughput and efficient patient management.
• Automated exposure control and precise speed control generate high quality images and excellent subtraction cases.

18	****NCVA197**	**pedestal**	**1**	**$10,035.00**	**$10,035.00**

Line #	Part #	Description	Qty	Each	Price

The pedestal creates an additional work spot to operate the system in the examination room.

Key Benefits

• Easy system control from different locations

Full control where you need it

To help your interventional suite work as efficiently as possible, no matter what layout or case mix it has, you can add this additional work spot to easily control the system from various locations in the Examination Room.

Specifications

The pedestal is provided with additional geometry and imaging modules. It offers the possibility to hold the X-ray footswitch. Optionally an additional touch screen module can be mounted on the pedestal, creating a work spot with full system control. The pedestal is connected to the system by means of a wall connection box. A cable length of 8 meter allows the user to position the pedestal freely around the patient table. The pedestal has been designed with stability and ease of use in mind and can be moved towards the wall connection box when not in use.

19	****NCVA783**	**table pivot option**	**1**	**$4,963.50**	**$4,963.50**

• Flexible positioning for upper extremity angiography
• Easy patient transfer

Flexible positioning and transfers

Transradial access, upper extremity angiography, and patient transfer have never been simpler with our optional Pivot feature. One finger push-to-pivot allows effortless patient positioning. It moves with less friction, making it easier to move larger patients. A secure mechanism locks the tabletop in place to prevent it from moving.

20	****NCVA695**	**FD Rotational Angio**	**1**	**$21,357.00**	**$21,357.00**

Realtime 3D impressions of complex vasculature

Key benefits

• Use 3D imaging to quickly determine the projection angle for treatment in complex vascular interventions, surgery and radiotherapy
• Supports assessment of vascular pathologies for diagnostic and therapeutic decisions.

Revealing hidden structures

The complexity of interventional procedures lies in the fact that every person’s pathology is unique. Visualization in three dimensions is therefore vital to aid decision making by the clinician. Rotational angiography provides real-time 3D impressions of complex vasculature and the coronary artery tree. Rotational Angio can be used to quickly determine the projection angle for treatment.

Specifications

Rotational Angio acquires multiple projections with just one contrast injection via a fast rotational scan of the region of interest. A rotational scan is possible both with the X-ray systems in the side position (ceiling mounted systems) and in the head position, providing the flexibility to perform procedures virtually from head to toe.
C-arm in side position:
Max. rotation Speed: 30 degrees/s
Max. rotation Angle: 180 degrees
C-arm in head position:
Max. rotation Speed: 55 degrees/s
Max. rotation Angle: 240 degrees
Max. Frame speeds are given by the frame speed specifications of the system configuration.
The very high movement speed allows using less contrast, whereas the very wide rotation range provides a complete evaluation of the anatomy.

Line #	Part #	Description	Qty	Each	Price

A contrast run can be followed up with a mask run, to allow image/run subtraction.
The stand is designed for a very high mechanical stability. It offers precise positioning and high reproducibility, assuring you of high quality images and excellent subtraction studies. Rotational Angio results are available on the X-ray system.
Operation of Rotational Angiography is straight forward: the procedure is selected, set up and executed virtually in a matter of seconds, supporting high patient throughput.
A set of dedicated acquisition programs is available on the touch screen module and can be selected at the touch of a button. The Rotational Angio is controlled from the exposure hand- or footswitch.

21 ****NCVD379** **StentBoost Subtract** **1** **$8,383.50** **$8,383.50**

StentBoost is a simple, quick, and cost-effective tool to enhance stent visualization in the coronary arteries.

Enhanced visualization software
When inserting a stent in complex cardiac vasculature, inexact positioning and under deployment are always a challenge. StentBoost is a simple, quick, and cost-effective tool to enhance stent visualization in the coronary arteries. With the StentBoost Subtract feature, you can even see the stent in relation to the vessel wall as you are working.

StentBoost automatically detects the stent delivery markers image after image. In each image StentBoost aligns the markers with the markers of the previous image. By doing this all radiopaque material in the close proximity of the markers will be enhanced resulting in enhanced stent visualization.

Specifications
StentBoost can be used with and without contrast. Without contrast the images are acquired with only a short cine run of 1 to 2 sec (recommended with 40 frames out).
With contrast the images are acquired with a cine run of 5 to 6 sec. Contrast media is required only for the last 3 to 5 sec. A contrast enhanced image run results in a dynamic representation of the enhanced stent in relation with the vessel wall.

The StentBoost Subtract functionality includes, but is not limited to:
• Review of StentBoost runs
• Store image snapshot
• Automatic pre-defined Region of Interest to indicate the location of the stent/balloon markers
• Fading in/out of contrast vessel and StentBoost image
• Viewing selection of StentBoost with and without contrast
• Manual correction possibility, boost phase and contrast image identification
• Automatically or manually create and store as movie to PACS

Stentboost Substract data can be exported to:
Any optional DICOM compatible device, supported only by DICOM SC

22 ****NCVC199** **Wireless footswitch: mono-plane version** **1** **$7,825.50** **$7,825.50**

One wireless footswitch in the examination room.

Key benefits
• Reduces clutter around the examination table
• Simplifies preparation and cleanup
• Streamlines workflow in the interventional suite

Reduce clutter and streamline workflow
The wireless footswitch option streamlines workflow, reduces clutter, and simplifies preparation and cleanup in the interventional suite. Clinicians can use the footswitch to wirelessly control the X-ray system in the examination room, from any convenient position around the table. No sterile covers are needed with the IPX8 certified waterproof design.

Line #	Part #	Description	Qty	Each	Price

Specifications
• The mono-plane wireless footswitch is a 3 pedal version; one pedal for fluoroscopy, one for exposure and one to control the room light/single shot. The pedals can be configured according customers preferred lay-out.
• The wireless footswitch is working via RF technology and is fully tested and released for medical use. It has an active range up to 10 meters, depending on structures within this range.
• The wireless footswitch has a lithium battery which only needs to be recharged once per week. During recharging the footswitch still can be used and is fully functional. In parallel, a wired footswitch can also be used.
• The status of the battery is indicated by an LED-indication on the footswitch itself, so that the user can decide when the footswitch needs to be recharged.
• The wireless footswitch has high water ingress protection standard (IPX8), it can easily be cleaned in water.
The wireless footswitch has an on/off switch. It can be switched off when not in use. When the footswitch is active, but not in use, it will go into a sleep-mode. It will be re-activated when touched or when one of the pedals is pressed.

23 **NCVD138 table tilt option 1 $20,362.50 $20,362.50

Table tilt option provides precise imaging of contrast medium, blood, or objects in the body.

Key benefits
• Tilts the table to support gravity oriented and puncture procedures
• Keeps the region of interest in the isocenter of rotation and angulation
• Allows more precise imaging of contrast medium, blood, or objects in the body

Precise imaging during gravity oriented and puncture procedures
To obtain high quality results and avoid re-takes during gravity oriented or puncture procedures, it's important to keep the region of interest centered at all times. The tilt option allows you to tilt the table. As the table tilts, the X-ray beam automatically adapts to the movement to keep the region of interest in the isocenter of rotation and angulation of the stand. As a result, your region of interest always remains centered to allow more precise imaging of contrast medium, blood, or objects in the body.

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, the table tilt option enables phlebography to be performed with a head-up tilted patient.

Specifications
• Motorized table height from 78.5 - 103.5 cm
• 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 36cm)
• Easy to use controls

24 **NCVD080 3rd touch screen module 1 $9,936.00 $9,936.00

Key benefits
• Control system operations with a third touch screen module

Tablet-like touch screen control
During an intervention flexible control of applications and system operations can support fast decisions and communication with team members. The touch screen module provides fast, table-like touch response to control system operations. Up to three touch screen modules can be connected to the X-ray system: on the table, on the pedestal and in the control room.

Line #	Part #	Description	Qty	Each	Price

Specifications
The third touch screen module is similar to the standard touch screen module and provides touch screen control of displayed functionality. The following functions can be made available providing the relevant commercial options have been selected:
- Acquisition settings
- Image processing controls
- Channel selection for MultiVision
- Automatic position control (optional)
- Quantitative Analysis controls (optional)
- Xcelera and IntelliSpace Portal viewing (optional)
- Interventional tool controls (optional)
- 3D-RA, Dynamic 3D Roadmap (optional)
- StentBoost, 3D-CA (optional)
- XperCT, XperGuide (optional)
- XIM physio monitoring controls (optional)

Connectivity:
A maximum of 3 touch screen modules can be connected to the X-ray system:
- one touch screen module on the table
- one touch screen module in the Control Room
- one touch screen module on the pedestal

25 **NCVD074 60Fr/sec extension (mono) 1 $17,383.50 $17,383.50

Frame rate extension to 60 frames per second.

Designed to enhance visualization of complex and pediatric interventions
Frame rate extension to 60Fr/sec increases the system acquisition speed up to 60 frames per second for cardio-vascular studies requiring high speed imaging allowing, for example, high speed pediatric applications.

Specifications
Up to 60 frames per second acquisition speed is achieved with 512x512 matrix.

26 **NCVD076 extension to 30Fr/sec (mono) 1 $16,218.00 $16,218.00

Frame rate extension to 30 frames per second.

Designed to enhance visualization of complex and pediatric interventions
Frame rate extension to 30Fr/sec increases the system acquisition speed up to 30 frames per second for cardio studies requiring high speed imaging.

Specifications
The frame rate extension increases the acquisition speed to 15fps and 30fps with a 1024x1024 matrix.

27 **NCVB882 Cradle extension 1 $16,654.50 $16,654.50

• Moves the tabletop in a cradle motion from side to side to support surgical and puncture procedures
• Improves access to patients
• Allows precise imaging of contrast medium or blood

Precise imaging during surgery and puncture procedures
To obtain high quality imaging results and help in avoiding re-takes during surgical or puncture procedures, it can be useful to swing the tabletop from side to side in a cradle movement. This extension moves the tabletop in a cradle motion to improve access to patients. It also allows precise imaging of contrast medium or blood.

28 **NCVD078 FD Dual Fluoro monoplane 1 $19,566.00 $19,566.00

Line #	Part #	Description	Qty	Each	Price

An additional fluoro channel in parallel to the standard fluoro channel

Key benefits

• View the subtracted fluoroscopy next to the default non subtracted fluoroscopy
• View a digitally zoomed fluoroscopy image next to the default fluoroscopy image

Second fluoro image to support complex interventions

For complex interventions, it can be useful to view the subtracted fluoroscopy image next to the normal fluoroscopy image. The Dual Fluoro option provides an additional fluoro channel in parallel to the default fluoro channel. The dual fluoro option allows to view live digitally zoomed fluoroscopy next to non-zoomed fluoroscopy.

Specifications

The Dual fluoroscopy mode is selected via the touch screen module.
The trace subtracted fluoro image will be displayed on the live viewport, the non-subtracted fluoro image is displayed on the reference 3 viewport.
In Dual Fluoro mode, the live fluoroscopy image can be zoomed digitally, providing a larger view of the region of interest for complex interventions. The zoomed live fluoroscopy image will be shown on the live viewport, while the entire non zoomed image will be shown on the reference 3 viewport. The fluoro zoom function is controlled via the touch screen module.

29	**NCVD137	CardiacSwing	1	$13,414.50	$13,414.50

CardiacSwing allows dual-axis rotational coronary angiography

Key benefits

• Provides uncommon angiography views to capture a more complete view of the coronary tree
• Reduces vessel foreshortening effect

Less risk, more information for coronary artery diagnosis

The goal of a coronary angiogram is to obtain as much information to assess lesions with a minimum of vessel foreshortening. The challenge is to do this without losing any of the information or views required and to use as little radiation and contrast as possible. CardiacSwing was designed to meet these goals by reducing the acquisition runs to typically 3 separate runs using 24-26 cc of contrast in total. It also significantly reduces the total procedure time.

CardiacSwing replaces two single axis runs with one dual axis run for the left and right coronary artery. Unlike typical coronary angio which acquires multiple stationary views, a CardiacSwing rotation can begin in the left anterior oblique (LAO), caudal orientation and end in the right anterior oblique (RAO), cranial orientation in one acquisition run. Unexpected angles are presented in a CardiacSwing. These views of the coronary tree provide additional support for lesion assessment and can expose views of vascular anatomy that might be hidden in a normal 2D X-ray angiogram.

Specifications

In total seven pre-programmed trajectories are available:
• Three for Left coronary imaging
• Two for Right Coronary imaging,
• Two generic trajectories.
The choice depends on size and weight of the patient. These trajectories are designed to fully cover all conventional projections for a diagnostic coronary angiography. Rotation and angulation movements are combined in one complete scan trajectory, using the maximum rotation and angulation speed of the X-ray system. (55 resp 30 degr/sec). CardiacSwing is possible in the side position (ceiling mounted systems) and in the head position.

Line #	Part #	Description	Qty	Each	Price

CardiacSwing functionality includes, but is not limited to
• 15 frames per seconds acquisition to allows using of less contrast.
• Wide rotation range provides a complete evaluation of the anatomy.
• Precise positioning and high reproducibility.
• Set up and executed in a matter of seconds.
• Set of dedicated acquisition programs with the trajectories available on the touch screen module
• The rotation end- and start-positions can be selected.
• Acquisition procedure is controlled from the exposure hand or footswitch.

30	****NCVD177**	**NCVD177 - IW Hardware (FlexSpot)**	**1**	**$21,078.00**	**$21,078.00**

Hardware for the 3D interventional tools combined with FlexSpot.

View multimodality images in exam room and control room: Images from a variety of sources are being increasingly used during interventions for a variety of Live Image Guidance tools. The Interventional Hardware option provides the hardware for our interventional tools that enables DICOM compatible data from other imaging modalities to be imported and viewed in the exam room and control room. To support fast results, a real-time digital image link is provided between the Interventional Hardware workstation and the X-ray system. Specifications: The Interventional hardware is the hardware for the 3D interventional tools that included Real Time Link. It enables import and viewing of DICOM compatible data from other imaging modalities. The Interventional Hardware comprises at least: - Computer Workstation; - Internal/external CD-ROM / DVD writer; - Mouse tablet to interact with all the interventional tools at the table side.

Conditionally: FD Calibration Tool Kit for 3D-RA Interventional Workspot is a Medical Device as defined in Regulation (EU) 2017/745 (EU-MDR)Key benefits:

- Facilitates multimodality viewing in exam room and control room
- Supports DICOM compatible data from CT and MR imaging modalities
- Provides real-time access to images to support fast results

31	****NCVA258**	**CO2 VIEW TRACE**	**1**	**$3,186.00**	**$3,186.00**

Software package enabling tracing (stacking) of images acquired with CO2 injections. This function can be used during postprocessing next to view trace of images acquired with CO2 injections.

32	****NCVD211**	**FlexVision XL HD boom solution**	**1**	**$164,331.00**	**$164,331.00**

Extension to 1 large screen monitor on 4 F boom

Key benefits
• Space efficient solution for low-ceiling labs
• Enhanced visibility for a variety of procedures
• Boom also supports wall connection boxes
• Allows users to free up laminar airflow field by moving monitors outside the airflow field

Get a wider view in a compact form
Many interventional suites are looking to improve their efficiency and quality of patient care during the variety of procedures they perform. The Azurion Series 7 family of monitor solutions offers an extension to 1 large screen monitor on a 4F boom that is designed to help you achieve both goals. The high definition color large screen monitor enhances the visibility of fine details and vital signs.

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Line #	Part #	Description	Qty	Each	Price

Specifications
• The boom allows flexible monitor positioning
• The overall boom arm length is 2400 mm
• The boom can be rotated up to 350 degrees.
• Height movement is mechanically balanced
(no motor support allowing for quick and easy height adjustments)
• Rotation points have electrical brakes to provide more controlled movements
Includes 1 x 58 inch high brightness color medical grade LCD monitor.

33	****FCV0510**	**Long mattress cardio**	**1**	**$1,021.50**	**$1,021.50**

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

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

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

34	****FCV0816**	**table accessory rail**	**1**	**$2,920.50**	**$2,920.50**

An extension for the table op-rail

Key benefits
• Extend the length of the OP rail to fit cardio and neuro tabletops
• Position operating modules and/or accessories conveniently
• Work comfortably at the head end of the table

Extend the length of the OP rail
To provide more flexibility when working at the head end of the cardio and neuro tabletops, the auxiliary OP (operation profile) rail can be extended by 500 mm with the additional OP rail. This rail is used to position operating modules and/or accessories closer to the head end of the tabletop. This allows the user to work comfortably when performing pacemaker implantations, venous jugular catheter insertions, and other procedures near the patient's head.

Specifications
• The additional OP rail can be mounted on either side of the tabletop where no OP rails are mounted.
• The additional OP rail is compatible with AD5 and AD7 Table (cardio and neuro) patient tabletops.
• The OP rail has the same profile and dimensions as the current standard OP rail.
• The maximum load (downwards) on the additional OP rail is 100 N (F=100N), determined by the tabletop of the patient table.
• The maximum mechanical moment on the additional OP rail is 40Nm downwards and 20Nm upwards (this is limited by the tabletop of the patient table)

35	****FCV0817**	**Accessory rail + cable ext.kit**	**1**	**$3,775.50**	**$3,775.50**

Line #	Part #	Description	Qty	Each	Price

• Extend the length of the OP rail to fit cardio and neuro tabletops
• Position operating modules and/or accessories conveniently
• Work comfortably at the head end of the table

Extend the length of the OP rail
To provide more flexibility when performing procedures, the additional OP rail accessory with cable extension kit is equipped with everything needed to mount operating modules and/or accessories next to the tabletop.

Specifications
This option includes the following items:
• One additional OP rail (mechanical) of 500 mm
• Cable extension set for OP rail
• Extension cable for control module, 1.3 meters long
• One connection box to connect the user interface cables to the module cables
• An extension for the table op rail of 500 mm

The additional OP rail can be mounted on either side of the tabletop where no OP rails are mounted. The additional OP rail is compatible with AD5 and AD7 Table (cardio and neuro) patient tabletops. The OP rail has the same profile and dimensions as the current standard OP rail. The maximum load (downwards) on the additional OP rail is 100 N (F=100N), the maximum mechanical moment on the additional OP-Rail is 40Nm downwards and 20Nm upwards, determined by the tabletop of the patient table.

Line #	Part #	Description	Qty	Each	Price
36	****NCVB951**	**Vascular Stentboost**	**1**	**$19,818.00**	**$19,818.00**

Extends the StentBoost Subtract capabilities to enhance visualization of stents in relation to the vessel wall of larger, non-coronary vessels.

Key benefits
• Shows fine details of stent struts, as well as thinner and drug-eluting stents.
• Supports precise pre- and post-stent deployment by showing the enhanced stent in relation to the vessel wall.
• Allows enhanced positioning and fine control of pre-dilation, stent expansion, and post-dilation.

Allows fine control during stenting procedures
When inserting a stent in large vessels, inexact positioning and underdeployment are always a challenge. StentBoost is a simple, quick, and cost-effective tool to enhance stent visualization in the coronary arteries. Vascular StentBoost extends the StentBoost Subtract capabilities to enhance visualization of stents in relation to the vessel wall of larger, non-coronary vessels. StentBoost images support precise pre- and post-stent deployment and allow the team to correct potential problems immediately, without applying additional fluoroscopy.

Specifications
Vascular StentBoost can be used with and without contrast. Without contrast the images are acquired with only a short cine run of 1 to 2 sec (recommended with 40 frames out) to show all radiopaque material in the close proximity of the markers.

With contrast the images are acquired with a cine run of 5 to 6 sec. Contrast media is required only for the last 3 to 5 sec (typical recommendation of total 100 frames which of 100 frames cine run of which last 60 frames are with contrast) to show all radiopaque material in the close proximity of the markers.

The Vascular StentBoost package functionality includes, but is not limited to:
• Pre-defined Region of Interest to indicate the location of the stent/balloon markers.
• Automatic stent detection.
• Manual correction possibility for marker identification
• Review of StentBoost runs, before and after processing

Line #	Part #	Description	Qty	Each	Price

• Measurements to supports decision-making in determining the percentage of remaining in the stent.
• Store image snapshot.
• Automatic pre-defined Region of Interest to indicate the location of the stent/balloon markers.
• Fading in/out of contrast vessel and StentBoost image.
• Viewing selection of StentBoost with and without contrast,
• Manual image contrast and brightness adjustment of the boost and contrast image
• Manual correction possibility for marker, boost and contrast identification.
• Create and store as movie.

StentBoost data can be exported to:
• Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D.
• Support archive on one or multiple DVD's, CD-ROM(s)
• Image transfer to a standard PC compatible format (JPEG, AVI)
• Store a subset of exportable objects (snapshots and AVI Movies) to a USB device.

37 ****NCVC846** **SmartCT Angio** **1** **$46,953.00** **$46,953.00**

NCVC846 SmartCT Angio

SmartCT Angio offers a 3D Rotational Angiography (3D RA) acquisition technique augmented with step-by-step guidance, advanced 3D visualization and measurement tools all accessible on the touch screen module at table side. To support you perform a fast and first-time-right* 3D-RA acquisition and streamline your workflow, you are guided though 4 key steps.
1- Room setup
2- Proper 3D protocol with corresponding suggested injection protocol (when applicable)
3- Collision free Zero dose table iso-centring
4- When to press and release the acquisition button

Once the 3D rotational scan is successfully performed, the acquired 3D image is automatically displayed in the SmartCT 3D visualization tools with the adequate rendering settings and the 3D measurement tools tailored for the selected 3D protocol.

Key Benefits
• Provides 3D imaging in the interventional suite to enhance decision making and guidance
• Supports accurate assessment of vascular pathologies by providing high-resolution 3D reconstructions of small vessels and lesions
• Enhances understanding of vascular anatomy for interventional treatment planning and procedural outcome verification.

Enhancing 3D functionality
Visualizing the complex spatial relationship between critical and branching vessels often involves several sequential 2D (DSA) acquisitions and radiation dose for the patient. SmartCT Angio offers a 3D-RA (3D Rotational Angiography) acquisition protocol that provides extensive 3D visualization of anatomy and vessels based on a single contrast-enhanced rotational angiogram. Its high-resolution 3D reconstructions provide critical information about depth and the relationship of one vessel to another to support the accurate assessment of anatomy and vasculature.

With SmartCT Angio, complex anatomy such as aneurysms, complex anatomy, or tortuous vessel structures can be assessed in three dimensions. This enhances the chances of delineating the neck of aneurysms, for example, and its shape and relationship to adjacent arteries. It also enhances the assessment of complex congenital heart disease anatomy and its relationship to adjacent structures.

Combined with the unique whole body coverage of the X-ray system, specifically designed for 3D imaging, SmartCT Angio can cover cerebral, abdominal, cardiac, and peripheral vasculature as well as other anatomy.

Specifications

4 step Guidance.

1. Room setup
2. Proper 3D protocol with corresponding suggestion of injection protocol (when applicable)
3. Collision free Zero dose table iso-centring
4. When to press and release the acquisition button

Image Acquisition
Image acquisition is performed with the Rotational Angiography feature of the X-ray system with the flexibility to position the C-arm in either head or side (not F12) position.
C-arm in head position: scan range of 240 degrees with a rotation speed up to 55 degrees/sec.
C-arm in side position: scan range of 180 degrees with a rotation speed up to 30 degrees/sec.

3D Vessel Reconstruction
The rotational run is automatically transferred and displayed as a 3D vessel model: with the Real-Time digital link (option) 125 images are reconstructed into a 3-dimensional model within seconds. Additional reconstructions, using the Reconstructive Zooming Technique, can be performed as well.

Workflow
Step by step acquisition guidance
Automated 3D-RA process from 3D acquisition to 3D Viewing,
3D at touch screen module,
3D Automatic Position Control (3D-APC),
3D Follow C-arc.

Calibration
3D-RA calibrations are performed by Philips Customer Support.
3D-RA calibration data are stable over at least 6 months’ time.

Viewing
Real Time user interface.
Philips' CRM (Contrast Resolution Management) Technology.
Image rendering:
Volume/Surface Rendering,
MIP,
Average
Gradient rendering,
MPR (Multi-Planar Reformatting),
unlimited distance measurements calculated in the same volume, including "Quick measurement”.
Volume calculation
Lesion segmentation,
Annotation,
Reconstructive Zooming Technique,
Subtraction of reconstructed volumes,
Set grey values WW/WL,
Store/Recall of user defined projections.

Line #	Part #	Description	Qty	Each	Price
		Archiving Transfer to: Optional Hard Copy unit (DICOM Print), DICOM compatible device, supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D, Any PC in a standard PC compatible format (JPEG, AVI), One or multiple DVD's, CD-ROM(s), USB device. *Evaluated with clinical users in a simulated lab environment with a total of 17 teams consisting of a physician and a radio-tech, with different levels of experience			
38	****NCVC852**	**SmartCT Vessel Analysis** NCVC852 SmartCT Vessel Analysis SmartCT Vessel Analysis allows easy inspection of the vessel and device positioning with straightened, curved and cross-section reformats to support treatment planning. The curved MPR view allows you to see the whole vessel segment on one plane. The straightened reformat view of the vessel segment, where the curvature is extracted from the vessel, while preserving the longitudinal and angular position, contains a graph showing the vessel diameter along the segment. The straightened cross-section view displays an indication of the minimum and maximum diameters at the pointer location as you move it over the curved, reformat or straightened reformat view. You can choose your preferred rendering to enhance visibility of guidewires and the stretched vessel view allows you to measure the diameter of the vessel/lumen and the length of the segment/stenosis at three locations. Ring landmarks can be used to mark feeder vessels to aid navigation.	**1**	**$5,589.00**	**$5,589.00**
39	****989600213942**	**Surface mounted adaptor plate AD5 to AD7 table** Surface mounted adaptor plate AD5 to patient table. This adapter plate allows mounting of a patient table on an existing floorplate for the AD5 table. The existing floorplate can remain limiting the need for floor reconstructions which simplifies room preparations. The adapter plate increases the minimum table height with 3 cm compared to mounting on an AD5/patient table floorplate that is mounted into the floor. This unit is a prerequisite for the installation of the table when reusing an existing AD5 floorplate. The adapter plate can be ordered in advance in order to perform hospital room preparations in advance of the installation of the patient table. Compatible with: patient table, both without and with pivot Existing floorplate for AD5 both with and without pivot	**1**	**$3,375.00**	**$3,375.00**
40	****459801079651**	**Cabinet Rear Cover** Cabinet Rear Cover	**4**	**$508.50**	**$2,034.00**
41	****459801252071**	**PRE INSTALLATION KIT 1100mm 1F/4F** PRE INSTALLATION KIT 1100mm 1F/4F	**1**	**$2,371.50**	**$2,371.50**
42	****989801229902**	**Low Load Fluoro (LLF) UPS - 5**	**1**	**$40,117.50**	**$40,117.50**

Line #	Part #	Description	Qty	Each	Price

Low Load Fluoro (LLF) UPS - 5 75kva Socomec Low Load Fluoro (LLF) UPS - 5: Enough battery to perform fluoro for five minutes (assumes batteries are in good condition) (1 cabinet plus remote display panel). Tested and approved 3-phase double conversion Low Load UPS enables the system to be used normally with the exception of the exposure functionality. Run time 5 mins (typical 8 min) UPS has a compatibility statement with Philips Imaging Systems.

43 **989801220158 Mark 7 Arterion, Table Mount 1 $25,650.00 $25,650.00

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

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

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

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

System Specifications:

- Flow Rate 0.1-45.0 ml/s in 0.1 ml increments
- 0.1-59.9 ml/m in 0.1 ml increments
- Volume 1-150 ml in 1 ml increments
- Pressure Limit 100-1200 psi in 1 psi increments
- (150ml syringe) 689-8273 kPa in 1 kPa increments
- Rise Time 0.0-9.9 seconds in 0.1 increments
- Delay Time 0.0-99.9 seconds in 0.1 increments
- Fill Speed 1-20 ml/s
- Fill Volume 1-150 ml
- Syringe Size 150 ml
- Syringe Heat Maintainer 35 °C (95 °F) ± 5 °C (9 °F)
- Protocol Memory 40 Protocols
- Injection Memory History

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Line #	Part #	Description	Qty	Each	Price
44	**989801220375	**Black Anti-fatigue Floor Mat w/logo.**	1	$180.00	$180.00
	Black Anti-fatigue Floor Mat with Philips Logo 36" x 60"				
45	**989801220388	**Lower Body Protection**	1	$1,557.00	$1,557.00
	UT70-10WS Lower body protection, width 1410 mm incl. wide extension Lower body protection of the model series UT70 with a modular design to provide a maximized protective zone for the physician and staff.				
46	**989801220406	**Hybrid Central Axis w Contour Rad Shield**	1	$25,164.00	$25,164.00
	Hybrid Central Axis with X-Ray Protective Shield Ceiling Column Hybrid Central Axis including Canopy, 200 mm Single extension arm non electrical, length 1750 mm for Hybrid Central Axis Mounting plate with three 800 mm distance tubes and interface plate with mounting parts for ceiling column part of Hybrid Central Axis Portegra2 spring arm OT50001FA Acrylic radiation protective shield shield with patient cutout 600 x 760 mm Accessory Electrified Single arm with lamp or lead acrylic shield Installation Hybrid Central Axis Includes: A. Site Visit #1: Equipment Location Confirmation with Philips Project Manager B. Site Visit #2: Installation of MAVIG HZP01 Substructure C. Site Visit #3: Installation of HCA Column, Extension Arm and Accessory				
47	**989801220403	**Hybrid Central Axis with 5MC Lamp**	1	$40,455.00	$40,455.00
	Hybrid Central Axis with LED 5MC Lamp Ceiling Column Hybrid Central Axis including Canopy, 200 mm Single electrical extension arm for lamps - 3 pole contact Mounting plate with three 800 mm distance tubes and interface plate with mounting parts for ceiling column part of Hybrid Central Axis M LED 5MC, Multi Color examination lamp with Portegra2 Spring Arm Including: - Sterilzable handle - Laser pointer - Transformer, UL				

Line #	Part #	Description	Qty	Each	Price

LED technology offers the following enhanced features:
- Facetted multi-lens system
- In-depth illumination
- Superior color rendition
- Integrated OP-Laser-pointer
- LED-OT-light for surgery

Technical data LED 5MC
Light intensity at 1 meter distance: 160,000 Lux
Color rendering index Ra at 4300 Kelvin: >=96
Color rendering index R9 at 4300 Kelvin: >=90
Focusable size of the light field: 20-32 cm
Color temperature: 3750, 4000, 4250, 4500, 4750 Kelvin
Electronic light intensity control at the lamp head: standard
Dimming range: 5 - 100 %
Temperature increase in head area: 0,5° C
Total power consumption: 160 W
Number of LEDs: 160
Life-span of the LEDs: > 40.000 h
Diameter of the lamp head: 72 cm
Working distance: 60 - 150 cm
Height Adjustment: 118 cm

Installation Hybrid Central Axis
Includes :
- 1 site pre-visit
- installation substructure HZP01
- installation Hybrid Central Axis, HZS200 Column, HZA1E175 Electrified Single arm with lamp or lead acrylic shield

48 ****NNAE596** **IXR StentBoost Imaging Systems OnSite Education** **1**

Philips Imaging Systems Clinical Education Specialist will provide eight (8) hours of education for up to four (4) students, as selected by customer, including technologists from weekend/night shifts as necessary. CEU credits are not available for this portion of training. 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.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref#296309-20170315
This training requires the purchase of StentBost Live.

49 ****NNAE597** **IXR Dynamic Coronary Roadmap OnSite Education** **1**

Philips Imaging Systems Clinical Education Specialist will provide eight (8) hours of education for up to four (4) students, as selected by customer, including technologists from weekend/night shifts as necessary. CEU credits are not available for this portion of training. 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.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref#296309-20170315
This training requires the purchase of Dynamic Coronary Roadmap.

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Line #	Part #	Description	Qty	Each	Price
50	**NNAT060	SmartCT Angio Ent	1		

Clinical Education Program for SmartCT Angio

IGT SmartCT Angio Handover OnSite Education: Philips Education Specialists will provide sixteen (16) hours of 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: 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.

Education expires one (1) year from equipment installation date (or purchase date if sold separately).
Ref#296511-29062020

51	**NNAT259	Azurion Follow Up Educ Pkg	1		

Azurion Follow Up Educ Pkg

Azurion Follow Up Education Package:

Philips Education Specialists will provide sixteen (16) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 16 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. Education expires one (1) year from installation date (or purchase date if sold separately).

52	**FCV8053	Advanced Room Solutions Plus	1	$5,706.00	$5,706.00

Advanced Room Solutions Plus

Advanced Room Solutions Plus facilitates an interactive 3D lab visualization of 2D site plans allowing for a more intuitive understanding of the entire solution before it is installed. It enables an interactive lab design that allows viewing of standard room templates, interaction with systems and models, and creation of 3D customized room layouts and site plans, and configuration of multiple rooms.

53	SP059Q	Clinical Services Flex Account	1	$30,000.00	$30,000.00

Clinical Services Flex Account

SP059Q Clinical Services Flex Account Agreement

Customer may request non-discountable clinical training (“Training”) commencing on the warranty start date for a period of three (3) years (“Training Contract Period”) from the Philips course catalogs available at the time Training is requested.

As Customer requests Training, the Flex Account balance will be reduced by Philips pursuant to the then current published and non-discountable list price for a given Training, multiplied by the number of Trainees scheduled to attend.

Subject to the terms and conditions in this Agreement, Philips will provide requested Training during the Training Contract Period until the monetary level of training is exhausted or falls below the then current published and non-discounted list price of the requested Training. Training

coverage expires at the end of the Training Contract Period and no credit for any unused funds may be carried forward to the next year.

Course catalogs include:

- Guided pathways to clinical excellence: Imaging Systems continuing education course catalog
- Education designed around you: Ultrasound course catalog
- Philips online Learning Center: www.philips.com/learningcenter
- Some additional clinical education programs may apply

Selections can be made across one or any of these modalities: Computed Tomography (CT), Cardiovascular (CV), General X-Ray (GXR), Hybrid, Magnetic Resonance (MR), Nuclear Medicine (NM), CT Simulation and Treatment Planning (Oncology), and Ultrasound.

Philips Training may be conducted at Philips training facilities, the Customer location(s) listed below in this Agreement ("Customer Site(s)"), through on-line or remote training, or at a third party location as determined by Philips. Customer is responsible for scheduling Training for its employees ("Trainee(s)"). Philips will make reasonable efforts to accommodate Customers scheduling requests. All Training is subject to availability. Philips reserves the right to cancel or reschedule courses at its sole discretion.

Trainee(s) must meet the minimum admission requirements set forth in the course syllabus, must satisfy all prerequisites prior to admission and may be required to sign or acknowledge Philips safety checklist prior to receiving Training. PHILIPS MAKES NO WARRANTY THAT ANY TRAINEE WILL PASS ALL OR ANY PORTION OF THE TRAINING COURSES PROVIDED OR THAT THE TRAINING WILL RESULT IN ANY TRAINEE BEING QUALIFIED OR ABLE TO OPERATE THE SYSTEM.

Unless otherwise indicated in this agreement, all travel and living expenses incurred by the Trainee(s) will be the responsibility of the Customer.

To receive remote training Customer must provide Philips a secure location to store a Philips remote services ("PRS") router (or a Customer owned router acceptable to Philips) for connection to the products and Customer network; provide Philips appropriate access to the PRS router to enable Philips to access the products remotely; provide Philips with 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 PRS and Customers network for Philips use in remote training, transmitting automated status notification from the products 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 new services). Unless Philips determines in its sole discretion that the products cannot be connected to the PRS, then Customer’s failure to provide the access described in this paragraph will constitute Customer’s waiver of its rights to remote training under this Agreement. Customer must identify, in writing, one (1) Customer representative to Philips who will manage and be responsible for Customer’s selection and scheduling of all Training to be provided by Philips.

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NET PRICE $1,672,887.00

Buying Group: PREMIER HEALTHCARE ALLIANCE Contract #: PP-IM-280

Addt'l Terms: The specific Premier Contract # referenced above represents the applicable Premier agreement with Philips containing discounts, fees and any specific terms and conditions applying to any Product identified as part of this quoted Solution. Philips

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.

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OPTIONS

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

Line #	Part #	Description	Qty	Each	Price	Initial
1	**NCVD058	FlexSpot	1	$58,131.00	$58,131.00	_____

Integrated work spot in the Control Room to view, control and manipulate all applications within a single view

Key benefits

• Access all applications on one compact workplace in the control room
• Set up unlimited custom screen layouts with all relevant information in one view
• Full flexibility of screen layouts (live resize, drag and drop)
• Clutter free and clean control room

Simplify control room workflow

Typical interventional control rooms are equipped with several workstations and controls to support procedures that require extra handling and space. FlexSpot helps you save time and space in the control room by giving you seamless access to all applications on one compact workplace. Easily set up any screen layout desired with all relevant information in one view. Resize, drag and drop items just like a tablet.

Specifications

FlexSpot offers an integrated workspot in the Control Room with one or more high resolution QHD (2560x1440) displays.

- Show internal video sources (e.g. Review, CR Live)
- Show up to 11 external video sources (e.g. Ultrasound, EchoNav, etc.)
- Video sources can be flexibly displayed on FlexSpot through user customizable presets. Users can customize the displayed layout and assign video sources to viewports as desired
- Up to 4 video sources can be displayed on a single FlexSpot display (excluding the add-on FlexSpot).
- Per display, the user can choose between 7 different layouts (positioning of viewports)
- FlexSpot offers user interaction through a keyboard and mouse with which users can seamlessly control all video sources on screen. Seamless means that users can move out of one viewport and into another without needing to press a special keyboard shortcut or use a gesture.
- In systems with both FlexSpot and FlexVision, FlexSpot offers convenient control access of FlexVision from the primary FlexSpot workspot.
- Users can define their own preset groups and preset names.
- Through field service, users can assign their own custom name and icon to a video source (also applies to FlexVision)
- The X-ray status area with all X-ray details is always visible on the primary display of the primary FlexSpot workspot.
- Up to 3 Philips workstations can be integrated into the technical room. With this, the workstations are powered from the system and are fully integrated into the system. Users do not need to separately power on/off these workstations.
- The snapshot function allows the user to store/save a screen-capture of any image on the FlexSpot as a photo image to the current Acquisition Patient study.
- 27 inch high brightness color LCD monitor for clinical image display in the Control Room.

The main characteristics for color monitor are:
- 27 inch color TFT-LCD display
- Native format 2560x1440 Quad HD
- High brightness (max 500 Cd/m2, default 350 Cd/m2)
- Wide viewing angle (approx. 178 degrees)
- Long term luminance stability through backlight stabilization circuit

100237 Azurion 7 M20

OPTIONS

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

Line #	Part #	Description	Qty	Each	Price	Initial

- Automatic brightness control with backlight sensor
- Control functions on side
- User programmable and standard reference setting
- On Screen Display
- Internal selectable lookup table for gray-scale transfer function, including DICOM
- Internal power supply (100-240 VAC)
- Integrated USB hub

2 ****NCVD059** **FlexSpot secondary monitor** **1** **$9,504.00** **$9,504.00** _____

FlexSpot secondary monitor

Simplify control room workflow

This option adds a second QHD (2560x1440) high resolution monitor to the primary FlexSpot workspot.

Specifications

2nd Display for FlexSpot enables the user to show up to 8 video sources on a single FlexSpot workspot by combining 2 high resolution displays. Keyboard and mouse control is seamless across the 2 displays, see FlexSpot.

3 ****NCVD064** **extension to FlexVision Pro** **1** **$40,243.50** **$40,243.50** _____

Extension to Flexvision large 58 inch high resolution LCD for exam room, enabling flexible screen lay outs and full control (seamless mouse) of up to 11 external sources including third party systems.

Key benefits

- Full control at table side of all applications with seamless mouse control or via touch screen module
- Full flexibility of screen layouts (live resize, drag and drop, unlimited number)
- To simplify and standardize system set-up for your FlexVision Pro, your personalized layout will come up automatically with ProcedureCards.

Easy tableside control

With FlexVision Pro, user can control FlexVision and video sources on FlexVision through wireless mouse in Examination Room as well as virtual keyboard and touchpad on the touch screen module in the Examination Room. An operator can resize images and adjust the screen layout during the procedure without going into configuration.

Specifications

Full control at table side of all applications in the interventional lab (view and control) with a single wireless mouse or with a Touch Screen Module

- Integration: control of up to 11 external sources
- Possibility to configure unlimited flexible screen layouts
- Screenshots: with single click all displayed inputs can be captured
- Live resize the video window and adjust the screen layout during the procedure without going into configuration
- Operate all the video sources displayed on the monitor using the wireless mouse at tableside
- Mouse and keyboard function on the touch screen module (TSM) to control (external) sources

4 ****NCVD072** **SmartMask Monoplane** **1** **$11,916.00** **$11,916.00** _____

OPTIONS

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Line #	Part #	Description	Qty	Each	Price	Initial

Key benefits
• Simplifies roadmap procedures by overlaying fluoroscopy with a selected acquired image.
• Enables roadmap procedures to manage radiation dose and contrast media by selecting an image from an acquired series as a mask image.

Supports navigation during interventions without the need of additional contrast media.
SmartMask simplifies roadmap procedures by overlaying fluoroscopy with a selected acquired image in the Live X-ray window.

Specifications
The reference image can be faded in/out with variable intensity, controlled from tableside. SmartMask uses the reference image displayed on the reference monitor. Any previously acquired image can be used as reference. SmartMask facilitates pre- and post- intervention comparisons to assess treatment results.

5 ****NCVD097** **DVD writer** **1** **$459.00** **$459.00** _____

Key benefits
• Store images and information on DVDs for easy sharing

Store images and information on DVDs for easy sharing
To provide flexible storage options, a DVD writer is available with the Philips X-ray system. Procedural images and information can be stored on DVDs and used for archiving, training and presentations.

Specifications
Export and import of X-ray images and X-ray runs to DVD and/or from DVD

6 ****NCVD081** **Touch Screen Module Pro** **1** **$27,949.50** **$27,949.50** _____

Extension of Touch Screen Module for easy control of X-Ray images at table site

Key benefits
- Imaging parameters can be quickly and easily adjusted at tableside
- Clinical image are shown to support easy navigation. Collimate on the clinical image with one finger. Pinch, zoom, pan and flag images for processing. Position shutters and wedges by simply swiping the image on screen.
- All X-ray settings can be easily adjusted to help you effectively manage patient and staff dose

Enhance image navigation on the touch screen module
This option extends the functionality of the touch screen module, allowing live X-ray images and source images from reference monitors to be displayed on the touch screen module. Shutters and wedges can also be easily positioned with a fingertip by simply dragging them into position. A pointer is also available on screen to improve communication in and between the exam room and control room.

Specifications
- enhance image navigation on the TSM
- intuitive control of shutters and wedges by simply dragging the lines shown on top of the image

100237 Azurion 7 M20

OPTIONS

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Line #	Part #	Description	Qty	Each	Price	Initial

- provides intuitive zooming an panning functionality (also during fluoroscopy)
- turns the touchscreen into the pointing device in order to improve communication in ER/CR: when activated the pointer is shown on corresponding monitor

!!! Note: Touchpad and Keyboard control from the TSM is NOT part of this option but 'FlexVision Pro' option.

!!! Note: Images shown on the TSM are not meant for diagnostic purposes (image is downscaled, compressed and latency during live/replay maybe higher than on the live monitor)

102503 IntraSight

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: The specific Premier Contract # referenced above represents the applicable Premier agreement with Philips containing discounts, fees and any specific terms and conditions applying to any Product identified as part of this quoted Solution.

Line #	Part #	Description	Qty	Each	Price
1	**NNAW511	IntraSight 7	1	$277,865.40	$277,865.40

IntraSight 7 IntraSight 7 is a scalable, applications-based platform designed to meet the evolving needs of your lab. Included within IntraSight 7 are best-in-class physiology and imaging tools such as iFR co-registration & IVUS co-registration. In addition to providing these leading technologies, the IntraSight platform also optimizes lab performance with efficient data management and user controls, remote service diagnostics, and advanced cybersecurity protection while minimizing the learning curve with a modern, intuitive interface that is fast to learn & easy to use. IntraSight interventional applications platform.Includes IntraSight CPU, CPU Base, Operator’s Manual, Power Transformer, Cable Pre-Install Kit, Power Supply, Connection Box, Mouse, Keyboard, 19” Monitor Kit, DICOM Network Connection. Imaging (IVUS) License.Includes IntraSight IVUS Software package: Digital (requires PIM hardware, included), Rotational (requires SpinVision/PIMr, hardware optional), and ChromaFlo IVUS. Digital PIM. Includes PIM, Cabling and PIM holder. Physiology (iFR/FFR) License (requires FM-PIM hardware, included).Includes IntraSight Physiology Software Package: iFR Hyperemia Free Lesion Assessment Modality, FFR Modality, iFR Option Manual FFR 2.5. FM-PIM.Cabling, FM-PIM holder, and FM-PIM to Verrata Wire Adapter. Touch Screen Module (TSM).Table side touch screen controller and articulating bedrail mount. SyncVision Workstation CPU, Power Supply, Isolation Transformer Medical Grade, Joystick Controller, Optical USB Mouse and Keyboard, LCD Monitor 19" Philips, Cable Kit, SyncVision System Operator's Guide.

102503 IntraSight

NET PRICE $277,865.40

Buying Group: PREMIER HEALTHCARE ALLIANCE Contract #: PP-IM-280

Addt'l Terms: The specific Premier Contract # referenced above represents the applicable Premier agreement with Philips containing discounts, fees and any specific terms and conditions applying to any Product identified as part of this quoted Solution. Philips

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 Standard Terms and Conditions of Sale

1. Initial Provisions

1.1 The Products (equipment, service, and software) offered on the quotation by the Philips legal entity identified thereon are subject to these Conditions of Sale.

1.2 The purchase prices set out on the quotation excludes all taxes. All taxes on the Products will be borne by the Customer unless Customer provides a tax exemption certification.

2. Quotation, Order and Payment

2.1 Any quotation on the Products will be open for acceptance within the period indicated therein and may be amended or revoked by Philips prior to Customer's acceptance. Any purchase orders shall be subject to Philips' confirmation. Any terms and conditions set forth on the Customer's purchase order or otherwise issued by the Customer shall not apply to the Products.

2.2 The prices and payment terms are set out on the quotation. Orders are subject to Philips' ongoing credit review and approval. If the quotation indicates net prices that are each associated with a payment method then Philips will invoice Customer, and Customer will pay the net price that corresponds to the payment method that Customer elected in its purchase order or signed quote. Prior to invoice, Customer may modify the payment method by providing Philips with an amended purchase order that reflects the new payment method and corresponding price.

2.3 Interest will apply to any late payments. Customer shall pay interest on any amount not paid when due at the annual rate of twelve percent (12%) which may be billed monthly. If the Customer fails to pay any amounts due or breaches these Conditions of Sale, Philips will be entitled to suspend the performance of its obligations and deduct the unpaid amount from any amounts otherwise owed to Customer by Philips, in addition to any other rights or remedies available to Philips. Philips shall be entitled to recover all costs and expenses, including reasonable attorneys' fees related to the enforcement of its rights or remedies.

2.4 Customer has no right to cancel an order, unless such cancellation right is granted to the Customer by mandatory law in which case the Customer shall pay the costs incurred by Philips up to the date of cancellation In other cases of cancellation, Customer shall pay a 15% cancellation fee.

2.5 Philips may make partial or early shipments and Customer will pay such invoice based on the date of invoice for each product in accordance with the payment terms set forth in the quotation

2.6 Payments may be made by check, ACH or wire. Philips does not accept transaction fees for wire transfers. All check payments over $50,000 usd must be paid via eCheck or via Philips prepaid FedEx account with tracking to secure against fraud and misappropriation

3. Retention of title until full payment

Philips is entitled to retain a security interest in the Philips products, until Philips receives full payment.

4. Technical changes; obsolescence of the Product

Philips shall be entitled to make changes to the design or specifications of the Products at any time, provided such change does not adversely affect the performance of the Products.

5. Lease and Trade In

5.1 If the Customer desires to convert the purchase of any Products to a lease the Customer shall within ninety (90) prior to the delivery of the Products provide all relevant rental documents for review and approval by Philips. The Customer is responsible for converting the transaction to a lease and is required to secure the leasing company's approval of all these 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. For any lease, if the lease does not fund then: (i) Customer guarantees the payment of all monies due or that may become due under these Conditions of Sale; (ii) Philips may convert the lease back to a purchase and invoice Customer; accordingly, and (iii) Customer will pay all such invoiced amounts per the invoice terms. In the event that there are multiple Products on one quote, the Product with the longest period for converting the transaction to a lease shall prevail.

5.2 Philips may provide a rental agreement at its discretion.

5.3 In the event Customer will be trading-in equipment ("Trade-In"), the Customer will provide the following:

5.3.1 Customer undertakes to possess good and marketable title to the Trade-In as of the date of the quotation and when Philips takes possession of the Trade-in from Customer's site. In the event Customer is in breach of this undertaking, Customer shall not be entitled to keep a trade-in credit for such Trade-In and shall promptly refund Philips such credited amounts upon receipt of an invoice from Philips.

5.3.2. The trade-in value set forth on Philips quotation is conditioned upon Customer providing Trade-In no later than the date Philips makes the new Product listed on such quotation available for first patient use. Customer shall bear the costs of any reduction in trade-in value arising due to a delay by the Customer causing the trade-in not to occur by the expected date and promptly pay the revised invoice.

5.3.3 In the event Philips receives a Trade-In having a different configuration (including software version) or model number than the Trade- In described on the Philips quotation, Philips reserves the right to adjust the trade in value and revise the invoice accordingly and Customer shall pay such revised invoice promptly upon receipt.

5.3.4, Customer undertakes to (i) clean and sanitize all components that may be infected and all biological fluids from the Trade-In; (ii) drain any applicable chiller lines and cap any associated plumbing and (iii) delete all personal data in the Trade-In. Customer agrees to reimburse Philips against any out-of-pocket costs incurred by Philips arising from Customer's breach of its obligations herein.

6. Shipment and delivery date

6.1 Philips shall deliver the Products in accordance with the Incoterms set forth on the quotation. If Philips and the Customer agree any other terms of delivery, additional costs shall be for the account of the Customer.

6.2 Philips will make reasonable efforts to meet delivery dates quoted or acknowledged. Failure to deliver by the specified date will not be a sufficient cause for cancellation nor will Philips be liable for any penalty, loss, or expense due to delay in delivery. If the Customer causes the delay, any reasonable expenses incurred by Philips will be paid for by Customer, including all storage fees, transportation expenses, and related costs. If the delay is more than fourteen (14) days, the Customer shall pay the full purchase price for the Products immediately to Philips.

7. Installation

7.1 If Philips has undertaken installation of the Products, the Customer shall be responsible for the following at its sole expense and risk:

7.1.1 The provision of adequate and lockable storage for the Products on or near the installation site. Additionally, Customers shall consider the mfg. labeling requirements for environmental and storge conditions. The Customer will repair or replace any lost or damaged item during the storage period.

7.1.2 Philips or its (affiliate's) representative shall have access to the installation site without obstacle or hindrance in due time to start the installation work at the scheduled date.

7.1.3 The timely execution and completion of the preparatory works, in conformity with Philips' installation requirements. The Customer shall ensure that the prepared site shall comply with all safety, electrical and building codes relevant to the Products and installation thereof.

7.1.4 The proper removal and disposal of any hazardous material at the installation site prior to installation by Philips.
7.1.5 The timely provision of all visa, entry, exit, residence, work or any other permits and licenses necessary for Philips' or Philips' representatives' personnel and for the import and export of tools, equipment, Products, and materials necessary for the installation works and subsequent testing.
7.1.6 The assistance to Philips or Philips' representative for moving the Products from the entrance of the Customer's premises to the installation site. The Customer shall be responsible, at its expense, for rigging, the removal of partitions or other obstacles, and restoration work.
7.2 If Products are connected to a computer network, the Customer shall be responsible for network security, including but not limited to, using secure administrative passwords, installing the latest security updates of operating software and web browsers, running a Customer firewall and maintaining up-to-date drivers, anti-virus and anti-spyware software.
7.3 If any of the above conditions are not complied with, Philips or Philips' representative may interrupt the installation and subsequent testing for reasons not attributable to Philips and the parties shall extend the period for completing the installation. Any additional costs shall be for the Customer's account and Philips shall have no liability for any damage resulting from or in connection with the delayed installation.
7.4 Philips shall have no liability for the fitness or adequacy of the premises or the utilities available at the premises for installation or storage of the Products.

8.Product Damages and returns

The following shall apply solely to medical consumables:
The Customer shall notify Philips in writing substantiating its complaints within ten (10) days from its receipt of the Products. If Philips accepts the claim as valid, Philips shall issue a return authorization notice and the Customer shall return the Products. Each returned Product shall be packed in its original packaging.

9.Product warranty

9.1 In the absence of any specific Product warranty attached to the quotation, the following warranty provisions will apply to the Product.
9.2 Hardware Products. Philips warrants to Customer that the Product shall materially comply with its product specification on the quotation and the user documentation accompanying the shipment of such Product for a period of one year from the date of acceptance or first clinical use, whichever occurs first, but under any circumstances, no more than fifteen (15) months from the date of shipment, provided the Product has been subject to proper use and maintenance. Any disposable Product intended for single use supplied by Philips to the Customer will be of good quality until the expiration date applicable to such Product.
9.3 Stand-alone Licensed Software Products. Philips warrants that the Stand-alone Licensed Software shall substantially conform to the technical specification for a period of ninety (90) days from the date Philips makes such Stand-alone Licensed Software available to the Customer. "Stand-alone Licensed Software" means Licensed Software sold without a contemporaneous purchase of a server for the Licensed Software.
9.4 Service. Philips warrants that all services will be carried out with reasonable care and skill. Philips' sole liability and Customer's sole remedy for breach of this warranty shall be at its option to give credit for or re-perform the services in question. This warranty shall only extend for a period of ninety (90) days after the completion of the services.
9.5 Customer shall only be entitled to make Product warranty claim if Philips receives written notice of the defect during the warranty period within ten (10) days from the Customer discovering the defect and, if required the Product or the defective parts shall be returned to an address stated by Philips. Such defective parts shall be the property of Philips after their replacement.
9.6 Philips' warranty obligations and Customer's sole remedy for the Product shall be limited, at Philips' option, to the repair or replacement of the Product or any part thereof, in which case the spare parts shall be new or equivalent to new in performance, or to the refund of a pro rata portion of the purchase price paid by the Customer solely after a reasonable cure period is given to Philips.
9.7 Philips' warranty obligations shall not apply to any defects resulting from:
9.7.1 improper or unsuitable maintenance, configuration or calibration by the Customer or its agents.
9.7.2 use, operation, modification, or maintenance of the Product not in accordance with the Product specification and the applicable written instructions of Philips or performed prior to the completion of Philips' validation process.
9.7.3 abuse, negligence, accident, damages (including damage in transit) caused by the Customer.
9.7.4 improper site preparation, including corrosion to Product caused by Customer.
9.7.5 any damage to the Product or any medical data or other data stored, caused by an external source (including viruses or similar software interference) resulting from the connection of the Product to a Customer network, Customer client devices, a third-party product or use of removable devices.
9.8 Philips is not responsible for the warranty for the third-party product provided by Philips to the Customer and Customer shall make any warranty claims directly with such vendors. However, if Philips, under its license agreement or purchase agreement with such third party, has right to warranties and service solutions, Philips shall make reasonable efforts to extend to the Customer the third-party warranty and service solutions for such Products.
9.9 During the term of the warranty and any customer service arrangement the Customer shall provide Philips with a dedicated high-speed broadband internet connection suitable to establish a remote connection to the Products in order for Philips to provide remote servicing of the Products by:
9.9.1 supporting the installation of a Philips approved router (or a Customer-owned router acceptable for Philips) for connection to the Products and Customer network (which router remains Philips property if provided by Philips and is only provided during the warranty term.
9.9.2 maintaining a secure location for hardware to connect the Products to the Philips Remote Service Data Center (PRSDC).
9.9.3 providing and maintaining a free IP address within the site network to be used to connect the Products to the Customer's network.
9.9.4 maintaining the so established connection throughout the applicable period.
9.9.5 facilitating the reconnection to Philips in case any temporary disconnection occurs.If Customer fails to provide the access described in this section and the Product is not connected to the PRSDC (including any temporary disconnection), Customer accepts any related impact on Products availability, additional cost, and speed of resolution.
9.9.6 THE WARRANTIES SET FORTH IN THIS CONDITIONS OF SALE AND QUOTATION ARE THE SOLE WARRANTIES MADE BY PHILIPS IN CONNECTION WITH THE PRODUCT, ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, WHETHER WRITTEN, ORAL, STATUTORY, EXPRESS, OR IMPLIED, INCLUDING ANY WARRANTY OF NON-INFRINGEMENT, QUIET ENJOYMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. PHILIPS EXPRESSLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULR PURPOSE. MOREOVER, PHILIPS DOES NOT WARRANT ANY PRODUCT USING THE CLOUD TO BE UNINTERRUPTED OR ERROR FREE.

10. Limitation of Liability.

10.1 THE TOTAL LIABILITY OF PHILIPS ARISING UNDER OR IN CONNECTION WITH THE PRODUCT FOR ANY BREACH OF CONTRACTUAL OBLIGATIONS, WARRANTY, NEGLIGENCE, UNLAWFUL ACT OR OTHERWISE IN CONNECTION WITH THE PRODUCT IS LIMITED TO THE ACTUAL PURCHASE PRICE RECEIVED FOR THE PRODUCT THAT GAVE RISE TO THE CLAIM.

10.2 PHILIPS SHALL NOT BE LIABLE FOR ANY INDIRECT, PUNITIVE, INCIDENTAL, EXEMPLARY, SPECIAL OR CONSEQUENTIAL DAMAGES AND/OR FOR ANY DAMAGES INCLUDING, LOSS OF DATA, PROFITS, REVENUE, BUSINESS INTERRUPTION OR USE IN CONNECTION WITH OR ARISING OUT OF THESE CONDITIONS OF SALE, REGARDLESS OF WHETHER THEY ARE FORESEEABLE OR NOT AND WHETHER THE CLAIM IS MADE IN TORT (INCLUDING NEGLIGENCE), BREACH OF CONTRACT, AT LAW OR IN EQUITY. NEITHER PHILIPS NOR PHILIPS' SUPPLIERS SHALL BE LIABLE FOR ANY LOSS OR INABILITY TO USE MEDICAL OR OTHER DATA STORED ON OR BY THE PRODUCT.

10.3 THE EXCLUSION OF LIABILITY IN THESE CONDITIONS OF SALE SHALL ONLY APPLY TO THE EXTENT ALLOWED UNDER THE APPLICABLE LAW.

10.4 FOR US CUSTOMERS, THE FOLLOWING ARE NOT SUBJECT TO THE LIMITATIONS OF LIABILITY UNDER SECTION 10.1:

10.4.1 THIRD PARTY CLAIMS FOR DIRECT DAMAGES FOR BODILY INJURY OR DEATH TO THE EXTENT CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT.

10.4.2 CLAIMS OF TANGIBLE PROPERTY DAMAGE REPRESENTING THE ACTUAL COST TO REPAIR OR REPLACE PHYSICAL PROPERTY TO THE EXTENT CAUSED BY PHILIPS NEGLIGENCE OR PROVEN PRODUCT DEFECT.

10.4.3 OUT OF POCKET COSTS INCURRED BY CUSTOMER TO PROVIDE PATIENT NOTIFICATIONS, REQUIRED BY LAW, TO THE EXTENT SUCH NOTICES ARE CAUSED BY PHILIPS UNAUTHORIZED DISCLOSURE OF PROTECTED HEALTH INFORMATION.

10.4.4 FINES/PENALTIES LEVIED AGAINST CUSTOMER BY GOVERNMENT AGENCIES CITING PHILIPS' UNAUTHORIZED DISCLOSURE OF PROTECTED HEALTH INFORMATION AS THE BASIS OF THE FINE/PENALTY, ANY SUCH FINES OR PENALTIES SHALL CONSTITUTE DIRECT DAMAGES.

11. Infringement of Intellectual Property Rights to the Products.

11.1 Philips will, at its option and expense, defend or settle any suit or proceeding brought against Customer based on any third-party claim that any Product or use thereof for its intended purpose constitutes an infringement of any intellectual property rights in the country where the Product is delivered by Philips.

11.2 Customer will promptly give Philips written notice of such claim and the authority, information and assistance needed to defend such claim. Philips shall have the full and exclusive authority to defend and settle such claim. Customer shall not make any admission which might be prejudicial to Philips and shall not enter a settlement without Philips' prior written consent.

11.3 If the Product is held to constitute infringement of any intellectual property right and its use by Customer is enjoined, Philips will, at its option and expense, either: (i) procure for Customer the right to continue using the Product; (ii) replace it with an equivalent non-infringing Product; (iii) modify the Product so it becomes non-infringing; or (iv) refund to the Customer a pro rata portion of the Products' purchase price upon the return of the original Products.

11.4 Philips will have no duty or obligation under this clause 11 if the infringement is caused by a Product being:

(i) supplied in accordance with Customer's design, specifications or instructions and compliance therewith has caused Philips to deviate from its normal course of performance.

(ii) modified by Customer or its contractors after delivery.

(iii) not updated by Customer in accordance with instructions provided by Philips (e.g. software updates).

(iv) combined by Customer or its contractors with devices, software, methods, systems, or processes not furnished hereunder and the third-party claim is based on such modification or combination.

The above states Philips' sole liability and Customer's exclusive remedy in respect of third-party intellectual property claims.

12. Use and exclusivity of Product documents.

All documents and manuals including technical information related to the Products and its maintenance as delivered by Philips is the proprietary information of Philips, covered by Philips' copyright, and remains the property of Philips, and as such, it shall not be copied, reproduced, transmitted, or disclosed to or used by third parties without the prior written consent of Philips.

13.Export Control and Product Resale

13.1 Customer agrees to comply with relevant export control and sanction laws and regulations,including the UN,EU or US ("Export Laws"),to ensure that the Products are not (i) exported or re-exported directly or indirectly in violation of Export Laws; or (ii) used for any purposes prohibited by the Export Laws, including military end-use, human rights abuses,nuclear,chemical or biological weapons proliferation.

13.2 Customer represents that (i) Customer is not located in a country that is subject to a UN, US or EU embargo and trade restriction; and (ii) Customer is not listed on any UN, EU, US export and sanctions list of prohibited or restricted parties.

13.3 Philips may suspend its obligation to fulfil any order or subsequent service if the delivery is restricted under Export Laws or an export/import license is not granted by relevant authorities.

14.License Software Terms

14.1 Subject to any usage limitations set forth on the quotation, Philips grants to Customer a non-exclusive, non-transferable license, without the right to grant sub-licenses, to incorporate and use the Licensed Software(as specified on the quotation, whether embedded or stand-alone) in Licensed Products and the permitted use (as referenced in the quotation) in accordance with these Conditions of Sale.

The Licensed Software is licensed and not sold.All intellectual property rights in the Licensed Software shall remain with Philips.

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.Customer may not reproduce, sell, assign, transfer or sublicense the Licensed Software.Customer shall preserve the confidential nature of the Licensed Software and shall not disclose or transfer any portion of the Licensed Software to any third party.

Customer shall maintain Philips' copyright notice or other proprietary legends on any copies of the Licensed Software. Customer shall not(and shall not allow any third party to) decompile, disassemble, or reverse engineer the Licensed Software.

14.2 The Licensed Software may only be used in relation to Licensed Products or systems certified by Philips.If Customer modifies the Licensed Software in any manner, all warranties associated with the Licensed Software and the Products shall become null and

void.Customer installation of Philips' issued patches or updates shall not be deemed to be a modification.
Philips and its affiliates shall be free to use any feedback or suggestions for modification or enhancement of the Licensed Software provided by Customer, for the purpose of modifying or enhancing the Licensed Software as well as for licensing such enhancements to third parties.
With respect to any third-party licensed software, the Customer agrees to comply with the terms applicable to such licensed software. Customer shall indemnify Philips for any damage arising from its failure to comply with such terms. If the third-party licensor terminates the third party license, Philips shall be entitled to terminate the third party license with the Customer and make reasonable effort to procure a solution.

15.Confidentiality

If any of the parties have access to confidential information of the other party, it shall keep this information confidential. Such information shall only be used if and to the extent that it is necessary to carry out the concerned transactions. This obligation does not extend to public domain information and/or information that is disclosed by operation of law or court order.

16.Compliance with Laws and Privacy

16.1 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 employment practices federal and state anti-discrimination laws (including Title VII of the Civil Rights Act of 1964 as amended, the Rehabilitation Act of 1973 as amended and the Veterans Readjustment ACT of 1972 as amended),E-Verify, 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]).
16.2 Processing of personal data: In relation to the provision of services, Philips may process information, in any form, that can relate to identified or identifiable individuals, which may qualify as personal data. Philips and/or its affiliates will: a) process any protected health information (PHI) as defined by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) on behalf and by instruction of the Customer, the terms, rights and responsibilities of the Parties for such processing of PHI are set forth in a Business Associate Agreement between the parties and b) process information such as log files or device parameters (which may contain personal data), to provide the services and to enable its compliance with and performance of its task as manufacturer of (medical) devices under the applicable regulations and standards (including but not limited to the performance of vigilance, post market surveillance and clinical evaluation related activities).
16.3 Customer agrees that Philips and/or its affiliates may use any data, other than personal data, generated by a Product and/or otherwise provided by Customer to Philips for Philips' own legitimate business purposes including, but not limited to, for data analytics activities to determine trends of usage and advise on the use of products and services, for research, product and service development and improvement (including the development of new offerings), substantiation of marketing claims and for benchmarking purposes.

17.Force majeure

17.1 Each party shall not be liable in respect of the non-performance of any of its obligations to the extent such performance is prevented by any circumstances beyond its reasonable control, including, but not limited to, acts of God, war, civil war, insurrection, fire, flood, labor disputes, epidemics, pandemic, cyber-attack, act of terrorism, governmental regulations and/or similar acts, embargoes, export control sanctions or restrictions, Philips' unavailability regarding any required permits, licenses and/or authorizations, default or force majeure of suppliers or subcontractors.
17.2 If force majeure prevents Philips from fulfilling any order from the Customer or otherwise performing any obligation arising out of the sale,Philips shall not be liable to the Customer for any compensation, reimbursement, or damages.

18. Miscellaneous

18.1 Any newly manufactured Product provided may contain selected remanufactured parts equivalent to new in terms of performance.
18.2 If the Customer becomes insolvent, unable to pay its debts as they fall due, files for bankruptcy or is subject to it, has appointed a recipient, is subject to a late fee on payments (temporary or permanent), or has its assets assigned or frozen, Philips may cancel any unfulfilled obligations or suspend its performance; provided that, however, the Customer's financial obligations to Philips shall remain in full force and effect.
18.3 If any provision of these Conditions of Sale is found to be unlawful, unenforceable, or invalid, in whole or in part, the validity and enforceability of the remaining provisions shall remain in full force and effect. In lieu of any provision deemed to be unlawful, unenforceable, or invalid, in whole or in part, a provision reflecting the original intent of these Conditions of Sale, to the extent permitted by the applicable law, shall be deemed to be a substitute for that provision.
18.4 Notices or other communications shall be given in writing and shall be deemed effective if they are delivered in person or if they are sent by courier or mail to the relevant party.
18.5 The failure by the Customer or Philips at any time to require compliance with any obligation shall not affect the right to require its enforcement at any time thereafter.
18.6 Philips may assign or novate its rights and obligations in whole or in part, to any of its affiliates or may assign any of its accounts receivable to any party without Customer's consent. Customer agrees to execute any documents that may be necessary to complete Philips' assignment or novation. The Customer shall not, without the prior written consent of Philips, transfer or assign any of its rights or obligations.
18.7 The Customer's obligations do not depend on any other obligations it may have under any other agreement or arrangement with Philips. The Customer shall not exercise any offset right in the quotation or sale in relation to any other agreement or arrangement with Philips.
18.8 These Conditions of Sale shall be governed by the laws of the country or state wherein the Philips legal entity identified in the quotation is situated, and the parties submit to the exclusive jurisdiction of the courts of that country or state, provided that Philips will be entitled to start legal proceedings against the Customer in any other court of competent jurisdiction. The United Nations Convention on Contracts for the International Sale of Goods and the Uniform Computer Information Transactions Act (UCITA), in any form, is expressly excluded.
18.9 Customer will report immediately to Philips any event of which Customer becomes aware that suggests that any Products provided by Philips, for any reason:
(a) may have caused or contributed to a death or serious injury, or (b) have malfunctioned where such malfunctions would likely cause or

contribute to a death or serious injury if the malfunction were to occur again. Additionally, Customer will also report to Philips complaints it receives from its personnel and patients or any other person regarding the identity, quality, performance, reliability, safety, effectiveness, labels, or instructions for use of the Products provided by Philips. Philips shall be solely responsible for submitting any filings or reports to any governmental authorities with respect to the Products provided by Philips hereunder, unless otherwise required by law.

18.10 To the extent applicable to your country or state, Philips and Customer shall comply with the Omnibus Reconciliation Act of 1980 (P.L. 96-499) and it's implementing regulations (42 CFR, Part 420). Philips agrees that until the expiration of four (4) years after furnishing Products pursuant to these Conditions of Sale, Philips shall make available, upon written request of the Secretary of the Department of Health and Human Services, or upon request of the Comptroller General, or any of their duly authorized representatives, these Conditions of Sale and the books, documents and records of Philips that are necessary to verify the nature and extent of the costs charged to Customer hereunder. Philips further agrees that if Philips carries out any of the duties of these Conditions of Sale through a subcontract with a value or cost of ten-thousand U.S. dollars ($10,000.00) or more over a twelve (12) month period, with a related organization, such subcontract shall contain a clause to the effect that until the expiration of four (4) years after the furnishing of such Products pursuant to such subcontract, the related organization shall make available, upon written request to the Secretary, or upon request to the Comptroller General, or any of their duly authorized representatives the subcontract, and books and documents and records of such organization that are necessary to verify the nature and extent of such costs. This paragraph relating to the retention and production of documents is included because of possible application of Section 1861(v) (1) (1) of the Social Security Act (42 U.S.C. 1395x (v) (1) (I) (1989)), as amended from to time to these Conditions of Sale. If Section 1861(v) (1) (1) should be found to be inapplicable, then this paragraph shall be deemed inoperative and without force and effect.

18.11 As of the date of the sale of this Product, Philips represents and warrants that Philips, its employees and subcontractors, are not debarred, excluded, suspended or otherwise ineligible to participate in a federal or state health care program, nor have they been convicted of any health care related crime for Products provided under these Conditions of Sale (an "Excluded Provider"). Philips shall promptly notify Customer if it becomes aware that Philips or any of its employees or subcontractors providing Products hereunder have become an Excluded Provider under a federal or state healthcare program, whereupon Customer shall provide Philips with a reasonable opportunity to discuss and attempt to resolve in good faith with Customer any Customer related concerns in relation thereto, and/or will give Philips a reasonable opportunity to dispute its, or its employee's or subcontractor's, designation as an Excluded Provider. In the event that the parties are unable to resolve any such Customer concerns of the applicable party's designation as an Excluded Provider, then Customer may terminate this order by express written notice for Products not yet shipped or rendered prior to a date of exclusion.

18.12 To the extent applicable to your country or state, 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.

18.13 To the extent applicable, Customer acknowledges it shall comply with all Medicare. Medicaid or state cost reporting requirements, including discounts afforded to Customer under these Conditions of Sale, for any Products purchased hereunder.

19. Product specific terms

Product specific schedules are incorporated herein as they apply to the Products listed in the quotation and their additional terms shall apply solely to the Products specified therein. If any terms set forth in the Product specific schedules conflict with terms set forth in these Conditions of Sale, the terms set forth in the Product specific schedule shall take precedent.

Revision S.1 (April 2022)

Imaging Systems Portfolio (IS)
Schedule 1

Interventional X-Ray (iXR), Mobile C-Arms (Surg), Volcano Philips Image Guided Therapy Corporation (IGTD) fka Volcano, IntelliSpace Portal (ISP), Digital X-Ray (DXR), Computed Tomography (CT), Magnetic Resonance (MR), OEM Imaging Components (Coils), Positron Emission Tomography (PET/CT), Advanced Molecular Imaging (SPECT & SPECT/CT) and Radiation Oncology (PROS)

If this schedule is attached to a quotation for Digital Pathology Solutions products, this Schedule 1 is not applicable, and is replaced with Schedule 1-A, Digital Pathology Solutions Portfolio (DPS), on the following page.

1. Payment Terms

Unless otherwise specified in the quotation, Philips will invoice Customer and Customer will pay such invoice based on the date of the invoice for each product as follows:

1.1 For Imaging Systems Portfolio:

1.1.1 0% of the purchase price shall be due with Customer's submission of its purchase order.

1.1.2 80% 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.

1.1.3 20% of the purchase price shall be invoiced the date 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.

1.1.4 Payment is due net thirty (30) days from Philips' invoice date.

2. Additional Customer Installation Obligations for Magnetic Resonance (MR)

2.1 Customer shall provide any and all site preparation and shall be in compliance with all radio frequency (RF) or magnetic shielding and acoustical suppression and building codes relevant to the Product and its installation and use.

2.2 If applicable, 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:

2.2.1 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.

1.2.2 Completed Helium Exhaust Pipe Verification Checklist (Provided by Local Philips Project Manager)

2.2.3 Picture showing the area where the Helium Exhaust Pipe will discharge.

2.3 If applicable. 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.

2.4 Costs of equipment preservation, to ensure a high-quality system, will be passed to the Customer if the installation site is not ready due to delays not caused by Philips. Additionally, climate control costs during and after equipment installation are also the responsibility of the Customer. Preservation of equipment is required to prevent exposing equipment to the negative effects of a non-climate controlled construction environment, where there is dust or high humidity. Climate_ control could include costs associated with ensuring a climate controlled environment. Activities and expenses required for preservation may include time, materials, and transportation to package and seal, and transport the equipment to a controlled environment to prevent dust from entering the equipment. For MR, as may be applicable, this includes the consumption of Helium for life support.

3. Further use of System Data

3.1 Mandatory Data. - Customer acknowledges and agrees that by executing this Agreement and using the Licensed Software, it has agreed that product inventory and crash signature data generated by the Licensed Software shall be delivered into the custody of Philips, or of systems maintained on Philips' behalf, without notice to Customer. Such data is referred to herein as "Mandatory Data" and such data is described in the Licensed Software's documentation for each Licensed Software release; the data comprising Mandatory Data is subject to change with each release of upgrades, updates, patches, and modifications to the Licensed Software.

3.2Customer agrees that any Mandatory Data will be the property of Philips. Part of the Mandatory Data might constitute (non-sensitive) Personal Data, which is anonymized data or aggregate log files, device parameters, and other signals collected from the equipment used by Customer and associated with Customer. Customer agrees that Philips may use and discloseManadatory Data for Philips' own business purposes (including, but not limited to, for data analytics activities to determine trends of useage of Philips's or its affiliates' devices and services, to facilitate and advise on continued and sustained use of Philips' or its affiliates' products and services, for product and service development and improvement (including the development of new offerings), substantiation of marketing claims and for benchmarking purposes). In connection with any disclosure of Mandatory Data, Philips will not associate such data with the Personal Data of Customer's patients, consumers, or employees.

Schedule 1-A
Digital Computational Pathology Portfolio (DCP)
Image Management System (IMS), UltraFast Scanner (UFS)

The following Schedule 1-A shall apply to Digital Computational Pathology Portfolio (DCP) only. The afore-referenced Schedule 1 shall not be applied to DCP.

1. Definitions

1.1 “Products” means, collectively, the equipment, system, Philips IntelliSite Pathology Solution, including the IMS and UFS, integration services and other products as described within the applicable Philips quotation.
1.2 “Project Implementation Plan” shall mean, if a Statement of Work is included in the Quotation (SOW) or otherwise created after award of the contract, the project management implementation plan, mutually agreed to by the parties, that sets timetables and the order of project rollout for the work scope set forth in the SOW, if and as applicable to the Products purchased.
1.3 “Authorized Users” of the Product shall mean persons reviewing pathology images or those requiring administrative access to patient records and images scanned into the Image Management System, as authorized by Customer, in support of performance of such services.
1.4 “Acceptance” means the following:
For Equipment: Acceptance means the Product(s) has been successfully installed by Philips at the Customer’s site, substantially meets Philips’ functionality for the Product(s) as set forth in the applicable Philips documentation for the Product and is available for first clinical use. Upon successful installation, Customer will sign the Philips acceptance form provided by Philips as acknowledgement that installation is complete and accepted by Customer. In the event that Product Integration is included in the scope of a project, Integration will not commence until Philips’ receipt of the Equipment acceptance form signed by Customer.
For Integration: Acceptance means the Product(s) has been successfully integrated into the Customer environment and substantially meets the integration requirements described in the applicable SOW (“Integration”). In the event that during Integration Philips discovers elements or features of the Customer’s environment that were not properly identified to Philips or could not have been reasonably known or understood by Philips prior to agreement on the applicable SOW, Philips may, after the exercise of commercially reasonable efforts complete implementation of an applicable Integration requirement, determine in good faith, and provide Customer with written notice, that such Integration requirement cannot, in whole or in part, be implemented. Upon Customer’s receipt of such notice, that Integration task shall be considered complete. Any such determination by Philips shall not reduce the price of the Integration or delay payment by Customer. Customer will sign the Philips acceptance form provided by Philips as acknowledgement that the Integration of the Products is complete and accepted by Customer.
1.5 “Available for first patient use” as it relates to the DCP Products and not withstanding anything to the contrary set forth in the Philips Standard Terms and Conditions of Sale, means the Product has been installed and performs in substantial compliance with the Philips documentation provided with the Product and is available for Customer’s first clinical use.
1.6 “Client Device” means a computer, workstation, terminal, or other electronic device used to access the Product(s).
Any other capitalized term used in this Schedule 1-A shall have the meaning ascribed to it in the main body of the Conditions of Sale.

2. Payment Terms

2.1 Unless otherwise specified in the quotation or Statement of Work (where applicable), Philips will invoice Customer and Customer will pay such invoice on receipt for each product as follows:
2.1.1 100% of the purchase Price for Products shall be due thirty (30) days from Philips’ invoice date.
2.1.2 100% of any Integration services Price shall be due thirty (30) days from Philips’ invoice date.
2.1.3 Payment terms are subject to credit approval.

3. Customer Room Preparation Responsibilities

In addition to the requirements set out in Section 7 of the Philips Standard Terms and Conditions of Sale, Customer is responsible for the following site preparation and installation activities:
3.1 Customer is responsible for all activities and costs necessary to prepare the facility for installation of the Product by Philips. Customer’s obligations include, but are not limited to, any connectivity to the Customer’s network, which includes the requirement for such connectivity to comply the applicable Philips Product requirements and specifications, running all required cables prior to installation.
3.2 Prior to acceptance of the quotation, Customer shall obtain from the applicable Philips implementation team any other additional Customer installation preparation requirements in connection with the implementation resulting from unique attributes of Customer’s environment and the size of the implementation.
3.3 Product Operating Environment: Customer shall ensure an adequate operating environment for the Product that meets generally accepted industry standards for the operation of computer server equipment, including without limitation stable table, power and air conditioning. The installation site shall be protected from unauthorized access.
3.4 In the event that multiple server racks are required to support the use of the Product, Customer shall provide, without charge, contiguous rack space at the installation site.
3.5 Minimum Network Requirements. Customer shall provide at a minimum the network requirements, if any, as stated in the SOW and/or the final design documentation, as applicable.
3.6 In case any or all of the above conditions are not properly or timely complied with, or Philips or its representative has to interrupt the installation and installation validation testing for reasons not attributable to Philips, the period of completion shall be extended accordingly and any and all additional costs resulting therefrom shall be the Customer's responsibility. PHILIPS NEITHER ASSUMES LIABILITY NOR OFFERS ANY WARRANTY FOR THE FITNESS OR ADEQUACY OF THE PREMISES OR THE UTILITIES AVAILABLE AT THE PREMISES IN WHICH THE PRODUCT IS TO BE INSTALLED, USED OR STORED.
3.7 Customer-Provided Equipment. Customer shall procure, maintain and upgrade all hardware and Client Devices. Hardware and Client Devices must meet the minimum requirements set forth in the final design and/or SOW. Notwithstanding the foregoing, no variance from the Client Devices specification is permitted. Minimum requirements for hardware and Client Devices may change during the Term. Upon Customer’s request, Philips shall provide updated minimum requirements, if any. Customer is solely responsible for determining whether hardware and Client Device display are of diagnostic quality and for maintaining the displays in accordance with the manufacturer’s specifications. Philips is not responsible for providing Client Devices.

4. Archive Requirement.
4.1 To the extent required by the final design, Customer is required to have storage and archival capabilities for any Digital Computational Pathology system provided hereunder. If Customer provides its own storage, Customer is responsible for procuring any specialty software or hardware (fiber channel or host bus adapter ("HBA")) necessary to manage storage and allow the system to access the storage. To the extent required by the final design, Customer is responsible for providing fiber channel switches, port upgrades, and other telecommunications and/or network hardware required for the Philips products to physically connect to the storage, regardless of whether or not Philips provides the storage.

5. Software Installation on Hardware or Infrastructure
5.1 Philips shall install the Licensed Software solely on the hardware delivered by Philips, per the term of Philips Quotation, or on to Customer's virtual infrastructure, provided that it meets Philips' specifications for virtual infrastructure. Customer shall not use the Licensed Software with any other hardware except as expressly stated herein or in an applicable SOW. If Philips releases a Software Update that requires a different Hardware environment and Customer elects to receive the Software Update, Customer shall provide the Hardware changes before Philips performs the Software Upgrade.
6. Storage Sizing
6.1 To the extent not otherwise stated in the quotation, an applicable SOW, or the final design documentation, Customer and Philips will agree on data retention requirements, including, estimates of storage sizing and which party will source the storage solution(s). Upon request, Philips will provide Customer with estimates of image study sizes for different types of studies that Customer can use as a general aide to calculate and determine its near-term and long-term storage requirements for the DCP solution. Customer is responsible determine what storage archive device types and sizes are required to support its DCP solution, whether through procurement from Philips or utilization of Customer's own existing storage solutions. Customer acknowledges that use of storage varies greatly based on its unique utilization of the system and based on factors that are outside Philips' control. Therefore, and notwithstanding any estimates provided to Customer by Philips, Customer is solely responsible to determine what storage device and archiving solution is best suited to meet its needs. As part of its decision-making process in connection with archive device storage size, Customer acknowledges that study sizes are affected greatly by (a) changes in the types and amount of modality equipment used, (b) technician discretion in file size creation, and (c) clinical protocols within a department. Customer is solely responsible for system administration for the DCP solution, which includes monitoring the storage archive device for its utilization levels and planning any necessary storage changes as Customer's requirements change. Once the final design is agreed upon between the parties, if it is determined that additional storage capacity is required beyond what is provided for in the Philips quotation, Customer shall be responsible for any additional cost associated with increasing the system's storage capacity to meet the requirements of the final design.

7. Unauthorized Patches and Anti-Virus Updates
7.1 Customer's installation or use of (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 without prior validation testing and approval by Philips ("Unauthorized Updates") may adversely affect the functionality and performance of the Licensed Software. If Customer installs or uses Unauthorized Updates, Philips shall have no liability or responsibility for performance of the Licensed Software and the warranty shall be void. If Customer is using Unauthorized Updates when requesting service support or an Unauthorized Update is discovered by Philips after commencing the technical support process, then, prior to being obligated to perform warranty support services during a service period, Philips may require Customer to roll back to the most recent operating system and anti-virus search engine versions that have been validated by Philips as posted on the Philips service internet site.

8 Interfaces
8.1 Philips' obligation to provide any Digital Computational Pathology interface is expressly conditioned upon Customer enabling its Information System to send and receive messages to and from the applicable Philips products by the date the products are available for first patient use. If Customer has not fulfilled its interface obligations by such time, Philips may, at its discretion, terminate any interface obligations and refund any pre- paid amounts for interfaces against the applicable purchase order. Customer will execute any documentation reasonably requested by Philips to document such terminated interfaces. Upon Philips issuance of a refund in accordance with this section, Customer shall be deemed to have accepted the applicable Philips products. Any interfaces terminated shall be re-evaluated under a separate new sales contract.

9 Frequent Data Backup/Disaster Recovery Responsibility
9.1 Philips is not responsible for: (1) the development or execution of a business continuity/disaster recovery plan;
(2) providing a means for backing up data and images; or (3) backing up the data and images processed by the system. Customer may request Philips' assistance in designing a disaster recovery plan, but Philips accepts no liability whatsoever for the resulting plan or the results of Customer's utilization of such plan. Customer is responsible for providing a storage solution or storage backup device and for performing frequent backups of any data, patient information or images residing on the repository database, on Philips' products, or an archive. Except to the extent that Customer purchases some or all of the storage solution from Philips, as provided for in Section 11 above, Philips does not provide the storage archive or Client Devices to be used with this Product. These are Customer provided and not included in this purchase.

10 Statement of Work ("SOW")
10.1 If applicable, Philips and Customer will create a mutually agreed upon Statement of Work (a "SOW") to include design processes and documents which the parties will sign prior to Philips' commencement of the applicable project. Unless expressly stated in a separate SOW for Integrations services, the acceptance criteria for Integration services shall be set forth in this SOW. The SOW is subject to any mutually agreed written adjustments to the project price, and the terms set forth in the Philips Standard Terms and Conditions of Sale, including this schedule, and the applicable quotation.

11 Applications Administration Requirement
11.1 Customer, at all times, shall have a designated IMS Applications Administrator that has completed the applications training for the version of the product running at Customer's site. The applicable applications training is set forth in the quotation.

Schedule 1-A
Annex I
DCP SOFTWARE LICENSE TERMS (“Software License Terms”)

In addition to the Licensed Software terms in Philips Standard Terms and Conditions of Sale (which may also be referred to herein as the “Agreement”), the following terms and conditions, apply to Digital Computational Pathology products:

1. License Grant
1.1 Software licenses are granted as provided for in the Philips Standard Terms and Conditions of Sale.
1.2 Customer acknowledges and agrees that the Product incorporates technology (software, programs, machine codes) owned or certified by Philips’ third party suppliers ("Embedded Software") and that this Embedded Software are either licensed to Customer directly by Philips’ suppliers pursuant to third-party license agreements or are subject to certain usage limits beside the ones listed in this Agreement. Customer hereby agrees to be bound by the terms of such third-party license agreements and usage limits. Philips reserves the right to provide additional “notice files” accompanying the Licensed Software as supplied by its third-party suppliers. Such notice files are purely informative.

2. Modifications
2.1 If Customer or any of its officers, employees or agents either (i) devise or acquire any improvements in the Licensed Software, or (ii) suggest or recommend to Philips any improvements, then such improvements and such information shall be disclosed in writing and a non-exclusive, world-wide, royalty-free license shall be offered to Philips in writing. In case Philips accepts such offer either in whole or in part by explicit written acceptance, Philips agrees to grant to Customer a non-exclusive, world-wide, royalty-free license to any further improvements Philips makes to any such improvement made by Customer.

3. Software Updates and Upgrades
3.1 Philips may create and license versions of the licensed Software containing Software Updates and Upgrades from time to time. Philips will make such Updated and Upgraded versions of the Licensed Software to Customer during the warranty period and during the term of a valid Philips Services Agreement for the related Product. Licensed Software versions containing Updates are identified by a change to the right of the decimal point in the Licensed Software release number and are offered to Customer at no additional charge. Licensed Software versions containing Upgrades are identified by a change to the left of the decimal point in the Licensed Software release number and are offered to Customer at the Philips prices for such Upgraded version and are subject to the terms and conditions of Philips' then applicable Software License terms and conditions.
3.2 Philips may make available maintenance of the Licensed Software updates and upgrades to Customer at Philips's published services rates and subject to the terms and conditions of Philips's then applicable software maintenance/customer support agreement.

4. Operating System Licensed Software Warranty
4.1 Philips warrants to Customer that the Operating System Licensed Software (the “Licensed Software”) will operate in substantial compliance with the Philips manual(s) delivered with the system for a period of twelve
(12) months from the date of the system’s availability for Customer’s first clinical use.
4.2 This warranty is made on the condition that during the applicable warranty period: (i) Customer promptly notifies Philips of the nonconformity giving full details of such nonconformity, (ii) such nonconformity is a critical error in the then-current version of the Licensed Software, and (iii) Philips is able to reproduce the nonconformity, then Philips shall at its option, and at its expense, endeavor to correct the nonconformity, either by replacement, work around, or by modification of the Licensed Software. If, after the expenditure of reasonable efforts, Philips is unable to correct the non-compliance, Philips may refund a reasonable portion of the purchase price for the Licensed Software, in which event the refund will be in full satisfaction of all Customer's claims relating to the non-conformance. Philips does not guarantee the effectiveness of the correction efforts and does not represent or warrant that all errors can be corrected. Correction of the Licensed Software shall not extend the original warranty period as set out above at Section 4.1.
4.3 NOTHWITHSTANDING THE FOREGOING, PHILIPS DOES NOT GUARANTEE THAT THE LICENSED SOFTWARE WILL PERFORM ERROR-FREE OR UNINTERRUPTED. PHILIPS DOES NOT GUARANTEE THAT IT WILL CORRECT ALL PROGRAMMING ERRORS. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THESE WARRANTIES ARE EXCLUSIVE. THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS, INCLUDING, WITHOUT LIMITATION, WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED.
4.4 PHILIPS FURTHER GRANTS NO WARRANTY AS TO DEFECTS THAT APPEAR IN THE LICENSED SOFTWARE DUE TO ONE OR MORE OF THE REASONS SPECIFIED IN SECTION 12 OF THE AGREEMENT

DIGITAL COMPUTATIONAL PATHOLOGY (DCP) SYSTEMS PRODUCT WARRANTY

This product warranty document is an additional to the terms and conditions set forth in the quotation to which this warranty document is attached. Unless specifically listed below, this warranty does not apply to replacement parts. 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.

1. **Twelve (12) Month System Warranty**

1.1 Philips Healthcare, a division of Philips North America LLC (Philips) warrants to Customer that the Philips' Digital Computational Pathology Systems (System) will perform in substantial compliance with the Philips' Product verification functionality set forth in the Product documentation accompanying the System, for a period of twelve (12) months after completion of installation and availability for first clinical use, which is indicated by Customer's signature on the acceptance test certificate.

2. **Planned Maintenance**

2.1 During the warranty period, Philips' personnel will schedule planned maintenance visits, in advance, at a mutually agreeable time on weekdays, between 8:00am and 5:00pm local time, excluding Philips' observed holidays.

3. **System Options or Accessories**

3.1 Any Philips' authorized options or accessories for the System which are delivered and/or installed on the System during the original term of the System warranty shall be subject to the same warranty terms contained in the first paragraph of this warranty, except that such warranty shall expire upon termination of the initial twelve (12) month warranty period for the System on which the option or accessory is installed.

3.2 This warranty is not applicable for replacement parts, third party products, integration services, if any, hardware upgrades, consumables nor any items for which other specific warranty conditions apply.

4. **System Software and Software Updates**

4.1 The software provided with the System will be the latest version of the standard software available for that System as of the ninetieth (90th) day prior to the date the System is delivered to Customer.

4.2 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.

4.3 All software is and shall remain the sole property of Philips or its software suppliers.

4.4 Use of the software is subject to the terms of a separate software license agreement.

4.5 The Software License Terms, attached as Annex I to the terms and conditions set forth in the quotation to which this warranty document is attached, include software specific warranty conditions.

4.6 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.

4.7 Any Philips' maintenance or service software and documentation provided with the System 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.

4.8 Customer agrees to restrict the access to such software and documentation to Philips' employees, those of its authorized agents and its authorized employees of Customer only.

5. **Warranty Limitations**

5.1 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.

5.2 Any refund will be paid, to the Customer when the product is returned to Philips.

5.3 Warranty service outside of normal working hours (i.e. 8:00am - 5:00pm, Monday through Friday, excluding Philips' observed holidays), will be subject to payment by Customer at Philips' standard service rates.

5.4 This warranty is subject to the following conditions: the product:

5.4.1 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);

5.4.2 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

5.4.3 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.

5.5 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 running in connection with the Licensed Software without prior 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; use of a Digital Computational Pathology system with a client device with less than a 100mb/s connection to the server software for such products; or viruses or similar software interference resulting from connection of the product to a network.

5.6 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.

5.7 The obligations of Philips described herein are Philips' only obligations and Customer's sole and exclusive remedy for a breach of a product warranty.

5.8 THE WARRANTIES SET FORTH HEREIN 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.

5.9 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.

6. **Philips' Remote Services Network (RSN)**

6.1 Customer will:

6.1.1 provide Philips with a secure location at Customer's premises to store one Philips' Remote Services Network router and provide full and free access to this router, (or a Customer-owned router acceptable to Philips) for connection to the equipment and to Customer's network; or

6.1.2 provide Philips with outbound internet access over SSL; at all times during the warranty period provide full and free access to the equipment and the Customer 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).

6.2 Customer's failure to provide the access described in Section 8.5 of the terms and conditions set forth in the quotation to which this warranty document is attached 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.

6.3 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.

7. **Transfer of System**

7.1 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.

7.2 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.

7.3 Customer will compensate Philips for these services at the prevailing service rates in effect as of the date the inspection is performed.

7.4 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.

8. **Limitation of Liability**

8.1 THE TOTAL LIABILITY, IF ANY, OF PHILIPS AND ITS AFFILIATES FOR ALL DAMAGES AND BASED ON ALL CLAIMS, WHETHER ARISING OR RELATING TO 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 GIVING RISE TO THE LIABILITY.

8.2 THIS LIMITATION SHALL NOT APPLY TO:

8.2.1 THIRD PARTY CLAIMS FOR DIRECT DAMAGES FOR BODILY INJURY OR DEATH TO THE EXTENT CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT;

8.2.2 CLAIMS OF TANGIBLE PROPERTY DAMAGE REPRESENTING THE ACTUAL COST TO REPAIR OR REPLACE PHYSICAL PROPERTY TO THE EXTENT CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT;

8.2.3 OUT OF POCKET COSTS INCURRED BY CUSTOMER TO PROVIDE PATIENT NOTIFICATIONS, REQUIRED BY LAW, TO THE EXTENT SUCH NOTICES ARE CAUSED BY PHILIPS' UNAUTHORIZED DISCLOSURE OF PHI; and

8.2.4 FINES/PENALTIES LEVIED AGAINST CUSTOMER BY GOVERNMENT AGENCIES CITING PHILIPS' UNAUTHORIZED DISCLOSURE OF PHI AS THE BASIS OF THE FINE/PENALTY, ANY SUCH FINES OR PENALTIES SHALL CONSTITUTE DIRECT DAMAGES.

9. **Disclaimer**

9.1 IN NO EVENT SHALL PHILIPS OR ITS AFFILIATES BE LIABLE FOR ANY INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY 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.

10. **Force Majeure**

10.1 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, health pandemics, acts of any civil military or government authority, fire, floods, war, embargoes, labor disputes, acts of sabotage, riots, accidents, delays of carriers, voluntary or mandatory compliance with any government act, regulation or request.

Philips' system specifications are subject to change without notice.

DCP Product Warranty Rev. R

Schedule 1-B
MR Subscription

Magnetic Resonance
MRI Software License Packages

The following Schedule 1-B shall apply to Magnetic Resonance Software License Packages offered under the MR as a Subscription.

1. Definitions

1.1. Covered System. The Philips MRI scanner on which the subscription licenses will reside. For existing/installed MRI units, the site number is set forth in the service agreement.
1.2. Covered Service Description. Included on the Quotation under NNAN399, describes the Subscription and the applicable fees.
1.3. Subscription. Philips grants to Subscriber a time-limited, nonexclusive, nontransferable right to use Subscription Service solely for Subscriber's own internal business purposes, subject to these terms.
1.4. Software Version. Introduces major release with significant new features and functionality.
1.5. Software Update. Provides minor enhancements or improvements to performance, maintainability and serviceability.
1.6. Software Fix. Corrects Product Defect.

2. Subscription Term

2.1 The Term of this Subscription is defined in the Quotation under NNAN399 ("Term"), and shall continue unless earlier terminated in accordance with this Agreement.
2.1.1 For new MRI system installations, the Subscription will commence upon completion of installation and availability for first patient use.
2.1.2 For existing/installed MRI systems, the Subscription will commence on the first day of the next calendar month.
2.2 The Subscription is non-cancelable by Customer and will remain in effect for the Term specified in this Agreement unless terminated in accordance with Section 6.

3. Scope of Subscription Service

3.1. Software Applications. Philips will provide the customer access to all Philips MR software applications, made generally commercially available by Philips, for the MR model/ Covered System listed under the service agreement, that have been released as of the date of execution of the contract that does not require additional hardware.
3.1.1. Some software updates and upgrades may require hardware updates or upgrades. Unless included hereunder, Customer is responsible for any such hardware updates or upgrades.
3.2. Annual Updates. On an annual basis during the Subscription Term, Philips will update the Covered System with any new and additional applications, made commercially available by Philips for the Covered System model, as well as any new release of software.
3.3. MR Clinical Applications Training. If Customer subscribes to On Demand Clinical Support (ODCS), then, within a reasonable time after Philips' installs updates to the application software, Philips will provide Customer with four days (28 hours) of virtual clinical application training. If Customer continues to subscribe to ODCS, then the Customer will be entitled to four days (28 hours) of virtual clinical application training during each subsequent contract year.
3.4. MR Marketing Support. Philips will provide, annually, additional marketing support (for the new applications) in the form of written support that the customer can use to drive additional referrals. This can come in the form of either a MS Word or MS PowerPoint document.

4. Fees and Payment

4.1. Refunds and Cancellation. Fees are: (i) nonrefundable; (ii) not decreased during the Subscription Term based on actual User or data storage usage; and (iii) not cancelable for the Subscription Term.
4.2. Subscription Fee. An annual Subscription Fee is due from the Start Date, payable on a quarterly basis, in advance, according to the Service Description. Fees for Subscription Term renewals or Subscriptions added during a Subscription Term will be: (i) at Philips's current standard price, due beginning on the Start Date for the Subscription Term; and (ii) charged for the full calendar month in which Subscriptions are added, and coterminous for the remainder of the Subscription Term.

5. Subscription Service Requirements

5.1 Customer must purchase Tech Maximizer (Plus) prior to commencement of the MR as a Subscription as a condition to purchase MR as a Subscription solution offering.
5.2 Customer must purchase a RightFit Service Agreement prior to commencement of the MR as a Subscription as a condition to purchase MR as a Subscription solution offering.
5.3 In order to receive virtual clinical eduction, Customer must purchase On Demand Clinical Support.

6. Termination

6.1. Philips may suspend or terminate Subscription Service with 30 days written notice if Subscriber breaches its obligations including timely payment, or without notice if Philips has a good faith belief that: (i) Subscriber is using Subscription Service for illegal purposes; (ii) the integrity or security of Subscription Service is threatened; (iii) it is necessary to prevent fraud or harm to Philips or Subscriber; (iv) Subscriber has or will breach its confidentiality obligations, infringe Philips' Intellectual Property rights, or assign or transfer its rights or obligations without consent; or (v) it is required by law.
6.2. Upon termination (i) Subscriber's right to use Subscription Service ends, (ii) Subscriber will cease using Subscription Service and, at Philips's direction, return or destroy Philips Confidential Information and Documentation, and (iv) Subscriber will immediately pay Philips all Fees due including Fees for the balance of the Subscription Term if Subscription Service is terminated prior to the end of the current Subscription Term.
6.3. If Subscriber added this Subscription to a previously installed and operational MRI system, then at the time of termination, all licenses will revert to the version that was in place prior to commencement of the subscription.
6.4. This Agreement will terminate automatically upon termination or expiration of all Subscription Terms.

7. Installation

7.1. Philips will install the product during normal working hours, 8:00 AM – 5:00 PM, in the time zone where the Customer is located.

8. Post Go-Live Support. Subscription Service includes telephone and remote support according to the terms of this Schedule.
8.1. Philips 's standard support generally includes: (1) commercially reasonable efforts to resolve problems which cause Application functionality not to perform substantially as described in the Documentation; (2) remote assistance and troubleshooting advice for trained Subscriber personnel to determine cause and address technical problems with Subscription Service; (3) information and status updates for known Application functionality technical issues; and (4) periodic "as available" updates or upgrades to Subscription Service. Support may address but not resolve minor or partial loss of functionality, intermittent problems or minor degradation of operations.
8.2. Philips will use commercially reasonable efforts to respond to support requests as soon as possible and may not respond in the same day a request is received. Subscription Service and support may be unavailable due to scheduled downtime, maintenance, or circumstances beyond Philips' reasonable control. Philips may schedule downtime at any time without notice if Philips reasonably determines that not acting immediately could be harmful to Philips or Subscriber.
8.3. Philips is not responsible or liable for support or Subscription Service interruption or problems due to: (1) Subscriber systems, information, content, software, scripts, data, files, application programming, web servers or service, materials, equipment, acts or omissions of Subscriber or its agents; (2) virus or hacker attacks; (3) circumstances beyond Philips 's reasonable control; (4) intentional shutdown for emergency intervention or security incidents; (5) Subscriber configuration changes; (6) Subscriber's failure to comply with Philips 's security and upgrade policies; (7) Internet or other connectivity between Subscriber's network and Subscription Service or Philips 's network, or any other network unavailability outside of the Philips network; or (8) training questions or Subscriber's use of Subscription Service; (9) acts or omissions of a party other than Philips.

9. Software Versions and Updates

9.1. If a new software version or update is made generally available by Philips for the Covered System, and the requirements of the Agreement are satisfied, then Philips will upgrade the Covered System application software during the term of the Agreement as follows:
9.1.1. Philips will provide new software versions and updates of software for existing applications made generally commercially available within a reasonable period after their release.
9.1.2. Functionality. Customer is entitled to additional functionality previously purchased or bundled with the software, if available, in the version or update released on or after the start date of the Agreement. Customer acknowledges that certain functionality in current and previous software versions may not be available in future new software versions.
9.2. To receive a new software version:
9.2.1. Customer must be in compliance with all terms and conditions of this schedule and the Agreement, including access to the Covered System by Philips personnel and payment ;
9.2.2. Customer must identify one Customer representative, in writing to Philips, that will manage and be responsible for Customer's selection and scheduling of new software version installations under this Schedule; and,
9.2.3. The Covered System that will receive the version or update must meet the specifications of the new software version. Customer shall purchase or provide the Covered System hardware or software necessary to meet such specifications.
9.3. Unless specifically included elsewhere in this Agreement, software versions and updates do not include implementation services, virus protection software, security patches,

custom interface software, operating system software, or software updates of third-party software (e.g. Citrix) or hardware required to use the update or upgrade, unless otherwise covered under a Tech Maximizer service offering purchased for the Covered System. Philips shall have no responsibility to provide software versions or updates for minor software defects that do not impact the intended use of the software or impact patient care.

9.4. Customer may not resell, transfer, or assign the right to such versions, updates, or fixes to any third party. All versions and updates provided to the Covered System under this Schedule are subject to the terms and conditions of this Schedule, the Agreement, and any license terms and conditions included in the purchase of the product from Philips or later provided to Customer.

10. Telephone And Remote Support

10.1. Telephone Support. Telephone and Remote Support coverage is included with MR as a Subscription. Technical and Clinical Telephone and Remote Support coverage services are available twenty-four hours per day, seven days per week including Philips recognized holidays.

10.2. Remote Access & Diagnostics. Philips may remotely access the Covered System to perform Services. Customer shall provide Philips remote access to the Covered System. Philips shall not be responsible for delays arising from customer's network or IT infrastructure that does not allow for remote dial into the Covered System

10.3. On-Site Software Resolution Response. Philips primary method for software services is telephone and Philips Remote Services Data Centre ("PRSDC"). Philips, at its sole discretion, may provide on-site software support services to resolve software issues that cannot be resolved through Philips' primary resolution method. On-site service is next business day, Monday through Friday 8:00 a.m. to 5:00 p.m. local time, excluding Philips recognized holidays, and includes labor and travel necessary for the delivery of corrective services.

10.4. InCenter Access. Philips will provide Customer access to Philips web-based support tool for the system(s) covered under this Agreement.

11. Customer Success Management Services

11.1. During the term of the Agreement Philips will assign a resource familiar with the Customer account, key stakeholders, and contract coverage to provide the following:

11.1.1. Philips will schedule and deliver a remote coverage and status review meeting annually, at a mutually agreeable date and time. The status meeting will focus on available entitlements and planning. The status review may outline all Covered System service issues resolved during the previous period and review any open or unresolved issues.

11.1.2. Prior to delivering any new software version, Philips will coordinate with the Customer assigned resource to identify and mitigate dependencies relative to the software upgrade and other service agreement entitlements.

11.1.3. The parties will develop a dependency mitigation plan to address resource needs, hardware needs, operating system requirements, interoperability and other dependencies for the deployment of new software upgrade.

12. Clinical Implementation Services

12.1. If included in the quotation Philips will provide on-site implementation services for new versions or updates that Customer is entitled to receive under this Agreement, at a time mutually agreed to by Philips and the Customer. Scope, duration and delivery methodology of the clinical support of installation and clinical education will vary by new version, update or fix and will be defined by Philips at Philips sole discretion.

12.2. Go-Live Support. Philips will provide clinical go-live support during the implementation for new version upgrades and updates. Go-live support will be scheduled between 7:00 a.m. – 7:00 p.m. Monday through Friday, relative to the new software version and will be virtual or on-site at Philips' discretion. Customer may request additional go-live support, or go-live support outside of standard hours, at an additional cost.

12.3. Clinical Education. Clinical services will be scheduled between 7:00 a.m. – 7:00 p.m. Monday through Friday, relative to the new software version. Customer may request additional clinical education or clinical education outside of standard hours, at an additional cost.

12.3.1. Clinical Education class size is limited to ten (10) participants;

12.3.2. If applicable, Customer will provide a suitable location for on-site classroom education; and

12.3.3. Customer will provide full and free access and use of the Covered System for training.

12.4. Scheduling. Customer must schedule all Clinical Implementation Services, except Online Education, at least eight (8) weeks prior to the desired date for Philips to deliver the applicable service. If Customer representative does not schedule the Clinical Implementations Services with Philips in accordance with this Schedule, then Philips shall not be obligated to perform such Clinical Services.

12.5. Travel Expenses. Unless otherwise stated in the quotation, Philips' travel expenses for all Clinical Implementation Services delivered at the Customer site are included in the price described in the Agreement.

12.6. Philips will provide the clinical education and product applications training ("Training") that customer has selected from the Philips' course catalog(s) ("Course Catalog(s)").

12.7. Clinical Education training and credits will expire upon termination or expiration of the Agreement.

12.8. Training does not include (a) maintenance or diagnostic related technical training or (b) clinical applications training on hardware or software not installed or provided by Philips.

12.9. Trainee(s) must meet the minimum admission requirements set forth in the course syllabus, must satisfy all prerequisites prior to admission, and may be required to sign or acknowledge Philips safety checklist prior to receiving Training.

12.10. Training may be conducted at Philips' training facilities, the Customer location(s) described in this Agreement ("Customer Site(s)"), through on-line or remote training, or at a third-party location determined by Philips.

12.11. Direct Course Purchase. Customer may purchase individual courses at then current prices.

12.12. PHILIPS MAKES NO WARRANTY THAT ANY TRAINEE WILL PASS ALL OR ANY PORTION OF THE TRAINING COURSES PROVIDED OR THAT THE TRAINING WILL RESULT IN ANY TRAINEE BEING QUALIFIED OR ABLE TO OPERATE THE SYSTEM.

13. Customer Responsibilities

13.1. System Administrator. The Customer shall designate an individual(s) to serve as Customer system administrator ("System Administrator') and an alternate, who will serve as Philips' primary support contacts. These individuals should be familiar with all aspects of training provided by Philips, including end-user and system administrator training. In addition, the System Administrator shall maintain the integrity of the Covered System operation and ensure that proper backup procedures are in place as outlined in the System Installation and Reference Guides.

13.2. Remote Access. Customer must provide necessary uninterrupted remote access, required information, and support for the Covered System to connect to Philips Remote Service ("PRSDC"). PRSDC is the basis for Services delivered under this Schedule. Customer waives all rights to services and service deliverables under this agreement unless PRSDC connectivity is enabled and maintained.

13.3. Security. The Customer is solely responsible for providing adequate security to prevent unauthorized Covered System access to Philips (or its third-party vendors) proprietary and confidential information.

13.4. Hardware Revision Levels. The Customer must maintain all associated Covered System hardware, firmware, and middleware at the required revision levels for the software version. To receive software versions and updates, the Customer must maintain all associated hardware to the then-current specification for the software versions and updates.

13.5. Data Reconstruction. The Customer shall follow the recommended daily back-up processes as outlined in the Covered System Installation or Reference Guide. Additionally, the Customer is responsible for the reconstruction, restoration, retrieval, or recovery of any lost or altered patient records, files, programs, or data. Philips is not responsible for the reconstruction, restoration, retrieval, or recovery of any lost or altered files, data, or programs.

13.6. Intermediate Resolutions. Customer shall implement any intermediate resolutions or workarounds as requested by Philips while Philips seeks a long-term resolution.

13.7. Customer shall be solely responsible to perform daily data back-ups for the Covered System and for cybersecurity protection, including malware and anti-virus for the Covered System. This is not included in Philips MR subscription service. Customer shall install and configure anti-virus software pursuant to the Installation manual for the Covered System or risk defects in the Covered Systems function such as performance degradation and slow down. If the defects arise from failure to follow such installation manual, such defects are not covered by this agreement and Philips may require Customer to reconfigure the anti-virus to the recommended settings.

14. Service Limitations

14.1. Software Restoration. If the software fails and the supported application software requires restoration, then Philips will reinstall the application software, database software, and operating system to the revision level that existed prior to the malfunction or failure and Philips will attempt to reinstall the Customer-created data backup. If the Customer-created data backup cannot be used to re-install any data to the Covered System, the Customer will hold sole responsibility for the loss of data. Custom or third-party software, custom database configurations or reports, and Customer-written product interfaces are not included. If a Covered System failure is attributed to hardware not supported under the Agreement, the Customer shall restore the software, operating system, and database software before Philips begins any software restoration efforts.

14.2. Non-Philips Software Assistance. Requests for assistance with hardware, operating systems, communications network, Third party software, printer configuration, etc., are outside the scope of this Agreement.

15. Exclusions

15.1. In addition to the any exclusions set forth in the Schedule, the following Exclusions apply to MR as a Subscription.

15.2. Any combining of the Covered System with a non-qualified device. A non-qualified device is:

15.2.1. Any product (hardware, firmware, software, or cabling) not supplied by Philips, whether used internal or external to Covered System without Philips' approval. Examples include, software patches, security fixes, and service packs from the operating system, web browser, or database software manufacturer(s);

15.2.2. Any product supplied by Philips that has been modified by the Customer or any third party; and
15.2.3. Any product maintained under this Agreement in which the Customer does not allow Philips to incorporate engineering improvements;
15.2.4. Any product that has reached its "End of Life". "End of Life" means software and or hardware equipment that has surpassed the published end of support life date by the original equipment manufacturer.
15.3. Operating system software issues that manifest themselves in non-performance of another installed application and affect use or performance of the Covered System.
15.4. If the Covered System covered by this Schedule is software only, then notwithstanding anything to the contrary in the Agreement or this Schedule, network, hardware and parts are not included in the Services.
15.5. Viruses arising from a Customer network, customer client devices such as phones, tablets, laptops and desktops, and/or third-party medical devices used by Customer.
15.6. Damage caused by fires (including watering systems), floods, and/or use of the Covered System in an environment not meeting the requirements recommended by Philips causing corrosion to the Covered System or other defects to the MR subscription software.

PHILIPS PRODUCT WARRANTY

INTERVENTIONAL X-RAY (iXR) SYSTEMS
PRODUCT WARRANTY

This product warranty document is an addition to the terms and conditions set forth in the quotation to which this warranty document is attached. Unless specifically listed below, this warranty does not apply to replacement parts. 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.

1. Twelve (12) Month System Warranty

1.1 Philips Healthcare, a division of Philips North America LLC (Philips) warrants to Customer that the Philips' Interventional X-Ray Systems (System) will perform in substantial compliance with its performance specifications, in the documentation accompanying the System, for a period of twelve (12) months after completion of installation and availability for first patient use.

1.2 Any glassware or flat detectors provided with the System is subject to special warranty terms set forth below.

2. Planned Maintenance

2.1 During the warranty period, Philips' personnel will schedule planned maintenance visits, in advance, at a mutually agreeable time on weekdays, between 8:00 am and 5:00 pm local time, excluding Philips' observed holidays.

3. System Options, Upgrades or Accessories

3.1 Any Philips' authorized options, upgrades, or accessories for the System which are delivered and/or installed on the System during the original term of the System warranty shall be subject to the same warranty terms contained in the first paragraph of this warranty, except that such warranty shall expire:

3.1.1 upon termination of the initial twelve (12) month warranty period for the System on which the upgrade, option or accessory is installed; or

3.1.2 after ninety (90) days for parts only from the date of installation.

4. MRC X-Ray Tubes

4.1 Philips warrants to Customer, for the warranty periods further specified in this section, that the Philips' X-Ray Tubes (tube) will be substantially free from defects in material and manufacturing workmanship, which impair performance under normal use as specified in Philips' System descriptions and specifications.

4.2 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.

4.3 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.

5. MRC Tube Warranty Exclusions

5.1 The above warranty shall not apply to X-Ray Tubes outside the United States and Canada.

5.2 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 System other than in accordance with Philips' applicable System specifications and written instructions; improper site preparation; abuse, negligence, accident, loss or damage in transit; improper site preparation; unauthorized maintenance or modifications to the System; or, to viruses or similar software interference resulting from the connection of the System to a network.

6. MRC Tube Warranty Remedies

6.1 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.

6.2 Any replacement tube would have a warranty period equal to the balance of the warranty period left on the tube replaced.

7. Dynamic Flat Detectors

7.1 Philips warrants the Dynamic Flat Detectors (detector) provided with the System, if any, will be free from defects in material and manufacturing workmanship for twelve (12) months.

7.2 Claims must be made within twelve (12) months after installation or fifteen (15) months after date of shipment from Philips, whichever occurs first.

7.3 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.

8. System Software and Software Updates

8.1 The software provided with the System will be the latest version of the standard software available for that System as of the ninetieth (90th) day prior to the date the System is delivered to Customer.

8.2 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.

8.3 All software is and shall remain the sole property of Philips or its software suppliers.

8.4 Use of the software is subject to the terms of a separate software license agreement.

8.5 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.

8.6 Any Philips maintenance or service software and documentation provided with the System 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.

8.7 Customer agrees to restrict the access to such software and documentation to Philips employees, those of its authorized agents and its authorized employees of Customer only.

9. Warranty Limitations

9.1 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.

9.2 Any refund will be paid, to the Customer when the product is returned to Philips.

9.3 Warranty service outside of normal working hours (i.e 8:00 am to 5:00 pm Monday through Friday, excluding Philips' observed holidays), will be subject to payment by Customer at Philips standard service rates.

9.4 This warranty is subject to the following conditions: the product

9.4.1 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);

9.4.2 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

9.4.3 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.

9.5 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 running in connection with the Licensed Software without prior 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.

9.6 Philips does not provide a warranty for any third party products furnished to Customer by Philips under this quotation; however, Philips shall use reasonable efforts to extend to Customer the third party warranty for the product.

9.7 The obligations of Philips described herein are Philips' only obligations and Customer's sole and exclusive remedy for a breach of a warranty.

9.8 THE WARRANTIES SET FORTH HEREIN 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.

9.9 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' Remote Services Network (RSN)**

10.1 Customer will

10.1.1 provide Philips with a secure location at Customer's premises to store one Philips Remote Services Network router and provide full and free access to this router, (or a Customer-owned router acceptable to Philips) for connection to the equipment and to Customer's network; or

10.1.2 provide Philips with outbound internet access over SSL; at all times during the warranty period provide full and free access to the equipment and the Customer 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).

10.2 Customer's failure to provide such access 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.

10.3 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.

11. Transfer of System

11.1 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.

11.2 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.

11.3 Customer will compensate Philips for these services at the prevailing service rates in effect as of the date the inspection is performed.

11.4 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.

12. Limitation of Liability

12.1 THE TOTAL LIABILITY, IF ANY, OF PHILIPS AND ITS AFFILIATES FOR ALL DAMAGES AND BASED ON ALL CLAIMS, WHETHER ARISING OR RELATING TO 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 GIVING RISE TO THE LIABILITY.

12.2 THIS LIMITATION SHALL NOT APPLY TO:

12.2.1 THIRD PARTY CLAIMS FOR DIRECT DAMAGES FOR BODILY INJURY OR DEATH TO THE EXTENT CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT.

12.2.2 CLAIMS OF TANGIBLE PROPERTY DAMAGE REPRESENTING THE ACTUAL COST TO REPAIR OR REPLACE PHYSICAL PROPERTY TO THE EXTENT CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT;

12.2.3 OUT OF POCKET COSTS INCURRED BY CUSTOMER TO PROVIDE PATIENT NOTIFICATIONS, REQUIRED BY LAW, TO THE EXTENT SUCH NOTICES ARE CAUSED BY PHILIPS' UNAUTHORIZED DISCLOSURE OF PHI; and;

12.2.4 FINES/PENALTIES LEVIED AGAINST CUSTOMER BY GOVERNMENT AGENCIES CITING PHILIPS' UNAUTHORIZED DISCLOSURE OF PHI AS THE BASIS OF THE FINE/PENALTY, ANY SUCH FINES OR PENALTIES SHALL CONSTITUTE DIRECT DAMAGES,

13. Disclaimer

13.1 IN NO EVENT SHALL PHILIPS OR ITS AFFILIATES BE LIABLE FOR ANY INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY 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. Force Majeure

14.1 Philips and Customer shall each 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, health pandemic, acts of any civil, military or government authority, fire, floods, war, embargoes, labor disputes, acts of sabotage, riots, accidents, delays of carriers, voluntary or mandatory compliance with any government act, regulation or mandatory direction or request. For clarity, Customer requests shall not be considered 'government' under this section.

Philips' system specifications are subject to change without notice.

IXR Product Warranty Rev. R

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 North America LLC
Address	22100 Bothell-Everett Highway, Bothell, WA 98021 United States of America

B. Company

Name	CHARLOTTE-MECKLENBURG HOSPITAL AUTHORITY DBA ATRIUM HEALTH
Address	920 CHURCH ST N CONCORD, NC 28025-2927

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	(OPEN) (OPEN)
Title	
Telephone	
Fax	(855) 600-4137
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.

Attachment D

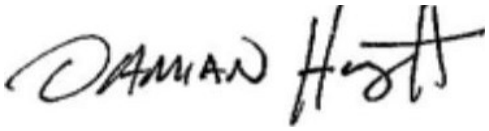
70,PROPOSED TOTAL CAPITAL COST OF PROJECT

Project name: Atrium Health Pineville Cardiac Cath Lab #3 Replacement

Provider/Company: Atrium Health

(1)	Purchase price of land	
(2)	Closing costs	
(3)	Site Preparation	
(4)	Construction/Renovation Contract	$1,662,000
(5)	Landscaping	
(6)	Architect/Engineering Fees	$336,800
(7)	Medical Equipment	$2,350,800
(8)	Non Medical Equipment	$170,500
(9)	Furniture	$70,000
(10)	Consultant Fees (CON Fees, Legal Fees)	
(11)	Financing Costs	N/A
(12)	Interest During Construction	N/A
(13)	Other (IS, Security, Internal Allocation)	$640,600
(14)	**Total Capital Cost**	$5,230,700

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



November 18, 2022

(Signature of Licensed Architect or Engineer) *DATE*

Sales taxes have been included in these equipment costs. However, because Atrium Health is entitled to a sales tax refund under N.C. Gen. Stat. § 105-164.14(b) and 105-467, the sales tax that Atrium Health initially incurs for this medical equipment purchase will be refunded to Atrium Health, and thus will reduce the capital costs that Atrium Health actually incurs for the equipment by $170,500.

Attachment E

STATE OF NORTH CAROLINA

Department of Health and Human Services
Division of Health Service Regulation

CERTIFICATE OF NEED

for
Project Identification Number #F-7979-07
FID# 923352

ISSUED TO: **Mercy Hospital, Inc. d/b/a Carolinas Medical Center – Pineville and Carolinas Medical Center - Mercy and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center – University and CS Center, LLC d/b/a Carolinas Surgery Center - Randolph**

Pursuant to N.C. Gen. Stat. § 131E-175, et. seq., the North Carolina Department of Health and Human Services hereby authorizes the person or persons named above (the "certificate holder") to develop the certificate of need project identified above. The certificate holder shall develop the project in a manner consistent with the representations in the project application and with the conditions contained herein and shall make good faith efforts to meet the timetable contained herein. The certificate holder shall not exceed the maximum capital expenditure amount specified herein during the development of this project, except as provided by N.C. Gen. Stat. § 131E-176(16)e. The certificate holder shall not transfer or assign this certificate to any other person except as provided in N.C. Gen. Stat. § 131E-189(c). This certificate is valid only for the scope, physical location, and person(s) described herein. The Department may withdraw this certificate pursuant to N.C. Gen. Stat. § 131E-189 for any of the reasons provided in that law.

SCOPE: **Expand CMC-Pineville by constructing an 8-story bed tower, renovating several hospital departments, and relocating 50 acute care beds from CMC-Mercy, 36 acute care beds from CMC-University , two operating rooms from Carolinas Surgery Center- Randolph, and two heart-lung bypass machines and two cardiac catheterization labs from CMC – Mercy. Upon completion of this project and Project I. D. #F-7313-05, CMC-Pineville shall have no more than 206 licensed acute care beds and 12 operating rooms/Mecklenburg County**

CONDITIONS: **See Reverse Side**

PHYSICAL LOCATION: **Carolinas Medical Center – Pineville**
10628 Park Road
Pineville, NC 28210

MAXIMUM CAPITAL EXPENDITURE: $174,000,000
TIMETABLE: **See Reverse Side**
FIRST PROGRESS REPORT DUE: September 1, 2008

This certificate is effective as of the 2nd day of April, 2008.

Lee B Hoffman by CRSAC

Chief, Certificate of Need Section
Division of Health Service Regulation

CONDITIONS:

1. Mercy Hospital, Inc. d/b/a Carolinas Medical Center-Pineville and Carolinas Medical Center-Mercy and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph shall materially comply with all representations made in the certificate of need application, except as specifically amended by the conditions of approval.

2. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and the Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center – University [CMC-University] and CS Center, LLC d/b/a Carolinas Surgery Center – Randolph shall relocate no more than 36 acute care beds from CMC-University and 50 acute care beds from CMC-Mercy to increase the number of licensed acute care beds at CMC-Pineville to 206 upon completion of this project and Project I. D. #F-7313-05. CMC-University shall be licensed for no more than 94 acute care beds and CMC-Mercy shall be licensed for no more than 124 acute care beds, upon completion of this project and Project I. D. #F-7313-05.

3. Of the 86 acute care beds to be relocated to CMC-Pineville, six acute care beds shall be developed as labor-delivery-recovery-postpartum (LDRP) beds for a total of 34 LDRP beds, 20 acute care beds shall de developed as intensive care unit (ICU) beds for a total of 30 ICU beds, and 60 acute care beds shall be developed as medical/surgery beds for a total of 132 medical/surgical beds, in addition to the ten existing neonatal Level III beds.

4. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph [CSC-Randolph] shall relocate no more than two existing operating rooms from CSC-Randolph to CMC-Pineville, for a total of nine shared operating rooms and three inpatient operating rooms, which includes two dedicated C-Section operating rooms, upon completion of this project and Project I., D. #F-7313-05. CSC-Randolph shall be licensed for no more than six operating rooms following completion of this project.

5. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph [CSC-Randolph] shall convert the existing inpatient operating room to a shared operating room, for a

total of no more than 11 shared operating rooms at CMC-Mercy upon completion of this project and Project I. D. #F-7313-05.

6. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph [CSC-Randolph] shall relocate no more than two existing units of cardiac catheterization equipment from CMC-Mercy to CMC-Pineville, for a total of three units of cardiac catheterization equipment at CMC-Pineville and one unit of cardiac catheterization equipment at CMC-Mercy.

7. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph [CSC-Randolph] shall relocate no more than two existing heart-lung bypass machines from CMC-Mercy to CMC-Pineville. One of the two machines shall be used for emergency back-up only and in no instance shall both heart-lung bypass machines at CMC-Pineville be scheduled simultaneously. CMC-Mercy shall remove one existing heart-lung bypass machine from service, and terminate open heart surgery services on the CMC-Mercy campus following completion of the project.

8. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph [CSC-Randolph] shall add no more than twenty-two unlicensed observation beds, of which ten beds shall be used for general observation for a total of 16 general observation beds, two shall be used for obstetrical observation, and ten shall be used in the clinical decision unit (CDU) in the emergency department. CMC-Pineville shall have a total of no more than 28 observation beds upon completion of this project and Project I. D. #F-7313-05.

9. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph [CSC-Randolph] shall develop at CMC-Pineville no more than three acute dialysis units to be used for inpatients only.

10. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville [CMC-Pineville] and Carolinas Medical Center-Mercy [CMC-Mercy] and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center-University and CS Center, LLC d/b/a Carolinas Surgery Center-Randolph [CSC-Randolph] shall not acquire, as part of this project, any equipment that is not included in the

project's proposed capital expenditure in Section VIII of the application or that would otherwise require a certificate of need.

11. Mercy Hospital, Inc., d/b/a Carolinas Medical Center-Pineville and Carolinas Medical Center-Mercy and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center – University and CS Center, LLC d/b/a Carolinas Surgery Center – Randolph shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Certificate of Need Section in writing prior to issuance of the certificate of need.

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TIMETABLE:

50% Completion of construction ----------September 30, 2010
75% Completion of construction ---------- August 2, 2011
Completion of construction ---------- May 2, 2012
Occupancy/offering of service(s) ---------- July 1, 2013

Attachment F

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 16, 2012

Greg Bass, Director
CHS Management Company
P.O. Box 32861
Charlotte, NC 28232

Exempt from Review – Relocation and Replacement of Equipment

Facility:	Carolinas Medical Center (CMC)
Project Description:	Replace existing cardiac catheterization equipment and relocate from CMC-Mercy to CMC-Pineville
County:	Mecklenburg
FID #:	923352

Dear Mr. Bass:

In response to your letter of March 21, 2011 and March 9, 2012 the above referenced proposal is exempt from certificate of need review in accordance with N.C.G.S 131E-184(a)(7). Therefore, you may proceed to acquire, without a certificate of need, the GE IC Innova 2121 IQ biplane catheterization equipment to replace the existing Phillips FD10F cardiac catheterization equipment and relocate from the CMC-Mercy campus to CMC-Pineville. The serial number for the existing cardiac catheterization equipment was not provided. This determination is based on your representations that the existing unit will be removed from North Carolina and will not be used again in the State without first obtaining a certificate of need. Further please be advised that as soon as the replacement equipment is acquired, you must provide the CON Section and the Medical Facilities Planning Section with the serial number of the new equipment to update the inventory, if not already provided. In addition, you should contact the Construction Section to determine if they have any requirements for development of the proposed project.

It should be noted that this 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 Agency and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Fatimah Wilson
Project Analyst

Craig R. Smith
Chief Certificate of Need Section

cc: Medical Facilities Planning Branch, DHSR
Construction Section, DHSR

Carolinas HealthCare System

March 21, 2011

Mr. Craig R. Smith, Chief
Certificate of Need Section
Division of Health Service Regulation
701 Barbour Drive
Raleigh, North Carolina 27603-0530

RE: Replacement of Cardiac Catheterization/EP Lab Equipment at Carolinas Medical Center-Pineville

Dear Mr. Smith:

Mercy Hospital, Inc. is planning to replace cardiac catheterization equipment that is CON approved to be relocated within the single Mercy Hospital license, from the Carolinas Medical Center-Mercy campus to Carolinas Medical Center-Pineville campus. The four-year old Phillips (FD10F) equipment is being replaced with a GE IC Innova 2121 IQ biplane system. Our responses to the replacement equipment questions are provided in Attachment 1. The projected total capital expenditure for the acquisition and installation of the replacement cardiac catheterization equipment is $1,315,981.

Based upon the project as described above, pursuant to N.C.G.S.§ 131E-184(a)(7), this letter serves as notification of our intent to proceed with this project. We would appreciate your written concurrence that this project is exempt from CON review. If you have any questions or require further information regarding this project, please contact me at 704-355-0350.

Sincerely,

Greg S. Bass

Greg S. Bass, Director
CHS Management Company

Attachment 1

Replacement Equipment Questions

CMC-Pineville Replacement of Cardiac Catheterization
Replacement Equipment Questions

1. A comparison of the existing and replacement equipment, using the format in the attached format.

Attachment 2 provides a side-by-side comparison of existing and the proposed replacement equipment.

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.

Existing equipment is used for physiological and angiographic studies using image intensifier fluoroscopy and digital imaging for the following types of procedures: electrophysiology studies: permanent pacemakers, Intra-cardiac defibrillators (ICD), Bi-ventricular ICD, radio-frequency ablations and venograms.

Replacement equipment will be used for physiological and angiographic studies using image intensifier fluoroscopy and digital imaging for the following types of procedures: electrophysiology studies: permanent pacemakers, Intra-cardiac defibrillators (ICD), Bi-ventricular ICD, radio-frequency ablations and venograms.

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

A brochure for the existing cardiac catheterization equipment could not be found. The brochure for the replacement equipment is provided as Attachment 3.

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

Due to the age of the equipment an original PO could not be found.

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

Mercy Hospital, Inc. owns the equipment. No title was issued.

6. If the replacement equipment is to be leased, a copy of the proposed capital 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).

Not applicable. The replacement 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.

A price quotation provided by GE Healthcare is provided as 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 for the North Carolina Certificate of Need law, and will not be used in North Carolina without first obtaining a new certificate of need.

A letter from Damax related to the purchase of the existing equipment is provided as Attachment 5.

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

The existing equipment is currently in operation and 597 procedures were performed with this equipment in 2010.

10. Proposed Total Capital Cost of Project form.

Refer to Attachment 6 for a description of the total project costs.

Attachment 2

Comparison of Existing and Replacement Equipment

Carolinas Medical Center–Pineville –Cardiac Catheterization Lab Replacement

Attachment 2 - **EQUIPMENT COMPARISON**

	Existing Equipment	Replacement Equipment
Type of Equipment (List each component)	Cardiac Catheterization EP Lab	Cardiac Catheterization
Manufacturer of Equipment	Phillips	GE
Tesla Rating for MRIs	N/A	N/A
Model Number	FD-10	IC Innova 2121IQ Biplane
Serial Number	633	N/A
Provider's Method of Identifying Equipment		
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	N/A	N/A
Mobile Tractor Serial Number/VIN #	N/A	N/A
Date of Acquisition of Each Component	2007	2011
Does Provider Hold Title to Equipment or Have a Capital Lease?	Purchased	Purchase
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.) <Use Attached Form>		$1,315,981
Total Cost of Equipment		$1,128,852
Fair Market Value of Equipment		$1,128,852
Net Purchase Price of Equipment		$1,128,852
Locations Where Operated	CMC-Mercy	CMC-Pineville Cardiac Cath Dept
Number Days in Use/To Be Used in N.C. per Year	24x7x365	24x7x365
Percent of Change in Patient Charges (by procedure)	0	0
Percent of Change in Per Procedure Operating Expenses (by procedure)	0	0
Type of Procedures Currently Performed on Existing Equipment	Physiologic and angiographic studies using image intensifier for electrophysiology studies: permanent pacemakers, Intra-cardiac defibrillators (ICD), Bi-ventricular ICD, radio-frequency ablations and venograms.	
Type of Procedures New Equipment is Capable of Performing		Physiologic and angiographic studies using image intensifier for electrophysiology studies: permanent pacemakers, Intra-cardiac defibrillators (ICD), Bi-ventricular ICD, radio-frequency ablations and venograms.

Attachment 3

Replacement Equipment Brochure

Attachment 4

Equipment Vendor Quote

Attachment 5

Equipment Disposal Letter

DAMAX Service Team Inc.
109 Evening Way Suite 100
Mauldin, SC 29662

Office 864-630-4516
Fax 864-676-0045
www.damaxservice.com

February 10, 2011

Michael Rush
Carolinas Medical Center

Dear Michael:

Thank you for the opportunity to submit an offer on the Philips labs at Mercy Hospital.

This letter serves as a proposal by DAMAX for the outright purchase of the two Philips cathlabs at CHS Mercy.

DAMAX is offering the amount of $120,000 for the Philips FD10F system OR the Philips FD20C system if sold individually. We would like to offer $230,000 for both labs if sold as a package. This includes the expense of removal and transport from the site (to be handled by DAMAX exclusively and at our expense).

Aside from the main system components, it is expected that all peripheral items related to the cathlabs from the original purchases from Philips are to be included with the sale. These include items such as the technical manuals, floorplate, injectors, patient accessories etc.

Should CHS and DAMAX come to a purchase agreement it is expected that the systems be fully operational at the time of deinstallation and removal. It is also expected that all Philips or government mandated safety & performance modifications be up to date also.

From DAMAX' perspective, an email message from authorized CHS personnel is sufficient to enter into the contract.

DAMAX assures that the equipment will be permanently removed from North Carolina, will no longer be exempt from requirements for the North Carolina Certificate of Need law, and will not be used in North Carolina without first obtaining a new certificate of need.

DAMAX will strive to meet any further conditions such as any that may exist due to the requirements of the RFP or other guidelines as set forth by CHS.

Sincerely,

C. Dane Vickery
Operations Manager

Attachment 6

Capital Cost Schedule

Project Name: CMCP Bed Tower Expansion and Renovation - EP - Cath Lab 3 - GE 2121 - Equipment
Provider/Company: Carolinas Medical Center - Pineville

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]		
	Soil borings / Clearing and grading		
	Roads and parking / Sidewalks		
	Water and sewer / Excavation and backfill		
	Termite Treatment		
	Sub-Total Site Preparation Costs	$	
(6)	Other	$	
(7)	**Sub-Total Site Costs**	$	-
B. Construction Contract			
(8)	Cost of Materials [Include]		
	General Requirements / Concrete/Masonry		
	Mechanical/Electrical / Woods/Doors & Windows/Finishes		
	Thermal & Moisture Protection / Equipment/Specialty Items		
	Sub-Total Cost of Materials	$	
(9)	Cost of Labor	$	
(10)	Other:	$	
(11)	**Sub-Total Construction Contract**	$	**177,129**
C. Miscellaneous Project Costs			
(12)	Building Purchase	$	
(13)	Fixed Equipment Purchase/Lease	$	1,128,852
(14)	Movable Equipment Purchase/Lease	$	-
(15)	Furniture	$	
(16)	Landscaping	$	
(17)	Consultant Fees		
	Architect and Engineering Fees	$	10,000
	Administrative and Legal Fees	$	
	Market Analysis	$	
	Other (Testing)	$	
	Sub-Total Consultant Fees	$	10,000
(18)	Financing Costs (e.g. Bond, Loan, etc.)	$	
(19)	Interest During Construction	$	
(20)	Other (Project Contingency)	$	
(21)	**Sub-Total Miscellaneous**	$	**1,138,852**
(22)	**Total Capital Cost of Project (Sum A-C above)**	$	**1,315,981**

Project Name: CMCP Bed Tower Expansion and Renovation - EP - Cath Lab 3 - GE 2121 - Equipment
Provider/Company: Carolinas Medical Center - Pineville

	Category	Capital Cost	Capital Cost Line Item	Comments
a.	Bonds, insurance, surveys, testing, (builders risk, storage insurance, performance bonds);	$ -	B (11)	Included in project
b.	Utility costs during construction, including utility extensions and relocations;	$ -		There are no utility extensions or relocations as part of this project.
c.	Parking and paving costs;	$ -		This project will utilize existing parking areas
d.	Architect and engineering fees including reimburseable expenses;	$ 10,000	C (17)	
e.	Construction management fees or costs;	$ -	B (11)	Included in project
f.	Interior and exterior signage;	$ -		This project will utilize existing signage
g.	Permits and fees for impact studies: environment, asbestos, building, zoning, etc., sprinkler water tap fees; highway access fees;	$ -	B (11)	Included in project
h.	Cable TV connections: wiring and/or hardware; external dishes and equipment;	$ -	B (11)	Not Applicable
i.	Computer wiring: hardware and/or software (information systems wiring, power etc.);	$ 166,352	B (11)	all inclusive
j.	Telephone wiring/system including equipment;	$ -	B (11)	Included in i.
k.	All consultants: construction, phasing, interior design, programmatic, etc.;	$ -	B (11)	Included in d.
l.	Exterior lighting, walks, rails, ramps, and protective barriers (fences/etc.);	$ -		This project will utilize existing exterior components
m.	Spare parts such as initial change of air filters;	$ -	B (11)	Not Applicable
n.	All types of movable equipment: furniture, linens, carts, desks, chairs, medical equipment, art work etc.;	$ -	C (14)	Not Applicable
o.	All types of fixed equipment, including moving and re-installation costs;	$ 1,128,852	C (13)	(1) New - IC Innova 2121 IQ Bi-Plane
p.	Startup costs such as cleaning, advertising, marketing, moving, grand opening, etc.;	$ -	B (11)	Not Applicable
q.	Security equipment, wiring, hardware, software, etc.;	$ -		This project will utilize existing security equipment
r.	Moving costs and other costs associated with leaving an existing space or building (post occupancy repairs, clean-up, removal of telephone systems, lease requirements when moving out, etc.);	$ -		This project does not involve moving costs or leaving existing space
s.	Interim Life Safety measures and/or OSHA requirements during construction (labor + materials);	$ -	B (11)	Included in project
t.	Correction of existing life safety code, JCAHO Plant, Licensure and OSHA deficiencies;	$ -		There are no known life safety code, JCAHO Plant, Licensure and OSHA deficiencies to correct as part of this project
u.	Vehicles, maintenance, storage buildings;	$ -		This project will utilize existing vehicles, maintenance and storage buildings
v.	Cost of financing;	$ -		This project will be funded using accumulated reserves and will require no financing
w.	Legal fees associated with the project: leases, agreements, disputes, deeds, consultation etc.;	$ -		There are no legal fees as part of this project.
x.	Interest during construction on construction loans	$ -		This project will be funded using accumulated reserves and will require no financing

y.	Building equipment and systems necessary to implement emergency management plan, such as, generators, snow removal equipment, extra fuel storage, etc.;	$ -		This project will utilize existing building equipment and systems necessary to implement emergency management plans
z.	Outstanding life code deficiencies or major repairs needed to maintain existing building safety, longetivity, and compliance with codes, regulations, and/or JCAHO requirements where applicable;	$ -		There are no known life code deficiencies or major repairs required as part of this project
aa.	Handicap accessibility requirements to assure compliance with ADA;	$ -	B (11)	Will comply (Included in project)
bb.	Painting, wallpaper, all interior finishes;	$ -	B (11)	Included in project
cc.	Carpet, floor tile, ceramic tile, operating room special flooring, etc.;	$ -	B (11)	Included in project
dd.	Demolition costs, including permits, hauling, special disposal costs;	$ 2,000	B (11)	
ee.	Partnership fees, incorporation fees, privilege licenses etc.;	$ -		The project does not involve a partnership, corporation or privilege license
ff.	Costs for elevator and boiler certifications;	$ -		The project will utilize existing elevators and boilers
gg.	Costs associated with compliance with final review comments by all reviewing regulatory agencies, including actual construction costs, design change costs if any, and modification of contracts (cost, profit, overhead);	$ -	B (11)	Included in project
hh.	A reasonable contingency cost to complete the work;	$ 8,777	B (11)	
ii.	Costs associated with completion of final system certifications, including but not limited to medical gas certification to comply with NFPA99 test criteria;	$ -	B (11)	Included in project
jj.	Costs for certification and testing of patient special electrical systems to comply with NFPA99 and the National Electrical Code (impedance, equipotential, and current leakage tests for fixed patient equipment);	$ -	B (11)	Included in project
kk.	Costs for fire alarm certification and sprinkler system certification prior to occupancy;	$ -	B (11)	Included in project
ll.	Costs associated with field labeling of any equipment that is not listed and labeled by a NC recognized safety testing lab (E.G., UL, ETL., MET., etc.);	$ -		There is no field lableing required as part of the project.
mm.	Costs to provide certification by the X-Ray shielding designer that the radiation shielding has been designed and installed per approved plans, specifications, and regulations (radiology installations only):	$ -	B (11)	Done In-House
nn.	Costs of all additive change orders known at this time;	$ -		None at this time

$ 1,315,981

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

J.M. Bum 2/14/11 NC Lic# 4844

(Signature of Licensed Architect or Engineer)

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

(Signature and Title of Officer Authorized to Represent Provider/Company)

Attachment G

PHILIPS

Image Guided Therapy System

Azurion 7

With Azurion, performance and superior care become one

17% reduction of procedure time with Philips Azurion at St. Antonius Hospital.[1]

The ability to treat one more patient per day today, or in the future

Treating patients. It's what you do.
You strive every day to provide the best patient care, quickly and reliably, no matter which procedure you are performing.
So try to imagine an increased number of procedures, for more patients, carried out consistently and efficiently with fewer preparation errors. Workflow can be optimized and performed on an intuitive platform designed to make your day a lot easier.

Azurion enables you to provide superior care

Azurion helps you optimize your lab performance

An easy-to-use platform supports you in quickly and easily performing diverse procedures

This is exemplified by our Image Guided Therapy System - Azurion 7. It allows you to easily and confidently perform a wide range of routine and complex procedures with a unique user experience, helping you optimize your lab performance and provide superior care. Azurion is powered by ConnectOS, a real-time multi-workspot technology designed specifically for the Azurion image guided therapy platform.

As the interventional space evolves, we continue to integrate essential lab systems and tools onto the Azurion platform for a better user experience. The Azurion integrated lab offers a seamless user experience that gives you control of all compatible applications from a single touch screen at table side, to help make fast and informed decisions without breaking sterility.

With Azurion's industry leading image guided therapy platform, we reinforce our commitment to you and your patients. Our goal is to help you effectively meet today's challenges so that you are ready for the future.

Outstanding user experience

At Philips, we are guided by you. With Azurion, we've brought the user experience and simplicity of touch screen controls right where it's needed to make a difference to lab workflow.

Full control at table side to enhance decision making
You can now control all compatible applications in the interventional lab via the central touch screen module and FlexVision Pro. Not only does this improve workflow within the exam room, it helps reduce the need for team members to leave the sterile area and walk to the control room during procedures. This can save time and help avoid delays.

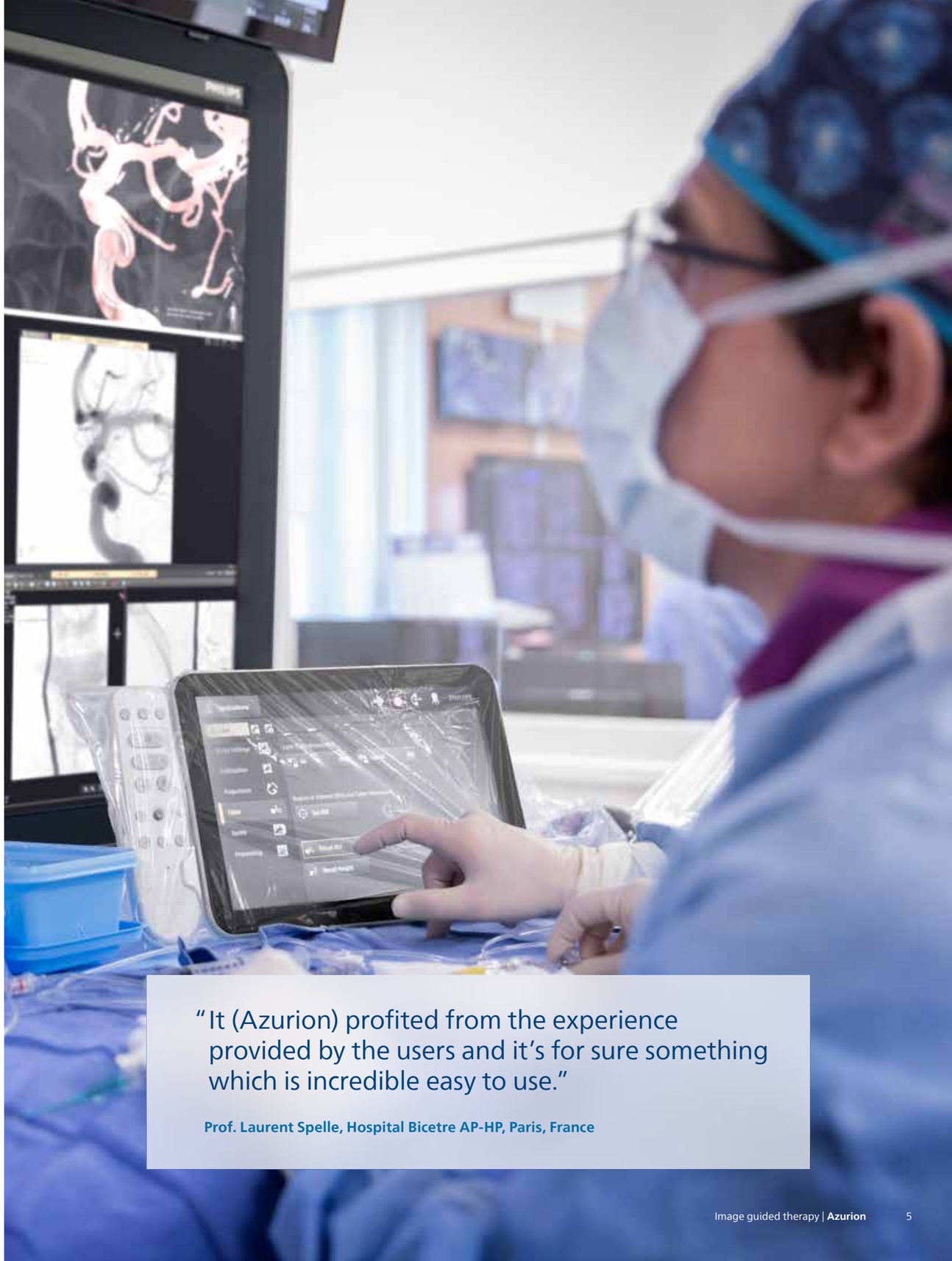
Gain advanced physiologic guidance to help improve treatment outcomes
You can access IntraSight, a comprehensive suite of clinically proven[2-6] imaging, physiology and co-registration[7] tools, via the central touch screen module. These tools allow you to go beyond the angiogram and complete your view of the target vessel, to help you make fast, informed clinical decisions.

Azurion with FlexArm – more independent control for physicians
The FlexArm option further evolves Azurion's table side control with the intuitive Axsys controller to make procedures flow naturally and easily. When changes or complications occur, the physician can quickly and easily take action. This can also reduce the need to move in and out of the sterile field during a procedure.

Designed around you and your procedure
All Azurion systems and interventional tools use the same standardized user interface to support training. Use has been further simplified through a sophisticated help function. You can access digital user guides with one click for on-the-spot assistance.

Clear and simple to use
On screen, information clearly stands out against the distinctive black background where active applications are highlighted. Backlit icons and distinctly shaped buttons on the Control Module promote intuitive operation. All controls are designed for easy cleaning to meet stringent sterility requirements.

Less clutter and faster workflow
With the Azurion integrated lab, controlling all compatible applications at the touch screen module can reduce extra interfaces and controls table side.
The FlexSpot works according to the same principle.
It gives you access to all compatible applications in one compact, customizable workplace that can be placed in the control room or exam room where needed.
Save time by setting the display to re-arrange and re-size as applications are opened and closed.



"It (Azurion) profited from the experience provided by the users and it's for sure something which is incredible easy to use."

Prof. Laurent Spelle, Hospital Bicetre AP-HP, Paris, France

With Azurion we help you to optimize your lab performance

"The new integrated system saves us time, because we can control all applications via one user interface."

Dr. med. Peter Ong, Robert Bosch Hospital, Stuttgart, Germany.

Azurion's integrated approach can help you achieve measurable improvements in throughput, cost reduction and staff satisfaction.

Do more at table side

With our enhanced touch screen module, you will experience simpler, smoother procedures, based on familiar tablet interactions. For example, you can now easily mark relevant details on 2D images on the touch screen with your fingertip.

Azurion allows you to run an entire case without breaking sterility

The touch screen module offers total control within the sterile field. Run an entire case table side as you quickly diagnose, navigate, annotate and measure to your exact specifications, even when wearing gloves and under a sterile drape. Table side control saves you from having to go to the control room to access applications.

Save time through Instant Parallel Working

The Azurion 7 image guided therapy system has been specifically designed to save time by enabling interventional team members to do two tasks at the same time in the exam room and control room - without interrupting each other. As an example, while fluoroscopy/exposure is taking place, a technologist in the control room can instantly review previous images from the same patient, prepare the next exam or finish reporting on another patient. This leads to higher throughput and faster exam turnover without compromising quality of care.

Simplify workflow

Enter patient information once and it is automatically transferred to connected applications to reduce data entry errors. To save time, IntelliSpace Cardiovascular[8] and IntelliSpace Portal launch automatically with the specific patient on the exam room monitor.

Azurion's full system automatic position control (APC) gives you more flexibility to recall the stored position of the C-arm, table and other parameters for a particular image to simplify positioning.

Imagine an easier work day

You can combine different user centric workspots (FlexVision Pro, FlexSpot and touch screen modules) to view, control and run applications where and when needed. At these workspots you can co-register[9] iFR or IVUS data with the angiogram, so you have the tools in hand to manage procedure quality and patient care. Together these flexible workspots allow you to customize your workflow to boost efficiency.

Safeguard clinical performance and enhance lab security over time with Windows 10 platform

The standard Windows 10 platform can help support compliance with the latest security and standards to protect patient data. It can also accommodate new software options to extend your system's clinical relevance over time.

Touch screen module Pro

FlexSpot

FlexVision Pro

Azurion enables you to provide superior care

As patient volumes rise and procedures become more complex, how do you maintain high standards of quality and safety in your healthcare facility?

Clinical demands are getting more specific. So are we.

Our clinical suites are tailored to meet your specific challenges, while offering you the flexibility to carry out procedures in the easiest, most efficient way.
We have a flexible portfolio of integrated technologies and services to support the full interventional spectrum. We also offer Hybrid OR solutions that create an innovative care environment for performing open and minimally invasive surgical procedures.

Simplified set-up and operation

The Azurion 7 uses a range of ProcedureCards to help optimize and standardize system set-up for all your cases. The system will automatically select the appropriate ProcedureCard(s) based on the (CIS/RIS/HIS) code of the scheduled procedure from the information system.

ProcedureCards can increase the consistency of exams by offering presets (e.g. most-frequently used, default protocols and user-specified settings) on the procedure, physician or department level.
In addition, hospital checklists and/or protocols can be uploaded into the ProcedureCards to help safeguard the consistency of interventional procedures and reduce preparation errors.

Enhance patient care with continuous monitoring

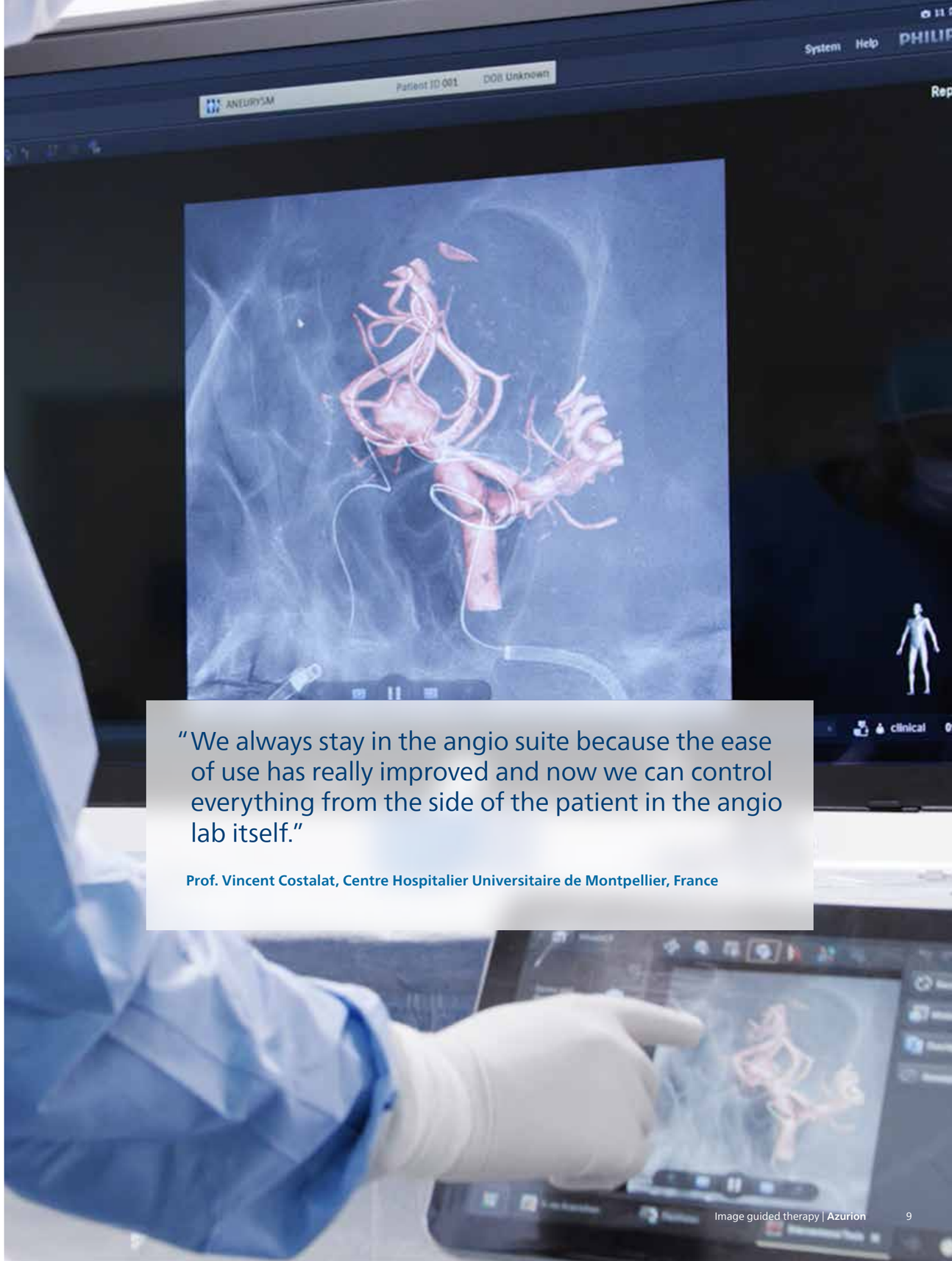
The Philips Interventional Hemodynamic System is integrated with the IntelliVue X3 patient monitor, allowing continuous patient monitoring throughout procedures in the interventional workflow. There is no need to change cables, minimizing disruption to vulnerable patients and giving you more time to focus on them. Continuous patient monitoring also results in a gap-free patient record.

Increase clinical confidence with 3D imaging

The clinical application software SmartCT enriches our exceptional 3D interventional tools for interventional procedures with step-by-step guidance that is designed to remove the barriers to acquiring 3D images in the interventional lab.

Easily control advanced 3D visualization and measurements at table side on the touch screen module. Studies have shown that 3D CT-like imaging can enhance diagnostic accuracy [9,10,11] and support improved patient outcomes.

Clinical suites



"We always stay in the angio suite because the ease of use has really improved and now we can control everything from the side of the patient in the angio lab itself."

Prof. Vincent Costalat, Centre Hospitalier Universitaire de Montpellier, France

High standards of safety and low radiation exposure

As you look for new radiation dose management strategies to continue to enhance patient and staff safety, while maintaining and enhancing your level of care, we can support you in meeting your goals.

High quality images at low X-ray dose

Our ClarityIQ imaging technology provides significantly lower dose across clinical areas, patients, and operators.[12] In routine coronary procedures[13], ClarityIQ technology reduces patient dose by 67% without affecting procedural performance while maintaining equivalent image quality, compared to a system without ClarityIQ.[14,15] In interventional Neuro procedures, ClarityIQ technology reduces patient dose by 65%, compared to a system without ClarityIQ.[16]

Managing dose efficiently

DoseWise is integrated across the Philips image-guided therapy Azurion portfolio. DoseWise consists of a comprehensive range of radiation dose management tools, training, and integrated product technologies that aim to help you take control over patient care, staff safety, and regulatory compliance. Another feature is the Zero Dose Positioning function. It lets you pan the table, change table height or field-of-view on your Last Image Hold (LIH) image. This enables positioning without the use of radiation on previously recorded last image.

Managing dose across your organization

Philips DoseAware provides real-time feedback in the exam room It displays the invisible nature of radiation in real time, so that you and your staff can see it promptly, easily and simply – and rapidly understand the effect of behavior changes and work patterns.

DoseAware Xtend is a dedicated solution for treatment rooms that builds on the capabilities of DoseAware and interfaces seamlessly with the Azurion image-guided therapy system. Thanks to this seamless integration, DoseAware Xtend can provide live individual dose rates (live screen) during procedures, and summarized procedure doses (review screen). It also reminds staff to better protect themselves by providing a warning symbol when the lead protection screen is not being used properly.

Perform standardized quality assurance verifications in just 5 minutes[17]

To make it easier for you to routinely perform consistent verification tests of radiation dose and image quality, only Philips offers the User Quality Control Mode (UQCM) tool on its Azurion system.
With this option, you can independently verify and audit the radiation and image quality related factors of your Azurion system in a standardized way in just 5 minutes, as well as carry out a range of validation and quality assurance tests.

Azurion – a comprehensive image guided therapy platform

The Azurion 7 integrated lab brings together a range of sophisticated interventional tools, including clinically proven[2-6] imaging and physiology tools, advanced hemodynamic measurements and cardiac informatics to support clinical excellence during procedures.

Cybersecurity woven into every layer of your interventional suite

Philips Image Guided Therapy recognizes the importance of securing medical devices and protecting your patient data. Together we can maintain a secure environment by remaining vigilant and identifying the ever-changing cybersecurity threat landscape. We are committed to meeting the needs and requirements of our customers. Our security plans encompass your people, processes, and technology with the goal of ensuring the confidentiality, integrity and availability of critical data - whether at rest or in transit. For more information, please contact your sales representative or send an email to: productsecurity@philips.com

Azurion 7 C/F12

With its 12" Flat Detector, the 7 Series provides high-resolution imaging over a large field-of-view with flexible projection capabilities, making it ideal for cardiac interventions. The entire coronary tree can be visualized in a single view with minimal table panning.

Azurion 7 C/F20

Enhance visibility for diverse cardiac and vascular procedures with the excellent image quality and broad coverage of the next generation 20" Flat Detector. This system supports head-to-toe imaging and patient access from all sides.

Azurion 7 C20 with FlexArm

Create a Hybrid OR that provides unlimited imaging flexibility for diverse procedures and exceptional positioning freedom for medical teams with the Azurion 7 and the next generation 20" Flat Detector, combined with the ceiling-mounted FlexArm option. You get a highly cost-effective environment that is ready for the procedures of the future.

Azurion 7 C20 with FlexMove

Move to a Hybrid OR with confidence, with the Azurion 7 and the next generation 20" Flat Detector, combined with the ceiling-mounted FlexMove option. FlexMove offers exceptional workflow flexibility to perform open and minimally invasive procedures in the same room.

Azurion 7 B12/12

The Azurion 7 biplane system with two 12" Flat Detectors provides high-resolution imaging and positioning flexibility to reveal critical anatomical information during congenital heart and electrophysiology procedures.

Azurion 7 B20/12

The Azurion 7 biplane system with a 20" and 12" Flat Detector provides exceptional clarity of detail and navigational precision to support a wide range of challenging cardiac and vascular interventions.

Azurion 7 B20/15

Enhance insight and certainty during neuro interventions with the Azurion 7 biplane system. It pairs a 20" frontal with a 15" lateral detector.

High productivity combined with low cost of ownership

With Philips, you get the best service performance which enables you to treat more patients, and professional support to help you deliver cost-efficient care.

Best service performance[18] enables you to treat more patients[19]

Staying on top of today's complex healthcare environment is challenging enough without a constant concern of keeping your systems up and running smoothly. With Philips, your operations are protected by the best overall service engineer performance for imaging systems according to IMV ServiceTrak for 5 years in a row. Philips remotely connected systems provide 135 more hours of operational availability per year, enabling you to treat more patients.

Professional support helps you deliver cost-efficient care

To help you fully leverage your financial, technological and staffing resources and realize a high return on your investment, we offer professional support through our experienced network of over 7,000 field service engineers, as well as a flexible service offering that includes:

- Innovative financing solutions tailored to meet the needs of healthcare organizations
- A broad range of healthcare consulting programs to help your organization further enhance the efficiency and efficacy of your care delivery process
- Philips Healthcare Education can help unlock the full potential of your staff, technology and organization to meet new challenges through innovative, meaningful and evidence-based healthcare education.

Cost-effectively manage future upgrades with the Technology Maximizer program

Technology Maximizer is a program that runs in tandem with your Philips Service Agreement.[20] When you opt into the program, you receive the latest available software and hardware[21] technology releases for a fraction of the cost of purchasing them individually. The Technology Maximizer Plus allows you to further tailor upgrades to reduce costs. No need to wait for budget approval.
No need to buy individual upgrades. Just a cost-effective way to manage ongoing technology upgrades through your operational budget.

Doing business responsibly and sustainably

When you choose Philips, you are choosing a partner committed to meet sustainability and circular economy ambitions. As a leading health technology company, our purpose is to improve people's health and well-being through meaningful innovation, positively impacting 2.5 billion lives per year by 2030.

The Azurion is the result of our EcoDesign process and offers significant environmental improvements:

- 100% product take-back after customers' acceptance of our trade-in offer.
- 100% repurposing of the equipment that is returned to Philips
- Up to 90% of material weight is reused during refurbishing, depending on type and age of product
- At least 10% lower energy consumption over total product life usage[22]

Read more about our Environmental, Social and Corporate Governance (ESG) commitments here: https://www.philips.com/a-w/about/sustainability.html

Philips remotely connected systems provide

135 more hours of operational availability on average, per year, enabling you to treat more patients.[19]

References

1. Philips whitepaper 12nc 4522 991 30501; Reduction of procedure time by 17% with Philips Azurion in independently verified study; https://www.philips.com.au/healthcare/resources/landing/ azurion/lab-performance-study-results. Results are specific to the institution where they were obtained and may not reflect the results achievable at other institutions.
2. Davies JE, et al. DEFINE-FLAIR: A Multi- Centre, Prospective, International, Randomized, Blinded Comparison of Clinical Outcomes and Cost Efficiencies of iFR and FFR Decision-Making for Physiological Guided Coronary Revascularization. New England Journal of Medicine, epub March 18, 2017.
3. Gotberg M, et al., Instantaneous Wave-Free Ratio Versus Fractional Flow Reserve Guided Intervention (IFR-SWEDEHEART): A Multicenter, Prospective, Registry-Based Randomized Clinical Trial. New England Journal of Medicine, epub March 18, 2017.
4. Patel M. "Cost-effectiveness of instantaneous wave-Free Ratio (iFR) compared with Fractional Flow Reserve (FFR) to guide coronary revascularization decision-making." Late-breaking Clinical Trial presentation at ACC on March 10, 2018.
5. Maehara A, Matsumura M, Ali ZA, Mintz GS, Stone GW. IVUS-guided versus OCT-guided coronary stent implantation. J Am Coll Cardiol Img. 2017;10:1487-1503.
6. Choi K, et al. Impact of Intravascular Ultrasound-Guided Percutaneous Coronary Intervention on Long-Term Clinical Outcomes in Patients Undergoing Complex Procedures. JACC: Cardivascular Interventions. Mar 2019, 4281; DOI: 10.1016/j.jcin.2019.01.227.
7. Co-registration tools available within IntraSight 7 configuration via SyncVision
8. It is the user's responsibility to ensure that Philips network requirements (such as performance, VPN) for IntelliSpace Cardiovascular are met. Note: Automatic same patient launch feature is available only with specific versions of ISCV and ISP.
9. Loffroy R et al. Comparing the Detectability of Hepatocellular Carcinoma by C-arm Dual-Phase Cone-Beam Computed Tomography During Hepatic Arteriography With Conventional Contrast- Enhanced Magnetic Resonance Imaging Cardiovasc Intervent Radiol. 2012, 35 (1), 97-104,
10. Berman et al. ,The use of threedimensional rotational angiography to assess the pulmonary circulation following cavopulmonary connection in patients with single ventricle. https:// www.ncbi.nlm.nih.gov/pubmed/22419358 Catheter Cardiovasc Interv. 2012 Nov 15;80(6):922-30.
11. https://pubmed.ncbi.nlm.nih.gov/?term=Schernthaner+RE&cauthor_id=25476872 Schernthaner et al., Delayed-Phase Cone-Beam CT Improves Detectability of Intrahepatic Cholangiocarcinoma During Conventional Transarterial Chemoembolization Cardiovasc Intervent Radiol , 38 (4), 929-36, 2015
12. In 28 individual comparative studies, Philips ClarityIQ was associated with reductions in patient radiation exposure. All 28 studies can be found online: www.philips.com/clinicallyproven
13. Routine coronary interventions comprise of fluoroscopy and exposure usage.
14. Buytaert, D., et al., Evaluation of patient and staff exposure with state of the art x ray technology in cardiac catheterization: A randomized controlled trial. Journal of Interventional Cardiology, 2018. 31(6): p. 807-814.

    (95% CI of 53%, 77% for all diagnostic and interventional coronary procedures). The results of the application of dose reduction techniques will vary depending on the clinical task, patient size, anatomical location and clinical practice. The interventional cardiologist assisted by a physicist as necessary has to determine the appropriate settings for each specific clinical task.
15. Results based on total dose area product from a single center prospective controlled randomized study (University Hospital Gent, Belgium) on 122 patients (42 for Allura Xper and 80 for AlluraClarity) undergoing coronary procedures. Of the 122 patients, 102 (83.6%) had a diagnostic procedure without intervention and 51 (41.8%) resulted in a diagnosis of no coronary disease. Patient radiation exposure was quantified using cumulative dose area product as collected from Radiation Dose Structured Reports and/or Allura Reports. Baseline dose was maintained by configuring both systems to power up with the lowest dose settings as default and default procedure settings for cardio were used. Exam duration and fluoro time was consistent between the systems and an increase in number of exposure images and runs with the AlluraClarity was attributed to the biplane configuration compared to the monoplane configuration of the Allura Xper.
16. Söderman, M., et al., Radiation dose in neuroangiography using image noise reduction technology: a population study based on 614 patients. Neuroradiology, 2013. 55(11): p. 1365-1372.

    Routine neuro interventions comprise of DSA and fluoroscopy usage.

    (95% CI 56%, 68% for routine diagnostic neuroendovascular procedures, 95% CI 58%, 71% forroutine interventional neuroendovascular procedures). The results of the application of dose reduction techniques will vary depending on the clinical task, patient size, anatomical location and clinical practice. The interventional radiologist assisted by a physicistas necessary has to determine the appropriatesettings for each specific clinical task. Results based on total dose area product from a single center retrospective historically controlled cohortstudy (Karolinska Hospital - Solna, Sweden) on 614patients (302 for Allura Xper and 312 for AlluraClarity) undergoing neuro endovascular procedures.
17. The related tests were performed by 3 users with different background and experience level. The test timings were performed using a frontal plane of an Azurion biplane R2.1 system (FD20/15N, STM-1713 (Dick Bruna), location QL-1).
18. IMV ServiceTrak 2018 X-ray Cardiovascular Systems.
19. Data shown is an average, based on the comparison between remotely connected and non-remotely connected systems. Data sample from 2018 for Allura FD and Azurion systems (n=9955).
20. Eligible RightFit Service Agreements are available with Technology Maximizer.
21. Not currently available for ultrasound hardware.
22. Determined via the COCIR SRI method. Compared to predecessor Allura Xper platform. Exact energy reduction depends on configuration

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Attachment H

EQUIPMENT COMPARISON – AH Pineville Cardiac Cath Lab #3 Replacement & Relocation

	EXISTING EQUIPMENT	REPLACEMENT EQUIPMENT
Type (e.g., Cardiac Catheterization, Gamma Knife®, Heart-lung bypass machine, Linear Accelerator, Lithotriptor, MRI, PET, Simulator, CT Scanner, etc.)	Cardiac Catheterization	Cardiac Catheterization
Manufacturer	GE	Philips
Model name/number	Innova 2121	Azurion 7 M20
Other method of identifying the equipment (e.g., Serial Number, VIN #)	607650BU9	Not Available Until Installed
Is the equipment mobile or fixed?	Fixed	Fixed
Date of acquisition	2012	2022
Was the existing equipment new or used when acquired? / Is the replacement equipment new or used?	New	New
Total projected capital cost of the project	NA	$5,230,700
Total cost of the equipment	$1,128,852	$2,092,182
Location of the equipment	AH Pineville Hospital, Room #1101	AH Pineville Hospital, Room #1937
Document that the existing equipment is currently in use	1,834 procedures were performed from 11/2021 to 10/2022	NA
Will the replacement equipment result in any increase in the **average charge per procedure**?	NA	No
If so, provide the increase as a percent of the current average charge per procedure	NA	NA
Will the replacement equipment result in any increase in the **average operating expense per procedure**?	NA	No
If so, provide the increase as a percent of the current average operating expense per procedure	NA	NA
Type of procedures performed on the existing equipment	Cardiac Catheterization and EP procedures	NA
Type of procedures the replacement equipment will perform	NA	Cardiac Catheterization

Attachment I

AH Pineville Cardiac Catheterization Lab #3 Volume by Month	
Month	**Volume**
Nov-21	163
Dec-21	176
Jan-22	136
Feb-22	140
Mar-22	140
Apr-22	125
May-22	129
Jun-22	166
Jul-22	181
Aug-22	175
Sep-22	135
Oct-22	168
Total	**1,834**

Attachment J

GE Healthcare

QUOTATION

Quotation Number: P1-C95896 V 9

Carolinas Medical Center - Pineville
10628 Park Rd
Charlotte NC 28210

Attn: Kevin Collier
Technical Operations Manager
10628 Park Rd
Charlotte NC 28210

Date: 02-10-2011

This Agreement (as defined below) is by and between the Customer and the GE Healthcare business ("GE Healthcare"), each as identified herein. GE Healthcare agrees to provide and Customer agrees to pay for the Products listed in this GE Healthcare Quotation ("Quotation"). "Agreement" is defined as this Quotation and the terms and conditions set forth in either (i) the Governing Agreement identified below or (ii) if no Governing Agreement is identified, the following documents:

1) This Quotation that identifies the Product offerings purchased or licensed by Customer;

2) The following documents, as applicable, if attached to this Quotation: (i) GE Healthcare Warranty(ies); (ii) GE Healthcare Additional Terms and Conditions; (iii) GE Healthcare Product Terms and Conditions; and (iv) GE Healthcare General Terms and Conditions.

In the event of conflict among the foregoing items, the order of precedence is as listed above.

This Quotation is subject to withdrawal by GE Healthcare at any time before acceptance. Customer accepts by signing and returning this Quotation or by otherwise providing evidence of acceptance satisfactory to GE Healthcare. Upon acceptance, this Quotation and the related terms and conditions listed above (or the Governing Agreement, if any) shall constitute the complete and final agreement of the parties relating to the Products identified in this Quotation. The parties agree that they have not relied on any oral or written terms, conditions, representations or warranties outside those expressly stated or incorporated by reference in this Agreement in making their decisions to enter into this Agreement. No agreement or understanding, oral or written, in any way purporting to modify this Agreement, whether contained in Customer's purchase order or shipping release forms, or elsewhere, shall be binding unless hereafter agreed to in writing by authorized representatives of both parties. Each party objects to any terms inconsistent with this Agreement proposed by either party unless agreed to in writing and signed by authorized representatives of both parties, and neither the subsequent lack of objection to any such terms, nor the delivery of the Products, shall constitute an agreement by either party to any such terms.

By signing below, each party certifies that it has not made any handwritten modifications. Manual changes or mark-ups on this Agreement (except signatures in the signature blocks and an indication in the form of payment section below) will be void.

- Terms of Delivery: FOB Destination
- Quotation Expiration Date: 04-22-2011
- Billing Terms: 80% delivery / 20% installation
- Payment Terms: Net Due in 30 Days
- Governing Agreement: Premier

Each party has caused this Agreement to be signed by an authorized representative on the date set forth below.

Please submit Purchase Orders to: General Electric Company, GE Healthcare, 9900 Innovation Dr, RP2124, Wauwatosa, WI 53226.
Fax to (414) 721-4181.

GE HEALTHCARE _____
Erik Kash — Date
Interventional Account Specialist

CUSTOMER

_____
Authorized Customer — Date

_____
Print Name and Title

_____
PO #

INDICATE FORM OF PAYMENT:

(If there is potential to finance with a lease transaction, GE HFS or otherwise, select lease.)

____ Cash * ____ Lease ____ HFS Loan

If financing please provide name of finance company below*:

_____

*Selecting Cash or not identifying GE HFS as the finance company declines option for GE HFS financing.

1/14

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
	1		**IC Innova 2121IQ Biplane System**
1	1	S18821XP	Innova 2121IQ Biplane System

GE Upgrade Program

Innova 2121IQ Cardiovascular Biplane System for 60-Hz Countries

The Innova 2121IQ is an angulating Biplane X-ray system designed for bi-directional x-ray imaging utilizing fluorosocopy, high rate cine, and optional DSA imaging. It provides a full range of clinical angulations and options for cardiovascular and electrophysiology studies.

Biplane Innova Positioner

- Patented 3-axis Isocentric Design
  - Unique Floor Mounted L-arm and Offset C-arm Frontal Positioner
  - Ceiling mounted lateral C-arm

Innova Digital Flat Panel Biplane Image Chain

- Dual 20.5 by 20.5 cm Digital Flat Panel
- 20.5 cm (9"), 17 cm (7"), 15 cm (6"), and 12 cm (5") FOV

Biplane Innova 100 Kw Generator System

- Dual 100 Kw X-ray generation systems
- Automated dose and image quality control with AutoEx multiparameter technique optimization
- Provides grid pulsed variable frame rate fluoroscopy:
  - Single plane mode - 7.5, 15, and 30 fps
  - Biplane mode - 7.5, 15, and 25 fps
- High Frame rate cine:
  - Single plane mode - 15 and 30 fps
  - Biplane mode - 15 and 25 fps
- Optional DSA at .5 to 7.5 fps in single plane mode, .5 to 3.75 fps in biplane mode
- Automatic pulse width optimizaton
- Automatic Beam Filtration insertion
- Automatic Dose reporting system
- Biplane Performix 160A X-ray Tubes
  - Trifocus focal spots -.3 mm, .6 mm and .9 mm Focal Spots
- 3.7 MHU Heat Unit Anode Capacity

Innova Biplane Collimator System

Item No.	Qty	Catalog No.	Description

- Automatically insertable Spectral Filters
  - .1 mm, .2 mm, .3 mm, .6 mm, .9 mm Filter
- Biplane Contour Filters controlled from the tableside TSSC control

LP Off Isocenter Lateral Plane Positioning +/- 20cm from the Isocenter Point

Innova DL Digital Imaging System

- Optional DSA capability available
- 136,000 1024 by 1024 matrix images stored
- In-room control and review
- Integrated menu control

Innova IQ User Interface

- Single Monitor System Menu Control
  - English keyboard and mouse
- Biplane Table side System control (TSSC)
- Innova Central Biplane Touchscreen User Interface
  - Controls acquisition and a variety of processing protocols at tableside
  - Control of Optional MacLab management and monitoring system at tableside
- Virtual Collimation provided with display of Collimator position on Fluoro Last Image Hold

Control Room Live Fluoro Display

- 2 LCD Flat Panel Live Fluoro Monitors
  - One frontal, one lateral live display

Innova Interface and DICOM Administration

- 10/100 Eternet Interface included
- Includes DICOM Worklist Functionality
- Includes DICOM Storage Committ function
- Includes Exam Data Export

Innova Biplane Standard Accessories

- Clear Vu Arm Supports
- Single Flat Armboard with replacement pad
- IV Pole

The Innova 2121IQ Biplane System includes a one year warranty on the full system

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
			and a full three year non-prorated warranty on the Performix 160 X-ray Tubes.
2	1	S18061CD	Omega V Long Table with Slicker Cover (Non Motorized) Omega V Long Table with Slicker Cover The Omega V Long Table is a manually operated table that allows easy patient positioning. • The Omega V Table can support a maximum patient weight of 204 kg (450 lbs) for the tabletop, 40 kg (88 lbs) of accessories supported on each of two side rails, and 20 kg (44 lbs) of accessories on the (optional) table end rails. • Tabletop is less than 1.0 mm aluminum equivalent for low absorption and scatter. • Table pedestal base is 24 x 18.2 inches and houses the table electronics and vertical drive motors. • Tabletop allows for +/- 180 degree rotation around the vertical axis, greatly enhancing patient transfer. • Tabletop is 131 inches long, 18 inches wide at patient trunk area. • Fluoroscopic coverage from head to toe on a 6 foot, 1 inch patient • 8-way horizontal float movement for complete flexibility in patient positioning • Longitudinal travel of 67 inches; transverse travel of +/- 5.5 inches • Total vertical travel of 12 inches; from 30.7 inches to 42.7 inches above the floor • Electromagnetic locks for inhibiting tabletop lateral, longitudinal and rotational travel are power release type locks. • Includes Slicker Cover
3	1	S18811CA	Biplane Footswitch with Table Lock/Unlock, Small and Large Covers Biplane Footswitch with Table Lock/Unlock, Small and Large Covers Innova Biplane Footswitch with Table Lock/Unlock capability including both Large and Small Covers. Fluoro Pedal Footswitch Order (from left to right): Biplane, Lateral, Frontal.
4	1	S18751SA	In-room Browser with Send Angles In Room Browser Enables a thumbnail display of acquired sequences and photos on the in room monitor for interactive table-side selection and review. With a press of a button, transfer the angulation information from a review image to positioner for auto-positioning of the gantry.

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
5	1	S18751FS	FluoroStore with Fluoroloop FluroStore Lets you store and play fluoroscopic loops with a push of a button. Enables looping display and storage of the last 450 fluoroscopic images (60 seconds to 15 seconds depending on frame rate). The images are marked with a separate icon to identify them distinctly during the review.
6	1	S18341TT	Table Panning Device with 5M Cable Table Panning Device with 5M Cable Table mounted vertical grip for fast and easy table lock release and panning of the Omega Cardiac and Angio tables.
7	1	S18811BB	Biplane Smart Box Tableside Control Primary Smart Box New Smart Box for Simplified and Intuitive Joystick Control of Positioner and Table • Anatomical and Mechanical Positioning • Independent or Simultaneous Movement of All Three Positioner Axes • Remote SID Control • Manual or Motor Assisted 4-way Table Panning • Ergonomic Design • Hermetically Sealed
8	1	S18461PA	Two Live and Two Reference 19 inch LCD In-room Monitor Package Four 19 Inch LCD Monitor Package All components required for four monitor in-lab viewing of high quality flicker free images. The kit includes: • Four 19 inch premium LCD monitors • 120Hz scan converter kit
9	1	S18391LK	8 LCD Monitor Suspension Eight LCD Monitor Suspension with 36M Cable All Components Required for In-Room Support of Four 18 Inch LCD Monitors and Four other monitors, including Physio Display and the Repeater AW In-room Monitor. • Eight Monitor Boom Suspension

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
			• Articulating Arm Allows Rotation/Pivot for Optimal Clearance • Pre-Cabled for Four Monitors and the Digital System Remote Receiver • Pre-Cabled for ECG Display Monitor • Accomodates AW In-room Display Option
10	1	S18461PG	One Live B&W LCD Frontal Control Room Monitor One Live B&W LCD Frontal Control Room Monitor • One optional repeater live monitor • Includes cables and connections
11	1	S18461PS	One Reference B&W LCD Frontal Control Room Monitor One Reference B&W LCD Frontal Control Room Monitor • One optional repeater reference monitor • Includes cables and connections
12	1	S1876PF	Biplane Power Distribution Panel Innova Main Disconnect Panel - UPS Ready Innova Biplane Version This main disconnect panel provides emergency shut down, undervoltage protection, overcurrent protection, OSHA lockout tag provisions, and serves as a local disconnect for the GEHC Innova system. It reduces installation time and cost by providing a single-point power connection, eliminating the need to mount and wire a number of individual components, and its standardized design and testing assures high product quality and system reliability. It is UL and cUL listed for compliance with National Electric Code, and it can be either surface or semi-flush mounted. Customer is responsible for rigging and arranging for installation with a certified electrician.
13	1	S18751PX	20 KVA UPS for Biplane 20 KVA UPS for Site with Neutral GE Digital Energy 20 KVA UPS for Innova 2121IQ and 3131IQ
14	1	S18751LB	InnovaSense with Advanced Patient Positioning InnovaSense, Advanced Patient Positioning, Patient Contouring and Anti-Collision Package Patient contouring feature leverages advanced capactive sensor technology in real time to sense the distance of the patient from the detector. Ability to do so is critical in moving the detector rapidly near the patient, and also positioning it optimally close to

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
			the patient to reduce skin dose.
15	1	E6415J	X-Ray Table Clamp for Remote Panning Handle X-Ray Table Clamp for Remote Panning Handle FEATURES/BENEFITS • Designed for an Omega cardiac/vascular table • BIG AL clamp allows the operator to position the table remote panning handle at the end of the angio table on either the right or left side • The location of the handle can be customized to meet the needs of the individual operator • Option will support clinical studies such as TIP's procedures, or any procedure where the operator needs to position and operate the table from the patient's head and neck area SPECIFICATIONS • Metal clamp: 3" x 3" x 7" box weighing 6 lbs COMPATIBILITY • GE Omega cardiac/vascular tables
16	1	E8016AS	GE Angio Slicker for Omega IV Tables - 118 in. GE Angio/Cardiac Slicker for Omega IV Tables 118 in. FEATURES/BENEFITS • Increase system uptime by protecting table from spills • Recommended for sites concerned with blood and fluid borne disease • Durable PVC material resists contamination • Facilitates faster cleanups of blood and fluids • Prevents contaminate buildup in hard to clean areas • Easy to install, does not interfere with normal table operation SPECIFICATIONS • Weight: 6 lbs. • Durable PVC material • 118 in. length • Includes table cover and mounting Velcroy COMPATIBILITY

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
			• Omega IV systems, 118 in.
17	1	E8015JB	Omega V Tempurpedic Table Pad (1 in. Thick), 131 in. L Omega V Tempurpedic Table Pad (1 in. Thick), 131 in. L GE has partnered with Tempurmedic to produce a 1 in. thick pad that improves patient comfort for long procedures. This mattress is designed for use in acute, sub-acute, and long-term care settings. It is a superior therapeutic adjunct that has been clinically demonstrated effective in supporting comprehensive plans of care intended to prevent and treat pressure ulcers. Healthcare facilities that have convert ed to this mattress have reported: significant reduction in wound incidence rates, desirable wound healing rates, and better patient comfort. This rectangular mattress is recommended for use with the Omega V Angio table, has a neutral gray color and measures 131 in. L x 22 in. W x 1 in. T...H
18	2	E3053J	Mavig Double Pivot Lower Body Protector Mavig Double-Pivot Lower Body Protector, System Includes: Pivotal, flexible shield, 0.5 mm Lead Equiv., 65 cm x 90 cm, Easy-on Upper Protective Shield, 25 cm x 65 cm, and One Set of Wall Storage Hangers. Mavig Part #: UT6902-US; Sold per Each ..H Warranty Period-6 months- Exchange of non conforming products, which are returned to GE during warranty period Note: Installation, parts, application training and on-site service is the buyer's responsibility
19	2	E7015L	Mavig Monitor Suspension Arm for LCD Monitors Mavig Monitor Suspension Arm for LCD Monitors This Mavig single VESA-adapter spring suspension arm works with 14-18 in. flat panel monitors and has a weight range from 5 - 17 lbs. Available with table clamp, wall mount or angle mount...H
20	2	E7058A	GE Anti-Fatigue Floor Mat GE Anti-Fatigue Floor Mat FEATURES/BENEFITS • Ingenious device for those who spend a lot of time on their feet on concrete or tile surfaces • Cradles feet in cushiony comfort, minimizing stress and fatigue • Sealed to prevent moisture absorption and facilitate cleanup - ideal for medical environments SPECIFICATIONS

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
			• Dimensions (L x W x D): 60" x 36" x 0.5" • Weight: Approx 22 lbs. • Blue/White Marble Color COMPATIBILITY • Cath Labs, Angiography, R&F rooms • Mammography • Ultrasound
21	1	E3053KM	Mavig 360 Track-Mounted Radiation Shield & M3 Lamp, 76 cm x 62 cm, 58 Column Mavig 360 Track-Mounted Radiation Shield & M3 Lamp, 76 cm x 62 cm, 58 Column The Mavig Portegra2 standard overhead lead acrylic radiation protection systems provide protection for medical personnel while allowing visual contact from practitioner to patient, and with Mavig's patented systems, these shields provide the utmost in safety and convenience. This track-mounted system with 360 degree rotation of the spring-arm provides ease of use and positioning, and includes a center-mounted 76 x 62 cm, 0.5 mm lead equivalent acrylic shield with contour cutout and MUL protection, a 58 cm Portegra2 ceiling column with trolley, a cable spooler, and an M3 operation lamp, 110,000 lux and an 8-35 cm focusable light field. UL and CE marked...H Warranty Period- 6 months- Exchange of non conforming products, which are returned to GE during warranty period Note: Installation, parts, application training and on-site service are the buyer's responsibility
22	1	W0100CV	Six Days Interventional X-ray Onsite System Training 6 Day Interventional Xray Onsite System Training Onsite Training for a new Cardiology, Radiology, or Vascular Innova X-ray System. Includes: • One-4 day onsite visit to coincide with system start up • One-2 day onsite follow-up visit 6-8 weeks post system start up During the first visit, the applications specialist will work with the medical and technical staff on system operation and patient procedures. The training produces the best results when a dedicated core group of 2-4 X-ray technologists complete the session with a modified patient schedule. By the end of this visit, the core group should be able to perform the routine patient procedures. The 2 day revisit is suggested after the staff has run the system for 6-8 weeks, however this is flexible based on the site needs. The training will focus on the intermediate and advanced functions of the system or special needs of the customer.

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Item No.	Qty	Catalog No.	Description
			The training produces the best results when the same dedicated core group of 2-4 technologists from the initial visit complete the session with a modified patient schedule.
23	1	S18101SP	Installation Template Installation Template
24	1	S18101SF	Above Grade and Through Bolts Anchor Kit - Above Grade and Through Bolts, 25 mm
25	1	S18111SA	7 ft. 9 in. Inboard Monitor Bridge 7 ft. 9 in. Inboard Monitor Bridge
26	1	S18111SB	9 ft. 6 inch Inboard Monitor Bridge 9 foot 6 inch Inboard Monitor Bridge
27	1	S18111SG	Short Sleeve F/3 Monitor Suspension Reinforcement for Short Bridge
28	1	S18111SH	Long Sleeve for 3 Monitor Support Reinforcement Bridge
29	1	S18121RD	In Board Rails, 228 inch/579 cm In Board Rails, 228 inches long, to be used with LCD Monitor Suspensions
30	1	S18811EA	Biplane Group 1 Cable Maximum Length Biplane Group 1 Cable Maximum Length
31	1	S18811EK	B/P GROUP2 CBL-MAX LENGHT Biplane Group 2 Cable, Maximum Length
32	1	S18811EE	Biplane Group 3 Cable Standard Length Biplane Group 3 Cable Standard Length
33	1	S18811EF	Biplane Group 5 Cable Standard Length Biplane Group 5 Cable Standard Length
34	1	S18751CD	MAC Lab Cable 70 inches

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description
			MAC Lab Cable, 70 inches
35	1	S18101SM	Vascular Base Plate Assembly
			Vascular Base Plate Assembly
36	1	S18741TP	Omega Table Baseplate
			Omega Table Baseplate
37	1	S18741ET	Innova Omega 5 Table Elevator
			Innova Omega 5 Table Elevator
38	1	S18101SX	Rails and Cable Drapes
			Rails and Cable Drapes
39	1	S18811FA	Monitor Suspension Spacer Kit (GEMSAM & Canada only)
			Monitor Suspension Spacer Kit
40	1	S18121TC	X-ray Digital Detector Coolant Kit
			X-ray Digital Detector Coolant Kit
41	1	S18121TF	Biplane Collector Package
			Biplane Collector Package
42	1	S18081KA	IVUS Ready Kit
			IVUS Ready Kit
	1		**Cardiology Tech Service Training**
43	1	R0175RY	INNOVA BIPLANE
			Innova Biplane Basic Service Class/Lab
			The Innova Biplane class/lab is a 1 week course that introduces digital detectors to biplane cardiac and vascular labs and provides the instructional and hands-on opportunities for the student to acquire the fundamental competencies to effectively and safely service the Innova Biplane System. Prior to attending this course student must have completed Innova Systems course (R0154RY). This course must be taken within 2 years from the purchase date.
44	5	R0100CM	Meals And Lodging Expense
			Meals and Lodging Expense has been developed to allow the customer the

Quotation Number: P1-C95896 V 9

Item No.	Qty	Catalog No.	Description

convenience of prepaying for their meals and lodging expenses when attending Technical Service Training at the GE Healthcare Institute located in Waukesha, WI.

The price of this convenience is based on a per day basis. Thus a quantity of 1 is equal to 1 day's meals and lodging expense. When purchasing the meals and lodging expense please be mindful of weekend days during the training stay and include 2 days to cover a weekend in the purchase quantity.

Examples: A 5-day course needs a quantity of 5. Any course longer than 5 days should include 2 days to account for the weekend stay. Any course longer than 10 days will require an additional 4 days of the meals and lodging expense to cover the 2 weekends of the stay. Thus a 15-day course would have a quantity of 19 days to cover the 2 weekends of the stay. This expense must be used within 2 years from the purchase date.

Three meals a day Monday thru Thursday, 2 meals on Friday, pluse breaks are provided in the onsite cafeteria. The GE Healthcare Institute cafeteria closes Friday after lunch and reopens Monday morning for breakfast. Weekend meals are the responsibility of the customer.

Only for In-resident courses to be taken at the GE Healthcare Institute.

Quote Summary:

Total Quote Net Selling Price **$1,128,852.30**

(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)

Service Option invoicing will be separate from the equipment.

For Third Party Products and Services Only. If GE Healthcare has agreed to provide any third party products and/or services (other than GE Healthcare accessories and supplies) to Customer as part of the Quotation, including but not limited to any Commitment Account/Non-Inventory items, (i) GE Healthcare is acquiring such products and/or services on Customer's behalf and not as a supplier of such products and/or services; (ii) GE Healthcare makes no warranties of any kind, express or implied, with respect to such products and/or services (warranties, if any, on such products and/or services will be provided by the manufacturer or service provider, as applicable); (iii) Customer is solely responsible for ensuring that the acquisition and use of such products and/or services is in compliance with applicable laws and regulations, including applicable FDA regulations; and (iv) Customer is solely responsible for any and all claims resulting from or related to the acquisition or use of such products and/or services.

For Mobile Systems Only. For products that are approved by GE Healthcare for use as transportable, relocatable and mobile systems, GE Healthcare will deliver the system to Customer's van manufacturer and furnish final assembly services to place the

system in Customer's van. At the time of order, Customer must notify GE Healthcare of the van manufacturer to which the system is to be shipped. It is Customer's responsibility to make arrangements with the van manufacturer for delivery of the van and to comply with any additional planning requirements of the van manufacturer. For MR systems, GE Healthcare's product tests will be performed when assembly in the van is completed and MR system operation will be re-checked when the van is delivered to Customer.

For Healthcare IT Products Only:

a. Payment. Unless specified separately in the Quotation, fees for non-GE Healthcare software and hardware shall be due one hundred percent (100%) on delivery of the applicable software or hardware.

b. Audit Rights. Upon forty-five (45) days notice GE Healthcare may audit Customer's use of the software. Customer agrees to cooperate with GE Healthcare's audit and to provide reasonable assistance and access to information. If the audit uncovers underpaid or unpaid fees owe to GE Healthcare, Customer agrees to pay those fees and GE Healthcare's costs incurred in conducting the audit within thirty (30) days of written notification of the amounts owed. If Customer does not pay the amounts owed, GE Healthcare may terminate Customer's license to use the applicable software. Customer agrees to permit GE Healthcare to obtain certain reasonable information regarding the users and other use information regarding the software. All of such information shall be treated as confidential information, shall be used solely for the purposes of technical support and auditing the use of the software, and shall not be disclosed to any third party (other than third-party vendors of software licensed to Customer under this Agreement) without Customer's consent.

02-10-2011

Mr. Kevin Collier
Technical Operations Manager
Carolinas Medical Center - Pineville
10628 Park Rd
Charlotte NC 28210

Dear Kevin Collier,

Offer subject to the Terms and Conditions of the applicable Group Purchasing Agreements currently in effect between GE Healthcare and Premier Purchasing Partners, L.P. including: PP-CA-146 Invasive Cardology and PP-IM-088 Vascular.

Regards,
Erik Kash
Interventional Account Specialist
704-658-8669
Erik.Kash@med.ge.com
Quotation Number: P1-C95896 V 9

From:	Huber, Brighid K
To:	Stancil, Tiffany C
Subject:	[External] FW: Exemption Request for The Charlotte-Mecklenburg Hospital Authority d/b/a Atrium Health Pineville
Date:	Friday, December 2, 2022 11:49:19 AM
Attachments:	2022 CMHA dba AH Pineville Cath Lab #3 Replacement & Relocation Exemption.pdf

Good morning!

Please see below and attached.

Thank you!

Brighid

Brighid Knoll Huber, MHA, ATC
Strategic Services Group
Mobile: 724-986-6214

From: Huber, Brighid K
Sent: Friday, December 2, 2022 11:40 AM
To: Faenza, Julie M <Julie.Faenza@dhhs.nc.gov>; Hunt, Tiffany C <Tiffany.C.Hunt@dhhs.nc.gov>; Waller, Martha K <martha.waller@dhhs.nc.gov>
Cc: Kirkman, Elizabeth <Elizabeth.Kirkman@atriumhealth.org>
Subject: Exemption Request for The Charlotte-Mecklenburg Hospital Authority d/b/a Atrium Health Pineville

Good morning,

I hope this email finds you well! Please find attached an exemption request submitted by The Charlotte-Mecklenburg Hospital Authority ("CMHA") d/b/a Atrium Health Pineville to replace and relocate existing cardiac catheterization equipment.

Thank you very much, and please let me know if you have any questions.

Best,

Brighid

Brighid Knoll Huber, MHA, ATC
Strategic Services Group
Mobile: 724-986-6214

Atrium Health
Carolinas HealthCare System is Atrium Health

2709 Water Ridge Parkway, Suite 200, Charlotte, NC 28217
