NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

ROY COOPER • Governor
MANDY COHEN, MD, MPH • Secretary
MARK PAYNE • Director, Division of Health Service Regulation

January 11, 2019

Gary S. Qualls
K&L Gates, LLP
P.O. Box 14210
Research Triangle Park NC 27709-4210

Exempt from Review – Replacement Equipment

Record #:	**2832**
Facility Name:	Rex Hospital
FID #:	953429
Business Name:	Rex Hospital, Inc.
Business #:	1554
Project Description:	Replace two linear accelerators and one CT simulator
County:	Wake

Dear Mr. Qualls:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of January 3, 2019, the above referenced proposal is exempt from certificate of need review in accordance with N.C. Gen. Stat. §131E-184(f). Therefore, you may proceed to acquire without a certificate of need the two linear accelerators and one CT simulator to replace the two existing linear accelerators and one existing CT simulator. This determination is based on your representations that the existing units will be sold or otherwise disposed of and will not be used again in the State without first obtaining a certificate of need if one is required.

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

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

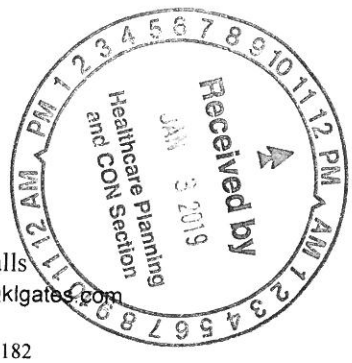
Sincerely,

Michael J. McKillip
Project Analyst

Martha J. Frisone
Chief, Healthcare Planning and
Certificate of Need Section

cc: Construction Section, DHSR
Radiation Protection Section, DHSR
Acute and Home Care Licensure and Certification Section, DHSR
Melinda Boyette, Administrative Assistant, Healthcare Planning, DHSR

K&L GATES



Gary S. Qualls
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T +1 919 466 1182
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January 3, 2019

Via Hand Delivery
Martha J. Frisone, Chief
Healthcare Planning and Certificate of Need Section
Division of Health Service Regulation
N.C. Department of Health and Human Services
809 Ruggles Drive
Raleigh, NC 27603

RE: Rex Hospital, Inc. d/b/a UNC REX's Material Compliance Request Regarding Main Campus Cancer Center (Project ID #J-8470-10), and Related Replacement Equipment Exemption Notices

Dear Ms. Frisone:

On behalf of our client, Rex Hospital, Inc. d/b/a UNC REX ("Rex"), we request a determination by the Department of Health and Human Services, Division of Health Service Regulation, Healthcare Planning and Certificate of Need Section (the "Agency") that Rex be permitted to modify its plans for the renovation and expansion of the cancer center at Rex Hospital, Project ID #J-8470-10 (the "Cancer Center Project"), the certificate of need ("CON") for which was originally issued on December 1, 2010. See Exhibit 1, CON.

Rex now plans to relocate the Cancer Center to another location on Rex's Main Campus. In addition, Rex plans to replace and relocate two existing linear accelerators and a CT simulator at the same time as the relocation and consolidation of Rex Main Campus Cancer Center services to the "New Cancer Center Building." Rex asks the Agency to verify that:

1. The proposed changes to the Cancer Center Project do not constitute a material change in scope for purposes of N.C. Gen. Stat. §131E-181(a), and are otherwise permissible; and

2. the proposed Replacement Equipment Units are exempt from CON review under N.C. Gen. Stat. §131E-184.

I. Proposed Cancer Center Project Changes

The Cancer Center Project CON approved a capital cost of $60,122,944 for a proposal projected to consist of 93,166 square feet of space on three (3) floors. Since that time, Rex's cancer program has expanded dramatically, in both patient volume and professional practitioners to serve those additional patients.

Even though the design of the original Cancer Center Project is complete, Rex has continued to explore the best long-term solutions for its oncology patients and providers. Rex has determined that it would be more efficient and effective to consolidate all Rex Main Campus cancer services in a single new building designed to accommodate increased cancer service demands and to create site planning efficiencies for Rex's oncology patients and providers. However, Rex anticipates being able to stay within the approved capital cost limits of the original Cancer Center Project CON.

The revised project envisions building the Cancer Center Project across Blue Ridge Road, within 250 yards of Rex's Main Campus Bed Tower. See Exhibit 2 (Main Campus Map) and Exhibit 3 (Radius Map). The New Cancer Center Building is now proposed to consist of 144,685 total square feet of space on four (4) floors, and will include space for four clinics rather than the one clinic originally proposed. This new space will also include the office space for the Radiation Oncology Department's physicians and support staff, personnel originally proposed to be housed in existing hospital space adjacent to the proposed Cancer Center Project construction.

Below is a chart summarizing the proposed changes to the Cancer Center Project. As the chart shows, some components of the Project needed more space than originally anticipated, and some components needed less space.

UNC REX Cancer Center Service Comparison		
	ORIGINAL CON PLAN	**NEW PROPOSED PLAN**
Summary		
	Renovate/Expand Existing Building	New Building
	Vertical Expansion (4 stories, no 3rd floor)	4 stories
	Radiation Oncology to remain unaffected	Radiation Oncology relocated to new building
Key Statistics:		
Physicians	5	11
Advanced Practitioners	0.5	9
Hem Onc / Surg Onc Patient Visits	8,784	22,588
Clinics	1	4
Total Square Footage	93,166 Square Feet	144,685 Square Feet
Clinic Space		
Hem/Onc Clinic:	22,249 Square Feet	32,534 Square Feet
Exam / Consult Rooms	24	28
Provider Offices	12	12
Surgical Oncology Clinic:	8,156 Square Feet	5,740 Square Feet
Exam / Consult Rooms	13	13
Provider Offices	0	9
Pharmacy	1,457 Square Feet	2,735 Square Feet
Supportive Care Clinic:	0 Square Feet	5,710 Square Feet
Exam / Consult Rooms	0	4

Imaging	3,516 Square Feet	366 Square Feet
Plain Film- Xray	0	1
PET CT	1	0
Lab	675 Square Feet	3,251 Square Feet
Oncology Infusion	19,245 Square Feet	15,324 Square Feet
Semi-Private Treatment Bays	40	49
Private Treatment Bays	4	7
Rad Onc Clinic:	0 Square Feet	7,582 Square Feet
Exam / Consult Rooms		8
Provider Offices		6
Rad Onc Treatment	0 Square Feet	3,648 Square Feet
Linacs / Vaults	0	3
HDR	0	1
CT Simulator	0	1

As the above chart shows, hematology and surgical oncology visits have almost tripled since the Cancer Center Project's original projections. In response, Rex has proposed to increase the number of practitioners and associated clinic space. Also, as referenced above, the radiation oncology clinic and equipment will now be housed in the New Cancer Center Building, rather than being housed in existing space near new construction.

The New Cancer Center Building materially complies with the original CON because:

1. the Cancer Center Project will still be located on Rex's Main Campus;

2. Rex still envisions being able to develop the New Cancer Center Building within the capital cost limits of the Cancer Center Project CON; and

3. the Cancer Center Project will still be fundamentally the same project (a consolidation of Main Campus cancer services), with the Project's square footage increasing in some respects and decreasing in some respects, each in response to updated patient demands.

II. Replacement Equipment Exemption Notices.

Rex also seeks to acquire two Elekta linear accelerators ("Linacs") and one GE CT simulator ("CT Simulator") as Replacement Equipment for the Cancer Center. The Replacement Equipment will replace the following Rex Existing Equipment:

1. Varian Linac (Serial No. H293933);
2. Accuray Linac (Serial No. 379); and
3. GE CT Simulator (Model No. 237586-6).

A. Rex's Proposed Replacement Equipment Meets Either Exemption Test Under Section 184 of the CON Statute.

The Existing Equipment is currently housed in Rex's existing Cancer Center on the Rex Main Campus. The Replacement Equipment will be located in the New Cancer Center Building, also on the Main Campus, as described above. Rex is requesting a determination that its purchase of the Replacement Equipment is exempt from CON review under the replacement equipment exemption provisions contained in N.C. Gen. Stat. §131E-184(f)(1)-(3) or N.C. Gen. Stat. §131E-184(a)(7).

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 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.

The term "main campus" is defined at 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.

Although the Replacement Equipment Units satisfy the replacement equipment exemption test in N.C. Gen. Stat. §131E-184(f)(1)-(3) because they will reside on the Main Campus, all three Replacement Equipment Units also satisfy the replacement equipment exemption test in N.C. Gen. Stat. §131E-184(a)(7) since each of the Replacement Equipment Units costs under $2 Million to acquire and install.

B. <u>Cost of the Replacement Equipment</u>

The bundled purchase price of the two Linacs is $3,580,000.00 ($1,790,000 for each) as shown in the quote from Elekta provided in Exhibit 4 (Combined Linac Quote). The purchase price of the CT Simulator is $404,203.14 as shown in the quote from GE provided in Exhibit 5 (CT Simulator Quote). The cost to acquire the Replacement Equipment -- including Replacement Equipment installation and Existing Equipment removal -- represents a total capital cost of $3,984,203.14 and is included in the quotes.

There will be no other construction costs or other capital costs associated with these Replacement Equipment Units.

C. Equipment Being Replaced is Located on the Main Campus

The Existing Equipment is currently located in Rex's existing Cancer Center. The Replacement Equipment will be located in the New Cancer Center Building, still located on the Main Campus. As the Map of Rex's Main Campus in Exhibit 3 and the Radius Map in Exhibit 4 show, the proposed New Cancer Center Building will be part of the Main Campus, pursuant to N.C. Gen. Stat. §131E-176(14n)(a) because it is within 250 yards of Rex's Main Building where Rex exercises financial and administrative control over the entire licensed hospital. The Replacement Equipment will be located on the first floor of the New Cancer Center Building. See Exhibit 6 (Line Drawing of New Cancer Center Building).

D. Comparable Equipment

In addition to the foregoing, to qualify for replacement equipment exemption under either test, the Replacement Equipment must be "comparable" to the equipment it replaces and must be "sold or otherwise disposed of when replaced." Rex's proposal meets this test as well. 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.

10A N.C.A.C. 14C.0303(c).

Rex intends to use the Replacement Equipment for substantially the same radiation oncology services for which Rex currently uses the Existing Equipment. The Existing Equipment is comprised of:

1. a Varian linac that was installed new at Rex in 2009;
2. an Accuray linac that was installed new at Rex in 2011; and
3. a CT Simulator that was installed new at Rex in 2007.

These Existing Equipment Units have been used for linear accelerator scans and CT simulations since installation, and all such units are currently in use.

The Replacement Equipment Units will perform all procedures currently performed on each Existing Equipment Unit, respectively. Although they possess some expanded capabilities due to technological improvements, the Replacement Equipment Units will perform the same general range of procedures as the Existing Equipment Units. See Equipment Comparison Charts, attached as Exhibits 7, 8 and 9. The Replacement Equipment is therefore "comparable medical equipment" as defined in Subsection (c).

Furthermore, Rex does not intend to increase patient charges or per procedure operating expenses more than 10% within the first 12 months after acquiring the Replacement Equipment. For further equipment comparison, please refer to Exhibits 7 through 9, the Equipment Comparison Charts.

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% increase in patient charges or per procedure operating expenses within the first twelve months after the replacement equipment is acquired.

10A N.C.A.C. 14C.0303(d).

The Replacement Equipment will meet all three of the 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 Charts See Exhibits 7 through 9. Moreover, Rex represents that use of the Replacement Equipment will not result in the types of expense or charge increase described in Subsection (d)(3).

E. Disposition of Equipment

As part of the proposal to acquire the Replacement Equipment Linacs, Elekta will de-install and take possession of the Existing Equipment Linacs. In addition, GE will also de-install and take possession of the existing CT Simulator. None of the Replacement Equipment Units will be re-sold or re-installed in North Carolina without appropriate CON approval.

III. Conclusion

Rex will continue to deliver the highest quality care to its patients. Rex believes that the revisions to the Cancer Center Project do not constitute a material change to that project, and thus do not require a new CON. We therefore ask the Agency to verify that the proposed changes in the Cancer Center Project described above materially comply with the Cancer Center CON, and that Rex need not obtain an additional CON to make these foregoing changes.

In addition, Rex hereby requests that the Agency provide a written response confirming that the acquisition of the Replacement Equipment 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.

Sincerely,

Gary Qualls/SLP

Gary S. Qualls

Exhibits

1. CON issued for Project ID J-8470-10
2. Map of Rex Main Campus
3. Radius Map
4. Quote for Both Linacs (bundled price)
5. CT Simulator Quote
6. Line Drawing of New Cancer Center Building
7. Comparison Chart for Linac
8. Comparison Chart for Linac
9. Comparison Chart CT Simulator

STATE OF NORTH CAROLINA

Department of Health and Human Services
Division of Health Service Regulation

CERTIFICATE OF NEED

for
Project Identification Number #J-8470-10

FID #050627

ISSUED TO: Rex Hospital, Inc. d/b/a Rex Healthcare
4420 Lake Boone Trail
Raleigh, NC 27607

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: **Rex Hospital, Inc. d/b/a/ Rex Healthcare shall renovate and expand the cancer center at Rex Hospital/ Wake County**

CONDITIONS: **See Reverse Side**

PHYSICAL LOCATION: **Rex Healthcare**
4420 Lake Boone Trail
Raleigh, NC 27607

MAXIMUM CAPITAL EXPENDITURE: **$60,122,944**

TIMETABLE: **See Reverse Side**

FIRST PROGRESS REPORT DUE: **December 1, 2010**

This certificate is effective as of the 17th day of August, 2010.

Craig R. Smith by M. Trisone

Chief, Certificate of Need Section
Division of Health Service Regulation

CONDITIONS:

1. Rex Hospital, Inc. d/b/a Rex Healthcare shall materially comply with all representations made in its certificate of need application.

2. Rex Hospital, Inc. d/b/a Rex Healthcare 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 and which would otherwise require a certificate of need.

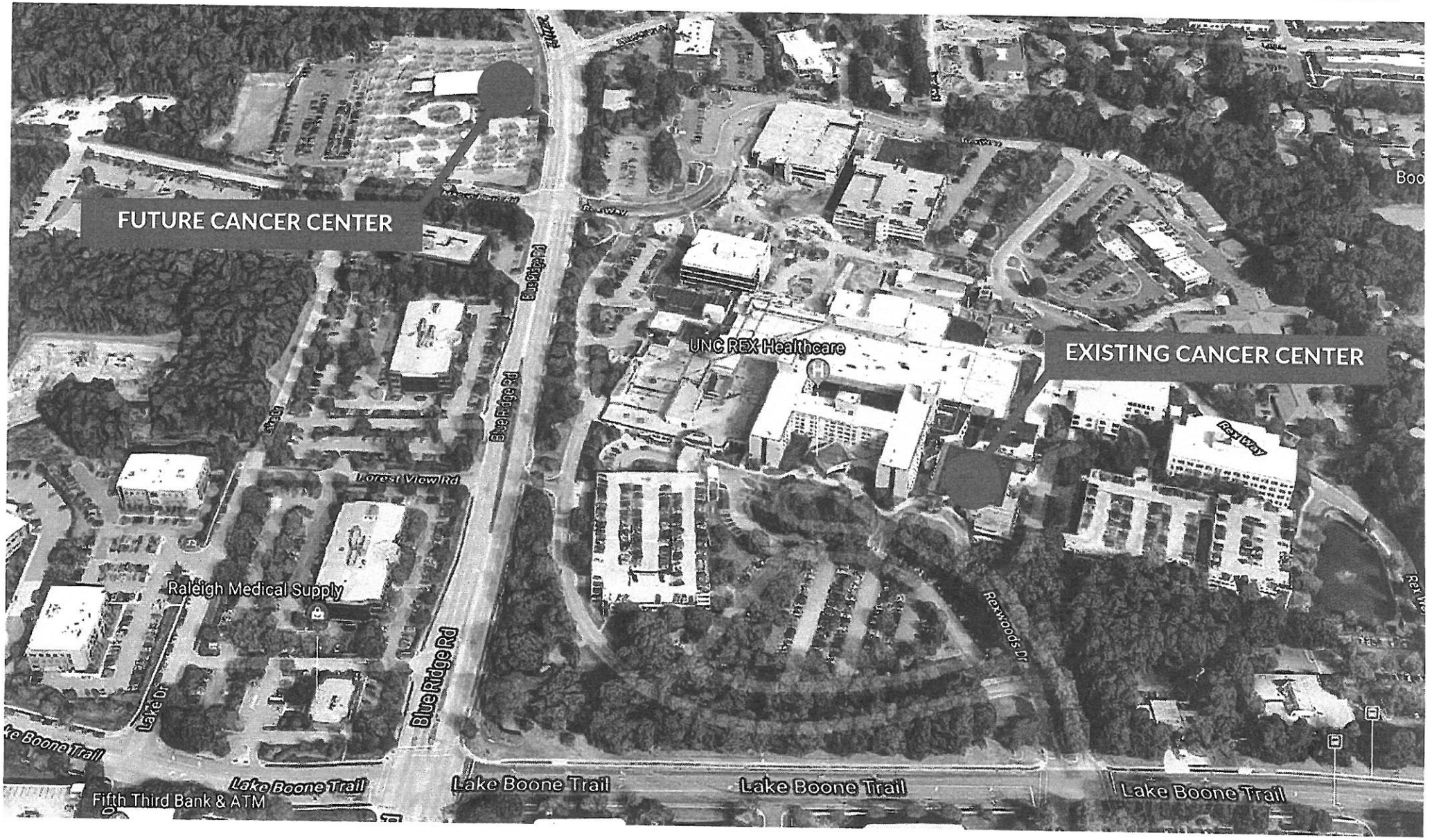
3. Prior to issuance of the certificate of need, Rex Hospital, Inc. d/b/a Rex Healthcare shall acknowledge acceptance of and agree to comply with all conditions stated herein in writing to the Certificate of Need Section.

A letter acknowledging acceptance of and agreeing to comply with all conditions stated in the conditional approval letter was received by the Certificate of Need Section on July 29, 2010.

TIMETABLE:

Completion of Final Drawings and Specifications	February 13, 2011
Contract Award	August 14, 2011
50% Completion of Construction	October 14, 2012
Completion of Construction	December 15, 2013

UNC REX HEALTHCARE



BSA

EXHIBIT

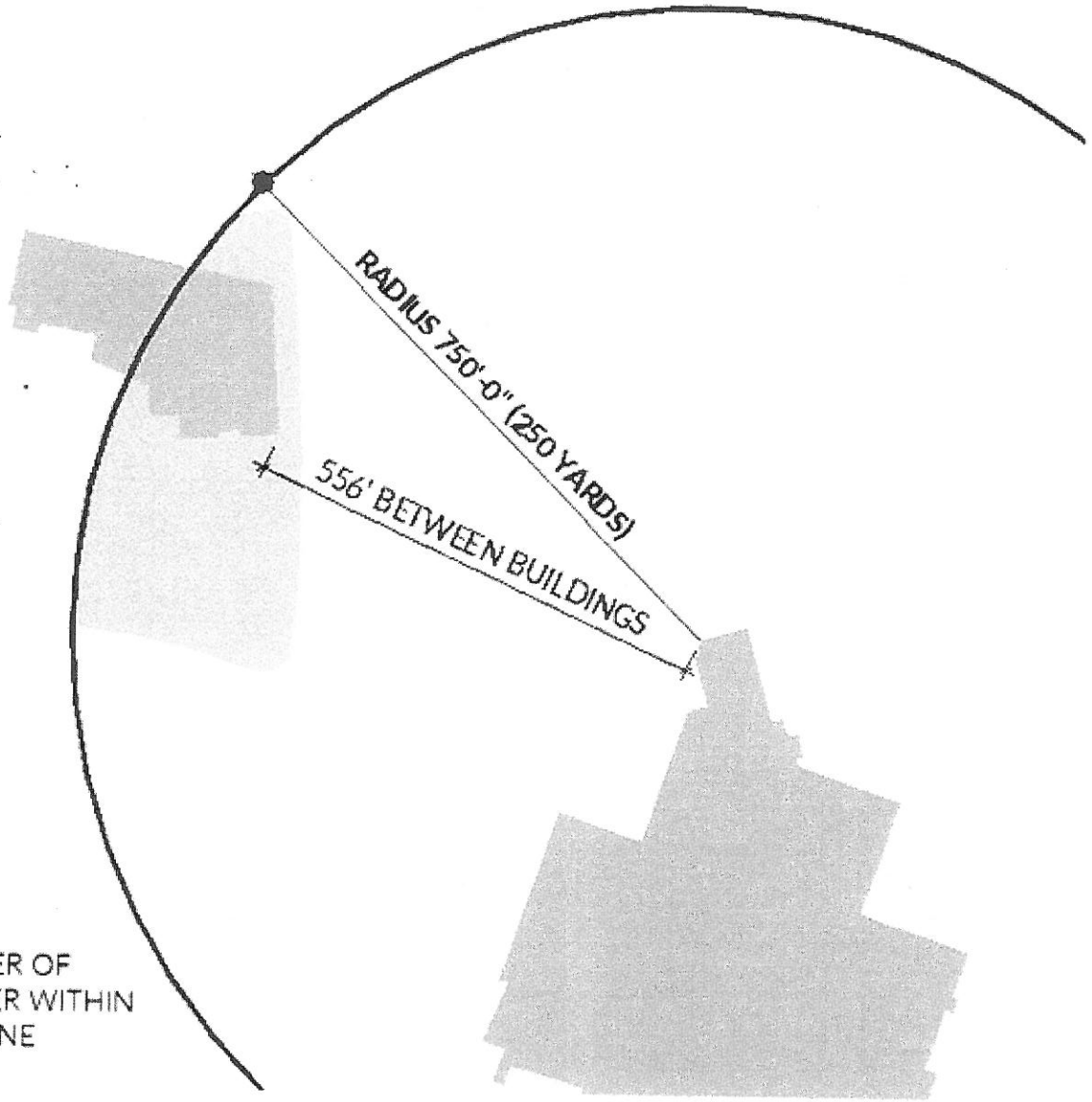
tabbies

2

UNC REX HEALTHCARE - CANCER CENTER

AERIAL VIEW

01.23.2018



LOCATE CORNER OF
CANCER CENTER WITHIN
LIGHT BLUE ZONE

01 DIAGRAM - DISTANCE FROM MAIN CAMPUS

1" = 200'-0"

EXHIBIT
3

Quotation:2018-238687-CB
December 17, 2018

Elekta

Oncology | Brachytherapy | Neuroscience | Software | Services

Elekta is pioneering significant innovations and clinical solutions for treating cancer and brain disorders.
We provide intelligent and resource-efficient technologies that improve, prolong and save patient lives.

Elekta

Quotation Number: 2018-238687-CB

Quotation Date: December 17, 2018

Valid Until: March 14, 2019

Prepared For:

University of North Carolina Health Care System / Rex Hospital
4420 Lake Boone Trail
Raleigh, North Carolina 27607
US
(t) +1 (919) 784-6842
(f) (919) 784-3004

Prepared By:

Elekta, Inc.
Chris Broyles
North Carolina Sales Client Manager
400 Perimeter Center Terrance, Suite 50
Atlanta, GA 30346
(t) 704.322.3493
(c) +1 7046998788
chris.broyles@elekta.com

Currency: USD

Elekta is pleased to submit the following Quotation for the products, software licenses, and/or services described herein at the prices and terms stated.

Rex Healthcare New Cancer Center 2 Linac Bundle + ElektaCare Gold Support through month 24 + Move/Upgrades to VersaHD#1	**Total Offer Price:**	**$3,580,000.00**

The price under this Quotation reflects a discount of $11,072,742.44 USD. For U.S. customers, this purchase is subject to the discount provisions of the federal anti-kickback statute, 42 U.S.C. § 1320a-7b(b), and the discount safe harbor regulations at 42 C.F.R. § 1001.952(h). In accordance with such provisions, Customer shall fully and accurately report all prices paid net of discounts where appropriate, and as appropriate, in the costs claimed or charges made under any Federal or State healthcare program, and provide information upon request to Medicare, Medicaid and other applicable federal and state health care programs on all discounts and price reductions received from Supplier.

Subject to Elekta, Inc. Terms and Conditions or those previously negotiated.

State, local, VAT and other taxes, and import/export licenses are not included in this Quotation

Elekta

Quotation Number: 2018-238687-CB Quotation Date: December 17, 2018 Valid Until: March 14, 2019

Scope of Supply

VersaHD (with Exactrac Requirements)

VersaHD (with Exactrac Requirements)

Qty	Description
1	**Elekta Versa HD™** Versa HD™ provides: • Digital accelerator with exclusive cover set design; • Agility™, Elekta's integrated multi-leaf collimator that provides full field high resolution beam shaping (5mm at isocentre), a 40 x 40cm treatment field and effective leaf tip speed of up to 6.5cm/sec, capable of covering multiple targets with interdigitation and island shapes; • 6MV and 10MV flattened energies delivered as standard; • A broad spectrum of delivery techniques from 3D Conformal Radiotherapy to IMRT, VMAT and SRT techniques; • XVI, offering 2D and 3D kV image guidance for advanced soft tissue visualization supporting image guided treatment workflows, XVI Software options VolumeView™, MotionView™ and PlanarView™ are included; • iViewGT™, offering 2D MV imaging capability supporting image guided treatment workflows. • IntelliMax™ Intelligent Agent license is included. Any provision of services relating to the use of data collected by the Agent (via the IntelliMax Enterprise) should be negotiated as part of the Service Contract between the Customer and the BU/distributor. IntelliMax Intelligent Agent requires a dedicated PC. Provision of this PC must be negotiated between the Customer and the Elekta BU/Distributor. A specification of the PC can be obtained from your Elekta representative. IntelliMax Intelligent Agent also requires a direct internet connection to the Agent PC opening secure port 443 (https).
1	**Stereotactic MV Isocenter Setup** Service to evaluate the MV (Gantry), and combined MV (Gantry) and table isocenter using software tool based on the Winston Lutz test. The following values will be achieved at 6 MV; • MV isocenter (Gantry): ≤ 0.7 mm radius • Combined MV isocenter (Gantry) and table isocenter: ≤ 1.mm radius.
1	**ExacTrac Goalpost Set** Precise, Synergy, Infinity, Axesse and Versa HD compatible Goalposts in combination with Brainlab ExacTrac System.
1	**MRT 20091, WIDE COVERS**
1	**Integrity™ R3.2 control system software** Integrity is the latest generation of Elekta's fully digital treatment control system software for systems with Agility™. Integrity is built on the latest LynX OS platform and is the monitoring and control foundation of Elekta treatment delivery systems. Integrity additionally supports Continuously Variable Dose Rate, dynamic and VMAT deliveries.
1	**High Dose Rate Mode Hardware Upgrade Kit**
1	**Integrity ™ 3.1 Software Upgrade Kit**
1	**MOSAIQ Sequencer PC** This option provides a MOSAIQ Sequencer PC that can be mounted in the rack based Treatment Control system cabinet.
1	**10 MV Mid Energy Photon**
1	**15 MV High Energy Photon**
1	**6MV High Dose Rate Software License** High Dose Rate Mode provides flattening filter free beam delivery of 6MV beams at dose rates up 1,400 MU/min, as well as reduction in scatter, lowering whole body radiation doses.

1 **9 MeV Electron Energy**

1 **12 MeV Electron Energy**

1 **15 MeV Electron Energy**

1 **18 MeV Electron Energy**

1 **U.S.A. Electron Flatness**
Electron flatness according to U.S.A. standards, optimized at 100 cm.

1 **Standard Set of Aperture Plate Electron Beam Applicators**
Field sizes:

- 6 x 6 cm, SSD 95 cm
- 10 x 10 cm, SSD 95 cm
- 14 x 14 cm, SSD 95 cm
- 20 x 20 cm, SSD 95 cm

Fitted with spring loaded touch guard, coded end frames and electrical connection to linear accelerator latch mounting system enables easy and rapid attachment.

1 **Factory Data Match**
The option of matching one or more new Elekta machines to each other and/or to an Elekta machine already installed on a customer site. The match is carried out during production of the new machines and the match is made to the factory data recorded in production for the existing Elekta machine.

1 **VMAT CAT (Volumetric Arc Therapy Customer Acceptance Test)**

1 **Response™ Gating Control System for Digital Accelerators**
Response provides a seamless interface that supports automated gated treatment delivery for a range of delivery techniques on the Elekta Digital Accelerator. The gating signal can be provided by a validated external motion management system, such as the Active Breathing Coordinator™.

1 **SYNERGISTIQ ™ Software License**
Enables the XVI functionality to support SYNERGISTIQ. SYNERGISTIQ integrates MOSAIQ® and XVI into a consolidated and synchronized user interface.

1 **Software Media Pack, SYNERGISTIQ™ Clients**

1 **SYNERGISTIQ ™ Monitor kit**
Specification for Extender/Receiver and cable for a remote monitor. Required for sites that use SYNERGISTIQ with a remote monitor in the treatment room.

1 **kiloVoltage Cone-beam CT Hardware for Versa HD™**

1 **40kW kV generator - 480V**
The integrated 40kW kV generator provides multiple settings control via the XVI software. Acquisition parameters are configured within the preset protocol function in the XVI software, and is user configurable. The generator and X-ray tube have been optimized for the 3D VolumeView™ imaging, as well as the 2D radiographic type exposures of PlanarView™ and MotionView™.

1 **Intrafraction Imaging License**
Provides the ability to acquire kV images during the delivery of an MV treatment field. Intra-fraction imaging allows you to:

- Acquire images (2D fluoro) for a specified time, and then move directly into a 3D volumetric acquisition.
- Acquire a 3D volumetric image during conformal, IMRT or VMAT MV deliveries to measure intrafraction movement.
- Perform Intra-fraction 3D or 4D volumetric imaging and registration per arc during dual (or multiple) arc procedures, allowing table corrections in between arcs.

1 **Symmetry™ License**
Symmetry is primarily indicated for respiratory motion management. It offers a unique 4D IGRT online solution that is correlated to internal organ movement. It facilitates for the planned dose to be delivered to the volume where the target spends most of its time in. This allows for margin reduction and baseline shift compensation, supporting treatment deliveries during free-breathing with no surrogates. The use of Symmetry does not require planning on a 4D reference CT.

1 **Critical Structure Avoidance**
Critical Structure Avoidance allows the registration of two separate areas of anatomy, utilizing both the clipbox and the Shaped Registration Region of Interest. XVI software will calculate the relationship of both areas of anatomy to the proposed correction vectors and alert the user if the target has moved closer to the critical structures due to anatomical changes. The user can then choose to select a compromise between the two areas, or send the patient for re-planning.

1 **3D Automated Seed Match License**
Offers an optimized 3D registration algorithm to register implanted markers, without compromising on 3D volumetric information.

1 **Distributed Review**
Distributed Review allows the sending of XVI CBCT data to MOSAIQ® for review at any MOSAIQ® workstation, as well as the primary XVI workstation.
Pre-requisites:

- Distributed Imaging/Treatment
- DICOM CT Export (+/- Auto DICOM CT Export).

1 **Distributed Imaging**
Distributed Imaging allows the transfer a patient between XVI systems without having to prepare the registration settings on the secondary XVI system, through MOSAIQ®.

1 **Elekta XVI Basic Calibration Kit - Bearing Phantom Assembly**
Specially designed geometric calibration phantom for kV to MV isocentre alignment. Suitable for the XVI system with the iBEAM® evo couch top.

1 **Couch top Adaptor kit for QA Phantom**
Single ball phantom table top adapter kit. This attachment supports the single ball bearing phantom which is used to calibrate the XVI imaging software to the mechanical isocenter. Fits the iBEAM®, iBEAM® evo, HexaPOD™ evo and Connexion™ couch tops.

1 **XVI Daily QA Phantom Kit**
Daily QA Phantom for kV and MV projection imaging and kV VolumeView™. Checks the laser and light field coincide and additionally provides a spreadsheet for recording and analyzing trend results.

1 **XVI Water Calibration Kit**
Water phantom calibration kit for XVI calibration. It provides a reduction in CBCT image ring artefacts in addition to image quality improvements.

1 **VolumeView™ Contrast phantom**
QA phantom to enable measurement of high resolution and contrast resolution and other image quality parameters of the VolumeView images acquired on the XVI workstation.

1 **2D Image Quality Phantom**
Image quality phantom use for 2D kV image quality to determine the low contrast and spatial resolution of XVI 2D images (PlanarView™ images). This test tool is used for the 2D image quality of the Customer Acceptance Test for XVI and can be used to monitor image quality over a period of time.

1 **Automated DICOM CT export license**
This tool uses DICOM Auto-Push for 3D images. DICOM Auto-Push automatically exports the CBCT image when you accept or save a 3D VolumeView reconstruction.

1 **Manual DICOM RT Image Export**
This tool uses DICOM to export 2D PlanarView images manually from XVI.

1 **Auto DICOM RT Image Export**
This tool uses DICOM Auto-Push for 2D images. DICOM Auto-Push automatically exports the image when you acquire a 2D PlanarView image.

1 **DICOM CT export license**
This tool uses DICOM to export the 3D images manually from XVI to MOSAIQ®, or any 3rd party DICOM-based tool.

1 **DICOM 4D export**
4D DICOM export allows the user to export to a third party system the CBCT data as generated by Symmetry™ of:

- Average phases
- All phases
- Single phase.

1 **Archive and retrieve to network**
Performs automatic archiving of patient images to a pre-defined network location, outside of MOSAIQ®. Archiving can be scheduled, and the network location can be specified at will. The same tool performs retrieval of files from the same location.

1 **Versa HD™ iViewGT™**
This kit contains all of the components for iViewGT including;

- A MK 6 imaging control system cabinet with the iViewGT software R3.4.1. pre-installed.
- A rigid and fully retractable slim line MV imaging detector arm with a large, square active detector area and wide lateral and longitudinal movement adjustments. The arm has automatic and manual arm movements and is fully interlocked.

1 **iViewGT™ R3.4.1 Installation Kit**

1 **iViewGT™ R3.4.1 Software License**

1 **iViewGT ™ R3.4.1 Software License Collation**
Third Party License toolkit necessary for supporting iViewGT.

1 **Remote Retraction of the iViewGT™ detector - 30M**
This kit allows Remote Retraction of the iViewGT detector from the Function Key Pad.

1 **DICOM 3.0 software interface for image transfer**
The international standard interface protocol for network transfer of medical images.

1 **iViewGT™ IMRT Verification Software License**
This software expands existing iViewGT functions to verify multiple segment beams for IMRT. The iViewGT image acquisition is triggered automatically and the image taken depends on whether the user selects single, multiple or movie image.

1 **Template Matching Software License**
The template matching option enables the user to compare the portal image with a nominated reference image for any set-up error. The set-up error is measured by matching visible anatomy and the field edge on the referenced image with the portal image. The user can move the templates to provide an image displacement.

1 **Patient Auto Select Software License**
This enables the prescription selected on the Linac to automatically select or create that patient record on iViewGT™ or iViewC™ using the iCom-Vx protocol. In addition, images will automatically be acquired and stored in the iViewGT / iViewC database without further operator intervention.

1 **Software License Image Approval**
This allows the user, assigned with the 'review' permission, to approve or disapprove any image within iViewGT™ or iViewC™.

1 **Las Vegas Calibration Phantom**
The Las Vegas phantom is a device that is used to check image quality of a portal imaging device at different megavoltage energies both at acceptance and as part of the corrective maintenance procedure.

1 **HexaPOD™ evo RT System with iGUIDE® 2.2.2**
The system consists of:

- HexaPOD evo RT Couchtop with homogeneous carbon fiber couchtop
- Handheld controller
- iBEAM evo Extension 750 long
- iBEAM evo Extension 415
- iBEAM Indexing bars
- iGUIDE Reference Frame
- EnableSwitch board
- iGUIDE workstation
- iGUIDE 2.2.2 software
- iGUIDE tracking system
- iGUIDE terminal.

1 **ExacTrac Integration License**
Interface to Brainlab ExacTrac for automated Positional Error Correction (PEC) data transfer for Systems with ExacTrac.

1 **HexaPOD™ evo RT System Integration License**
This license package will provide the following integration features:

- Interface to MOSAIQ for automated patient ID and treatment site loading for departments using MOSAIQ 2.5 or higher.
- Control of Precise Table with iGUIDE for Systems with Integrity 3.2.

1 **iBEAM® evo Extension 650**
The iBEAM evo Extension 650 is designed to support the patients upper body and extends off the end of the iBEAM evo Couchtop by 650 mm, thus allowing for treatment of the prostate of very tall patient's.

1 **iBEAM® evo Frameless Extension**
The iBEAM evo Frameless Extension is designed for the usage of the Brainlab Frameless Array.

1 **Beam Block Tray - Star Pattern**
Lexan beam block tray with holes in a star pattern. Trays are designed with threaded, removable plugs for the coding of each block. Specially designed for use with the Elekta shadow tray assembly.

1 **Hook and Latch Magnification Graticule**
Solid Frame Port Film magnification graticule that attaches directly to the linac, taking the place of the coded shadow tray, thus providing more clearance between the patient and the accessory.Used in treatment verification for situations where simultaneous fitment of blocking tray is not required.

1 **Electron Beam Field Shaping System**
For use with Electron applicators from Elekta and allows the user to easily provide Electron Beam field shaping. The system comprises:

- A Universal leveling template with an adjustable arm for securing styro-foam inserts- Set of five (5) rubber molds compatible with Elekta Electron applicators
  - 6cm x 6cm
  - 10cm x 10cm
  - 14cm x 14cm
  - 20cm x 20cm
  - 25cm x 25cm

Provided as part of the system is one (1) Hot Wire Cutter.

1 **19-inch Control Room LCD Monitor**

4 **19-inch Control Room LCD Monitor**

1 **19-inch Control Room LCD Monitor**

1 **19-inch Control Room LCD Monitor**

1 **CONTROL ROOM MONITOR CABLE KIT, MRT 7841**

1 **TREATMENT ROOM CAT5 MONITOR CABLE KIT (MRT 7831)**

1 **AQUA Version 1.0 Base License**
AQUA is a QA management system designed to integrate devices such as treatment delivery, imaging and quality assurance equipment in routine use within today's radiation therapy departments, irrespective of vendor, including:

- Linear accelerators
- Quality assurance equipment
- CT simulators and other imaging systems
- Brachytherapy equipment
- Gamma® and other radiosurgery machines

AQUA provides a web-based database for easy monitoring and maintenance of all machine QA processes across the clinic, or multiple sites, allowing centralized data management and remote access. Providing a full suite of workflow-orientated machine QA tasks, AQUA monitors regular scheduled tests to confirm that machines are operating within specifications and are fit for patient therapy. With real-time alerts to areas that require immediate attention, AQUA detects machine compliance and performance issues before they affect clinical service, increasing confidence in machine quality and safety.
The base license includes integration of up to two treatment devices.

3 **AQUA additional device license** .
This license requires the customer to have AQUA site license (TRT 7401) and can only be ordered in addition to a new or existing site license. Order one license per additional treatment device.

1 **AQUA Server Hardware**

1 **Software License Linac Record**
The Daily Record Function allows the Treatment System radiation beam information to be recorded on a continuous basis. Every time the beam is turned on it records the incidence: patient treatments or port films. This can be used as a back up for record and verify systems or for billing purposes.

1 **Software license Linac Record to file**
The Software license Linac record to file offers the user the option to configure the Linac (in Service Mode) to send the data to network file rather than to a printer.

1 **Extended Service License**
This license allows the user extra service tools/functionality.

1 **Extender Cards**
Extender cards for fault diagnosis on the Electrical Interface Module (EIM).

1 **ExacTrac Hardware CITB Kit - 10m**
The CITB-ET enables communication between ElektaLinac and Brainlab ExacTrac System. The provided cable length is 10m.

1 **Turbo Starter Kit for Linear Accelerators**
Ancillary equipment required for the installation and maintenance of any Precise Digital Accelerator. Comprising:

- Rotary vacuum pump
- Turbo molecular pump attachment for rapid pump down times and higher roughing vacuum.

1 **Room Lasers, Green, Remote**
Set of 4 green room lasers with remote control adjustment. Comprising 3 crosshair and 1 line sagittal laser. Featuring fine lines (< 1mm), high precision adjustment at the isocenter and stable mounting bracket. Inclusive of switchable (110v to 240v) power supply and universal main adaptor.

1 **Applications Training for Standard Therapy on the Desktop**
The 2-day Standard Precise Desktop Course (travel time inclusive) provides training for 4 Radiation Therapists in the clinical use of the Precise Desktop Digital Linear Accelerator. Successful participants will be equipped with the knowledge and skills to operate the system effectively. The course does not provide training in the principles or techniques used in Radiation Therapy.

1 **Applications training for iViewGT™**
The 3-day iViewGT training course (travel time inclusive), provides training for 4 radiation therapists in the clinical use of the iViewGT imaging system. Successful participants will be equipped with the knowledge and skills to operate the system effectively. The course does not provide training in the principles or techniques used in radiation therapy.

1 **XVI Applications Training**
The 4-day XVI training course (travel time inclusive) provides training for Radiation Therapists in the clinical use of the X-ray Volume Imaging portion of the Elekta Digital Accelerators. Successful participants will be equipped with the knowledge and skills to operate the system effectively. The course does not provide training in the principles or techniques used in Radiation Therapy, CT, or Diagnostic Imaging. This course is given at the customer site for a maximum of 4 users.

1 **HexaPOD™ evo RT System Training**
The 2-day HexaPOD evo RT CouchTop and iGUIDE® course (travel inclusive) provides training for 4 radiation therapists in the clinical use of the HexaPOD evo RT CouchTop and iGUIDE software. Successful participants will be equipped with the knowledge and skills to operate the system effectively. The course does not provide training in the principles or techniques used in radiation therapy.

1 **Linac Labor Warranty**

2 **Accelerated Installation**
Additional resources and hours needed to accelerate the completion of the linear accelerator installation.

1 **Weekend Rigging & Handling**
Basic rigging of Linac to first floor or ground floor location outside of Elekta's normal working hours. Elekta will provide the necessary crew to offload, uncrate, rigging and machinery moving required to set system as per plan, and remove debris. Basic rigging excludes use of a crane or rigging down an elevator shaft.
Standard Rigging includes:

- Make one pre-installation site visit and delivery project management.
- Drill holes for equipment fasteners
- Supply a 12,000 lb capacity forklift during the off loading procedure.
- Stage and uncrate the linac machine, move all components into the facility, and set as directed.
- Remove and dispose of all packaging that will not be reused.
- Transport the base, gantry and beam arm into the facility/bunker on transport trolleys supplied by Elekta.

- Set the base frame in place (Elekta will level).
- Set the gantry drum onto the base frame.
- Set beam arm into the gantry.
- Install counterweight holder and stack the counterweights.
- Supply a manual gantry lifting system to perform aforementioned setting activities and all necessary tools.
- Supply a crew, including a rigging supervisor.
- Include the cost of all associated resource and expenses, including related travel time.
- Complete all rigging activities in a single day.

Standard Rigging excludes:

- Crane service.
- Elevator, or shaft deliveries.
- No clear access to the building (exterior).
- Interior obstruction en route to treatment room.
- Any shoring needed to protect the structure from the weight of the system.
- Any shoring and/or plating needed to build temporary dock or landing area for the unit.
- Extra long delivery routes, distances in excess of 150' from offload site to the treatment room.
- Overtime, weekend, premium time, unless Weekend Rigging selected.
- Additional travel expenses should the project exceed the time allotted in this scope for reasons beyond Elekta or our contractor's control.
- Additional man-hours, manpower, travel expenses, or equipment required due to delays caused by incorrect site preparation, waiting time, or delays not caused by Elekta or our contractor will be itemized and billed to the customer at then current rates.

1 **Open Air Graticule**
The Open Air Graticule is intended to be used for Radiation Therapy to project a scale of defined increments on port film images which can aid in treatment setup and verification. The Open Air Graticule does not require the use of a shadow tray holder and can be attached directly to the head of the Precise Treatment System or SL Linac. It consists of two wires delineating the X & Y axis of the treatment field. This model of graticule is ideal for MLC customers and especially those using Elekta's iView & iViewGTTM. Because the open air graticule has a minimal transmission factor, with Physic's approval, the customer does not have to re-enter the treatment room after the port film to deliver the treatment. Please see product User manual for specific treatment information.

1 **Aperture Plate Electron Beam Applicator 25 x 25 cm**
Fitted with spring loaded touch guard, coded end frames and electrical connection to linear accelerator.
The X-ray diaphragms are then set automatically to the optimum position.
A unique hook and latch mounting system enables easy and rapid attachment.

1 **Closed Circuit TV System - Color**
The standard CCTV system consists of two Samsung SNP-5321 (1.3 Megapixel HD) dome-shaped color cameras and two pan/tilt/zoom control mounts allowing the operator full control of both cameras.

1 **Intercom system for patient and radiographer communication**
The ASK-4® 501-TLI-CF is a single zone audio monitoring system with 2-way talk/listen capabilities. It consists of a remote speaker/microphone and audio base station with built-in microphone and speaker.

1 **iBEAM Indexing Bar (set of 3)**
The iBEAM Indexing Bar is designed for the BodyFIX® 14 Indexing system and allows indexing and positioning of compatible surface mounted accessories.

1 **Control System hardware for XVI R5.0.4**
The XVI control system is a high specification PC which supports all aspects of the IGRT process including 2D, 3D and 4D kV image acquisition, reconstruction, and analysis using a suite of registration functionality.

1 **XVI 5.0.4 Software Licenses**

1 **Elekta Versa HD™ - Optional XVI Cassettes**
Provision of additional XVI collimators, in Elekta Versa HD colours, for Imaging. Includes:

- VolumeView cassettes: L10, M2, L2
- XVI Cassette holder.

1 **Linac Installation**

1 **Drayage**

1 **iViewGT™ Amorphous Silicon detector panel for production systems.**

1 **iViewGT Linac Specific Activation License – Sun Nuclear**
Allows for connectivity between the iViewGT database and the specified 3rd party dosimetry system. One license per linac.

1 **Treatment Control System Rack Cabinet**
Rack based control system cabinet for the linear accelerator and Agility MLC. The cabinet also hosts the NSS computer and is capable of hosting the MOSAIQ Sequencer PC.

1 **Licenses and Manuals Integrity 3.x**
Licenses and Manuals for Linac and Control System Integrity 3.x

1 **HexaPOD evo - Universal Camera Mount - Kit**
The Universal Camera Mount is part of the HexaPOD evo RT System and will be shipped form the service warehouses. The independent shipment from the warehouses enables a pre-installation of the UCM if required.

1 **Medical Gases SF6 for Installation and Service**
Includes:

- 44-liter cylinder for SF6 gas
- 115 lbs of SF6 gas
- Regulator
- Delivery.

1 **Medical Gases Nitrogen for Installation and Service**
Includes:

- 16-liter cylinder for Nitrogen (N2) gas
- Nitrogen (N2) gas
- Regulator
- Delivery.

1 **Medical Accelerator Quality Assurance**
After completing this course, attendees will:

- List all AAPM TASK GROUP 142 REPORT report tests and their recommended frequency.
- Perform Dosimetry, mechanical, safety, respiratory gating, universal wedge, MLC, and imaging tests and evaluate results of these tests.
- Evaluate all AAPM TG 142 report tests and determine applicability of each test to their clinical setting.
- Analyze potential causes of test failures in order to assist in determining necessary corrective actions in conjunction with Elekta and/or Field System Engineer.
- List Elekta linear accelerator characteristics and how they apply to TASK GROUP 142 REPORT accelerator QA.

Course Content

- During this course, participants will learn about the philosophy and purpose of the recommendations given in the AAPM TASK GROUP 142 REPORT report: Quality assurance of medical accelerators.
- The recommended tests listed in the AAPM TASK GROUP 142 REPORT report will be presented and evaluated during this course in order for medical physicist to understand the clinical rational of each test, evaluate the necessity of each test for their specific clinical setting, and how to execute the tests in their clinical setting.
- The application has been made to CAMPEP for Medical Physics Continuing Education Credits (MPCEC).

Duration
3-day training at Elekta's Region North America LINC

Target Group
Certified Medical Physicists
Medical Physics Students

Pre-requisites
Physics 1 : Medical Accelerator Introduction

2 **Education & Training Travel Support (4-6 day course)**
Elekta will provide reasonable and necessary travel to support completion of the Off-Site Education & Training course(s) purchased under this Agreement. This Travel Support includes reasonable and necessary airfare and accommodations booked at least three (3) weeks in advance through Elekta's approved travel agent, proof of course registration at the time of booking is required. Extended airfare and accommodations beyond the duration required to travel and attend the course(s) is not permitted. This Travel Support also includes reasonable and necessary local transportation costs and up to $100 (USD) per person per day to cover reasonable and necessary meals, which will be paid by Elekta directly to Customer (not to Customer employees) upon receipt of invoice, proof of course completion and supporting receipts. This Travel Support is available for up to two (2) years after date of Acceptance, no exceptions permitted. Price - $2,000.00 USD (ea)

1 **A Frame for Installation/Service**
Includes:

- A Frame
- Trolley
- Hoist (pulley)

Delivery Note: Not required if iBeam is in place.

1 **Volumetric Modulated Arc Therapy (VMAT) QA**
Objectives
After completing this course, attendees will:

- Explain the clinical rational for the VMAT treatment technique.
- Evaluate the key factors influencing the quality of VMAT plans.
- List advantages and limitations of VMAT treatment technique.
- Explain the method by which VMAT is delivered by an Elekta linear accelerator.
- List the constraints required by the delivery system to ensure optimal treatment planning.
- Evaluate which aspects of VMAT must be tested prior to clinical use.
- Perform Picket Fence with Gantry Rotation, synchronization of dose rate and gantry speed, and synchronization of dose rate and MLC speed tests to evaluate proper performance of the Elekta medical accelerator.
- Develop and execute commissioning benchmark tests to determine baseline system performance for routine quality control testing post future repairs, upgrades, or cal checks.
- Discuss implementation strategies for patient specific measurement to determine gamma pass rate of the delivered plan.

Content
During this one-day course, attendees will learn the rationale for VMAT as a treatment technique and the different methods for creating VMAT treatment plans. The course will also cover VMAT delivery, commissioning, and quality assurance for the Elekta medical accelerator as well as advantages and limitations for VMAT as a treatment technique. The application has been made to CAMPEP for 7.75 Medical Physics Continuing Education Credits (MPCEC).
Duration
1 day
Target Audience

- Certified Medical Physicists
- Medical physics students

Prerequisites

- Physics 1: Medical Accelerator Introduction
- Quality Assurance of Elekta Medical Accelerators.

1 **Elekta Stereotactic Radiosurgery and Stereotactic Body Radiotherapy Physics Course**
During this 4-day course, participants will learn the physics behind the operation of an Elekta Medical Accelerator with Agility MLC, APEX MLC, and Stereotactic Cones.
Students will build on the principles of operation of the accelerator as addressed in Elekta Medical Accelerator Physics 1 and the quality assurance aspects taught in Elekta Machine QA. Students will learn about the principles of each of the systems in regards to their Commissioning, Quality Assurance and Application for SRS and SBRT.
Objectives
After completing this course, attendees will:

- Be able to accept, commission and QA the SRS/SBRT solution
- Perform small field dosimetry
- Perform commissioning measurements
- Describe the relationship of various isocenters in the accelerator
- Perform Winston Lutz tests
- Explain patient immobilization options
- Describe IGRT options for patient positioning verification
- Explain appropriate routine QA tests
- Perform End to End testing
- Understand requirements of AAPM TG54, TG 101 and ASTRO Target Safety reports

Target Audience

- Certified Medical Physicists
- Medical Physics students

Prerequisites

- Physics 1: Medical Accelerator Introduction

Pricing Includes

- Tuition for one student

Pricing Does Not Include

- Airfare
- Hotel
- Travel-related expenses

Your eligibility for this course expires:

- Purchased with new equipment - twenty-four (24) months after Acceptance or first clinical use, whichever occurs first.
- Purchased directly - 24 months after Purchase Order is accepted.

Rex Infinity #1 (New Cancer Center)

Rex Infinity #1 (New Cancer Center)

Qty	Description
1	**Elekta Infinity™** Dual modality digital accelerator provides: • a choice of up to three different x-ray energies and up to 9 electron energies • Agility™, Elekta's integrated multi-leaf collimator, that provides full field high resolution beam shaping (5mm at isocentre), a 40 x 40cm treatment field and effective leaf tip speed of up to 6.5cm/sec, capable of covering multiple targets with interdigitation and island shapes • A broad spectrum of delivery techniques from 3D Conformal Radiotherapy to IMRT, VMAT- VMAT enables simultaneous and dynamic movement of the MLC while rotating the gantry in combination with varying the dose rate, gantry speed and or collimator angle to deliver a highly conformal dose. • XVI, offering 2D and 3D kV image guidance for advanced soft tissue visualization supporting image guided treatment workflows . XVI Software options VolumeView™, MotionView™ and PlanarView™ are included. • iViewGT™, offering 2D MV imaging capability supporting image guided treatment workflows • remote system diagnostic ready and will function with the optional Elekta IntelliMax™ service monitoring and support system. IntelliMax is enabled through software and is available during the original system warranty period or through purchase of an Elekta Advanced Service Agreement • Precise Treatment Table™ which comprises a vertical lift mechanism, couch base and the control system • low isocentric height of 124cm. • IntelliMax™ Intelligent Agent license is included. Any provision of services relating to the use of data collected by the Agent (via the IntelliMax Enterprise) should be negotiated as part of the Service Contract between the Customer and the BU/distributor. IntelliMax Intelligent Agent requires a dedicated PC. Provision of this PC must be negotiated between the Customer and the Elekta BU/Distributor. A specification of the PC can be obtained from your Elekta representative. IntelliMax Intelligent Agent also requires a direct internet connection to the Agent PC opening secure port 443 (https).
1	**Stereotactic MV Isocenter Setup** Service to evaluate the MV (Gantry), and combined MV (Gantry) and table isocenter using software tool based on the Winston Lutz test. The following values will be achieved at 6 MV; • MV isocenter (Gantry): ≤ 0.7 mm radius • Combined MV isocenter (Gantry) and table isocenter: ≤ 1.mm radius.
1	**ExacTrac Goalpost Set** Precise, Synergy, Infinity, Axesse and Versa HD compatible Goalposts in combination with Brainlab ExacTrac System.
1	**Agility ™ Kit** Agility - fully integrated 160 leaf Beam Shaping Device with fine resolution leaves (0.5 cm wide) across the full 40x40 cm field size. The MLC comes with a Treatment Control System Rack Cabinet and Integrity R3.X software which includes integral leaf calibration workflows. Agility is designed to support high resolution stereotactic radiation therapy and volumetric arc therapy (VMAT), providing high conformance beam shaping for these advanced delivery techniques. It also supports conventional and electron based radiation techniques.
1	**Agility head covers and touchguard** Required for all Elekta delivery systems with the Agility beam shaping device.
1	**Integrity™ R3.2 control system software** Integrity is the latest generation of Elekta's fully digital treatment control system software for systems with Agility™. Integrity is built on the latest LynX OS platform and is the monitoring and control foundation of Elekta treatment delivery systems. Integrity additionally supports Continuously Variable Dose Rate, dynamic and VMAT deliveries.
1	**Integrity ™ 3.1 Software Upgrade Kit**

1 **MOSAIQ Sequencer PC**
This option provides a MOSAIQ Sequencer PC that can be mounted in the rack based Treatment Control system cabinet.

1 **6 MV Low Energy Photon**

1 **10 MV Mid Energy Photon**

1 **15 MV High Energy Photon**

1 **6 MeV Electron Energy**

1 **9 MeV Electron Energy**

1 **12 MeV Electron Energy**

1 **15 MeV Electron Energy**

1 **18 MeV Electron Energy**

1 **U.S.A. Electron Flatness**
Electron flatness according to U.S.A. standards, optimized at 100 cm.

1 **Standard Set of Aperture Plate Electron Beam Applicators**
Field sizes:

- 6 x 6 cm, SSD 95 cm
- 10 x 10 cm, SSD 95 cm
- 14 x 14 cm, SSD 95 cm
- 20 x 20 cm, SSD 95 cm

Fitted with spring loaded touch guard, coded end frames and electrical connection to linear accelerator latch mounting system enables easy and rapid attachment.

1 **Factory Data Match**
The option of matching one or more new Elekta machines to each other and/or to an Elekta machine already installed on a customer site. The match is carried out during production of the new machines and the match is made to the factory data recorded in production for the existing Elekta machine.

1 **PreciseBEAM™ VMAT**
Provides Volumetric Intensity Modulated Arc Therapy which offers simultaneous dynamic control of the MLC, diaphragms, gantry and collimator. It allows continuous variable MU/degree along the arc.

1 **Combined Interdigitation & CVDR license**
License providing interdigitation and Continuously Variable Dose Rate (CVDR) functionality.

1 **VMAT Treatment Planning System Manual**

1 **VMAT CAT (Volumetric Arc Therapy Customer Acceptance Test)**

1 **Response™ Gating Control System for Digital Accelerators**
Response provides a seamless interface that supports automated gated treatment delivery for a range of delivery techniques on the Elekta Digital Accelerator. The gating signal can be provided by a validated external motion management system, such as the Active Breathing Coordinator™.

1 **SYNERGISTIQ ™ Software License**
Enables the XVI functionality to support SYNERGISTIQ. SYNERGISTIQ integrates MOSAIQ® and XVI into a consolidated and synchronized user interface.

1 **Software Media Pack, SYNERGISTIQ™ Clients**

1 **SYNERGISTIQ ™ Monitor kit**
Specification for Extender/Receiver and cable for a remote monitor. Required for sites that use SYNERGISTIQ with a remote monitor in the treatment room.

1 **kiloVoltage Cone-beam CT Hardware for Elekta Infinity™**

1 **40kW kV generator - 480V**
The integrated 40kW kV generator provides multiple settings control via the XVI software. Acquisition parameters are configured within the preset protocol function in the XVI software, and is user configurable. The generator and X-ray tube have been optimized for the 3D VolumeView™ imaging, as well as the 2D radiographic type exposures of PlanarView™ and MotionView™.

1 **Intrafraction Imaging License**
Provides the ability to acquire kV images during the delivery of an MV treatment field. Intra-fraction imaging allows you to:

- Acquire images (2D fluoro) for a specified time, and then move directly into a 3D volumetric acquisition.
- Acquire a 3D volumetric image during conformal, IMRT or VMAT MV deliveries to measure intrafraction movement.
- Perform Intra-fraction 3D or 4D volumetric imaging and registration per arc during dual (or multiple) arc procedures, allowing table corrections in between arcs.

1 **Symmetry™ License**
Symmetry is primarily indicated for respiratory motion management. It offers a unique 4D IGRT online solution that is correlated to internal organ movement. It facilitates for the planned dose to be delivered to the volume where the target spends most of its time in. This allows for margin reduction and baseline shift compensation, supporting treatment deliveries during free-breathing with no surrogates. The use of Symmetry does not require planning on a 4D reference CT.

1 **Critical Structure Avoidance**
Critical Structure Avoidance allows the registration of two separate areas of anatomy, utilizing both the clipbox and the Shaped Registration Region of Interest. XVI software will calculate the relationship of both areas of anatomy to the proposed correction vectors and alert the user if the target has moved closer to the critical structures due to anatomical changes. The user can then choose to select a compromise between the two areas, or send the patient for re-planning.

1 **3D Shaped Registration Region of Interest**
The 3D Shaped Registration Region of Interest can be generated from any structure imported from the treatment planning system, or created manually using tools in the software. This allows generation of a 3D registration volume that conforms to anatomical structures.

1 **3D Automated Seed Match License**
Offers an optimized 3D registration algorithm to register implanted markers, without compromising on 3D volumetric information.

1 **Distributed Review**
Distributed Review allows the sending of XVI CBCT data to MOSAIQ® for review at any MOSAIQ® workstation, as well as the primary XVI workstation.
Pre-requisites:

- Distributed Imaging/Treatment
- DICOM CT Export (+/- Auto DICOM CT Export).

1 **Distributed Imaging**
Distributed Imaging allows the transfer a patient between XVI systems without having to prepare the registration settings on the secondary XVI system, through MOSAIQ®.

1 **Elekta XVI Basic Calibration Kit - Bearing Phantom Assembly**
Specially designed geometric calibration phantom for kV to MV isocentre alignment. Suitable for the XVI system with the iBEAM® evo couch top.

1 **Couch top Adaptor kit for QA Phantom**
Single ball phantom table top adapter kit. This attachment supports the single ball bearing phantom which is used to calibrate the XVI imaging software to the mechanical isocenter. Fits the iBEAM®, iBEAM® evo, HexaPOD™ evo and Connexion™ couch tops.

1 **XVI Daily QA Phantom Kit**
Daily QA Phantom for kV and MV projection imaging and kV VolumeView™. Checks the laser and light field coincide and additionally provides a spreadsheet for recording and analyzing trend results.

1 **XVI Water Calibration Kit**
Water phantom calibration kit for XVI calibration. It provides a reduction in CBCT image ring artefacts in addition to image quality improvements.

1 **VolumeView™ Contrast phantom**
QA phantom to enable measurement of high resolution and contrast resolution and other image quality parameters of the VolumeView images acquired on the XVI workstation.

1 **2D Image Quality Phantom**
Image quality phantom use for 2D kV image quality to determine the low contrast and spatial resolution of XVI 2D images (PlanarView™ images). This test tool is used for the 2D image quality of the Customer Acceptance Test for XVI and can be used to monitor image quality over a period of time.

1 **Automated DICOM CT export license**
This tool uses DICOM Auto-Push for 3D images. DICOM Auto-Push automatically exports the CBCT image when you accept or save a 3D VolumeView reconstruction.

1 **Manual DICOM RT Image Export**
This tool uses DICOM to export 2D PlanarView images manually from XVI.

1 **Auto DICOM RT Image Export**
This tool uses DICOM Auto-Push for 2D images. DICOM Auto-Push automatically exports the image when you acquire a 2D PlanarView image.

1 **DICOM CT export license**
This tool uses DICOM to export the 3D images manually from XVI to MOSAIQ®, or any 3rd party DICOM-based tool.

1 **DICOM 4D export**
4D DICOM export allows the user to export to a third party system the CBCT data as generated by Symmetry™ of:

- Average phases
- All phases
- Single phase.

1 **Archive and retrieve to network**
Performs automatic archiving of patient images to a pre-defined network location, outside of MOSAIQ®. Archiving can be scheduled, and the network location can be specified at will. The same tool performs retrieval of files from the same location.

1 **Extra Collimators**
Provision of additional XVI collimators for imaging. Includes:

- VolumeView cassettes: L10, M2, L2.

1 **Elekta Infinity™ iViewGT™**
This kit contains all of the components for iViewGT including;

- A MK 6 imaging control system cabinet with the iViewGT software R3.4.1. pre-installed.
- A rigid and fully retractable slim line MV imaging detector arm with a large, square active detector area and wide lateral and longitudinal movement adjustments. The arm has automatic and manual arm movements and is fully interlocked.

1 **iViewGT™ R3.4.1 Installation Kit**

1 **iViewGT™ R3.4.1 Software License**

1 **iViewGT ™ R3.4.1 Software License Collation**
Third Party License toolkit necessary for supporting iViewGT.

1 **Remote Retraction of the iViewGT™ detector - 30M**
This kit allows Remote Retraction of the iViewGT detector from the Function Key Pad.

1 **DICOM 3.0 software interface for image transfer**
The international standard interface protocol for network transfer of medical images.

1 **iViewGT™ IMRT Verification Software License**
This software expands existing iViewGT functions to verify multiple segment beams for IMRT. The iViewGT image acquisition is triggered automatically and the image taken depends on whether the user selects single, multiple or movie image.

1 **Template Matching Software License**
The template matching option enables the user to compare the portal image with a nominated reference image for any set-up error. The set-up error is measured by matching visible anatomy and the field edge on the referenced image with the portal image. The user can move the templates to provide an image displacement.

1 **Patient Auto Select Software License**
This enables the prescription selected on the Linac to automatically select or create that patient record on iViewGT™ or iViewC™ using the iCom-Vx protocol. In addition, images will automatically be acquired and stored in the iViewGT / iViewC database without further operator intervention.

1 **Software License Image Approval**
This allows the user, assigned with the 'review' permission, to approve or disapprove any image within iViewGT™ or iViewC™.

1 **Las Vegas Calibration Phantom**
The Las Vegas phantom is a device that is used to check image quality of a portal imaging device at different megavoltage energies both at acceptance and as part of the corrective maintenance procedure.

1 **iBEAM® evo Couchtop**
The iBEAM evo Couchtop has no metallic components apart from the rails. The Couchtop comes complete with the following extensions;

- iBEAM evo Extension 415
- indexing bar
- iBEAM evo Extension removable rails EP (aluminum).

The table top comes with a fixed rail at the foot end of the couch and a removable, light weight rail for the superior couch end.

1 **iBEAM® evo Extension 650**
The iBEAM evo Extension 650 is designed to support the patients upper body and extends off the end of the iBEAM evo Couchtop by 650 mm, thus allowing for treatment of the prostate of very tall patient's.

1 **Precise Treatment Table™ or Pedestal Pit Kit**
This kit provides the necessary fixings, floor boards and template to install a Precise Treatment Table into a custom built pit or a modified Pedestal pit.

1 **Independent X/Y movement of table top**
To save time, in reaching the desired position, this kit allows the X/Y brakes to be released independently.

1 **Beam Block Tray - Star Pattern**
Lexan beam block tray with holes in a star pattern. Trays are designed with threaded, removable plugs for the coding of each block. Specially designed for use with the Elekta shadow tray assembly.

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1 **Hook and Latch Magnification Graticule**
Solid Frame Port Film magnification graticule that attaches directly to the linac, taking the place of the coded shadow tray, thus providing more clearance between the patient and the accessory.Used in treatment verification for situations where simultaneous fitment of blocking tray is not required.

1 **Electron Beam Field Shaping System**
For use with Electron applicators from Elekta and allows the user to easily provide Electron Beam field shaping. The system comprises:

- A Universal leveling template with an adjustable arm for securing styro-foam inserts- Set of five (5) rubber molds compatible with Elekta Electron applicators
  - 6cm x 6cm
  - 10cm x 10cm
  - 14cm x 14cm
  - 20cm x 20cm
  - 25cm x 25cm

Provided as part of the system is one (1) Hot Wire Cutter.

1 **19-inch Control Room LCD Monitor**

4 **19-inch Control Room LCD Monitor**

1 **19-inch Control Room LCD Monitor**

1 **19-inch Control Room LCD Monitor**

1 **CONTROL ROOM MONITOR CABLE KIT, MRT 7841**

1 **TREATMENT ROOM CAT5 MONITOR CABLE KIT (MRT 7831)**

1 **Table ASU License**
In addition to normal linac ASU, the user is able to separately request the auto setup of the table isocenter from inside and outside the room.

1 **Software License Linac Record**
The Daily Record Function allows the Treatment System radiation beam information to be recorded on a continuous basis. Every time the beam is turned on it records the incidence: patient treatments or port films. This can be used as a back up for record and verify systems or for billing purposes.

1 **Software license Linac Record to file**
The Software license Linac record to file offers the user the option to configure the Linac (in Service Mode) to send the data to network file rather than to a printer.

1 **Extended Service License**
This license allows the user extra service tools/functionality.

1 **Extender Cards**
Extender cards for fault diagnosis on the Electrical Interface Module (EIM).

1 **Linear Accelerator Manual Set**

1 **ExacTrac Hardware CITB Kit - 10m**
The CITB-ET enables communication between ElektaLinac and Brainlab ExacTrac System. The provided cable length is 10m.

1 **Turbo Starter Kit for Linear Accelerators**
Ancillary equipment required for the installation and maintenance of any Precise Digital Accelerator. Comprising:

- Rotary vacuum pump
- Turbo molecular pump attachment for rapid pump down times and higher roughing vacuum.

1 **General Function Key Pad**
The Function Key Pad provides the following features:

- MV Start, Interrupt and Terminate
- LEDs to indicate radiation on / off status
- Linac Assisted Setup (ASU) - facilitating automatic gantry and diaphragm rotations
- Table ASU - facilitating automatic table translations and isocentric setup
- Imaging ASU - facilitating automatic remote retraction of the iViewGT™ detector.

1 **XVI cable reeling**

1 **Remote Automatic Table Movement License**
This license enables the user to make the translation correction movements remotely and automatically at the Precise Treatment Table™. This movement can either take place following a registration as part of an on-line VolumeView imaging workflow or the table can be moved remotely and automatically to coordinates entered into MOSAIQ®.

1 **Room Lasers, Green, Remote**
Set of 4 green room lasers with remote control adjustment. Comprising 3 crosshair and 1 line sagittal laser. Featuring fine lines (< 1mm), high precision adjustment at the isocenter and stable mounting bracket. Inclusive of switchable (110v to 240v) power supply and universal main adaptor.

1 **Applications Training for Standard Therapy on the Desktop**
The 2-day Standard Precise Desktop Course (travel time inclusive) provides training for 4 Radiation Therapists in the clinical use of the Precise Desktop Digital Linear Accelerator. Successful participants will be equipped with the knowledge and skills to operate the system effectively. The course does not provide training in the principles or techniques used in Radiation Therapy.

1 **Applications training for iViewGT™**
The 3-day iViewGT training course (travel time inclusive), provides training for 4 radiation therapists in the clinical use of the iViewGT imaging system. Successful participants will be equipped with the knowledge and skills to operate the system effectively. The course does not provide training in the principles or techniques used in radiation therapy.

1 **XVI Applications Training**
The 4-day XVI training course (travel time inclusive) provides training for Radiation Therapists in the clinical use of the X-ray Volume Imaging portion of the Elekta Digital Accelerators. Successful participants will be equipped with the knowledge and skills to operate the system effectively. The course does not provide training in the principles or techniques used in Radiation Therapy, CT, or Diagnostic Imaging. This course is given at the customer site for a maximum of 4 users.

2 **Accelerated Installation**
Additional resources and hours needed to accelerate the completion of the linear accelerator installation.

1 **Weekend Rigging & Handling**
Basic rigging of Linac to first floor or ground floor location outside of Elekta's normal working hours. Elekta will provide the necessary crew to offload, uncrate, rigging and machinery moving required to set system as per plan, and remove debris. Basic rigging excludes use of a crane or rigging down an elevator shaft.
Standard Rigging includes:

- Make one pre-installation site visit and delivery project management.
- Drill holes for equipment fasteners
- Supply a 12,000 lb capacity forklift during the off loading procedure.
- Stage and uncrate the linac machine, move all components into the facility, and set as directed.
- Remove and dispose of all packaging that will not be reused.

- Transport the base, gantry and beam arm into the facility/bunker on transport trolleys supplied by Elekta.
- Set the base frame in place (Elekta will level).
- Set the gantry drum onto the base frame.
- Set beam arm into the gantry.
- Install counterweight holder and stack the counterweights.
- Supply a manual gantry lifting system to perform aforementioned setting activities and all necessary tools.
- Supply a crew, including a rigging supervisor.
- Include the cost of all associated resource and expenses, including related travel time.
- Complete all rigging activities in a single day.

Standard Rigging excludes:

- Crane service.
- Elevator, or shaft deliveries.
- No clear access to the building (exterior).
- Interior obstruction en route to treatment room.
- Any shoring needed to protect the structure from the weight of the system.
- Any shoring and/or plating needed to build temporary dock or landing area for the unit.
- Extra long delivery routes, distances in excess of 150' from offload site to the treatment room.
- Overtime, weekend, premium time, unless Weekend Rigging selected.
- Additional travel expenses should the project exceed the time allotted in this scope for reasons beyond Elekta or our contractor's control.
- Additional man-hours, manpower, travel expenses, or equipment required due to delays caused by incorrect site preparation, waiting time, or delays not caused by Elekta or our contractor will be itemized and billed to the customer at then current rates.

1 **Open Air Graticule**
The Open Air Graticule is intended to be used for Radiation Therapy to project a scale of defined increments on port film images which can aid in treatment setup and verification. The Open Air Graticule does not require the use of a shadow tray holder and can be attached directly to the head of the Precise Treatment System or SL Linac. It consists of two wires delineating the X & Y axis of the treatment field. This model of graticule is ideal for MLC customers and especially those using Elekta's iView & iViewGTTM. Because the open air graticule has a minimal transmission factor, with Physic's approval, the customer does not have to re-enter the treatment room after the port film to deliver the treatment. Please see product User manual for specific treatment information.

1 **Agility™ Beam Arm Cover (new white)**

1 **Aperture Plate Electron Beam Applicator 25 x 25 cm**
Fitted with spring loaded touch guard, coded end frames and electrical connection to linear accelerator.
The X-ray diaphragms are then set automatically to the optimum position.
A unique hook and latch mounting system enables easy and rapid attachment.

1 **Order two sets of pre defined terminated cable kits**
Pre installation treatment room and Inter bay terminated cable kits.

1 **Elekta Infinity Drum and Ring Cover Set**

1 **Standard Quadrant Cover Set**

1 **iViewGT™ Amorphous Silicon detector panel for production systems.**

1 **Closed Circuit TV System - Color**
The standard CCTV system consists of two Samsung SNP-5321 (1.3 Megapixel HD) dome-shaped color cameras and two pan/tilt/zoom control mounts allowing the operator full control of both cameras.

1 **Intercom system for patient and radiographer communication**
The ASK-4® 501-TLI-CF is a single zone audio monitoring system with 2-way talk/listen capabilities. It consists of a remote speaker/microphone and audio base station with built-in microphone and speaker.

1 **iBEAM Indexing Bar (set of 3)**
The iBEAM Indexing Bar is designed for the BodyFIX® 14 Indexing system and allows indexing and positioning of compatible surface mounted accessories.

1 **Treatment Control System Rack Cabinet**
Rack based control system cabinet for the linear accelerator and Agility MLC. The cabinet also hosts the NSS computer and is capable of hosting the MOSAIQ Sequencer PC.

1 **Licences and Manuals Integrity 3.x**
Licences and Manuals for Linac and Control System Integrity 3.x

1 **Control System hardware for XVI R5.0.4**
The XVI control system is a high specification PC which supports all aspects of the IGRT process including 2D, 3D and 4D kV image acquisition, reconstruction, and analysis using a suite of registration functionality.

1 **XVI 5.0.4 Software Licenses**

1 **iViewGT Linac Specific Activation License – Sun Nuclear**
Allows for connectivity between the iViewGT database and the specified 3rd party dosimetry system. One license per linac.

1 **Medical Gases SF6 for Installation and Service**
Includes:

- 44-liter cylinder for SF6 gas
- 115 lbs of SF6 gas
- Regulator
- Delivery.

1 **Medical Gases Nitrogen for Installation and Service**
Includes:

- 16-liter cylinder for Nitrogen (N2) gas
- Nitrogen (N2) gas
- Regulator
- Delivery.

1 **Elekta Linac Physics**
Objective
After completing this course, attendees will:

- Identify different components of an Elekta linear accelerator.
- Operate the linear accelerator's controls.
- Summarize the system communication and the different protocols used.
- Operate the accelerator in service and clinical modes.
- Perform calibration of dosimetry system.
- Understand fundamentals of MLC control system, optical tracking, and calibration.
- Outline the operation of imaging systems for IGRT and perform basic quality assurance.

Course Content

- Theory of Operation
- Control Sytem and System Communication
- Beam Measurement and Dosimetry
- Agility Beam Limiting Device
- Imaging Systems and Introduction to IGRT

The application has been made to CAMPEP for 31.2 Medical Physics Continuing Education Credits (MPCEC.)
Duration
5-day training at Elekta's Region North America LINC
Target Group

- Medical Physicists
- Medical Physics Students

Pre-requisites
None

2 **Education & Training Travel Support (4-6 day course)**
Elekta will provide reasonable and necessary travel to support completion of the Off-Site Education & Training course(s) purchased under this Agreement. This Travel Support includes reasonable and necessary airfare and accommodations booked at least three (3) weeks in advance through Elekta's approved travel agent, proof of course registration at the time of booking is required. Extended airfare and accommodations beyond the duration required to travel and attend the course(s) is not permitted. This Travel Support also includes reasonable and necessary local transportation costs and up to $100 (USD) per person per day to cover reasonable and necessary meals, which will be paid by Elekta directly to Customer (not to Customer employees) upon receipt of invoice, proof of course completion and supporting receipts. This Travel Support is available for up to two (2) years after date of Acceptance, no exceptions permitted. Price - $2,000.00 USD (ea)

1 **A Frame for Installation/Service**
Includes:

- A Frame
- Trolley
- Hoist (pulley)

Delivery Note: Not required if iBeam is in place.

1 **Volumetric Modulated Arc Therapy (VMAT) QA**
Objectives
After completing this course, attendees will:

- Explain the clinical rational for the VMAT treatment technique.
- Evaluate the key factors influencing the quality of VMAT plans.
- List advantages and limitations of VMAT treatment technique.
- Explain the method by which VMAT is delivered by an Elekta linear accelerator.
- List the constraints required by the delivery system to ensure optimal treatment planning.
- Evaluate which aspects of VMAT must be tested prior to clinical use.
- Perform Picket Fence with Gantry Rotation, synchronization of dose rate and gantry speed, and synchronization of dose rate and MLC speed tests to evaluate proper performance of the Elekta medical accelerator.
- Develop and execute commissioning benchmark tests to determine baseline system performance for routine quality control testing post future repairs, upgrades, or cal checks.
- Discuss implementation strategies for patient specific measurement to determine gamma pass rate of the delivered plan.

Content
During this one-day course, attendees will learn the rationale for VMAT as a treatment technique and the different methods for creating VMAT treatment plans. The course will also cover VMAT delivery, commissioning, and quality assurance for the Elekta medical accelerator as well as advantages and limitations for VMAT as a treatment technique. The application has been made to CAMPEP for 7.75 Medical Physics Continuing Education Credits (MPCEC).
Duration
1 day
Target Audience

- Certified Medical Physicists
- Medical physics students

Prerequisites

- Physics 1: Medical Accelerator Introduction
- Quality Assurance of Elekta Medical Accelerators.

1 **Elekta Stereotactic Radiosurgery and Stereotactic Body Radiotherapy Physics Course**
During this 4-day course, participants will learn the physics behind the operation of an Elekta Medical Accelerator with Agility MLC, APEX MLC, and Stereotactic Cones.
Students will build on the principles of operation of the accelerator as addressed in Elekta Medical Accelerator Physics 1 and the quality assurance aspects taught in Elekta Machine QA. Students will learn about the principles of each of the systems in regards to their Commissioning, Quality Assurance and Application for SRS and SBRT.
Objectives
After completing this course, attendees will:

- Be able to accept, commission and QA the SRS/SBRT solution
- Perform small field dosimetry
- Perform commissioning measurements
- Describe the relationship of various isocenters in the accelerator
- Perform Winston Lutz tests
- Explain patient immobilization options
- Describe IGRT options for patient positioning verification
- Explain appropriate routine QA tests
- Perform End to End testing
- Understand requirements of AAPM TG54, TG 101 and ASTRO Target Safety reports

Target Audience

- Certified Medical Physicists
- Medical Physics students

Prerequisites

- Physics 1: Medical Accelerator Introduction

Pricing Includes

- Tuition for one student

Pricing Does Not Include

- Airfare
- Hotel
- Travel-related expenses

Your eligibility for this course expires:

- Purchased with new equipment - twenty-four (24) months after Acceptance or first clinical use, whichever occurs first.
- Purchased directly - 24 months after Purchase Order is accepted.

EOL Upgrades (Rex VersaHD)

EOL Upgrades (Rex VersaHD)

Qty	Description
1	**SYNERGISTIQ ™ Software License** Enables the XVI functionality to support SYNERGISTIQ. SYNERGISTIQ integrates MOSAIQ® and XVI into a consolidated and synchronized user interface.
1	**Software Media Pack, SYNERGISTIQ™ Clients**
1	**SYNERGISTIQ ™ Monitor kit** Specification for Extender/Receiver and cable for a remote monitor. Required for sites that use SYNERGISTIQ with a remote monitor in the treatment room.
1	**Distributed Review** Distributed Review allows the sending of XVI CBCT data to MOSAIQ® for review at any MOSAIQ® workstation, as well as the primary XVI workstation. Pre-requisites: • Distributed Imaging/Treatment • DICOM CT Export (+/- Auto DICOM CT Export).
1	**Distributed Imaging** Distributed Imaging allows the transfer a patient between XVI systems without having to prepare the registration settings on the secondary XVI system, through MOSAIQ®.
3	**Installation Local Engineer**
1	**iGUIDE®2.2 Basic Upgrade Package** This package contains the iGUIDE 2.2 software, a new workstation and some hardware components.
1	**HexaPOD™ evo RT System Integration License** This license package will provide the following integration features: • Interface to MOSAIQ for automated patient ID and treatment site loading for departments using MOSAIQ 2.5 or higher. • Control of Precise Table with iGUIDE for Systems with Integrity 3.2.
1	**Archive and retrieve to network** Performs automatic archiving of patient images to a pre-defined network location, outside of MOSAIQ®. Archiving can be scheduled, and the network location can be specified at will. The same tool performs retrieval of files from the same location.
1	**XVI 5.0.4 Upgrade License** Standard Elekta and third party software licenses required for 5.0.4
1	**XVI System Upgrade - 5.0.4** Consists of the hardware kit (cabling) and the MK6 cabinet and frame grabber with the 5.0.4 software
1	**Software SYNERGISTIQ Clients - Upgrade** SYNERGISTIQ client software.
1	**Installation Local Engineer**

1 **iViewGT™ R3.4.1 MV imaging software & MK 6 imaging cabinet**
This upgrade provides the new MK6 iViewGT Imaging Control Cabinet with iViewGT R3.4.1 pre-loaded.

- Operating System: Windows Embedded Standard 7 (WES7) SP1.
- Software supports both new and existing MV Imaging Panel.
- Support for imaging of FFF beams, (with new MV Imaging Panel only).
- Three additional licenses are available in iViewGT R 3.4.1
  - Required Basic iViewGT acquisition license incorporates all previous licenses for DICOM, IMRT, iComVX, Image Approval, Template Matching, .
  - EPII, optional
  - EPID Dosimetry, optional
- Improved iCom & MOSAIQ® workflows.
- VMAT support with no restriction to frames for Movie acquisitions
- A new database architecture allows r3.4.1 software to access patient data from previous formats through the 'Retrieve Patient' functionality.

1 **iViewGT ™ R3.4.1 Software License Collation**
Third Party License toolkit necessary for supporting iViewGT.

1 **iViewGT™ R3.4.1 Software License**

1 **Software SYNERGISTIQ Clients - Upgrade**
SYNERGISTIQ client software.

1 **iViewGT Linac Specific Activation License – Sun Nuclear**
Allows for connectivity between the iViewGT database and the specified 3rd party dosimetry system. One license per linac.

Move VersaHD#1 (153638) to New Cancer Center

De-installation and Re-installation of Elekta VersaHD S/N 153638

De-installation Location:
UNC Rex Hospital
4420 Lake Boone Trail
Raleigh, NC 27607

Re-installation Location:
New Cancer Center
Raleigh, NC 27607

Equipment Covered:
VersaHD S/N 153638

This Agreement covers the de-installation and re-installation of the existing VersaHD System which includes services as follows:

- End-to-end Project Management
- Construction site inspections and oversight
- Remove VersaHD machine using our riggers and Elekta engineers
- Packing and transportation to new vault
- Labor hours for Elekta engineers
- Perform acceptance testing to ensure operation within system specifications
- Replacement of parts required after reinstall that were functioning prior to disassembly
- Rig-in and reinstall of the VersaHD System at the new hospital

Basic rigging of Linac to first floor or ground floor location. Elekta will provide the necessary crew to offload, uncrate, Rigging and machinery moving required to set system as per plan, and remove debris. Basic rigging excludes use of a crane or rigging down an elevator shaft.

Rigging includes:

- Make one pre-installation site visit and delivery project management;
- Drill holes for equipment fasteners;
- Supply a 12,000 lb capacity forklift during the off loading procedure;
- Stage and uncrate the linac machine, move all components into the facility, and set as directed;
- Remove and dispose of all packaging that will not be reused;
- Transport the base, gantry and beam arm into the facility/bunker on transport trolleys supplied by Elekta;
- Set the base frame in place (Elekta will level);
- Set the gantry drum onto the base frame;
- Set beam arm into the gantry;
- Install counterweight holder and stack the counterweights;
- Supply a manual gantry lifting system to perform aforementioned setting activities and all necessary tools;
- Supply a crew, including a rigging supervisor;
- Include the cost of all associated resource and expenses, including related travel time; and
- Complete all rigging activities in a single day.
- *Overtime and incidental charges associated with work during a weekend (no holidays).

Standard Rigging excludes:

- Crane service;
- Elevator, or shaft deliveries;
- No clear access to the building (exterior);
- Interior obstruction en route to treatment room;
- Any shoring needed to protect the structure from the weight of the system;
- Any shoring and/or plating needed to build temporary dock or landing area for the unit;
- Extra long delivery routes, distances in excess of 150' from offload site to the treatment room;
- Overtime, weekend, premium time, unless Weekend Rigging selected; and
- Additional travel expenses should the project exceed the time allotted in this scope for reasons beyond Elekta or our Contractor's control. Additional man-hours, manpower, travel expenses, or equipment required due to delays caused by incorrect site preparation, waiting time or delays not caused by Elekta or our contractor will be itemized and billed to the customer at then current rates.

- Additional travel expenses should the project exceed the time allotted in this scope for reasons beyond Elekta or our contractor's control. Additional man-hours, manpower, travel expenses, or equipment required due to delays caused by incorrect site preparation, waiting time, or delays not caused by Elekta or our contractor will be itemized and billed to the customer at then current rates.

Add Exactrac Requirements to Rex VersaHD #1 (Hardware)

Qty	Description
1	**HexaPOD™ evo RT System Integration License** This license package will provide the following integration features: • Interface to MOSAIQ for automated patient ID and treatment site loading for departments using MOSAIQ 2.5 or higher. • Control of Precise Table with iGUIDE for Systems with Integrity 3.2.
1	**ExacTrac Goalpost Set** Precise, Synergy, Infinity, Axesse and Versa HD compatible Goalposts in combination with Brainlab ExacTrac System.

1 **ExacTrac Hardware CITB Kit - 10m**
The CITB-ET enables communication between ElektaLinac and Brainlab ExacTrac System. The provided cable length is 10m.

1 **iBEAM® evo Frameless Extension**
The iBEAM evo Frameless Extension is designed for the usage of the Brainlab Frameless Array.

1 **ExacTrac Integration License**
Interface to Brainlab ExacTrac for automated Positional Error Correction (PEC) data transfer for Systems with ExacTrac.

UNC Rex MOSAIQ Licenses

UNC Rex MOSAIQ Licenses

Qty	Description	License Term
1	**Interface to ExacTrac Positioning Device** Patient Positioning System interface to ExacTrac Device.	Perpetual
1	**Interface to MOSAIQ - HexaPOD evo**	Perpetual
1	**MOSAIQ IGRT Connectivity for Elekta** Connectivity kit including the RTD and Elekta delivery platform, interface to Elekta MLC/IMRT, interface to iViewGT electronic portal imaging device and connectivity to the XVI including volumetric imaging.	Perpetual
1	**SYNERGISTIQ** SYNERGISTIQ integrates MOSAIQ and Elekta IGRT devices into a consolidated and synchronized user interface that brings together, in a coordinated manner, the various systems that are required for Image Guided Radiotherapy.	Perpetual
1	**Connectivity to Elekta VMAT** Support for Elekta VMAT treatment techniques.	Perpetual
1	**DICOM Information Manager for MOSAIQ Data Director** Core module MOSAIQ Data Director. Provides standards based, full fidelity storage for all DICOM objects and DICOM RT. Provides non-DICOM storage support for many file formats and highly configurable data storage, migration and organization rules for both.	Perpetual
5	**DICOM Device Connectivity for MOSAIQ Data Director** Access to data from DICOM sources (5 Per Core DICOM License) DICOM Data Connectivity including access to imaging devices, treatment planning systems, DICOM-based data generation devices.	Perpetual
1	**Barcode Scanner Kit for MOSAIQ** Contract pass-through 3rd party product. Includes: 1 x MK9540-72A38 Metrologic MS9540 VoyagerCG Barcode Scanner USB	NA
1	**Barcode Printer Kit for MOSAIQ** Contract pass-through 3rd party product. Includes: 1 x 282P-201111-000 Zebra LP2824+ 203DPI/DT/SER/USB/51 1 x F3U133-06 BELKIN USB CABLE A-B 6FT 2 x SLP-2RL Seiko address Labels; (White) 260 labels 1-1/8in x 3-1/2in	NA
1	**KVM Extender Kit for In-Room SEQUENCER Monitor** Contract pass-through 3rd party product. Includes: 1 x ACS4001A-R2 Black Box ServSwitch Single DVI-D CATx KVM Extender, USB 1 x A3L980-150-BLUS Belkin CAT6 150' patch cable, RJ45 1 x 26911 Cables to Go DVI-D M/M Display Cable - 6.6 ft	NA

UNC Rex MOSAIQ Licenses Infinity #2

UNC Rex MOSAIQ Licenses Infinity #2

Qty	Description	License Term
1	**Interface to ExacTrac Positioning Device** Patient Positioning System interface to ExacTrac Device.	Perpetual
1	**MOSAIQ IGRT Connectivity for Elekta** Connectivity kit including the RTD and Elekta delivery platform, interface to Elekta MLC/IMRT, interface to iViewGT electronic portal imaging device and connectivity to the XVI including volumetric imaging.	Perpetual

1	**SYNERGISTIQ** SYNERGISTIQ integrates MOSAIQ and Elekta IGRT devices into a consolidated and synchronized user interface that brings together, in a coordinated manner, the various systems that are required for Image Guided Radiotherapy.	Perpetual
1	**Connectivity to Elekta VMAT** Support for Elekta VMAT treatment techniques.	Perpetual
1	**DICOM Information Manager for MOSAIQ Data Director** Core module MOSAIQ Data Director. Provides standards based, full fidelity storage for all DICOM objects and DICOM RT. Provides non-DICOM storage support for many file formats and highly configurable data storage, migration and organization rules for both.	Perpetual
5	**DICOM Device Connectivity for MOSAIQ Data Director** Access to data from DICOM sources (5 Per Core DICOM License) DICOM Data Connectivity including access to imaging devices, treatment planning systems, DICOM-based data generation devices.	Perpetual
1	**Barcode Scanner Kit for MOSAIQ** Contract pass-through 3rd party product. Includes: 1 x MK9540-72A38 Metrologic MS9540 VoyagerCG Barcode Scanner USB	NA
1	**Barcode Printer Kit for MOSAIQ** Contract pass-through 3rd party product. Includes: 1 x 282P-201111-000 Zebra LP2824+ 203DPI/DT/SER/USB/51 1 x F3U133-06 BELKIN USB CABLE A-B 6FT 2 x SLP-2RL Seiko address Labels; (White) 260 labels 1-1/8in x 3-1/2in	NA
1	**KVM Extender Kit for In-Room SEQUENCER Monitor** Contract pass-through 3rd party product. Includes: 1 x ACS4001A-R2 Black Box ServSwitch Single DVI-D CATx KVM Extender, USB 1 x A3L980-150-BLUS Belkin CAT6 150' patch cable, RJ45 1 x 26911 Cables to Go DVI-D M/M Display Cable - 6.6 ft	NA

VersaHD#1 (153638) Upgrades for Exactrac (OIS)

Qty	Description	License Term
1	**Interface to ExacTrac Positioning Device** Patient Positioning System interface to ExacTrac Device.	Perpetual
1	**Interface to MOSAIQ - HexaPOD evo**	Perpetual

GE Healthcare

December 5, 2018
Quote Number: **2001758113.3**
Customer ID: **1-23I0MM**
Agreement Expiration Date: **3/5/2019**

UNC Rex Hospital
4420 Lake Boone Trl
Raleigh, NC 27607-7505

This Agreement (as defined below) is by and between the Customer and the GE Healthcare business ("GE Healthcare"), each as identified below for the sale and purchase of the Products and/or Services identified in this Quotation, together with any applicable schedules referred to herein ("Quotation"). "Agreement" is this Quotation and either: (i) the Governing Agreement identified below; or (ii) if no Governing Agreement is identified, the GE Healthcare Terms and Conditions and Warranties that apply to the Products and/or Services identified in this Quotation. In the event of conflict, the Quotation supersedes.

GE Healthcare can withdraw this Quotation at any time before Customer: (i) signs and returns this Quotation or (ii) provides evidence of Quotation acceptance satisfactory to GE Healthcare ("Quotation Acceptance"). On Quotation Acceptance, this Agreement is the complete and final agreement of the parties relating to the Products and/or Services identified in this Quotation. There is no reliance on any terms other than those expressly stated or incorporated by reference in this Agreement and, except as permitted in this Agreement, no attempt to modify will be binding unless agreed to in writing by the parties. Modifications may result in additional fees and cannot be made without GE Healthcare's prior written consent.

Handwritten or electronic modifications on this Agreement (except an indication of the form of payment, Customer purchase order number and signatures on the signature blocks below) are void.

Governing Agreement:	University of North Carolina Health Care System MPA-11008
Terms of Delivery	FOB DESTINATION
Billing Terms	10% down / 70% delivery / 20% install
Payment Terms	Due On Receipt-30 Days
Total Quote Net Selling Price	$404,203.14
Sales and Use Tax Exemption	No Certificate on File

INDICATE FORM OF PAYMENT:

(If there is potential to finance with a lease transaction, by GE HEF otherwise, select lease)

___ Cash*
___ Lease
___ GE HEF Loan
___ If financing, please provide name of finance company: _____)

*Selecting "Cash" or not identifying GE HEF as the finance company declines the option for GE HEF financing.

The parties have caused this Agreement to be executed by their authorized representative as of the last signature date below.

UNC Rex Hospital Legal Entity

Signature: _____

Print Name: _____

Title: _____

Date: _____

_____
Purchase Order Number, if applicable

GE Healthcare Legal Entity Name

Signature: Nicholas Bengel

Title: Imaging Account Manager

Date: December 5, 2018

EXHIBIT
tabbies
5

GE Healthcare

December 5, 2018
Quote Number: **2001758113.3**
Customer ID: **1-23I0MM**
Agreement Expiration Date: **3/5/2019**

To Accept This Quotation

Please sign and return this quotation together with your Purchase Order to:

Name: Nicholas Bengel

Email: nicholas.bengel@ge.com

Phone: 414-238-7008

Fax:

Name: Jim Benecki

Email: jim.benecki@ge.com

Phone: (615) 390-3634

Fax: (910) 401-1049

Payment Instructions

Please **remit** payment for invoices associated with this quotation to:

GE Healthcare
P.O. Box 96483
Chicago, IL 60693

FEIN – 14-0689340

UNC Rex Hospital Addresses:

Bill To:	UNC Rex Hospital	4420 Lake Boone Trl, Raleigh, NC, US, 27607-7505
Ship To:	UNC Rex Hospital	4420 Lake Boone Trl, Raleigh, NC, US, 27607-7505
Ship To:		

To Accept This Quotation

- Please sign the quote and any included attachments (where requested).
- If requested, please indicate your form of payment.
- If you include a purchase order, please make sure it references the following information:
  - The correct Quote number and Version number above
  - The correct Remit To information as indicated in **"Payment Instructions"** above
  - Your correct SHIP TO and BILL TO site name and address
  - The correct Total Price as indicated above

Upon submission of a purchase order in response to this quotation, GE Healthcare requests the following to evidence agreement to contract terms: Signature page on quote filled out with signature and P.O. number **** OR**** Verbiage on the purchase order must state one of the following:

(i)Per the terms of Quotation # _____, (ii) Per the terms of GPO #_____; (iii) Per the terms of MPA# _____: or (iv) Per the terms of SAA # _____.

Include applicable quote/agreement number with the reference on the purchase order. In addition, Source of Funds (choice of Cash/Third Party Load or GE HFS Lease Loan or Third Party Lease through _____), must be indicated, which may be done on the Quote Signature Page (for signed quotes), or the Purchase Order (where quotes are not signed) or via a separate written source of funds statement (if provided by GE Healthcare)."

Line	Qty.	Catalog	
1	1.00	Y0000LC	**Pricing Non-Disclosure Language**

This CONFIDENTIAL offer may not be shared with any third parties, buying evaluation groups or anyone not directly employed by customer. This offer is being extended in relation to a national show-site agreement, research partnership, or other non-standard transaction. If required for publishing, GE will happily provide a list price quote.

Line	Qty.	Catalog	
2	1.00	S7891ES	**Discovery RT - ES**

The GE Discovery RT ES system is a new multi-purpose wide bore CT scanner that meets your needs in diagnostic, interventional and bariatric settings.
Discovery RT ES is built on a platform with GE's microVoxel(TM) imaging and 100kW Performix(TM) Pro 100 tube, to deliver the image quality you expect from GE CT. When combined with a 650-lb high capacity table*, the system is ideal for obese patients and bariatric imaging. The system also delivers the optional ASiR(TM)*, (Adaptive Statistical Iterative Reconstruction) dose reduction technology.
• ASiR reconstruction technology may enable reduction in pixel noise standard deviation (a measurement of image noise). The ASiR reconstruction algorithm may allow for reduced mA in the acquisition of diagnostic images, thereby reducing the dose required+.
• A reconstruction technology that may enable improvement in low contrast detectability+.
+ In clinical practice, the use of ASiR may reduce CT patient dose depending on the clinical task, patient size, anatomical location and clinical practice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain image quality for the particular clinical task.
The Discovery RT ES also meets your interventional* CT priorities: 1)high image quality to see the anatomy to guide your devices, 2) at extremely low dose for you and your patient, and 3) with flexible in-room controls for fast procedures. You can complete simple procedures quickly and accurately with GE's SmartStep* or tap mode. And manage complex procedures with advanced SmartView(TM) fluoroscopy.* They are the ultimate duo for all your interventional needs.
The Discovery RT ES comes with MaxFOV technology. MaxFOV is an iterative reconstruction algorithm that provides fully specified image quality across the entire diameter of the bore. Smart metal artifact reduction (MAR)* is also available.
* Option .
System Components:
• Gantry: Advanced slip ring design continuously rotates the generator, Performix(TM) Pro 100 tube, Matrix II detector and Volara digital data acquisition system around the patient.
• Aperture: 80 cm
• Maximum scan field of view (SFOV): 50 cm
• Maximum display field of view DFOV: 80 cm
• Rotational Speeds: 360 degrees in 0.5, 0.6, 0.7, 0.8, 1.0, 2.0, 3.0 and 4.0 seconds.
• Integrated breathing lights and countdown timer
• Integrated start scan button with countdown timer to indicate when x-ray will turn on
Key Features
Excellent Image Quality: Exclusive SmartSpeed allows full 360-degrees rotation in 0.5, 0.6, 0.7, 0.8, 1, 2, 3, 4 seconds, ensuring short breath holds, more comfortable exams and flexibility to customize protocols for unique patients' needs with minimal coverage impact. - Exclusive Pro 100kW generator and 8.0MHU tube designed to deliver the mA needed to support routine faster gantry rotation times. - Routine thin slice scanning, as thin as 0.625 optimizing lesion detection and facilitating the use of thinner images for sagittal, coronal, oblique, and volume image presentation and review. - GE proprietary, non-linear interpolation algorithms, balance slice profile, helical pitch, image noise, and required technique. Image decomposition to: - Create retrospective thin images from data sets where thicker images were initially reconstructed. - Facilitate more detailed image analysis - Improve 3D

and reformat visualization
Fast Easy Simultaneous Workflow: - Xtream FX Workflow Platform, the next evolution of GE's workflow platform built to help you maximize productivity - Delivering 6 (16 optional) full fidelity images per second (fps) reconstruction - Up to 10 fps network transfer rates - Direct Multiplanar Reformats (DMPR) that enables the move from 2D review to prospective 3D review of sagittal, coronal and oblique planes automatically. - Data Export and Interchange that allow you easily share images with referring physicians and patients. - Includes a set of reference protocols and the ability to customize your own for a total of 4000 protocols - Remote tilt from the operator console to increase exam speed - Built-in breathing lights with a countdown times, to the patient does not have to guess how much longer to hold their breath - In room start button mounted on gantry with countdown display, facilitates single technologist operation and improved departmental productivity - GE software allows you to automate or build every task into the protocols to increase throughput 250,000 uncompressed 512 image files storage capacity, and 2880 scan seconds of scan data storage capacity
Dose Check - provides the user with tools to help them manage CT dose in clinical practice and is based on the standard XR-25-2010 published by The Association of Electrical and Medical Imaging Equipment Manufacturers (NEMA), XR-29 Compliant. Dose Check provides the following:
• Checking against a Notification Value if the estimated dose for the scan is above your site established dose value
• Checking against an Alert Value where the user needs specific authority to continue the scan at the current estimated dose without changing the scan parameters if the estimated dose exceeds the alert value
• The ability to define Alert Values for Adult and Pediatric with age threshold
• Audit logging and review capabilities
• Protocol Change Control capabilities
Laser Alignment Lights: - Defined internal and external scan planes to +/- 1mm accuracy - Operate over full range of gantry tilt, Coronal light remains perpendicular to axial light as gantry tilts making visual readout easy from tableside or the operator console.
Table: VT 1700 table with maximum 500 lbs is standard. Optional High Capacity table has loading capacity up to 650 lbs. IV Pole integrated at the foot-end of the table prevents IV lines from becoming crossed and tangled, and ensures that the lines stay securely in place on the patient.
• X-ray Tube: Performix(TM) Pro 100 metal-ceramic tube unit offers an optimized design for exams requiring a large number of scans without tube cooling. Performix(TM) Pro 100 tube with 8.0 MHU of storage and capability of 100kW at 140kV operation provides increased helical performance with greater patient throughput and virtually no tube cooling. Advanced technology in the tube includes a metal ceramic frame and high speed bearing for long life at sub-second scanning, a high efficiency motor to accelerate the anode and efficient cooling for high throughput and superior helical performance. Wide range of technique (10mA to 800mA in 5mA increments) gives technologist and physician flexibility to tailor protocols to specific patient needs, while optimizing patient dose, and providing the power needed to perform a
broad spectrum of examinations. - Heat storage capacity of 8.0 MHU - Heat dissipation: Anode (Max) 1783 KHU/min, tube unit at 8 kW Continuous - Dual Focal Spots:
• Small Focal Spot:
• 0.7 x 0.6 per IEC60336/1993, Loading factors: 120kV, 125mA
• 0.9 x 0.7 per IEC60336/2005, Loading factors: 120kV, 168mA
• Large Focal Spot:
• 0.9 x 0.9 per IEC60336/1993, Loading factors: 120kV, 250mA
• 1.2 x 1.1 per IEC60336/2005, Loading factors: 120kV, 400mA
- Maximum power: 100 kW - Beam collimated to 56 degrees fan angle
• High Voltage Generator: High Frequency on-board generator allows for continuous operation during scan. - 100 kW Output Power - kV: 80, 100, 120, 140 kV
• mA: 10 to 800 mA, 5 mA Increments.
HiLight Matrix II Detector: The HiLight Matrix II detector was designed for high performance imaging. The Discovery RT ES allows up to 16 slices per rotation per second. The HiLight Matrix II detector benefits are: - Increased coverage per rotation with thinner slices routine - Solid Image Quality from the use of GE's patented HiLight material, a ceramic scintillator specifically engineered for CT applications. GE HiLight Matrix II detector. - 24 detector rows, each containing 888 active patient elements, 18 reference elements. - 7 Modes of Data Output:
• 16 x 0.625 mm or 1.25 mm
• 8 x 1.25 mm or 2.5 mm

• 4 x 3.75 mm
• 4 x 1.25 mm
• 2 x 0.625 mm
Volara Digital DAS(Data Acquisition System): The Volara digital DAS dramatically reduces noise in low dose exams, large patient, or areas of the anatomy that are difficult to image such as shoulder and hips. - 12,288 available input channels - 1968Hz maximum sample rate - Effective analog to digital conversion range greater than 8,000,000:1
Operator Console: Split tabletop allows unrestricted patient viewing while supporting 2 19-inch color LCD monitors. Each work surface can be adjusted to accommodate operator preferences and a wide variety of site requirements.
• Xtream (TM) FX, the next evolution of GE's workflow platform built on the LINUX operating system and delivering fast reconstruction of 16 fps with full fidelity images and fast network transfer rates of up to 10 fps. The 19-inch color LCD monitors support scan and and recon, as well as image. - Size: 48in wide X 40.5in deep X 49.5in high
Image Networking: Exams can be selected and moved between the Discovery RT ES CT system and any imaging system supporting the DICOM protocol for network send, receive and pull/inquiry. - Standard Auto-configuring Ethernet - Direct Network Connection - Supports 1GB or 10/100 BaseT - Supported Protocols - DICOM Network - Advantage Net - InSite Point-to-Point - TCP/IP (for System Administration)
DICOM Conformance Standards: - DICOM Storage Service Class - Service Class User (SCU) for image send - Service Class Provider (SCP) for receive - DICOM Query/Retrieve Service Class - DICOM MOD Media Service Class - DICOM Storage Commitment Class Push - DICOM Modality Worklist (incl: Performed Procedure Step) - DICOM Print - DICOM Structured Dose Report
Image Quality: - Low Contrast Detectability (LCD) Statistical LCD: on 8 Inch (20cm) CATPHAN Phantom - 5 mm @ 0.3% at 13.3 mGy - 3 mm @ 0.3% at 37.2 mGy - Noise - on an AAPM Water Phantom or GE
Quality Assurance Phantom - 0.32% +/- 0.03% at 28.5 mGy - High Contrast Spatial Resolution - on GE Performance Phantom
• Standard Algorithm - 8.5 lp/cm @ 0% MTF
• Hi-res Algorithm - 15.4 lp/cm @ 0% MTF
Maximum Field of View (MaxFOV): A full view, edge-to-edge, with specified accuracy to help increase your confidence. MaxFOV uses GE Healthcare's proprietary algorithms to leverage collected data that traditional algorithms ignore to essentially build a complete view of everything within the CT's entire bore, edge-to-edge.
• Skin line accuracy of:
2 mm from 50 cm to 70 cm DFOV
3 mm from 70 cm to 80 cm DFOV
• Density accuracy of:
40 HU from 50 cm to 70 cm DFOV
80 HU from 70 cm to 80 cm DFOV

The Discovery RT ES provides outstanding performance with flexible collimation modes, extended helical pitches, fast rotation speeds. - Pitches: 0.5625:1, 0.9375:1, 1.375:1, and 1.75:1 Helical Pitches for 16 Slice Modes. - Exclusive SmartSpeed allows full 360-degree rotation in 0.5, 0.6, 0.7, 0.8, 1, 2 seconds, ensuring short breath holds, comfortable exams and flexibility to customize protocols for unique patient needs with minimal coverage impact.
Exam Speed: As a multi-slice scanner, the Discovery RT ES delivers flexible and fast scan speeds by combining 16 slice acquisition, 1.75:1 helical pitch and 0.5 s rotation. Because of these quick exam speeds, scan speed is no longer what determines the systems throughput of a multi-slice scanner. Other tasks are equally important to determine the real performance of the CT: - Scan Setup - Image Reconstruction - Reformat and 3D Processing - Networking, Archiving, Filming
The Discovery RT ES with Xtream FX workflow platform is designed to deliver high performance in each of these tasks: - SmartTools Simplifies Scan Setup and includes All Reconstructions, Filming, Archiving, Transferring Prospectively and Reducing Exam Time by up to 40%. Xtream (TM) FX, the next evolution of GE's workflow platform built on the LINUX operating system delivers fast 16 fps reconstruction of full fidelity images and fast network transfer rates of up to 10 fps. Data Export and Interchange allow you to easily share images with referring physicians and patients. Direct MPR enables the move from 2D review to 3D image review of axial, sagittal, coronal and oblique planes automatically. Exam Split (optional) delivers the capability to "split" a series of patient images into separate groups for networking. Exam Rx desktop environment provides the clinical tools necessary fast, efficient control of patient studies. Exam Rx tools include patient scheduling and data entry, exam protocol selection, protocol viewing and editing, scan data acquisition, image reconstruction, image display and routine analysis, AutoTransfer, AutoStore, and AutoFilm. ImageWorks is a desktop environment designed to take advantage of the Discovery RT ES advanced computer system. Standard

features include archive, network and manual film control, as well as advanced image processing such as Direct multi-projection volume rendering (MPVR) and display. The ImageWorks desktop also provide a gateway for DICOM 3.0 image transactions, either through a local area network,or via DICOM-formatted media. Five flexible Image Review Layouts are provided. Each image window can be further subdivided increasing the total number of images that can be displayed at once to 16. Multi-Projection Volume Reconstruction (MPVR) is a quick and easy way to generate volumetric images for CT angiography without thresholding data or removing unwanted anatomy. An entire volume is used to generate images in any plane, creating real-time frames of reference at the same time; Clinical utility is extended via two additional modes: - MPIS enhances contrast and improves visualization of calcifications - Average - generates 2D radiographic images VariViewer is an interactive axial review mode that can change the slice thickness
reconstruction instantaneously. - Other Exam Rx Image display features:

- Zoom/Roam
- Explicit Magnify
- Flip/Rotate
- Ellipse ROI
- Measure Distance
- Grid On/Off
- Cross Reference
- User Annotation
- Hide Graphics
- Erase
- Screen Save
- Gray Scale Enhancement

Scan Modes: The Discovery RT ES scanner system can perform virtually any clinical application due to its wide variety of scan modes. Helical scan mode offers continuous 360-degrees scanning with table incrementation and no interscan delay. Axial scan mode allows for up to 16 contiguous axial planes to be acquired simultaneously.
Helical Scans: Reference helical protocols allow for fast and efficient patient set up.
Helical Multi-slice Modes: Helical scanning has been simplified by grouping all critical acquisition parameters within helical pitches optimized for image quality and speed - 0.5625:1, 0.9375:1, 1.375:1, 1.75:1 for 16 slice acquisition.
These clinically derived helical scan modes offer a wide range of selections that carefully balance acquisition speed image thickness, and provide table speeds up to 35 mm per rotation (70mm per second) enabling scan speeds that are more than 20 times faster than single slice helical scanners.
Prospective Multiple Thickness Reconstruction: For any helical scan modes, the operator can choose to reconstruct images prospectively in any of 7 nominal image thicknesses - 0.625, 1.25, 2.5, 3.75, 5, 7.5, and 10 mm. The operator may also prospectively specify additional image sets to be reconstructed. The images can be reconstructed at any of the defined nominal image thicknesses available for a given table speed and scan mode. Direct MPR may also be prospectively specified which quickly enables the move from 2D review to prospective 3D image review of axial, sagittal, coronal and oblique planes automatically.
Helical scan parameters: - Scan Speed: Full 360-degrees rotational scans in 0.5, 0.6, 0.7, 0.8, and 1.0.
Scan Technique: - kV: 80, 100, 120, 140 kV - mA: 10 to 800 mA (5 mA increments) - Power: 0.8 to 100kW - Focal Spot Selection (at 140 kVp):

- Small spot for up to 46.9 kW
- Larger spot for greater than 46.9 kW
- Max. Helical Scan Time: 120 sec
- Multiple scan can be acquired in one series to produce up to 3000 contiguous helical images
- Minimum Inter-group Delay (IGD): 5 sec

Helical Scan Enhancements: - 16 fps reconstruction even while scanning Xtream FX workflow allows, image reconstruction, display, processing and analysis, as well as networking, archival and filming all while scanning.
Anatomical programmer: A ten region anatomical selector allows quick and easy access to user programmable protocols. Separate selector for adult and pediatric exams with greater than 8460 protocol storage available. - Ten user-defined regions. Each region has reference protocols displayed with the anatomical selector for fast access to frequently used protocols. Protocols include preset scan time, kV, mA, scan mode, image thickness and spacing, table speed, scan FOV, display FOV and center, recon algorithm, and special image acquisition and processing options like DMPR. Any scan parameters may be edited for each scan or all scans -

either before or during and exam. The number of scans may also be easily changed. - AutoScan: Automates table movement and start of each scan

• AutoVoice: 3 preset (English) and 17 user defined messages automatically deliver patient breathing instructions, especially useful for multiple helical scanning - Trauma Patient: Allows patient scans and image display/analysis without entering patient data before scanning

Axial Scans: Multi-slice axial acquisitions and short interscan delays significantly reduce potential mis-registration between scans by increasing the number of scans in a single breath hold.

Reference protocols allow for fast and efficient patient set up.

Axial Multi-slice Modes: The Discovery RT ES system acquires axial scans in sets of up to 16 contiguous images in one 360-degrees rotation. For each rotation of the gantry the system collects 16 rows of scan data. There are five reconstruction modes available for creating images from the multi-slice axial scan data.

Axial Scan Parameters: - Scan Speed: Full 360-degrees rotational scans in 0.5, 0.6, 0.7, 0.8, 1.0, 2.0, 3.0 and 4.0

Scan Techniques: - Same as Helical

Scan Plane Geometry: - +/- 30 Degrees Angulation in .5 mm increments - Longitudinal Positioning in 0.01 mm per Slice Increment

Interscan Delay (ISD): - Minimum ISD:Table Moves of 0-10mm:1.0 sec - Minimum ISD:Table Moves of > 10mm:1.3 sec

Intergroup Delay (IGD): - Minimum IGD is the same as Minimum ISD

Scan-to-Scan Cycle: - Minimum Scan-to-scan Cycle of 1 sec possible for 0.5 sec Scan Speed with Minimum ISD's - Scan with zero table increment, contiguous image location, or skipped image location Overlapped axial scans are not possible.

Axial Image Reconstruction: Reconstruction algorithms:Soft Tissue, Standard, Detail, Bone, Bone Plus, Chest, Lung and Edge. Axial Image Reconstruction Speed: 6 images per second.

For US and Canadian Customers, this quotation includes access to the DoseWatch Explore application for a period of time concurrent with the system warranty. DoseWatch Explore is an introductory dose management software application that provides you secure access, via any PC with internet access, to dose and protocol data from this system. An InSite connection to the system and completion of the registration process is required to use the DoseWatch Explore application.

Warranty:

The published Company warranty in effect on the date of shipment shall apply. The Company reserves the right to make changes. All specifications are subject to change.

Regulatory Compliance:

This product is designed to comply with applicable standards under the radiation control for Health and Safety Act of 1968. Laser alignment devices contained within this product are appropriately labeled according to the requirements of the Center for Devices and Radiological Health.

This product is a CE-compliant device satisfying regulations regarding Electro-Magnetic Compatibility (EMC), Electro-Magnetic Interference (EMI), and IEC-60601-1 and all applicable collateral and particular standards.

This product complies with NEMA Standard 29-2013 / MITA Smart Dose Standard.

Line	Qty.	Catalog	
3	**1.00**	**B7590EN**	**English Keyboard Kit**

English Keyboard Kit

Line	Qty.	Catalog	
4	**1.00**	**B7580GA**	**RT Std cable set**

Standard Cable Set

Line	Qty.	Catalog	
5	1.00	B7877DW	VT 1700 Table

The VT 1700 table enables volume scanning. Key features of the VT 1700 table include: 500 lb weight capacity, 1700 mm scannable range, 175 mm/sec travel time, real-time position control to support advanced applications such as SnapShot Pulse, VolumeShuttle and Volume Helical Shuttle.

Line	Qty.	Catalog	
6	1.00	B7716WM	Cabling for RPM unit to Gantry

RPM CABLE: cable for connecting CT and RPM

Line	Qty.	Catalog	
7	1.00	B7820HD	ADAPTOR -SMRT STEP GOC6

Adaptor cabling for console with LCD monitor & Suspension

Line	Qty.	Catalog	
8	1.00	B7660B	Chair

Chair for CT scanner

Line	Qty.	Catalog	
9	1.00	B75352CA	Table Convenience kit

Table tray and IV pole

Line	Qty.	Catalog

10	**1.00**	**B75002CD**	**CT Operator Console Desk**

The CT workspace is an ergonomic working environment specifically designed for use with the GE Healthcare imaging systems. The sleek table design enables the efficient use of space while enhancing clinical workflow and technologist comfort.

The workspace provides a minimalist footprint to improve patient visibility and giving the user easier access to patients in the imaging suite.

It can also help reduce noise and heat with remote location options of the console. It is 51.2" long x 35.25" wide x 33.5" in height and weighs 122.8 lbs. 1300mm long x 895mm wide x 850mm in height and weighs 55.8kg

Line	Qty.	Catalog	
11	**1.00**	**B7999ZA**	**2 Phase Uninterruptible Power Supply**

Uninterruptible Power Supply

Exide Uninterruptible Power Supply. Custom Designed Firmware to Interconnect with LightSpeed Pro, LightSpeed RT, Optima and BrightSpeed Systems.
The UPS Primarily Backs Up the System Computer Functions. Bridges Short Power Outages and Provides Time for Crossover from Normal Main Power to Emergency Power.
Must be Located Within Eight Feet of the PDU.

Line	Qty.	Catalog	
12	**1.00**	**B77292CA**	**CT Service Cabinet**

Service cabinet for system accessories storage

Line	Qty.	Catalog	
13	**1.00**	**E6315JE**	**DIACOR RTP Flat Tabletop for CT and PET/CT Systems - RT16, DVCT, Disc 600/690, HD750 and VCT**

Diacor Radiation Therapy Planning Overlay for GE Healthcare Global Tables, Model 1700, 2000 and PET/CT

The Radiation Therapy Planning Overlay, or "CT Overlay", provides a secure flat surface for CT Simulation applications, consistent with the treatment couch, for accurate and reproducible patient positioning.

FEATURES/BENEFITS
• Carbon fiber construction with foam core provides durable, light-weight device with outstanding imaging properties • Varian Exact Technology and Indexing Immobilization Patient Positioning system along entire length of the overlay • Designed specifically for GE Healthcare's Global Table • Easily locks and unlocks from the CT Table, providing easy transition between therapy and

diagnostic procedures

INCLUDED:
• Carbon Fiber CT Overlay with locking accessories • Two Varian Exact Couch Indexing Bars • One Varian Respiratory Gating Interface Plate and associated mounting hardware

SPECIFICATIONS:
Weight: 30 lbs. (13.61 kg) Length: 85.25 in. (217.17 cm) Width: 20.87 in. (53.0 cm) Height: 1.62 in. (4.12 cm)

Line	Qty.	Catalog	
14	**1.00**	**E4502BE**	**CT Main Disconnect and UPS Control 380-480V 50 60Hz 125A**

Main Disconnect Panel (MDP) UL 125A 400/480V 50/60Hz 3 phases for CT, PET and PETCT

The (Main Disconnect and UPS Control Panel serves as the main facility power disconnect source installed ahead of the CT system PDU. On systems where the optional partial system UPS is included in the system, the panel provides NEC mandated UPS emergency power-off control function via a UPS control cable included with the UPS. The optimized design PDB saves time, installation labor, and valuable mounting space by consolidating the main circuit breaker, control power source and required warning lights into a compact factory manufactured panel. The panel provides short circuit protection, overload protection and National Electrical Code and Canadian Electrical Code required emergency shutdown for the system. The 24-volt low voltage controls all power, using either the panel cover mounted EMERGENCY OFF push button or the remote EMERGENCY OFF push button included with each system. The PDB is painted to match the imaging system for a total coordinated system appearance. Available in a combination surface\semi-flush mounted enclosure. The system provides stock availability of otherwise special-order devices, saving time and installation costs.

Benefits
• The System Main Disconnect saves time, installation labor, and valuable mounting space by consolidating the main circuit breaker, the feeder overcurrent devices, magnetic contactors and UPS emergency power-off into one compact panel
• The system provides stock availability of otherwise special-order devices, saving time and installation costs
• Reduces installation time and cost by eliminating delays in obtaining individually enclosed components and by eliminating on site assembly
• UPS emergency power-off functions are included for future, partial system UPS addition.
• Disconnects system power on first loss of incoming power, preventing damage to system components
• Provides a standardized platform for UPS or other future GE engineered modifications or upgrades
• Main power disconnect operating handle can be padlocked in the OFF position for servicing safety and OSHA lock out/tag out
• The door has provisions for padlocking
• Enclosure door is interlocked with ON / OFF disconnect handle to prevent unauthorized access if disconnect is in the ON position

Features
• Optional partial system UPS provides clean uninterrupted power to the system computer, maintaining system integrity during power loss while also providing a solution to power quality problems
• UL, cUL listed, and CE labeled
• Supplied with low voltage, cover mounted Push to Stop, Twist to Restore pushbutton and long-life LED pilot lights
• Provides overcurrent and short circuit protection with GE GuardEON solid-state circuit breakers
• Suitable for use on systems with 25,000A of short circuit current. It is the installer's responsibility to verify that the available shout circuit current is 25,000A or less for compliance to all electrical codes
• Emergency-off disconnects power to both the PDU and optional partial system UPS output, per National Electric Code

- Factory wired and tested
- All devices are selected for high reliability and long life
- Panel disconnect provides OSHA lockout / tag out provisions

Remote EPO

- This MDP comes with two normally closed contact blocks attached to the back of the emergency off push button.

Seismic Specifications

- This Panel has been certified by an independent California structural engineer in conformance with the shake testing requirements of ICC-AC 156. The California OSHPD number is OSP-0457-10.
- The seismic performance characteristics are as follows: SDS(g) ≤ 2.56; z/h ≤ 1.0 ; Ip ≤ 1.5

Physical Characteristics

- Dimensions: Height x Width x Depth: 30 x 16 x 8 inches (762 x 407 x 203 mm)
- Handle depth: 2.75 inches (70 mm)
- Weight: 55 pounds (25 kg)

Components supplied with each panel

- The Main Disconnect and UPS Control Panel
- An Installation, Operations & Service Manual
- (2) sets of Emergency Power Off pushbuttons with 2NC on each EPO
- Drawings and Electrical Schematics

Line	Qty.	Catalog	
15	**1.00**	**B7500CS**	**1.5 DAYS ONC APPS TRG**

1.5 Days Oncology Applications Training

Line	Qty.	Catalog	
16	**1.00**	**B7500CT**	**2.5DAYS ONSITE ONCOL.TRNG**

CT Advantage Sim Training

- (1) 2.5 Day On Site Visit for Training Advantage Sim and Advantage CT/MR Fusion

Total Quote Subtotal: **$404,203.14**

Total Quote Net Selling Price: ***$404,203.14***

Optional Items

Please initial by net price in terms you wish to purchase

Catalog Number	Qty.	Description	Net Price	Initial
B71752RT	1.00	**Adaptive Statistical Iterative Reconstruction (ASiR) Option**	$100,000.00	

ASiR(TM)(Adaptive Statistical Iterative Reconstruction) dose reduction technology*

• ASiR reconstruction technology may enable reduction in pixel noise standard deviation (a measurement of image noise). The ASiR reconstruction algorithm may allow for reduced mA in the acquisition of images,
thereby reducing the dose required*.

• A reconstruction technology that may enable improvement in low contrast detectability*.

* In clinical practice, the use of ASiR may reduce CT patient dose depending on the clinical task, patient size, anatomical location and clinical practice. A consultation with a radiologist and physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task.

Catalog Number	Qty.	Description	Net Price	Initial
B7580MT	1.00	**Deviceless 4D option**	$42,500.00	

Smart Deviceless 4D, a breakthrough innovation in 4D CT simulation for RT planning, improves productivity and delivers suberb efficiency, as it:

• is an alternative and efficient solution for 4D imaging and virtual simulation - without an external device.

• Eliminates the need for the sometimes complex & time-consuming exam specific setup using an external respiratory monitoring device

• Uses internal anatomical metrics from image data to determine breathing signal in real-time

• Combines amplitude & phase binning for optimal 4D CT image quality

• Provides streamlined, protocol-driven 4D simulation workflow, enhancing productivity and enabling shorter 4D CT examination times

Smart Deviceless 4D enables outstanding 4D CT image quality and optimized workflow, without the connection & maintenance of an external device:

• Precise measurement offers real-time data and internal

anatomical metrics for visualization of tumor and organ motion

• Protocol-driven workflow...uses the same simple, efficient 4D workflow for all patients; enables clinicians to setup and scan with just a few clicks of the mouse

• Fewer parts, no additional device...no connection or parts issues, no time-consuming setup and no added hassles; built-in functionality offers inherent high reliability

Catalog Number	Qty.	Description	Net Price	Initial
B7580WD	1.00	**ADV 4D ON OC RT FRD MKE**	**$27,500.00**	

Catalog Number	Qty.	Description	Net Price	Initial
B7716WK	1.00	**Prospective Respiratory Gating Package**	**$9,000.00**	

The Prospective Respiratory Gating Option, together with Varian's RPM, provides the means to trigger the scan according to a start point defined upon the respiratory cycle in free breathing or breath-hold mode. Pre-requisite: Varian RPM option (not included)

Catalog Number	Qty.	Description	Net Price	Initial
B79602CB	1.00	**MAR option for Z840**	**$22,500.00**	

MAR helps reduce photon starvation, beam hardening and streak artifacts caused by high Z material in the body, such as hip implants. The clarity of MAR images is addressing the challenges posed by metal artifacts, helping clinicians accurately contour targets and critical organs.
MAR offers:
• Exceptional image quality: Mar is based on the latest in GE HEalthcare smart technology, which uses a novel three-step, sinogram-based iterative algorithm.
• Stream-lined workflow: MAR requires only one scan, making the process of obtaining a corrected image fast and efficient.
• Dose conscious: MAR requires only one acquisition.
• Patient comfort: The efficient, single-scan process helps to reduce patient time inside the scanner.
• Versatility: MAR is designed to enhance clarity across a range of images including scans of hip implants, dental fillings, screws and other metal objects.
Not CE marked

Catalog Number	Qty.	Description	Net Price	Initial
B7864KH	1.00	**EXAM SPLIT ON OC**	**$10,000.00**	

FX Exam Split

Pre-requisite: ConnectPro

Exam Split simplifies anatomy-specific physician review and billing by providing customers with the capability to split a series of patient images back into individual procedures or groups.

With Exam Split the user retrospectively selects the first and last image in a group and attaches them to one of the accession numbers in the exam They then select the next group of images for attaching to each successive accession numbers. This accession number is what ties the exam to billing codes, and comes from the customer RIS (Radiology Information System).

Exam Split FX integrates the image groups pre-defined in the scan order with your RIS, and notifies physicians when their image groups are ready to read. Ther new smaller image groups can then be networked to seperate review locations for multiple "reads" and appropriate billing on select patient exams.

This application can be run in one of two modes (hard and virtual) to support hosts that do and do not support Gray Scale Presentation State (GPSPS). Virtual mode provides ability to send window level values, flip & rotate images, and has compatibility with MPPS. Customers using Exam Split also require Radiology Information System or Modality Worklist support.

Catalog Number	Qty.	Description	Net Price	Initial
E8819LC	1.00	**Sentinel 4DCT / Respiratory Gating Device**	**$110,800.00**	

Accurate and easy to use for 4D Imaging in advanced radiation therapy. Marker less: optimal respiratory points are selected with a single click; Audio Coaching: In-room speakers assist the patient to follow the optimal breathing pattern; Multiple Tracking Points: Advanced correlation models ensure detection of the respiratory pattern in the thorax and abdominal region.

Catalog Number	Qty.	Description	Net Price	Initial
E8819KZ	1.00	**Respiratory Gating for Scanners, configured for couch mounting with Installation - US only**	**$82,500.00**	

Catalog Number	Qty.	Description	Net Price	Initial
E8505VG	1.00	**Docking Station for CARINAnav system only. Not for use with CARINAsim**	**$520.00**	

Catalog Number	Qty.	Description	Net Price	Initial
E8505VH	1.00	**LAP DORADO Nova Green wall system With CARINAnav**	**$53,520.00**	

1. **Definitions.** As identified in this Agreement, "Equipment" is hardware and embedded software that is licensed with the purchase of the hardware delivered to Customer in GE Healthcare's packaging and with its labeling; "Software" is software developed by GE Healthcare and/or delivered to Customer in GE Healthcare's packaging and with its labeling, and Documentation associated with the software; "Third Party Software" and "Third Party Equipment" are respectively software developed by a third party, and hardware and embedded software that is licensed with the purchase of the hardware, that is delivered to Customer in the third party's packaging and with its labeling (collectively, "Third Party Product"); "Product" is Equipment, Software and Third Party Product; and "Services" is Product support or professional services. "Healthcare IT Products" are: (i) Software identified in the Quotation as "Centricity"; (ii) Third Party Software licensed for use in connection with Centricity Software; (iii) hardware used to operate Centricity or Third Party Software; (iv) Services provided for implementation, installation or support and maintenance of Centricity or Third Party Software; and/or (v) any Product or Service that is identified in a Healthcare IT Quotation. "Specifications" are GE Healthcare's written specifications and manuals as of the date the Equipment is shipped. "Documentation" is the online help functions, user instructions and manuals regarding the installation and operation of the Product as made available by GE Healthcare to Customer.

2. **Term and Termination.** Services and/or Software licenses will have individual term lengths identified in the Quotation. If there is a material breach of this Agreement that is not cured by the breaching party within 60 days from receipt of written notice, the non-breaching party can terminate it. Other than as set forth in this Agreement, neither party can unilaterally terminate this Agreement. Any remaining undisputed, unpaid fees become immediately due and payable on expiration or termination.

3. **Software License.** Other than as identified in the Quotation, GE Healthcare grants Customer a non-exclusive, non-transferable, non-sublicensable, perpetual license to use the Software for Customer's internal business purposes only. Customer's employees, agents and independent contractors may use the Software, but Customer is responsible for their acts. Customer-controlled entities may use the Software, but these entities will agree to these terms and pay additional license fees. Independent contractors that supply products comparable to the Software cannot be provided access to the Software unless GE Healthcare has provided its prior written consent. Customer may make a reasonable number of copies of the Software in machine-readable form for backup, testing or archival purposes. If GE Healthcare provides Third Party Software, Customer will comply with the relevant license terms, and licensors are third-party beneficiaries of this Agreement.

Customer must not: (i) display or make available the Software to any other entity; (ii) transfer the Software outside the United States or Customer's network; (iii) decompile, disassemble or reverse engineer the Software or attempt to learn its source code, structure or algorithms; (iv) modify, translate or create derivative works based on the Software; (v) modify markings, labels or notices of proprietary rights of the Software or Documentation; (vi) release results of testing or benchmarking of the Software; or (vii) use the Software outside of the scope defined in this Agreement or the Quotation.

Software and Documentation is licensed to Customer, but no title or other ownership interest passes. No rights are granted except as expressly provided in this Agreement or the Quotation. If the parties enter into a statement of work related to a Quotation ("SOW"), GE Healthcare owns all deliverables and intellectual property developed during performance. Customer assigns, and will cause its employees and independent contractors to assign, to GE Healthcare all of its rights to the SOW deliverables and intellectual property. GE Healthcare grants to Customer a non-exclusive, non-transferable, non-sublicensable license to use the SOW deliverables subject to the limitations in this Agreement.

4. **Commercial Logistics.**

4.1. Order Cancellation and Modifications.

4.1.1. Cancellation. If Customer cancels an order prior to shipment without GE Healthcare's written consent, GE Healthcare may charge: (i) a fee of up to 10% of the Product price; and (ii) for site evaluations performed prior to cancellation. GE Healthcare will retain, as a credit, payments received up to the amount of the cancellation charge. Customer must pay applicable progress payments (other than final payment) prior to final calibration, and GE Healthcare may delay calibration until those payments are received. If Customer does not schedule a delivery date within 6 months after order entry, GE Healthcare may cancel on written notice. This Section does not apply to Software Quotations, Third Party Products and/or professional or installation services included on those Quotations; those orders are non-cancellable.

4.1.2. Used Equipment. Equipment identified as pre-owned, refurbished, remanufactured or demonstration Equipment has been previously used ("Used Equipment"); it is not new. When delivered, Used Equipment may have received reconditioning, as necessary, to meet Specifications. Since Used Equipment may be offered simultaneously to several customers, its sale is subject to availability. If it is no longer available, (i) GE Healthcare will attempt to identify other Used Equipment in its inventory that meets Customer's needs, and (ii) if substitute Used Equipment is not acceptable, GE Healthcare will cancel the order and refund any deposit Customer paid for the Used Equipment.

4.2. Site Preparation. Customer must, at its expense, prepare the site and network where the Product will be installed, ensuring that its site and network are adequate for proper Product operation and performance and meet GE Healthcare's written requirements and applicable laws. GE Healthcare may refuse to deliver or install if the site has not been properly prepared or there are other impediments.

4.3. Transportation, Title and Risk of Loss. Unless otherwise identified in the Quotation, shipping terms are FOB Destination. Title and risk of loss to Equipment and Third Party Equipment passes to Customer on delivery to Customer's designated delivery location.

4.4. Delivery, Returns and Installation. Delivery dates are approximate. Products may be delivered in installments. GE Healthcare may invoice multiple installment deliveries on a consolidated basis, but this does not release Customer's obligation to pay for each installment delivery. Delivery occurs: (i) for Product, on electronic or physical delivery to Customer; and (ii) for Services, on performance.

Products cannot be returned for refund or credit if they match the Quotation.

Delivery and installations will be performed from 8am to 5pm local time, Monday-Friday, excluding GE Healthcare holidays, and outside those hours for an additional fee. Customer will: (i) install cable and assemble products not provided by GE Healthcare; (ii) enable connectivity and interoperability with products not provided by GE Healthcare; (iii) pay for construction and rigging costs; and (iv) obtain all licenses, permits and

approvals for installation, use and disposal of Products. For Equipment requiring installation, if GE Healthcare delivers the Equipment but does not perform the installation, Customer will pay GE Healthcare the quoted selling price less: (a) the installation price, if separately identified in the Quotation; or (b) if no installation price is identified, the fair market value for the installation as determined by an independent third party. For upgrades and revisions to non-Healthcare IT Products, Customer must return replaced components to GE Healthcare at no charge.

4.5. Information Technology Professional Services ("ITPS"). ITPS must be completed within 12 months of the later of the ITPS order date or Product delivery. If not done within this time period, other than because of GE Healthcare's failure to perform, ITPS performance obligations expire without refund. ITPS includes applications training, project management, HL7/HIS system integration, database conversion, network design and integration and separately cataloged software installations. This Section does not apply to Healthcare IT Products.

4.6. Acceptance.

4.6.1. Equipment Acceptance. Beginning on completion of installation (not to exceed 30 days from shipment) or delivery (if installation is not required), Customer will have 5 days to determine if the Equipment operates substantially in accordance with Specifications ("Equipment Test Period"). If the Equipment fails to perform accordingly, Customer will provide to GE Healthcare: (i) written notice; (ii) access to the Equipment; and (iii) a reasonable time to bring the Equipment into compliance. After correction by GE Healthcare, Customer will have the remainder of the Equipment Test Period or 3 days, whichever is greater, to continue testing. Equipment is accepted on the earlier of expiration of the Equipment Test Period or the date the Equipment is first used for non-acceptance testing purposes.

4.6.2. Software Acceptance. Beginning on completion of Software implementation, Customer will have 30 days to determine if the Software operates substantially in accordance with the Documentation ("Software Test Period"). If the Software fails to perform accordingly, Customer will provide to GE Healthcare: (i) written notice; (ii) access to the Software; and (iii) a reasonable time to bring the Software into compliance. After correction by GE Healthcare, Customer will have the remainder of the Software Test Period or 5 days, whichever is greater, to continue testing. Software is accepted on the first to occur of: (a) expiration of the Software Test Period; (b) the date Software is first used to process actual data; or (c) the "Go-Live Date" as defined in the Quotation.

4.6.3. Third Party Product Acceptance. Third Party Products are accepted 5 days after delivery.

4.7. Third Party Products and Services. If GE Healthcare provides Third Party Products and/or Services, then (i) GE Healthcare is acquiring them on Customer's behalf as its agent and not as a supplier; (ii) GE Healthcare provides no warranties or indemnification, express or implied; and (iii) Customer is responsible for all claims resulting from or related to their acquisition or use.

4.8. Mobile Equipment. GE Healthcare will assemble Equipment it has approved for mobile use at the vehicle location identified by Customer. Customer will comply with the vehicle manufacturer's planning requirements and arrange for delivery of the vehicle.

4.9. Audit. GE Healthcare may audit Customer's use of Software and Healthcare IT Products to verify Customer's compliance with this Agreement. Customer will provide reasonable assistance and unrestricted access to the information. Customer must pay underpaid or unpaid fees discovered during the audit, and GE Healthcare's reasonable audit costs, within 30 days of written notification of the amounts owed. If Customer does not pay, or the audit reveals that Customer is not in compliance, GE Healthcare may terminate Customer's Software license or use of the Healthcare IT Product.

5. Security Interest and Payment.

5. 1. Security Interest. Customer grants GE Healthcare a purchase money security interest in all Products in the Quotation until full payment is received, and Customer will perform all acts and execute all documents necessary to perfect GE Healthcare's security interest.

5.2. Failure to Pay. If, after Product delivery, Customer is more than 45 days past due on undisputed payments, GE Healthcare may, on 10 days' prior written notice, disable and/or remove the Products.

5.3. Late Payment. Customer must raise payment disputes before the payment due date. For any undisputed late payment, GE Healthcare may: (i) suspend performance under this Agreement until all past due amounts are paid; (ii) charge interest at a rate no more than the maximum rate permitted by applicable law; and (iii) use unapplied funds due to Customer to offset any of Customer's outstanding balance. If GE Healthcare suspends performance, any downtime will not be included in the calculation of any uptime commitment. If Customer fails to pay when due: (a) GE Healthcare may revoke its credit and designate Customer to be on credit hold; and (b) all subsequent shipments and Services must be paid in full on receipt.

5.4. Taxes. Prices do not include applicable taxes, which are Customer's responsibility.

5.5. Lease. If Customer leases a Product, it continues to be responsible for payment obligations under this Agreement.

6. Trade-In Equipment. Trade-in equipment identified in a Quotation will be subject to separate trade-in terms and conditions.

7. General Terms.

7.1. Confidentiality. Each party will treat this Agreement and the other party's proprietary information as confidential, meaning it will not use or disclose the information to third parties unless permitted in this Agreement or required by law. Customers are not prohibited from discussing patient safety issues in appropriate venues.

7.2. Governing Law. The law of the State where the Product is installed or the Service is provided will govern this Agreement.

7.3. Force Majeure. For non-monetary obligations, performance time will be reasonably extended for delays beyond a party's control.

7.4. Assignment; Use of Subcontractors. Rights and obligations under this Agreement cannot be assigned without the other party's prior written consent, unless: (i) it is to an entity (except to a GE Healthcare competitor) that (a) is an affiliate or parent of the party, or (b) acquires substantially all of the stock or assets of such party's applicable business, Product line or Service thereof; and (ii) the assignee agrees in writing to be bound by this Agreement, including payment of outstanding fees. GE Healthcare may hire subcontractors to perform work under this Agreement but will remain responsible for its obligations.

7.5. Waiver; Survival. If any provision of this Agreement is not enforced, it is not a waiver of that provision or of a party's right to later enforce it. Terms in this Agreement related to intellectual property, compliance, data rights and terms that by their nature are intended to survive its end will continue in full effect after its end.

8. Compliance.

8.1. Generally. Each party will comply with applicable laws and regulations. Customer is only purchasing or licensing Products for its own medical, billing and/or non-entertainment use in the United States. GE Healthcare will not deliver, install, service or train if it discovers Products have been or are intended to be used contrary to this Agreement. This Agreement is subject to GE Healthcare's ongoing credit review and approval. Customer is aware of its legal obligations for cost reporting, including 42 C.F.R. § 1001.952(g) and (h), and will request from GE Healthcare any information beyond the invoice needed to fulfill Customer's cost reporting obligations. GE Healthcare will provide safety-related Equipment and Software updates required by applicable laws and regulations at no additional charge.

8.2. Security. Customer must provide network and Product security, virus protection, backup, data integrity, and recovery of data, images, software or equipment; GE Healthcare is not responsible for recovery of lost or damaged data or images. NEITHER PARTY WILL BE LIABLE FOR DAMAGES CAUSED BY UNAUTHORIZED ACCESS TO THE NETWORK OR PRODUCT IN SPITE OF A PARTY'S COMPLIANT SECURITY MEASURES.

8.3. Environmental Health and Safety. GE Healthcare has no obligation to provide Products and/or Services until Customer: (i) provides and maintains a safe, hazard-free environment in material compliance with applicable Federal, State, and local requirements and written requirements provided by GE Healthcare; (ii) provides to GE Healthcare onsite personnel with a list of chemical/hazardous materials with which these personnel may come into contact, related safety data sheets and its written safety procedures; (iii) performs GE Healthcare recommended routine maintenance and operator adjustments; and (iv) ensures that service not provided by GE Healthcare is performed, and Products are used, in accordance with applicable documentation. Before Customer sends a Product to GE Healthcare (e.g., for repair, loaner return) or GE Healthcare services a Product, Customer will remove bodily fluids and remediate hazardous conditions that may cause injury or illness, and be responsible for managing, storing and disposing of all waste material, unless GE Healthcare is legally required to take back the materials. Customer is responsible, at its expense, for: (a) controlling access to, and all operations and protocols of, the Product and the site, as well as ensuring compliance with environmental and health and safety regulations; (b) obtaining required permits and licenses, including any required to handle or produce radioactive materials; (c) decommissioning and disposal requirements of its facilities; and (d) as applicable, complying with GMP and/or pharmaceutical regulations. Customer will provide radioactive materials for calibration and testing of the Product.

8.4. Parts and Tubes. GE Healthcare: (i) recommends the use of parts it has validated for use with the Product; (ii) is not responsible for the quality of parts supplied by third parties to Customer; and (iii) cannot assure Product functionality or performance when non-GE Healthcare parts are used. Certain Products are designed to recognize GE Healthcare-supplied tubes and report the presence of a non-GE Healthcare tube; GE Healthcare is not responsible for the use of, or effects from, non-GE Healthcare supplied tubes.

8.5. Training. GE Healthcare's training does not guarantee that: (i) Customer trainees are fully trained on Product use, maintenance or operation or (ii) training will satisfy any licensure or accreditation. Customer must ensure its trainees are fully qualified in the use and operation of the Product. Unless otherwise identified in the training catalog, Customer will complete training within 12 months after: (a) if with a Product purchase, the date of Product delivery; (b) if with a Services purchase, the start date for Services; or (c) if with a training-only purchase, the date training is ordered. If not done within this time period (other than because of GE Healthcare's fault), training expires without refund.

8.6. Medical Diagnosis and Treatment. All clinical and medical treatment, diagnostic and/or billing decisions are Customer's responsibility.

8.7. Connectivity. If a Product has remote access capability, Customer must provide GE Healthcare with, and maintain, remote access to the Product by a GE Healthcare-validated connection to permit GE Healthcare to perform Services. If remote access is not provided, GE Healthcare reserves the right to charge Customer for onsite support at GE Healthcare's then-current billing rate. The remote connection and collection of machine data (e.g., temperature, helium level) will continue after the end of this Agreement unless Customer requests in writing that GE Healthcare disable it.

8.8. Use of Data.

8.8.1. Protected Health Information. If GE Healthcare creates, receives, maintains, transmits or otherwise has access to Protected Health Information as such term is defined in 45 C.F.R. § 160.103 ("PHI") under this Agreement, it will only use and disclose the PHI as permitted by law and by the Business Associate Agreement between the parties.

8.8.2. Data Rights. GE Healthcare and its subcontractors may access, collect, maintain, analyze, prepare derivatives from and otherwise use information about Products and/or Services that is not PHI, including, but not limited to, machine, technical, systems, usage and related information ("Source Data") to facilitate the provision of Products and/or Services to Customer and for research, development and continuous improvement of GE Healthcare's products, software and services. GE Healthcare will own all discoveries, ideas, improvements, products, services, software, data, intellectual property and other rights arising from and/or related to GE Healthcare's and its subcontractors' use, analysis, research and/or development of the Source Data.

8.9. Customer Policies. GE Healthcare will use reasonable efforts to respect Customer-provided policies that apply to GE Healthcare, and do not materially contradict GE Healthcare policies. Failure to respect Customer policies is not a material breach unless it is willful and adversely affects GE Healthcare's ability to perform its obligations.

8.10. Insurance. GE Healthcare will maintain coverage in accordance with its standard certificate of insurance.

8.11. Excluded Provider. To its knowledge, neither GE Healthcare nor its employees performing Services under this Agreement have been excluded from participation in a Federal Healthcare Program. If an employee performing Services under this Agreement is excluded, GE Healthcare will replace that employee within a reasonable time; if GE Healthcare is excluded, Customer may terminate this Agreement upon written notice to GE Healthcare.

9. Disputes, Liability and Indemnity.

9.1. Dispute Resolution. The parties will first attempt to resolve in good faith any disputes related to this Agreement. Violation of GE Healthcare's license, confidentiality or intellectual property rights will cause irreparable harm for which the award of money damages alone is inadequate. GE Healthcare may: (i) seek injunctive relief and any other available remedies; and/or (ii) immediately terminate the license grant and require Customer to cease use of and return the Software and Third Party Software. Other than these violations or collection matters, unresolved disputes will be submitted to mediation prior to initiation of other means of dispute resolution.

9.2. Limitation of Liability. GE HEALTHCARE'S ENTIRE LIABILITY, AND CUSTOMER'S EXCLUSIVE REMEDY, FOR DIRECT DAMAGES INCURRED BY CUSTOMER FROM ANY CAUSE, REGARDLESS OF THE FORM OF ACTION, ARISING UNDER THIS AGREEMENT OR RELATED HERETO, WILL NOT EXCEED:
FOR PRODUCTS, THE PRICE FOR THE PRODUCT THAT IS THE BASIS FOR THE CLAIM; OR (II) FOR SERVICE OR SUBSCRIPTIONS, THE AMOUNT OF THE SERVICE OR SUBSCRIPTION FEES FOR THE 12 MONTHS IMMEDIATELY PRECEDING THE ACTION THAT IS THE BASIS FOR THE CLAIM. THIS LIMITATION OF LIABILITY WILL NOT APPLY TO GE HEALTHCARE'S DUTIES TO INDEMNIFY CUSTOMER IN ACCORDANCE WITH THIS AGREEMENT. THE LIMITATION OF LIABILITY WILL APPLY EVEN IF THE LIMITED REMEDIES FAIL OF THEIR ESSENTIAL PURPOSE.

9.3. Exclusion of Damages. NEITHER PARTY WILL BE LIABLE FOR INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, CONSEQUENTIAL OR REPUTATIONAL DAMAGES, OR FOR LOSS OF PROFITS, REVENUE, TIME, OPPORTUNITY OR DATA, REGARDLESS OF THE FORM OF ACTION OR BASIS OF THE CLAIM. HE EXCLUSION OF DAMAGES WILL APPLY EVEN IF THE LIMITED REMEDIES FAIL OF THEIR ESSENTIAL PURPOSE.

9.4. IP Indemnification. GE Healthcare will indemnify and hold Customer harmless from third-party claims for infringement of United States intellectual property rights caused solely by Customer's use of the Equipment and Software in accordance with the Documentation and license. GE Healthcare will control the defense. Customer may retain counsel but at Customer's expense.

9.5. General Indemnification. GE Healthcare will indemnify and hold Customer harmless for third party damages that Customer becomes legally obligated to pay related to bodily injury or damage to real or tangible personal property to the extent the damages are caused by a manufacturing or design defect, negligent failure to warn, negligent installation, or negligent Service with respect to Products manufactured by GE Healthcare and supplied under this Agreement. GE Healthcare has no obligation to indemnify and hold Customer harmless for damages caused by: (i) Customer's fault or legal expenses incurred by Customer in defending itself against suits seeking damages caused by Customer's fault or (ii) any Product modification not authorized in writing by GE Healthcare.

Customer will indemnify and hold GE Healthcare harmless from third party damages that GE Healthcare becomes legally obligated to pay related to bodily injury or damage to real or tangible personal property to the extent the damages are caused by Customer's: (a) medical diagnosis or treatment decisions; (b) misuse or negligent use of the Product; and/or (c) use of the Product in a manner or environment, or for any purpose, for which GE Healthcare did not design it, or in violation of GE Healthcare's recommendations or instructions.

The above obligations are conditional on the indemnified party providing the indemnifying party prompt written notice of the claim after receiving notice of it, allowing the indemnifying party the option to control defense and disposition of the claim, and reasonably cooperating with the indemnifying party in the defense. The indemnifying party will not be responsible for any compromise made without its consent.

10. Notices. Notices will be in writing and considered delivered when received if sent by certified mail, postage prepaid, return receipt requested, by overnight mail, or by fax. Notice to Customer will be directed to the address on this Agreement, and notice to GE Healthcare to General Counsel, 9900 Innovation Dr., Wauwatosa, WI 53226.

11. Position Emission Tomography ("PET") and Computed Tomography ("CT"). Customer will provide all radioactive sources and radioisotopes for calibration and performance checks of such system.

12. CT Uptime Commitment. GE Healthcare will provide an uptime commitment during warranty for CT Equipment (excluding peripherals) if Customer provides GE Healthcare with: (i) access to the CT Equipment through a secure connection meeting Specifications and industry best practices; (ii) notice of changes that impact Customer's connection; and (iii) prompt and unencumbered access to the CT Equipment. The "Uptime Commitment" for CT Equipment is 97%. Other Products may be eligible for an uptime commitment if identified in the Quotation.

If GE Healthcare fails to meet the Uptime Commitment over a 26-week period, it will extend the warranty as follows:

% Less than Uptime Commitment	Warranty Extension
0.1 - 3.0	1 week
3.1 - 8.0	2 weeks
8.1 - 13.0	4 weeks
> 13.0	6 weeks

Uptime is calculated as follows:

$$\left(\frac{UptimeBase - Downtime}{UptimeBase}\right)$$

"Uptime Base" = ("a" hours per day X "b" days per week X 26 weeks) – (Planned Maintenance ("PM") hours during prior 26 weeks), where "a" hours per day and "b" days per week are determined by the standard warranty for the CT Equipment. "Downtime" is the number of hours during which the CT Equipment is subject to a Critical Malfunction. Downtime starts when Customer notifies GE Healthcare that the CT Equipment is inoperable and unavailable for use due to GE Healthcare's design, manufacturing, material or performance failure ("Critical Malfunction"). Downtime ends when the CT Equipment is available for clinical use. To be eligible for the Uptime Commitment, Customer must maintain a performance log that includes data required to calculate Downtime.

13. DoseWatch Device License. Each connection of a Device (defined below) to the DoseWatch Software requires Customer to purchase a unique Device license referencing a Device ID that allows concurrent use of the DoseWatch Software with that Device at a specified Customer facility on Customer's secured network. All other terms, duration and warranties applicable to the Software license apply to the Device license. "Device" is specific Customer equipment approved by GE Healthcare to be connected to DoseWatch Software under this Agreement. Additional Device connections may be added to this Agreement, subject to individual Device licenses, and related installation, implementation, configuration and optimization services at GE Healthcare's then-current rates.

14. Software as a Service Terms.

14.1. Scope. GE Healthcare will provide Customer with the SaaS in accordance with the terms of this Agreement and its Documentation. GE Healthcare will assist Customer with technical issues via phone, email or online support as provided generally to SaaS customers.

14.2. Term and Termination. The SaaS term is identified in the Quotation and renews automatically for the same duration as the initial term unless otherwise identified in the Quotation. Except as otherwise identified in this Agreement or a Quotation, price increases will be communicated with 90 days' prior written notice. SaaS Quotations are not cancellable, except that either party may terminate the SaaS after the initial SaaS term or any subsequent renewal period by providing at least 90 days' prior written notice to the other party. On termination or expiration of the SaaS: (i) Customer must immediately discontinue use of the SaaS and return any associated leased hardware to GE Healthcare; (ii) GE Healthcare will remove Customer's access; (iii) GE Healthcare may destroy information, images or data, including PHI, associated with a patient ("Patient Information") or otherwise; (iv) Customer must destroy its copies of Documentation; (v) Customer must immediately pay all fees due; and (vi) all rights and obligations of the parties terminate, except those that accrued prior to termination, expiration or as otherwise identified in this Agreement.

14.3. Payment. Payment terms are in the Quotation. Travel, living and incidental project-related expenses are Customer's responsibility and GE

will be invoiced separately as incurred.

14.4. Access and Use. Customer must ensure: (i) use of the SaaS is consistent with this Agreement; (ii) the SaaS is used only for its internal business operations in the United States; (iii) the SaaS is not accessed by non-Customers, unless GE Healthcare consents and then Customer must ensure that those users comply with this Agreement and any terms of use prompted by the SaaS; and (iv) users maintain individually-assigned confidential user identifications and control mechanisms to access the SaaS. Customer will notify GE Healthcare immediately of unauthorized access to or use of a user name, password or other breach of security. GE Healthcare may disable any user name, password or other identifier if it believes Customer has breached this Agreement. If GE Healthcare provides connectivity software with the SaaS, Customer will be granted a license to it for the term of the SaaS in accordance with the Software License terms set forth in this Agreement. GE Healthcare may charge additional fees if Customer requires professional services or additional hardware resources.

14.5. Patient Information. Customer must: (i) obtain necessary consent from patients for use, access, disclosure and transfer of Patient Information; (ii) develop, implement and train users on privacy and security policies in compliance with applicable laws and regulations and ensure compliance with those policies; (iii) provide GE Healthcare with a copy of those policies and patient consents on request; (iv) not use, disclose, access or transfer Patient Information that has been opted out without express consent from the respective patient(s); and (v) comply with changes in laws and regulations regarding patient consents related to the use of clinical, administrative or financial information.

14.6. Content. GE Healthcare does not own, control, verify or endorse: (i) non-GE Healthcare content uploaded to the SaaS; or (ii) access to or use of the SaaS granted by Customer. Customer is responsible for content that it uploads, accesses or uses. Reliance on content uploaded to the SaaS is at Customer's own risk. The SaaS may contain tools that may only be used by qualified healthcare providers, and it is the Customer's and/or healthcare provider's responsibility to use its independent medical and professional judgment to make clinical or financial decisions. Uploaded or created content may be deleted upon reasonable notice.

14.7. Modifications. GE Healthcare may, with notice: (i) withdraw or amend all or part of the SaaS; and (ii) restrict access for maintenance or other reasons. Revisions are effective when made by GE Healthcare.

14.8. Prohibited Activities. Customer must not use the SaaS, and ensure the SaaS is not used, to: (i) transmit or upload promotional material or objectionable content; (ii) engage in conduct that adversely affects another person or entity or otherwise exposes them to liability; (iii) promote or assist in illegal activity; (iv) access, use or interfere with the proper working of the SaaS or any related server, computer or database unless authorized by GE Healthcare; (v) introduce viruses, trojan horses, worms, logic bombs or other harmful material; (vi) modify, reverse engineer, copy or create derivative works of the SaaS; (vii) remove or modify labels or notices of proprietary rights of the SaaS or Documentation; or (viii) use the SaaS outside of the scope defined in this Agreement or the Quotation.

14.9. Audit. GE Healthcare may audit Customer's use of the SaaS to verify Customer's compliance with this Agreement. Customer will provide reasonable assistance and unrestricted access to the information. Customer must pay underpaid or unpaid fees discovered during the audit, and GE Healthcare's reasonable audit costs, within 30 days of written notification of the amounts owed. If Customer does not pay, or the audit reveals that Customer is not in compliance, GE Healthcare may terminate Customer's access to or use of the SaaS.

14.10. Disclaimer of Warranties. GE HEALTHCARE DOES NOT WARRANT THAT THE SAAS WILL BE FREE OF VIRUSES OR OTHER DESTRUCTIVE CODE. GE HEALTHCARE WILL NOT BE LIABLE FOR ANY LOSS CAUSED BY AN ATTACK, VIRUS OR OTHER EVENT THAT AFFECTS CUSTOMER'S USE OF THE SAAS OR CONTENT OBTAINED THROUGH IT. OTHER THAN ANY UPTIME COMMITMENT, THE SAAS IS PROVIDED IN ACCORDANCE WITH ITS DOCUMENTATION ON AN "AS AVAILABLE"

BASIS. UNLESS OTHERWISE PROHIBITED BY APPLICABLE LAW, GE HEALTHCARE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OR TO THE ACCURACY, RELIABILITY OR USEFULNESS OF STATEMENTS, CONTENT, OR PRODUCTS OR SERVICES MADE AVAILABLE OR OBTAINED THROUGH THE SAAS. GE HEALTHCARE MAKES NO WARRANTY THAT THE SAAS OR CONTENT WILL BE UNINTERRUPTED, TIMELY, SECURE, ERROR FREE, MEET CUSTOMER REQUIREMENTS, OR THAT DEFECTS WILL BE CORRECTED.

14.11. Customer Indemnity. In addition to other indemnification obligations in this Agreement, Customer will indemnify and hold GE Healthcare harmless against damages that GE Healthcare becomes legally obligated to pay related to: (i) content, format, inaccuracy or incompleteness of Patient Information uploaded by Customer or users; (ii) consent for use, access, disclosure and/or transfer of Patient Information; (iii) use of the SaaS by Customer or users in any manner not authorized in writing by GE Healthcare; (iv) Customer's intellectual property infringement or privacy violations; (v) investigations by law enforcement, technical disruption, or Customer's use or access of the SaaS; (vi) Customer's or users' breach of this Agreement with respect to the SaaS; and (vii) violations of federal or state wage and hour laws alleged by third parties or Customer employees.

1. Warranty.

1.1. Equipment. For non-customized Equipment purchased from GE Healthcare or its authorized distributors, unless otherwise identified in the Quotation, GE Healthcare warrants that Equipment will be free from defects in title, and, for 1 year from Equipment Acceptance, it will: (i) be free from defects in material and workmanship under normal use and service; and (ii) perform substantially in accordance with the Specifications. The warranty covers parts and labor and only applies to end-users that purchase Equipment from GE Healthcare or its authorized distributors.

1.2. Software. For Software licensed from GE Healthcare, GE Healthcare warrants that: (i) it has the right to license or sublicense Software to Customer; (ii) it has not inserted Disabling Code into Software; (iii) it will use efforts consistent with industry standards to remove viruses from Software before delivery; and (iv) unless otherwise identified in the Quotation, for 90 days from Software Acceptance, Software will perform substantially in accordance with the Documentation. "Disabling Code" is code designed to interfere with the normal operation of Software, but code that prohibits use outside of the license scope is not Disabling Code.

1.3. Services. GE Healthcare warrants that its Service will be performed by trained individuals in a professional, workman-like manner.

1.4. Used Equipment. Certain Used Equipment is provided with GE Healthcare's standard warranty for the duration identified in the Quotation, but in no event more than 1 year. If no warranty is identified, the Used Equipment is not warranted by GE Healthcare.

1.5. Accessories and Supplies. Warranties for accessories and supplies are in GE Healthcare's catalog and at www.gehealthcare.com.

1.6. Third Party Product. Third Party Product is covered by the third party's warranty and not GE Healthcare's warranties.

2. Remedies. If Customer promptly notifies GE Healthcare of its claim during the warranty and makes the Product available, GE Healthcare will: (i) at its option, repair, adjust or replace the non-conforming Equipment or components; (ii) at its option, correct the non-conformity or replace the Software; and/or (iii) re-perform non-conforming Service. Warranty service will be performed from 8am to 5pm local time, Monday-Friday, excluding GE Healthcare holidays, and outside those hours at GE Healthcare's then-current service rates and subject to personnel availability. GE Healthcare may require warranty repairs to be performed via a secure, remote connection or at an authorized service center. If GE Healthcare replaces Equipment or a component, the original becomes GE Healthcare property and Customer will return the original to GE Healthcare within 5 days after the replacement is provided to Customer. Customer cannot stockpile replacement parts. Prior to returning Equipment to GE Healthcare, Customer will: (a) obtain a return to manufacturer authorization; and (b) back up and remove all information stored on the Equipment (stored data may be removed during repair). Customer is responsible for damage during shipment to GE Healthcare. The warranty for a Product or component provided to correct a warranty failure is the unexpired term of the warranty for the repaired or replaced Product.

GE Healthcare may provide a loaner unit during extended periods of Product service. If a loaner unit is provided: (i) it is for Customer's temporary use at the location identified in the Quotation; (ii) it will be returned to GE Healthcare within 5 days after the Product is returned to Customer, and if it is not, GE Healthcare may repossess it or invoice Customer for its full list price; (iii) it, and all programs and information pertaining to it, remain GE Healthcare property; (iv) risk of loss is with Customer during its possession; (v) Customer will maintain and return it in proper condition, normal wear and tear excepted, in accordance with GE Healthcare's instructions; (vi) it will not be repaired except by GE Healthcare; (vii) GE Healthcare will be given reasonable access to it; (viii) Customer is not paying for its use, and Customer will ensure charges or claims submitted to a government healthcare program or patient are submitted accordingly; and (ix) prior to returning it to GE Healthcare, Customer will delete all information, including PHI, from it and its accessories, in compliance with industry standards and instructions provided by GE Healthcare.

NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WILL APPLY. SERVICE MANUALS AND DOCUMENTATION ARE PROVIDED "AS IS". GE HEALTHCARE DOES NOT GUARANTEE PRODUCTS WILL OPERATE WITHOUT ERROR OR INTERRUPTION.

3. Limitations. GE Healthcare has no obligation to Customer for warranty claims if Customer uses the Product: (a) for non-medical or entertainment use or outside the United States; (b) in combination with software, hardware, or services not recommended in writing by GE Healthcare; and (c) in a manner or environment for which GE Healthcare did not design or license it, or in violation of GE Healthcare's recommendations or instructions.

In addition, these warranties do not cover: (i) a defect or deficiency from improper storage or handling, inadequate backup or virus protection, cyber-attacks, failure to maintain within Specifications power quality, grounding, temperature, humidity and repairs due to power anomalies, or any cause external to the Products or beyond GE Healthcare's control; (ii) payment or reimbursement of facility costs arising from repair or replacement of the Products or parts; (iii) adjustment, alignment, calibration, or planned maintenance; (iv) network and antenna installations not performed by GE Healthcare or its subcontractors; (v) lost or stolen Products; (vi) Products with serial numbers altered, defaced or removed; (vii) modification of Product not approved in writing by GE Healthcare; (viii) Products immersed in liquid; and (ix) consumable/replaceable items.

4. Exceptions to Standard Warranty.

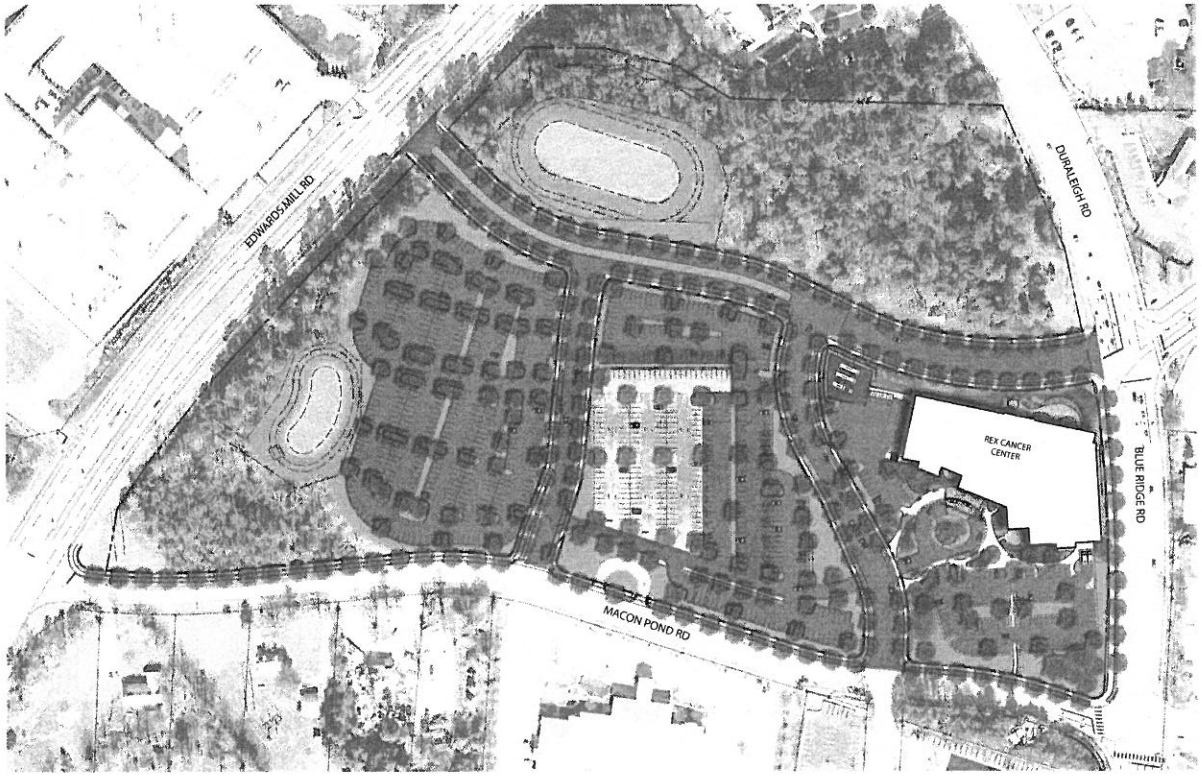
DoseWatch Explore: DOSEWATCH EXPLORE SOFTWARE, SERVICES AND INFORMATION IS PROVIDED "AS IS" WITH NO WARRANTY
Partial System Equipment Upgrades for CT, MR, X-Ray, PET (Scanners, Cyclotrons and Chemistry Labs) and Nuclear systems: 6 months (only applies to the upgraded components)
Cyclotron and Radiopharmacy: Warranty starts on the earlier of (i) 3 months after the date GE Healthcare completes mechanical installation, or (ii) the date Product testing is successfully completed
MR Systems: Warranty does not cover: (i) a defect or deficiency from failure of water chillers supplied or serviced by Customer, and (ii) for MR systems with LHe/LN or shield cooler configured superconducting magnets (except for MR Systems with LCC magnets), any cryogen supply, cryogenic service or service to the magnet, cryostat, coldhead, shield cooler compressor or shim coils unless the need for supply or service is caused by a defect in material or workmanship covered by this warranty.

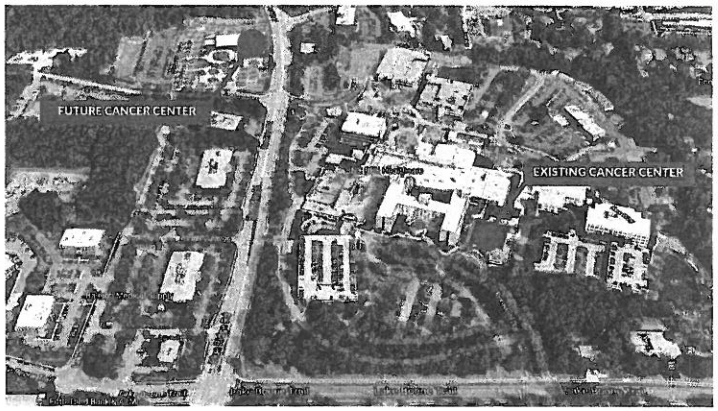
Proteus XR/a, Definium and Precision 500D X-Ray Systems: Warranty does not cover collimator bulbs
MX150 Vascular and Performix 160A (MX160) Tubes: 3 years
X-Ray High Voltage Rectifiers and TV Camera Pick-Up Tubes: 6 months
X-Ray Wireless Digital Detectors: In addition to the standard warranty, GE Healthcare will provide coverage for detector damage due to accidental dropping or mishandling. If accidental damage occurs, GE Healthcare will provide Customer with 1 replacement detector during warranty at no additional charge. If subsequent accidental damage occurs during warranty, each additional replacement will be provided for $30,000 per replacement. This additional coverage excludes damage caused by any use that does not conform to OEM guidelines, use that causes fluid invasion, holes, deep scratches or the detector case to crack, and damage caused by abuse, theft, loss, fire, power failures or surges. If the warranty is voided by these conditions, repair or replacement is Customer's responsibility.
Bone Mineral Densitometry: Alpha Source, Inc. will perform installation, application support and warranty services. Direct warranty claims to Alpha Source, Inc. at 1-800-654-9845. Upgraded computer, printer and monitor components include a 1 month warranty. Customer will not be credited the value of this warranty against pre-existing warranties or service agreements.
GE OEC New or Exchange Service/Maintenance Parts: 3 months
GE OEC Refurbished C-Arms: 1 year after installation
HealthNet Lan, Advantage Review — Remote Products: 3 months
Vivid T8: 3 years, includes TEE probes purchased with the Vivid T8
Vivid i, Vivid e, Vivid q, Vivid iq and Voluson i: Warranty includes (i) repair at GE Healthcare facilities, (ii) 3 business day turnaround repair for Products shipped via overnight delivery (where available), measured from shipment date (GE Healthcare is not responsible for delays in overnight shipment), (iii) 72-hour loaner unit or probe replacement service via Fed Ex, and (iv) phone support from 7am to 7pm Central Time, Monday-Friday, excluding GE Healthcare holidays. For an additional charge, GE Healthcare may provide field support/service, planned maintenance, and/or coverage for damage due to accidental dropping or mishandling with a maximum of 2 replacement systems during warranty.
LOGIQ e, Venue, Vivid iq and related transducers and peripherals purchased with them: 5 years (3 years for Vivid iq), except the following have a 1 year warranty:

Transducers: 6Tc-RS, i739-RS, t739-RS, and i12L
Carts: Venue Docking Cart, LOGIQ e Isolation Cart and Tall Docking Carts
Other Accessories: Venue & LOGIQ e batteries (internal & external), TEE cleaning & storage system and printers

Warranty includes: (i) repair at a GE Healthcare Service Depot, (ii) phone support from 7am to 7pm Central Time, Monday-Friday, excluding GE Healthcare holidays, and (iii) a loaner Product when available (shipping charges included).
Vscan: 3 years, except Vscan Version 1.1 Demonstration systems, which are warranted for 1 year. Warranty includes: (i) repair at a GE Healthcare Service Depot; (ii) repair within 5 days after receipt of the Vscan, excluding GE Healthcare holidays (GE Healthcare is not responsible for delays in shipment); and (iii) phone support from 7am to 7pm Central Time, Monday-Friday, excluding GE Healthcare holidays.
Ultrasound Partial System Equipment Upgrades: 3 months (only applies to the upgraded components). Customer will not be credited the value of the warranty against pre-existing warranties or service agreements.
Batteries: 3 months, except for x-ray nickel cadmium or lead acid batteries and Vsan batteries, which are warranted for 1 year
CARESCAPE Monitors B450, B650 and B850: 3 years parts, 1 year labor (excluding displays, which are standard)
B40 Monitors: 2 years parts, 1 year labor (excluding displays, which are standard)
MAC 800, 1200, 1600, 2000 and 3500: 3 years
CARESCAPE V100 and VC150 Vital Signs Monitors: 2 years
Exergen: 4 years
Panda® iRes Warmers, Giraffe® Warmer and Giraffe® Carestation OmniBed: 7 year parts warranty on heater cal rod
Microenvironment and Phototherapy consumable components: 1 month
Corometrics® Fetal Monitoring: Warranty includes: (i) warranty starting on the earlier of (a) if GE Healthcare or Customer installs, 5 days after installation or (b) 40 days after shipment; and (ii) 2 years parts, 1 year labor
Corometrics® Nautilus Transducers: 2 years
Lullaby Phototherapy System: 3 years on lamp assembly
Oximeters: 3 years from installation, or 39 months from date of GE Healthcare invoice, whichever occurs first
Anesthesia Monitor Mounting Solutions: If purchased directly from GE Healthcare, it will be warranted as a GE Healthcare Product
Tec 7 Vaporizers: 3 years
Tec 6 Plus Vaporizers: 2 years

UNC REX HEALTHCARE





BSA

UNC REX HEALTHCARE - OUTPATIENT CANCER CENTER

SITE PLAN

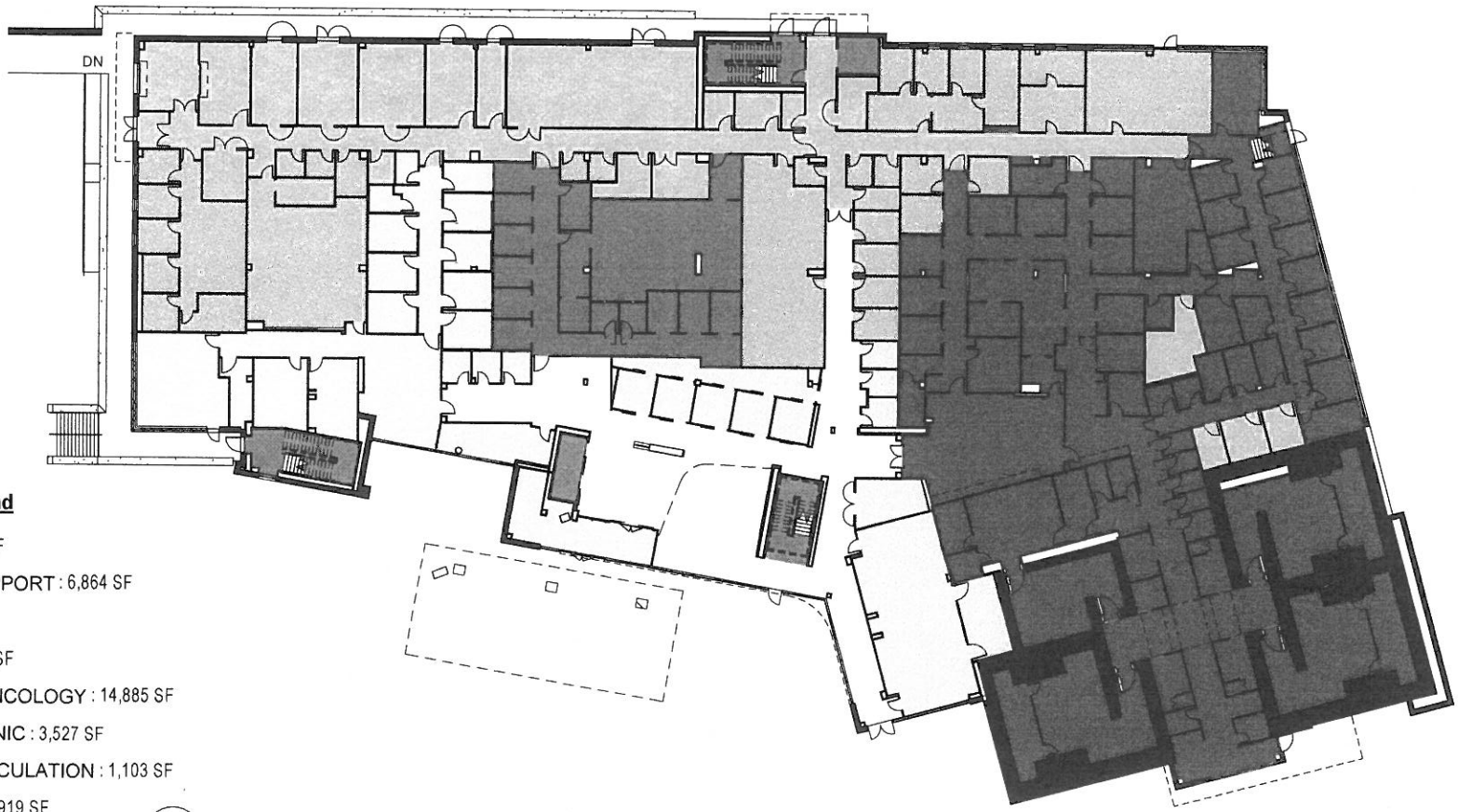
12/12/13

EXHIBIT

6

tabbies

UNC REX HEALTHCARE



Department Legend

- ADMIN : 6,556 SF
- BUILDING SUPPORT : 6,864 SF
- LAB : 2,921 SF
- PUBLIC : 3,594 SF
- RADIATION ONCOLOGY : 14,885 SF
- SUPPORT CLINIC : 3,527 SF
- VERTICAL CIRCULATION : 1,103 SF
- CIRCULATION: 3,919 SF
- WALLS: 5,322 SF

1/01 OVERALL LEVEL 1
1" = 30'-0"

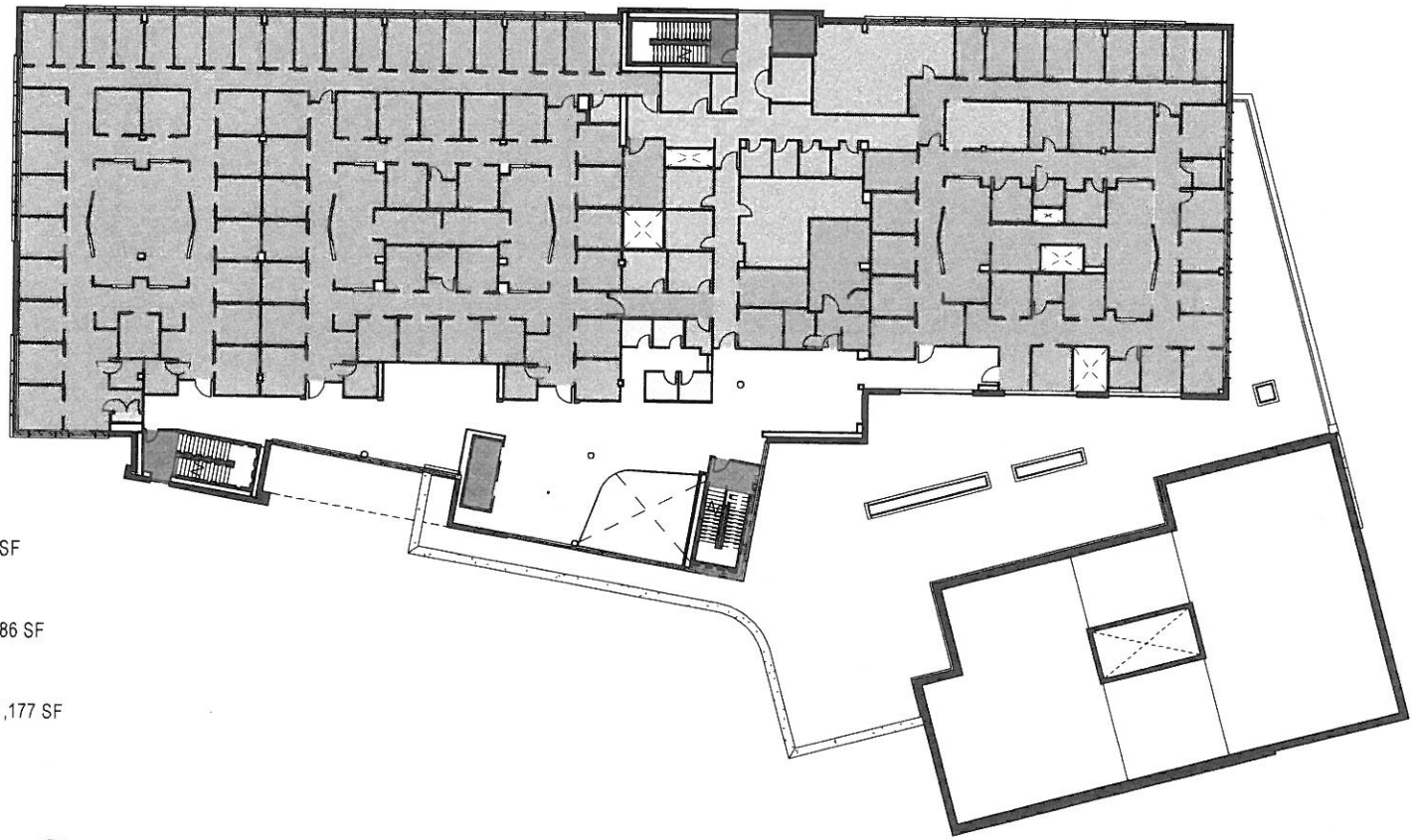
BSA

UNC REX HEALTHCARE - OUTPATIENT CANCER CENTER

OVERALL PLAN - LEVEL 1

12/12/23

UNC REX HEALTHCARE



Department Legend

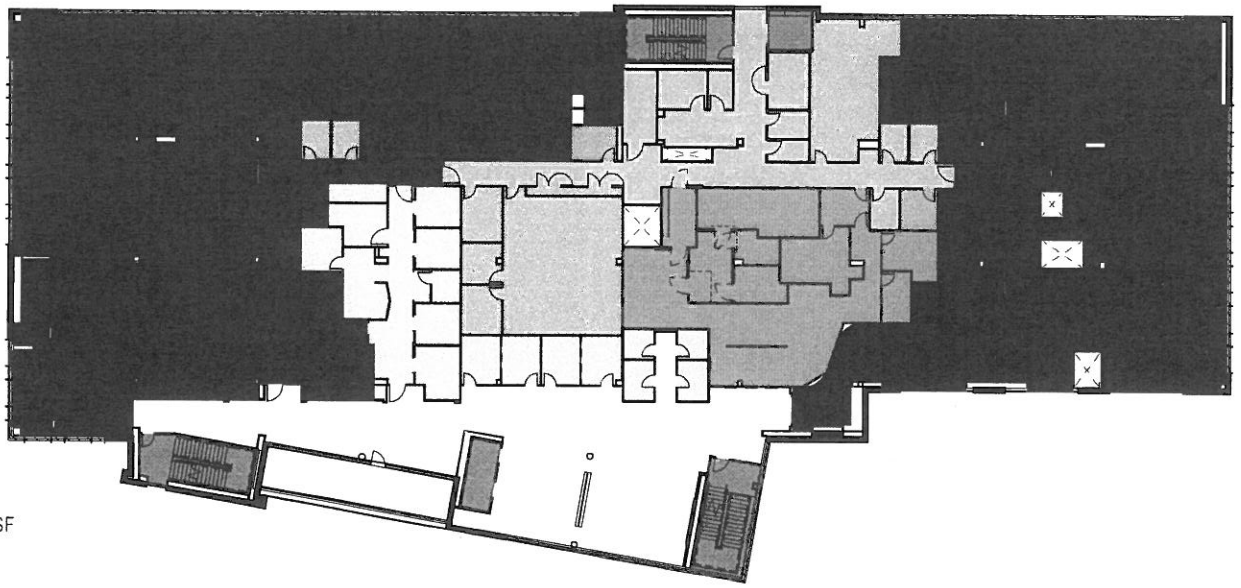
- ADMIN: 2,369 SF
- BUILDING SUPPORT: 1,225 SF
- IMAGING: 530 SF
- MEDICAL ONCOLOGY: 20,286 SF
- PUBLIC: 242 SF
- VERTICAL CIRCULATION: 1,177 SF
- CIRCULATION: 4,056 SF
- WALLS: 2,280 SF

1/02 OVERALL LEVEL 2
1" = 30'-0"

BSA

UNC REX HEALTHCARE - OUTPATIENT CANCER CENTER
OVERALL PLAN - LEVEL 2
12/12/13

UNC REX HEALTHCARE



Department Legend

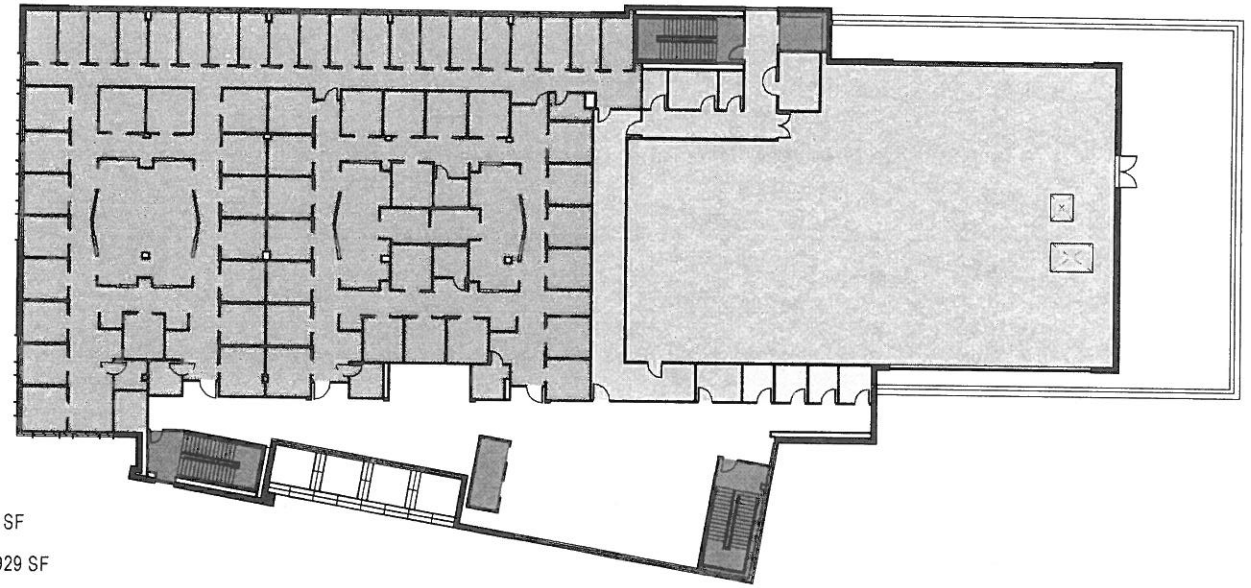
- ADMIN : 2,287 SF
- BUILDING SUPPORT : 1,991 SF
- INFUSION : 16,764 SF
- MEDICAL ONCOLOGY : 185 SF
- PHARMACY : 2,591 SF
- PUBLIC : 717 SF
- SUPPORT CLINIC : 1,409 SF
- VERTICAL CIRCULATION : 1,177 SF
- CIRCULATION : 4,070 SF
- WALLS : 1,554 SF

1/03 OVERALL LEVEL 3
1" = 30'-0"

BSA

UNC REX HEALTHCARE - OUTPATIENT CANCER CENTER
OVERALL PLAN - LEVEL 3
12.12.18

UNC REX HEALTHCARE



Department Legend

- BUILDING SUPPORT: 9,807 SF
- MEDICAL ONCOLOGY: 12,929 SF
- PUBLIC : 280 SF
- VERTICAL CIRCULATION: 1,188 SF
- CIRCULATION: 3,684 SF
- WALLS: 1,293 SF

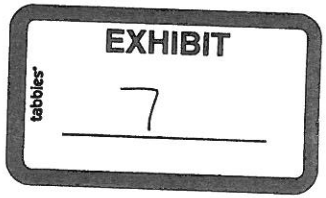
1/04 **OVERALL LEVEL 4/PENTHOUSE**
1" = 30'-0"

BSA

UNC REX HEALTHCARE - OUTPATIENT CARE CENTER
OVERALL PLAN - LEVEL 4
12/13/13

UNC REX Healthcare
Cancer Center Project
EQUIPMENT COMPARISON

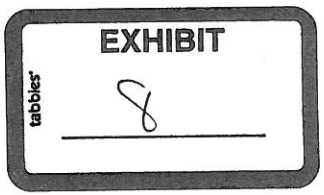
	Existing Equipment	Replacement Equipment
Type of Equipment (List each component)	Linear Accelerator	Linear Accelerator
Manufacturer of Equipment	Accuray	Elekta
Tesla Rating for MRIs		
Model Number	Tomotherapy	Tbd
Serial Number	379	Tbd
Provider's Method of Identifying Equipment	By model and serial #	By model and serial #
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	3/2/2011	Tbd
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title Held	Tbd
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.) <Use Attached Form>	?	$1,790,000



Total Cost of Equipment	?	$1,790,000
Fair Market Value of Equipment	?	$1,790,000
Net Purchase Price of Equipment	?	$1,790,000
Locations Where Operated	Rex Main Campus	Rex Main Campus
Number Days in Use/To Be Used in N.C. per Year	365	365
Percent of Change in Patient Charges (by procedure)	N/A	No change
Percent of Change in Per Procedure Operating Expenses (by procedure)	N/A	No change
Type of Procedures Currently Performed on Existing Equipment	Radiation Therapy Treatments	
Type of Procedures New Equipment is Capable of Performing		Radiation Therapy Treatments

UNC REX Healthcare
Cancer Center Project
EQUIPMENT COMPARISON

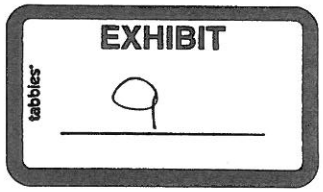
	Existing Equipment	Replacement Equipment
Type of Equipment (List each component)	Linear Accelerator	Linear Accelerator
Manufacturer of Equipment	Varian	Elekta
Tesla Rating for MRIs		
Model Number	21 ix	TBD
Serial Number	H293833	TBD
Provider's Method of Identifying Equipment	By model and serial number	By model and serial number
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	N/A	N/A
Mobile Tractor Serial Number/VIN #	N/A	N/A
Date of Acquisition of Each Component	7/9/2009	Tbd
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title Held	To be purchased
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.) <Use Attached Form>	?	$1,790,000



Total Cost of Equipment	?	$1,790,000
Fair Market Value of Equipment	?	$1,790,000
Net Purchase Price of Equipment	?	$1,790,000
Locations Where Operated	Rex Main Campus	Rex Main Campus
Number Days in Use/To Be Used in N.C. per Year	365	365
Percent of Change in Patient Charges (by procedure)	N/A	No change
Percent of Change in Per Procedure Operating Expenses (by procedure)	N/A	No change
Type of Procedures Currently Performed on Existing Equipment	Radiation Therapy Treatments	N/A
Type of Procedures New Equipment is Capable of Performing	N/A	Radiation Therapy Treatments

UNC REX Healthcare
Cancer Center Project
EQUIPMENT COMPARISON

	Existing Equipment	Replacement Equipment
Type of Equipment (List each component)	CT – Simulator	CT - Simulator
Manufacturer of Equipment	GE	GE
Tesla Rating for MRIs		
Model Number	237486-6	Tbd
Serial Number	379	Tbd
Provider's Method of Identifying Equipment	By model and serial #	By model and serial #
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	5 / 2007	New
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title Held	To be Purchased
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.) <Use Attached Form>	?	$404,203.14



Total Cost of Equipment	?	$404,203.14
Fair Market Value of Equipment	?	$404,203.14
Net Purchase Price of Equipment	?	$404,203.14
Locations Where Operated	Rex Main Campus	Rex Main Campus
Number Days in Use/To Be Used in N.C. per Year	365	365
Percent of Change in Patient Charges (by procedure)	N/A	No Change
Percent of Change in Per Procedure Operating Expenses (by procedure)	N/A	No Change
Type of Procedures Currently Performed on Existing Equipment	Simulations for radiation therapy treatments	Simulations for radiation therapy treatments
Type of Procedures New Equipment is Capable of Performing		Simulations for radiation therapy treatments