NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES

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

April 12, 2019

Elizabeth V. Kirkman
2709 Water Ridge Parkway, Suite 200
Charlotte, NC 28217

Exempt from Review – Replacement Equipment

Record #:	**2912**
Facility Name:	Carolinas Medical Center
FID #:	943070
Business Name:	The Charlotte-Mecklenburg Hospital Authority
Business #:	1770
Project Description:	Replace existing MRI scanner and temporarily utilize a mobile MRI scanner during the replacement process
County:	Mecklenburg

Dear Ms. Kirkman:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of April 5, 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 GE Signa Premier 3.0T XT Lift MRI to replace the GE Signa Excite 1.5T MRI (serial number R5529), and you may temporarily utilize a mobile MRI scanner during the process of replacing the existing MRI scanner. This determination is based on your representations that both the existing unit and the temporary mobile unit will be sold or otherwise disposed of and will not be used again in the State without first obtaining a certificate of need if one is required.

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

It should be noted that the Agency's position is based solely on the facts represented by you and that any change in facts as represented would require further consideration by this office and a separate determination.

If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Julie M. Faenza
Project Analyst

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

cc: Construction Section, DHSR
Acute and Home Care Licensure and Certification Section, DHSR

Atrium Health

April 5, 2019

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

RE: Exemption Request for The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center ("CMC") to Replacement the Magnetic Resonance Imaging Equipment ("MRI") located on the Third Floor of Levine Children's Hospital on CMC's Main Campus

Dear Ms. Frisone:

The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center ("CMC"), seeks to acquire a GE Signa Premier 3.0T XT Lift MRI ("Replacement Equipment"). Please see Attachment A for a copy of CMC's current hospital license. The Replacement Equipment will replace CMC's current GE Signa Excite 1.5T MRI ("Existing Equipment"). The Existing Equipment is currently housed on the third floor of Levine Children's Hospital ("LCH") on CMC's main campus located at 1000 Blythe Boulevard in Charlotte, NC 28203 (see Attachment B).

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

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

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

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

> (f) The Department shall exempt from certificate of need review the purchase of any replacement equipment that exceeds the two million dollar ($2,000,000) threshold set forth in G.S. 131E-176(22) if all of the following conditions are met:

(1) The equipment being replaced is located on the main campus.
(2) The Department has previously issued a certificate of need for the equipment being replaced. This subdivision does not apply if a certificate of need was not required at the time the equipment being replaced was initially purchased by the licensed health service facility.
(3) The licensed health service facility proposing to purchase the replacement equipment shall provide prior written notice to the Department, along with supporting documentation to demonstrate that it meets the exemption criteria of this subsection.

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

(14n) "Main campus" means all of the following for the purposes of G.S. 131E-184(f) and (g) only:

a. The site of the main building from which a licensed health service facility provides clinical patient services and exercises financial and administrative control over the entire facility, including the buildings and grounds adjacent to that main building.
b. Other areas and structures that are not strictly contiguous to the main building but are located within 250 yards of the main building.

The Existing Equipment is currently located on the third floor of LCH on CMC's main campus located at 1000 Blythe Boulevard, Charlotte, NC 28203, which is the site from which CMC provides clinical patient services and exercises financial and administrative control over the entire facility (see Attachment B). CMC's President's office is located on the second floor of the main hospital building. Please see a copy of CMC's license in Attachment A.

In addition to the foregoing, to qualify for this exemption, the replacement equipment must be "comparable" to the equipment it replaces and the equipment being replaced must be "sold or otherwise disposed of when replaced." CMC's proposal qualifies for this exemption.

A. Cost of the Replacement Equipment

The purchase price of the Replacement MRI Equipment is $2,631,069 ($2,447,590 MRI & Injector + $183,479 Tax). Quotes for the MRI Replacement Equipment and supporting equipment are provided in Attachment C. The projected total capital cost of the project is $5,016,075 (including taxes and freight) and includes the removal of the existing equipment and installation of the Replacement Equipment as well as the cost to lease a temporary mobile while the new equipment is being installed ($436,870). The projected total capital cost of the project also includes aesthetic renovations to the MRI room and support space that will make the space more child-friendly. The total

capital cost schedule of the renovation required to install the new equipment is provided in Attachment D.

B. Equipment Being Replaced is Located on the Main Campus

The Existing Equipment is currently located on the third floor of LCH on CMC's main campus (see Attachment B). The Replacement Equipment will be located in the same location as the Existing Equipment (see Attachment B).

C. Certificate of Need Issued for Equipment Being Replaced

This proposal also fits within the exemption criterion in Section 131E-184(f)(2) because the Department issued a Certificate of Need for the Existing Equipment (see Attachment E). The Existing Equipment was purchased in 2007.

D. Comparable Equipment

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

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

CMC intends to use the Replacement Equipment for substantially the same MRI procedures for which it currently uses the Existing Equipment. The Existing Equipment is a GE Signa Excite 1.5T that was installed new in 2007. This Existing Equipment has been used for MRI procedures since installation.

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

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

Subsection (d) of the regulation further provides:

(1) it has the same technology as the equipment currently in use, although it may possess expanded capabilities due to technological improvements; and
(2) it is functionally similar and is used for the same diagnostic or treatment purposes as the equipment currently in use and is not used to provide a new health service; and

(3) the acquisition of the equipment does not result in more than a 10.0 percent increase in patient charges or per procedure operating expenses within the first twelve months after the replacement equipment is acquired.

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

Documentation provided in Attachment H indicates that 2,251 procedures were performed from March 2018 to February 2019 on the existing fixed equipment.

E. Disposition of Equipment

Please see Attachment I for a letter documenting the Existing Equipment will be taken out of service and will not be re-sold or re-installed in North Carolina without appropriate certificate of need approval.

CONCLUSION:

Based on the foregoing information, CMC 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.

Thank you for your consideration of this notice.

Sincerely,

Elizabeth V. Kirkman

Elizabeth V. Kirkman
Assistant Vice President
Atrium Health Strategic Services Group

Attachments

cc: Vicki Block, President, Carolinas Medical Center

Hale, Gloria

From: Kirkman, Elizabeth <Elizabeth.Kirkman@atriumhealth.org>
Sent: Wednesday, April 10, 2019 7:32 AM
To: Hale, Gloria
Subject: [External] RE: Additional - re. exemption request
Attachments: A102 - SITE PLAN_REV 04092019.pdf

Gloria,
The temporary mobile will be located at Morehead Medical Plaza on the CMC campus. See attached site plan showing the location (labeled "mobile pad" next to MMP). I'm happy to provide a letter regarding the removal of the mobile MRI scanner from the state after it is no longer needed, however, this is not a document we have provided previously in equipment replacement exemptions when we utilize a temporary mobile (under our CON). Is this a new requirement?
Thanks,
EK

From: Hale, Gloria <gloria.hale@dhhs.nc.gov>
Sent: Tuesday, April 09, 2019 4:19 PM
To: Kirkman, Elizabeth <Elizabeth.Kirkman@atriumhealth.org>
Subject: Additional - re. exemption request

Elizabeth, we will also need a statement regarding removal of the temporary mobile MRI scanner from the state after it is no longer needed for this particular project. Thanks.

Gloria C. Hale, MPH
Team Leader, Certificate of Need
Division of Health Service Regulation, Healthcare Planning and Certificate of Need Section
NC Department of Health and Human Services

Office: 919-855-3873
Gloria.Hale@dhhs.nc.gov

809 Ruggles Drive, Edgerton Building
2704 Mail Service Center
Raleigh, North Carolina 27699-2704

Twitter | Facebook | YouTube | LinkedIn

From: Hale, Gloria
Sent: Tuesday, April 09, 2019 4:03 PM

To: 'Kirkman, Elizabeth' <Elizabeth.Kirkman@atriumhealth.org>
Subject: Question re. exemption request

Elizabeth, we are in receipt of your request for an exemption to replace an MRI at LCH. I do have one question. Where will the temporary mobile MRI scanner be located when the space for the replacement MRI scanner is being renovated?

Gloria C. Hale, MPH
Team Leader, Certificate of Need
Division of Health Service Regulation, Healthcare Planning and Certificate of Need Section
NC Department of Health and Human Services

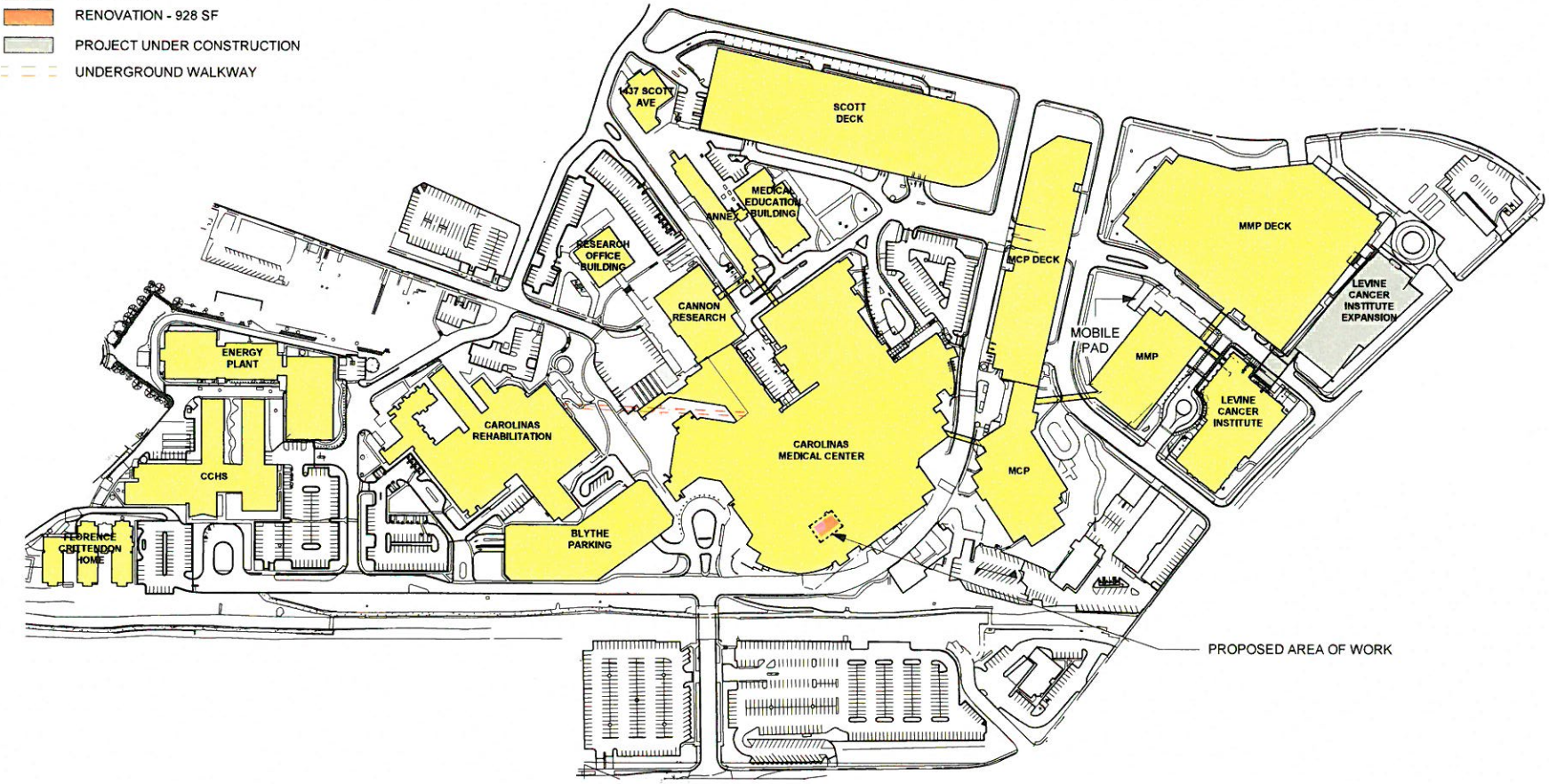
Office: 919-855-3873
Gloria.Hale@dhhs.nc.gov

809 Ruggles Drive, Edgerton Building
2704 Mail Service Center
Raleigh, North Carolina 27699-2704

Twitter | Facebook | YouTube | LinkedIn

COLOR KEY

- EXISTING BUILDING
- MRI - 441 SF
- RENOVATION - 928 SF
- PROJECT UNDER CONSTRUCTION
- UNDERGROUND WALKWAY



SITE PLAN

LCH MRI Replacement

Atrium Health

03/01/2019

Carolinas Medical Center

DMS HEALTH
A Digirad Company

DMS Health Technologies
2101 North University Drive
Fargo, ND 58102
701.237.9073 | 800.437.4628
www.dmshealth.com

April 10, 2019

John W. Howard
Manager, Cross-Sectional Imaging (CT & MRI)
Carolinas Medical Center/Levine Children's Hospital
Carolinas Healthcare System is Atrium Health
704-355-5855 Office | 704-355-4088 Pager 1672

Dear Mr. Howard,

DMS will be providing a mobile unit supporting the project to replace the in-house MRI at Levine Children's Hospital and will remove the unit from the state of North Carolina upon the completion of the new magnet install.

Sincerely,

Jacob Fiebelkorn
Director of Interim Sales | Mobile Healthcare
DMS Health Technologies | A Digirad Company
2101 North University Dr. | Fargo, ND 58102
Office: 605.321.0547 | Mobile: 605.321.0547 | Fax: 877.684.2530
Email: Jacob.fiebelkorn@dmshealth.com | Web: dmshealth.com

DMS HEALTH
A Digirad Company

Attachment A

State of North Carolina

Department of Health and Human Services
Division of Health Service Regulation

Effective January 01, 2019, this license is issued to

The Charlotte-Mecklenburg Hospital Authority

to operate a hospital known as

Carolinas Medical Center/Center for Mental Health

located in Charlotte, North Carolina, Mecklenburg County.

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

Facility ID: 943070

License Number: H0071

Bed Capacity: *1211*

General Acute 1055, Rehabilitation 13 , Psych 132, Substance Abuse 11,

Dedicated Inpatient Surgical Operating Rooms: 10
Dedicated Ambulatory Surgical Operating Rooms: 11
Shared Surgical Operating Rooms: 41
Dedicated Endoscopy Rooms: 12

Authorized by:

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

Director, Division of Health Service Regulation

Attachment B

COLOR KEY

- EXISTING BUILDING
- MRI - 441 SF
- RENOVATION - 928 SF
- PROJECT UNDER CONSTRUCTION
- UNDERGROUND WALKWAY

SITE PLAN

Atrium Health

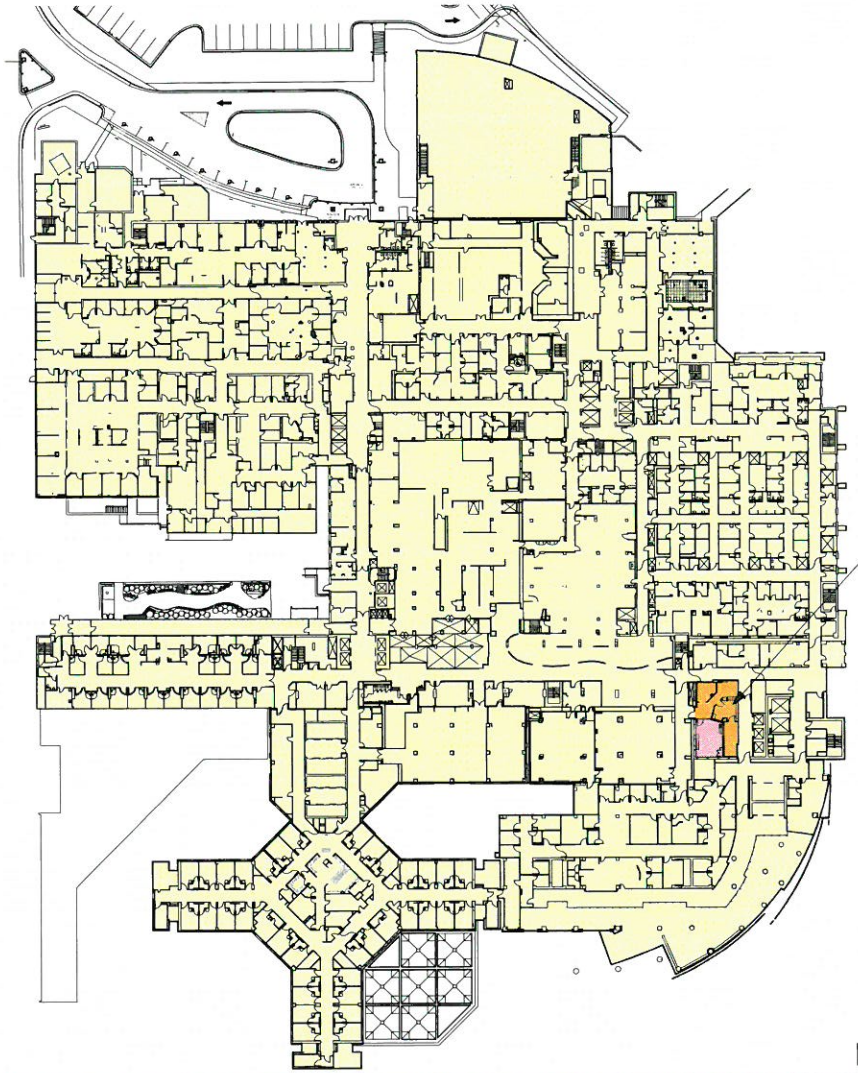
03/01/2019

LCH MRI Replacement

Carolinas Medical Center

COLOR KEY

- EXISTING BUILDING
- MRI - 441 SF
- RENOVATION - 928 SF
- PROJECT UNDER CONSTRUCTION
- UNDERGROUND WALKWAY



EXISTING LEVEL 03 PLAN

Atrium Health

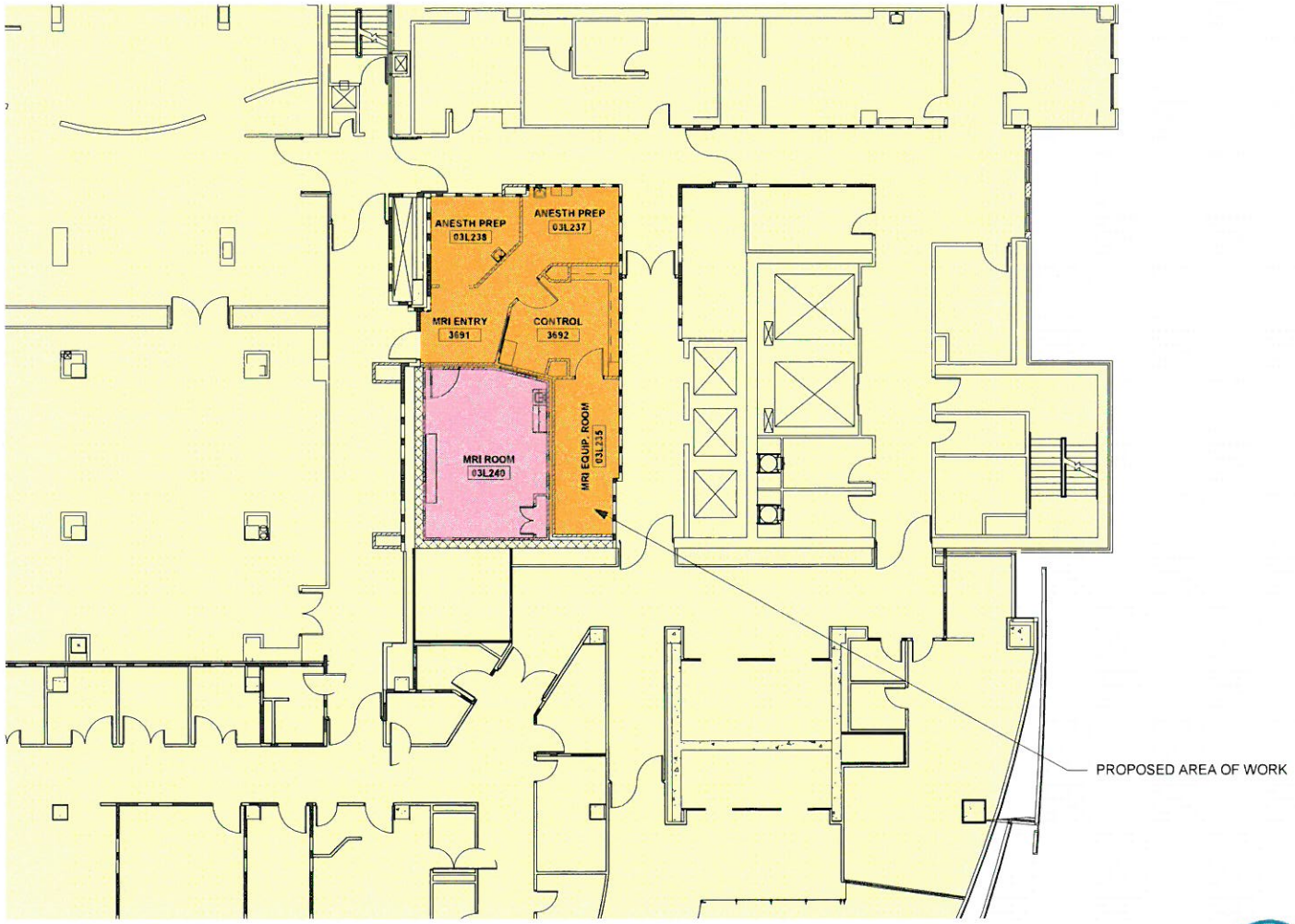
03/01/2019

LCH MRI Replacement

Carolinas Medical Center

COLOR KEY

- EXISTING BUILDING
- MRI - 441 SF
- RENOVATION - 928 SF
- PROJECT UNDER CONSTRUCTION
- UNDERGROUND WALKWAY



ENLARGED EXISTING LEVEL 03 PLAN

LCH MRI Replacement

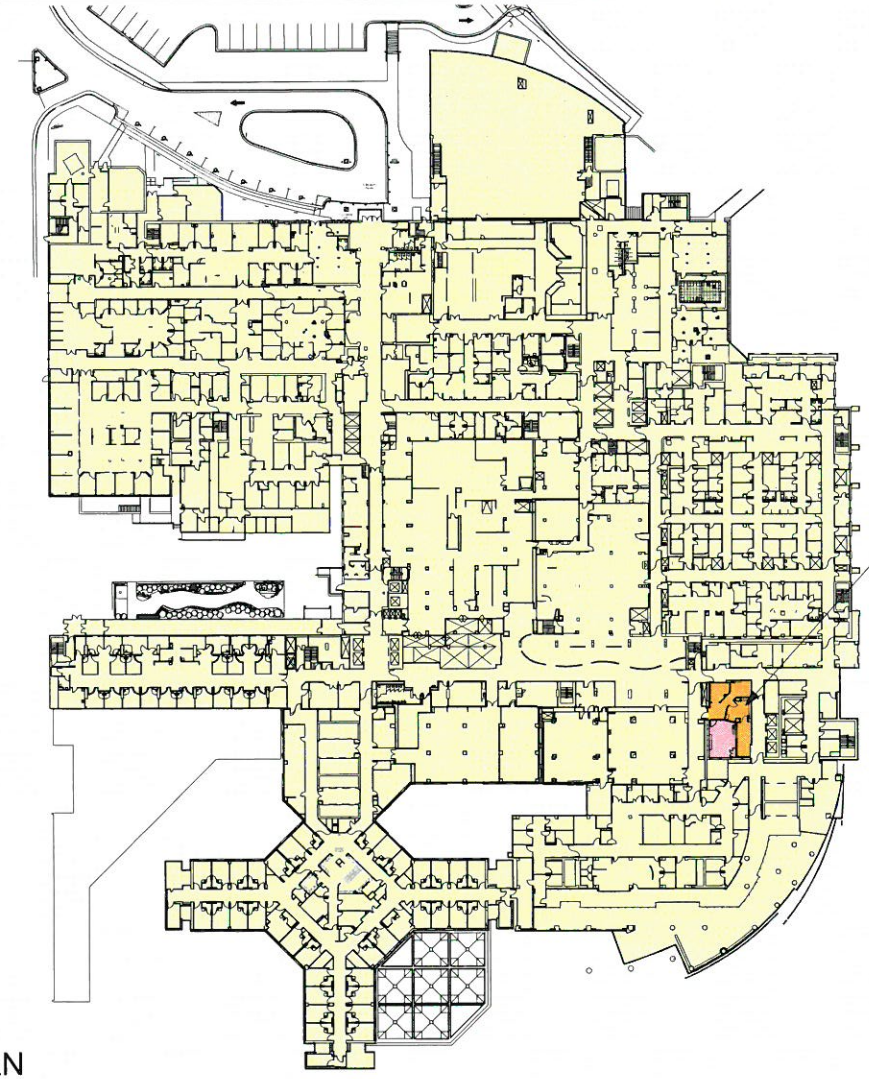
Atrium Health

03/01/2019

Carolinas Medical Center

COLOR KEY

- EXISTING BUILDING
- MRI - 441 SF
- RENOVATION - 928 SF
- PROJECT UNDER CONSTRUCTION
- UNDERGROUND WALKWAY



PROPOSED LEVEL 03 PLAN

Atrium Health

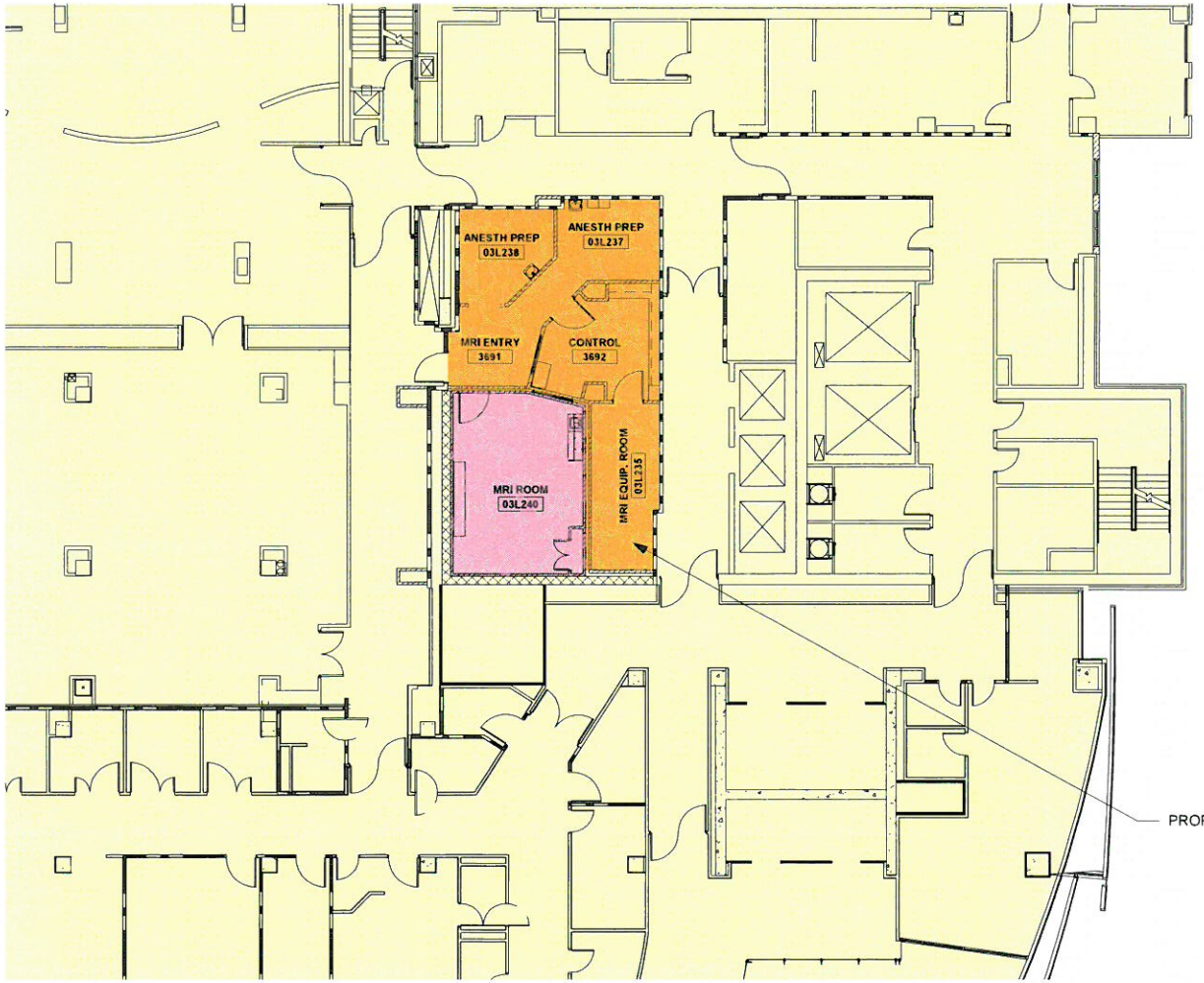
03/01/2019

LCH MRI Replacement

Carolinas Medical Center

COLOR KEY

- EXISTING BUILDING
- MRI - 441 SF
- RENOVATION - 928 SF
- PROJECT UNDER CONSTRUCTION
- UNDERGROUND WALKWAY



ENLARGED PROPOSED LEVEL 03 PLAN

LCH MRI Replacement

Atrium Health

03/01/2019

Carolinas Medical Center

GE Healthcare

February 17, 2019
Quote Number: **2004702973.2**
Customer ID: **1-25JJ8D**
Agreement Expiration Date: **5/12/2019**

Carolinas Medical Center
1000 Blythe Blvd
Charlotte, NC 28203-5812

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:	Premier
Terms of Delivery	FOB Destination
Billing Terms	80% delivery or Shipment / 20% Acceptance or Installation
Payment Terms	NET 30
Total Quote Net Selling Price	$2,067,522.00
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.

Carolinas Medical Center

Signature: _____

Print Name: _____

Title: _____

Date: _____

_____
Purchase Order Number, if applicable

GE Precision Healthcare LLC, a GE Healthcare business

Signature: Herb Klann

Title: Imaging Account Manager

Date: February 17, 2019

GE Healthcare

February 17, 2019
Quote Number: **2004702973.2**
Customer ID: **1-25JJ8D**
Agreement Expiration Date: **5/12/2019**

To Accept This Quotation

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

Name: Herb Klann

Email: herb.klann@ge.com

Phone: 724-504-8778

Fax:

Payment Instructions

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

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

FEIN: 83-0849145

Carolinas Medical Center Addresses:

Bill To:	CAROLINAS MEDICAL CENTER	PO BOX 32861, ATTN: RON PADGETT, CHARLOTTE, NC, 28232
Ship To:	CAROLINAS MEDICAL CENTER	1000 BLYTHE BLVD, CHARLOTTE, NC, 28203-5812

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	S7527PM	**SIGNA™ Premier 3.0T XT Lift (EXCITE, HD, HDxt, or HD23 to Premier XT upgrade)**

SIGNA™ Premier XT is the next generation MR system from GE Healthcare, designed to deliver unprecedented performance with uncompromised patient comfort.

3.0T Magnet Technology (reuse):

The SIGNA™ Premier XT Lift upgrades an existing EXCITE, HD, HDxt, or HD23 system to the next generation 3.0T wide-bore SIGNA™ Premier XT, without replacing the 3.0T magnet. The upgradable magnet is a compact, lightweight, superconducting magnet designed to provide excellent homogeneity ensuring uniform signal and fat-suppression over a larger FOV. While improving the patient experience with a 70 cm bore size, the SIGNA™ Premier XT magnet supports a large 50 cm FOV and may reduce exam time since fewer acquisitions are needed to cover a large anatomy. The main characteristics of the SIGNA™ Premier XT magnet are:

- 3.0T magnet
- 70cm wide-bore diameter
- 50cm x 50cm x 50cm maximum Field of View (FOV) with 2.5ppm typical homogeneity
- Zero Boil-Off
- 174 cm x 212 cm x 240 cm magnet dimensions (without enclosures)

SuperG Gradient Technology:

SIGNA™ Premier XT features the SuperG gradient technology, which delivers powerful performance and superb stability for outstanding imaging results. The efficient electromagnetic design of the SuperG gradient coil allows for 80 mT/m maximum gradient strength. The SNR increase in diffusion scans can now be combined with the patient comfort of a wide-bore imaging system. Combined with a maximum slew rate of 200 T/m/s, the SuperG gradient is a leading performer at the 70 cm bore size. The gradient coil is designed to work in conjunction with the SuperG gradient driver using an intelligent gradient control with load-optimized feed forward and feedback control algorithms that deliver accurate and repeatable output performance. The main characteristics of the SyperG gradient subsystem of the SIGNA™ Premier XT are:

- 80 mT/m peak amplitude
- 200 T/m/s peak slew rate
- 100% duty cycle
- All-hollow-conductor design for direct water cooling per axis
- Forced-balanced design for minimum vibro-acoustic interactions with the patient
- 50cm x 50cm x 50cm maximum Field of View (FOV)
- 1034 Amps / 2324 Volts peak amplifier current and voltage
- 2nd order high order shim coils* (XY, ZX, ZY, Z2, X2-Y2) integrated into a single module to minimize the effect of patient-induced magnet inhomogeneity (*only activated when the optional High Order Shim driver is purchased)

TDI RF Receive Architecture:

The RF acquisition technology of the SIGNA™ Premier enables greater clinical performance and higher image quality, especially for data-intensive applications. The technology is based on GE's Total Digital Imaging (TDI) RF architecture and provides significant improvement in SNR compared to previous generations.

Direct Digital Interface (DDI) employs an independent analog-to-digital converter to digitize inputs from 146 RF channels, eliminating unnecessary noise enhancement. In other words, every element translates to a digitized signal. The result? Not only does DDI technology improves SNR, but it also works with legacy GE coils for unmatched flexibility.

Digital Micro Switching (DMS) technology represents a revolutionary advance in RF coil design by replacing analog blocking circuits with intelligent Micro Electro-Mechanical Switches (MEMS). The result? Coil design supports ultrafast coil switching times for further expansion of zero TE imaging capabilities and reduced power consumption. The main characteristics of the TDI RF architecture of the SIGNA™ Premier XT are:

- 146 RF channels

- 146 RF receivers (Analog to Digital converters)
- 80 MHz receiver bandwidth
- >165 dB receiver dynamic range at 1Hz Bandwidth

MultiDrive RF Transmit Architecture:

MultiDrive RF architecture adjusts/optimizes the phase and amplitude of each RF amplifier output channel that is applied to the 4-port drive whole-body RF transmit coil to enhance RF uniformity and signal homogeneity regardless of patient size and body habitus. The main characteristics of the MultiDrive architecture of the SIGNA™ Premier XT are:

- 2 output channels
- 30kW maximum RF amplifier output power
- 4-port driven, 16-rung quadrature birdcage integrated Transmit/Receive body coil

PERFORM 2.0 combines RF body coil design, optimized pulse sequences, detailed predictive SAR modeling during prescription, and real-time SAR feedback and correction during scanning to help ensure high performance across all applications, tailored for each patient.

reFINE designed to address the challenge of 3.0T high-field uniformity. Just like a home theater surround system can be optimized, with reFINE, you increase your control over improved RF pulse efficiency, so you get clearer, crisper signals no matter your patient composition or position. reFINE makes consistent 3.0T imaging the rule, not the exception.

Volume Reconstruction Engine and Host Computer:

The latest computing platform comes standard and utilizes a parallel, multi-processor design to enable simultaneous scanning, reconstruction, filming, post-processing, archiving, and networking. The keyboard assembly integrates an intercom speaker, microphone, volume controls, and emergency stop switch. Start scan, pause scan, stop scan and table advanced to center hot keys are also included.
The main characteristics of the Host Computer of the SIGNA™ Premier XT are:

- 3.7 GHz clock rate
- 32 GB memory
- 1024 GB SSD hard disk storage

Reconstruction performance today is challenged by explosive growth in data, and increased computational complexity. The amount of data to be stored and processed continues to increase with the advances in MR system technology. The SIGNA™ Premier meets that challenge head-on with innovations in reconstruction to take full advantage of computing power and by leveraging both hardware and software technology. The main characteristics of the Gen6 Volume Reconstruction Engine (VRE) of the SIGNA™ Premier XT are:

- 2.6 GHz clock rate
- 256 GB memory
- 3 x 400 GB SSD hard disk storage
- 75,000 2D FFTs/second (256 x 256, full FOV)

Orchestra reconstruction platform delivers a new software toolbox for advanced reconstruction approaches allowing the most demanding applications to be run seamlessly delivering enhanced productivity without reconstruction lag between scans and exams.

The SIGNA™ Premier XT system generates MR Image, Secondary Capture, Structured Report, and Gray Scale Softcopy Presentation State DICOM objects. The DICOM networking supports both send and query retrieve as well as send with storage commit to integrate with PACS archive. Please refer to the DICOM Compliance Statement for SIGNA™ Premier for further details.

Coils:

SIGNA™ Premier XT comes standard with a Head Neck Array, a Spine Posterior Array embedded in the Comfort Plus patient table and a Body Anterior Array (the Posterior and Anterior Arrays are described in separate catalogs). The coil suite is indicated for use for: head, neck, brachial-plexus, spine, pelvis, hips, prostate, abdominal, cardiac, lower extremities, blood vessels, and long bone

imaging. The combined use of the entire coil suite will facilitate high-resolution, high-SNR whole-body imaging from the top of the head down to the feet.

The 3.0T coil suite was designed to reduce multiple physical coil changes within a single exam and between different exams, and to improve patient comfort. The system will automatically select the coil mode configuration that best fits the selected region of interest. The combined effect is to help reduce the total duration of an exam and improve workflow.

Head Neck Array (HNA):

The Head Neck Array includes the head base-plate and two anatomically optimized anterior arrays: the anterior Neuro-Vascular array and the anterior Open-Face array. The HNA supports head-first imaging and may remain in place for all body, vascular, spine, and the majority of MSK exams. The HNA base plate supports the patient's head, and the Comfort Tilt variable-degree ramp can be positioned under the HNA base plate to elevate the coil to match the patient's head and neck position.

- 21 elements
- Up to 29 elements in the FOV when combined with the Posterior Array and Anterior Array
- 45 cm Superior/Inferior coverage
- 53 cm x 35 cm x 35 cm dimensions (L x W x H)

SIGNA™ Flow:

SIGNA™ Flow is designed to standardize and accelerate workflows for patient set-up, exam prescription, scanning and post-processing. SIGNA™ Flow can begin before the patient enters the magnet room and exams can be completed within a few mouse clicks – delivering quality and consistency for all patients and from all technologists. At the same time, SIGNA™ Flow maintains the flexibility needed to rapidly adapt and optimize exams for patient specific situations.

- In-Room Operator Console and controls
- IntelliTouch land-marking
- Protocol Libraries & Management Tools
- Workflow Manager & Auto Functions
- Inline Processing, Networking & Viewing
- Start Scan, Stop Scan, Pause/Resume Scan
- ReadyView post processing on console

deFINE takes the results of SIGNA™ Premier to the next level by enhancing the image appearance with integrated, in-line, optimizable settings. These settings can be generated for each individual sequence or for the entire exam. With deFINE, you meet your high-quality image needs and go beyond the normal.

Comfort Plus Patient Table: The SIGNA™ Premier offers a fully integrated Comfort Plus patient table (also known as TDI patient table), which features the embedded Posterior Array, helps improve exam efficiency, and patient comfort. The Comfort Plus patient table can be lowered to very low heights for easy and fast transfer of wheelchair patients. The cradle width has also been increased by 30% from previous generations to enable a more comfortable experience for patients.

- 250kg maximum patient weight for scanning
- 250kg maximum lift capacity
- 25 cm/sec (fast), 1.9 cm/sec (slow), 15 cm/sec (patient positioning) longitudinal speed
- 168 cm total scannable range
- 53.5 cm to 93 cm minimum to maximum height

SIGNA™Works XT:

SIGNA™Works XT is the latest software platform provided by GE, it includes the base pulse sequences, workflow enhancements and visualization tools to enable high productivity with exceptional quality and outcomes. SIGNA™Works, starting with the acquisitions, provides the tools needed to enable superb results in the various clinical fields. With six optimized Works categories, GE delivers preset protocols for the most demanding Neuro, Musculoskeletal, Cardiovascular, Body, Oncology and Paediatric areas. In addition to enabling the routine imaging, SIGNA™Works provides the user with a streamlined and efficient operating environment with in-line processing through single-click outcomes for even the most demanding processes.

NeuroWorks XT: Includes the basic imaging acquisitions and processing along with the latest in motion correction, functional and volumetrics. Supporting both simple reconstruction and real-time perfusion results with BrainStat AIF. Including:

- Silent Suite with 3D Silenz and PROPELLER MB
- FOCUS
- Flex for FSE and Cube
- SWAN 2.0
- PROPELLER MB motion robust radial FSE now including T1 and Fat suppression (STIR and ASPIR)
- 3D Cube FSE-based 3D imaging including Dual Inversion Recovery
- BrainStat AIF parametric maps
- eDWI
- ReadyBrain automated brain exam prescription
- 3D COSMIC modified steady state imaging
- 3D BRAVO IR prepared fast SPGR imaging
- PROBE PRESS single voxel spectroscopy

OrthoWorks XT: Delivers routine imaging that is not always a given. From motion correction to advanced volumetric imaging, GE's latest MSK techniques provide you with the contrasts you need for the basic imaging to enhanced cartilage imaging. And with multiple tissue suppression methods available, OrthoWorks enables the best of what can be achieved in a standard configuration. Including:

- MARS High Bandwidth for FSE
- PROPELLER MB motion robust radial FSE now with T1 and Fat Suppression (STIR and ASPIR)
- 3D Cube FSE
- 3D COSMIC
- Flex for FSE and Cube

BodyWorks XT: The latest in Torso imaging is delivered with volumetric imaging supporting advanced Parallel imaging standard. Including, Snapshot imaging with optimized Single Shot FSE, 3D isotropic imaging for MRCP, Dynamic Imaging and Routine Volumetric imaging enabled with Motion Free navigation for post-contrast uses with high temporal resolution results. Motion correction is further enhanced with both the PB navigators as well as PROPELLER including T1 weighted results. Turbo class of acquisitions streamlines the speed and enables higher quality results. Advanced processing is made one-touch with the new READYView on Console capabilities. Including:

- FOCUS
- Flex for FSE and Cube
- Body Navigators pencil-beam diaphragm tracker
- PROPELLER MB for motion robust radial FSE including PB Navigator and fat suppression (STIR/ASPIR)
- Turbo LAVA and LAVA Flex with Turbo ARC
- Enhanced SSFSE
- MultiPhase DynaPlan
- SmartPrep

OncoWorks XT: Delivers a complete platform for your needs in Prostate, Breast and Radiation Therapy planning. From the basic routine acquisitions to whole body imaging including volumetric and enhanced diffusion capabilities, GE enables superb linearity from the gradient platform and hardware performance. GE provides the necessary preset protocols to supply you with optimal imaging for your oncology needs that is further enhanced visualization capabilities so that your results can be a single click away. Including:

- FOCUS
- Flex for FSE and Cube
- Body Navigators pencil-beam diaphragm tracker
- PROPELLER MB for motion robust radial FSE including PB Navigator and fat suppression (STIR/ASPIR)
- Spin Echo & Fast Spin Echo Suites
- eDWI
- Whole Body Scanning tools including eDWI

CVWorks XT: Provides GE's extensive coverage for the latest techniques enabling high performance Cardiovascular imaging

outcomes. Single Breath-Hold imaging for whole heart coverage are available from Morphology to Delayed enhancement. Enabling simplified generation of superb results including head-to-toe MRA support to single acquisition Time of Flight and additional non-contrast imaging for flow. With SmartPrep and Fluoro triggering enabled for first time right contrast injections.

Vascular specific including:

- Body Navigators pencil-beam diaphragm tracker
- 2D/3D Time-Of-Flight & 2D Gated Time-of-Flight
- 2D/3D Phase Contrast & Phase Contrast Cine
- SmartPrep automated bolus detection
- Fluoro Trigger real-time bolus monitoring
- 3D QuickStep automated multi-station imaging
- Inhance Suite
- TRICKS time resolved vascular imaging

Cardiac specific including:

- iDrive Pro Plus
- Double-Triple IR-FSE with spectral fat suppression
- FastCine FGRE-based, gated multi-phase imaging
- 2D FIESTA Cine steady-state, gated multi-phase imaging
- 3D FS FIESTA steady-state coronary imaging
- Cine Paging (128 images/4 windows @ 30fps)
- MDE Plus Phase Sensitive Single shot and Multi-shot options
- Cine IR
- StarMap
- Single shot black blood FSE

PaedWorks XT: Is the GE solution to address your specific needs in Paediatric imaging, from standard sequences supported with the latest in motion control for brain to toes. GE delivers standard acoustic reduction technologies and further addresses clinical needs for volumetric imaging, whole body imaging and enhanced diffusion results. The streamlined processing enables simplified one-click processing and visualization of complex results. PaedWorks covers your needs for all anatomies and provides optimized protocols and preset procedures. Including:

- FOCUS
- Flex for FSE and Cube
- PROPELLER MB motion robust radial FSE now including T1 and Fat suppression (STIR and ASPIR)
- 3D Cube FSE-based 3D imaging including Dual Inversion Recovery
- BrainSTAT AIF parametric maps
- Body Navigators pencil-beam diaphragm tracker
- eDWI
- Black Blood SSFSE
- SWAN 2.0
- Inhance Suite

In addition, the following SIGNA™ Works XT advanced applications are included as part of the SIGNA™ Premier XT:

- Diffusion Tensor Imaging and Fiber Tracking
- Cartigram T2 mapping
- IDEAL IQ iron quantification
- Cardiac Tagging
- Cardiac Time Course
- 3D HEART coronary vessel imaging

Line	Qty.	Catalog	
2	**1.00**	**M7100AK**	**SIGNA Premier Magnet Upgrade for MR750, HDxt, HD, EXCITE**

SIGNA Premier Magnet Upgrade for MR750, HDxt, HD, EXCITE

Line	Qty.	Catalog	
3	1.00	M7100AE	**Premier Preinstall Collector**

The Preinstallation Collector delivers to the site in advance of the magnet and main electronic components. This facilitates the later delivery and installation of supporting electronics. This collector includes the heat exchange cabinet for distribution of chilled water and a helium cryocooler hose kit.

Line	Qty.	Catalog	
4	1.00	M7100AH	**Premier Scan Room Collector**

The Scan Room Collector contains the Primary Penetration wall panel for support of the penetration cabinet, and the Secondary Penetration wall panel for support of gradient filters, helium cables, and chilled air and water.

Line	Qty.	Catalog	
5	1.00	M7000GL	**Cabinet Dollies**

Provided to install the System Cabinets. Dollies remain the property of GE to be returned after cabinets are in place at customer site.

Line	Qty.	Catalog	
6	1.00	M7100AS	**Premier 3.0T Cable Collector - A (Short SR / Short ER)**

To accommodate various electronic and scan room configurations and sizes, the system has preset lengths of cables and connector kits to speed system installation. This configuration is for sites with a relatively short distance of 7 meters between the penetration wall and the rear of the MR scanner room (SR), and approximately 9 meters between the penetration wall and cabinets in the electronics room (ER). Refer to the pre-installation manual for exact cable lengths and configurations. This cable collector is compatible with fixed and modular or relocatable building configurations.

Line	Qty.	Catalog	
7	1.00	M7100BD	**Premier Gradient Cable G3 Collector - Config A**

Premier Gradient Cable G3 Collector - Config A

Line	Qty.	Catalog	
8	1.00	M7100AA	**Main Disconnect Panel - 480V**

The Main Disconnect Panel safeguards the MR system's critical electrical components, by providing complete power distribution and emergency-off control.

Line	Qty.	Catalog	
9	1.00	M1000MW	**Operator Console Table**

The Operator Console Table is designed specifically for the color LCD monitor and keyboard.

Line	Qty.	Catalog	
10	1.00	M3335JZ	**English Keyboard**

Required for our operator console. This keyboard is ergonomically designed to keep your staff comfortable even through the longest shifts. The scan control keyboard assembly has an intercom speaker, microphone, volume controls and emergency stop switch.

Line	Qty.	Catalog	
11	1.00	R32052AC	**Standard Service License**

The Standard Service License provides access to service tools used to perform basic level service on the Equipment and is included at no charge for the warranty period.

Line	Qty.	Catalog	
12	1.00	M7001KA	**3.0T TDI Posterior Array**

The TDI Posterior Array is the first coil to include the Digital Micro Switch which enables it to achieve ultra-fast coil switching that enhances zero TE imaging capability to further expand Silent Scan capability. To simplify the workflow for the technologist and increase efficiency, the system will automatically select the appropriate subset of coil elements based upon the prescribed field-of-view. The Integrated Posterior Array is symmetrically positioned within the patient supporting cradle, and coil connection ports are located at both ends of the table. This design enables all components of the TDI Coil Suite to support either patient orientation and enable a more comfortable patient position.

The TDI PA is invisible to additional surface coils when they are placed directly on top of the surface. Unique electronic decoupling circuits ensures there is no electrical interference between surface coils. This feature is critically important for patient and operator workflow and enables the PA to be stationary for all exams, including breast and musculoskeletal exams where dedicated coils are typically used for these anatomies.

PA Coil Specifications:

- S/I Coverage: 113cm.
- Head or Feet-first imaging.
- Elements: 32.

The TDI PA Array is designed to be used in conjunction with the TDI Head Neck Unit, the Anterior Array, the Small Anterior Array, and the Peripheral Vascular Array (each purchased separately). In addition, the PA may co-reside with additional dedicated anatomy-specific coils (each purchased separately).

Line	Qty.	Catalog	
13	1.00	M7006LB	**3.0T 16-ch Medium Flex Extremity Coil**

The high density 16-channel receive coil is designed to give high quality images in a wide range of applications. The high degree of Flexibility was achieved by removing all non-essential electronics to an external interface assembly, ensuring reduced weight on the patient and better conformance to the anatomy. The high degree of Flexibility is particularly advantageous when imaging patients that do not fit the constraints of rigid coils, improving patient and technologist experience, and enabling most exams to be completed with the same level of image quality expected from dedicated rigid coils. This coil covers a broad range of muscular skeletal applications, including hand, wrist, elbow, shoulder, hip (unilateral and bilateral), knee, ankle, and foot. In addition, the coil's versatility has been shown in a range of general purpose applications that include head, neck, and spine exams.
Requires Interface Module (sold separately).

Line	Qty.	Catalog	
14	**1.00**	**M7006LD**	**3.0T Flex Interface Module 16-channel**

3.0T Flex Interface Module 16-channel

Line	Qty.	Catalog	
15	**1.00**	**M7750PR**	**Premier XT Chiller**

A 94kW chiller for SIGNA™ Premier XT.

Line	Qty.	Catalog	
16	**1.00**	**S9350KD**	**GoldSeal HDxt 3.0T HD23 16CH**

GoldSeal Signa HDxt 3.0T 16-Channel Fixed Site MR System

The GoldSeal Signa HDxt 3.0T scanner launches a new era in MR scanning with a premium technology platform delivering unparalleled performance and image quality. Exclusive GE applications provide unprecedented imaging speed, resolution, and contrast in neurovascular, cardiovascular, abdominal, orthopedic and spectroscopic imaging. Utilizing exclusive TwinSpeed dual-gradient design, and driven by high-fidelity gradient drivers, this premium system offers full 45-cm field-of-view imaging. It incorporates GE's exclusive HDxt technology to enable the industry's fastest pulse-sequence performance. And its 8-channel architecture is equipped with a blade Volume Reconstruction Engine (VRE) to provide real-time image reconstruction capability, enhanced parallel imaging reconstruction, and rapid 3D volume reconstruction. This configuration also includes a quadrature transmit/receive RF head coil.

The revolutionary Signa HDxt 3.0T superconducting magnet represents a true breakthrough in magnet design. It delivers everything that you demand from a high performance, 3.0T system: a short and compact design, industry-leading homogeneity, a clinically relevant 48-cm imaging field of view, and a 60-cm bore to maximize patient comfort.

By using two sets of actively shielded gradient coils integrated into a single subsystem, the innovative, GE-exclusive TwinSpeed Gradient Module virtually eliminates tradeoffs. Its Zoom mode offers outstanding performance for small-field imaging, with amplitudes up to 50 mT/m and a slew rate of 150 mT/m/ms. The Whole-Body mode, designed for larger FOVs, offers amplitudes of up to 23 mT/m and a slew rate of 80 mT/m/ms. The result is the high-performance speed and resolution demanded for high-definition MR, without compromising your ability to use a large FOV.

The HDxt 3.0T platform comes standard with GE's proprietary acoustic noise management system, Quiet Technology, resulting in noise levels that are comparable to 1.5T systems, with absolutely no compromise or de-rating of high duty cycle gradient-intensive pulse sequences. The HDxt 3.0T system comes standard with PERFORM: GE's unique and comprehensive approach that removes the burden of Specific Absorption Rate (SAR) management at 3.0T. PERFORM combines an extremely efficient body coil design with continuous closed loop processing feedback and a variety of unique preparation pulses and scanning approaches to make your 3.0T scanning experience efficient and clinically relevant.

Patient Transport:

The patient table and transport includes a detachable table with automated vertical and longitudinal power drives for easy patient positioning and maximum patient safety. The table can be easily docked and undocked by a single operator. As a result, emergency patient extraction can typically be performed in less than 30 seconds eliminating the need for 3.0T compatible emergency equipment. The table includes a self-storing, non-ferrous IV pole, table pad and positioning pads, safety rails and security straps.

This configuration is designed for installation into a fixed site and includes a complete fixed site hardware kit but does not include chillers or a main disconnect panel (which is optional). Rigging for system installation is the responsibility of the Customer.

Operator Console and User Interface:
The operator console consists of the Linux computer, LCD monitor and scan controls.
The computer components are housed in a single tower configuration, and the flat panel display monitor provides high, 1280x1024, resolution with a 300:1 contrast ratio. The scan control keyboard is ergonomically designed and contains an intercom speaker, microphone, volume controls and emergency stop switch.

The HDxt User Interface leverages the Linux computer platform to enhance productivity through single-screen prescription for most protocols and includes Secure Coil Connect, that eliminates coil connection errors, ProtoCopy, that facilitates the development and rapid transfer of scan protocols, and Vector Gating for highly reliable ECG triggering. HDxt ScanTools: The HDxt ScanTools Package delivers a full range of pulse sequences and analysis software for whole-body imaging on the HDxt technology platform. The core HDxt ScanTools package includes the spin echo, fast spin echo, gradient echo, fast gradient echo, time-of-flight, phase contrast and echo planar pulse sequence suites along with FuncTool, ClariView, Multi-planar Volume Reformat and Interactive Vascular Imaging analysis packages. GE's unique SAR approaches, such as VERSE and MART are also included. Additionally, this special offering of HDxt ScanTools includes specialized applications: iDrivePro Plus, EchoPlus, ASSET, BRAVO, 2D MERGE, 3D MERGE, SmartPrep, SmartStep, FTMRA, 2D FIESTA, 3D FIESTA, FIESTA-C, 3D FAT SAT FIESTA, Double-Triple IR-FSE, ConnectPro, LAVA and LAVA XV body imaging, and QuickStep. Expanded descriptions follow:

ScanTools Core Features:
The core pulse sequence suites in HDxt ScanTools provide sequences with broad sequences optimized for specific clinical applications. The post-processing and analysis packages complement the pulse sequence families with tools that enable the optimization of image quality or quantitative analysis.

Spin Echo and Fast Spin Echo are fundamental pulse sequence suites that enable the generation T1W, T2W and PDW contrast images. Fast Spin Echo uses an echo-train to collect multiple lines of data per repetition in order to reduce scan time as compared to standard SE, and as a result has expanded capability: T1W, T2W and PDW contrast images can be generated along with specialized T1W FLAIR and T2W FLAIR contrast. The FSE suite encompasses multiple techniques that enable optimized 2D and 3D imaging as well as single-shot and multi-shot imaging with increased slice coverage and minimal edge blurring. Fast Recovery techniques enable rapid T2W image, and inversion recovery techniques enable fluid suppressed T1 FLAIR, and T2 FLAIR imaging with enhanced gray and white matter contrast.

Gradient Echo and Fast Gradient Echo use short TR, short TE, variable flip angles and gradient refocusing to reduce scan time. Fast Gradient echo techniques further speed imaging with fractional RF and fractional readout. T1W, T2*W and PDW contrast images can be rapidly generated in 2D and 3D modes. The GRE suite encompasses multiple techniques that enable the optimization of contrast. Spoiler pulses enable optimized T1W imaging and Steady-State-Free-Precession enables fluid sensitive, heavy T2*W imaging. Dual echo enables fat/water in-phase and out-of-phase imaging in a single acquisition, and SPECIAL enables fat suppression for 3D T1W imaging.

Time-of-Flight is a gradient echo based suite of sequences optimized to exploit flow-related enhancement. The TOF suite uses short TR, short TE, variable flip angles and gradient refocusing to both
reduce scan time and capture signal from flowing blood. Fast TOF techniques further speed imaging with fractional RF and fractional readout. TOF techniques enable optimized 2D and 3D imaging, 2D gated imaging, as well as Spoiler pulses for arterial flow enhancement Phase Contrast is a gradient echo based suite of sequences optimized to exploit flow-related enhancement and extract velocity and directional flow information. The PC suite uses short TR, short TE, variable flip angles and gradient refocusing to both reduce scan time and capture signal from flowing blood or CSF as well as Velocity Encoding pulses to encode flow direction and speed. PC techniques enable optimized 2D, 3D and Fastcine imaging.

Echo Planar collects multiple segments of image data from a spin echo or gradient echo sequence and enables ultra-fast imaging. The EPI suite encompasses multiple techniques that enable optimized 2D and 3D imaging as well as single-shot and multi-shot imaging. Inversion recovery techniques enable fluid suppressed T2 FLAIR imaging.

FuncTool enables advanced post-processing for a broad range of MR applications. The suite of algorithms includes ADC and eADC mapping for diffusion imaging, and correlation coefficients for functional brain imaging. In addition, for contrast enhanced imaging the suite provides negative and positive enhancement integrals, signal enhancement ratio, maximum slope increase, maximum difference function and difference function. If PROBE and/or PROSE Spectroscopy are purchased, the FuncTool CSI options activate. If Diffusion Tensor Imaging is purchased, the FuncTool DTI options activate.

ClariView is a post-processing tool that uses a state-of-the-art adaptive filter algorithm to reduce noise and sharpen edges in MR images. The filter tool enables the user to select different levels of noise reduction and edge sharpening to enhance image display. Multi-planar Volume Reformat is a post-processing tool that enables the manipulation of 3D volumetric MR data sets. The reformat tool enables the user to prescribe alternative viewing planes and volume thickness than the original scan plane and thickness. MPVR may enable the ability to reduce the number of total scans.

Interactive Vascular Imaging is a post-processing tool that enables the removal of the background from MRA images. The IVI tool is embedded in MPVR and enables the user to generate maximum or minimum intensity projections in multiple viewing planes to enhance viewing of MRA images.

VERSE and MART are innovative ways to reduce SAR with the FSE, FRFSE and SSFSE pulse sequence families. Through RF management (and not compromising image quality nor T1 and T2 contrast) VERSE and MART provide up to a 60% reduction in SAR when compared with conventional approaches. The results: Slice coverage where you need it, with uncompromised scan parameter selection. ScanTools Enhanced Features: The HDxt ScanTools package also provides optimized applications that further enhance clinical utility or make specific applications easier to perform.

iDrivePro and iDrivePro Plus provides real-time interactive MR imaging that makes it easier to optimize and streamline scan prescription.The iDrive tool uses the 2D FGRE/FSPGR sequence and allows the user to change-on-the-fly geometric and image contrast scan parameters. Results can be evaluated immediately and bookmarked or saved. Scan locations can also be easily exported to pre-programmed protocols.

EchoPlus expands the Echo Planar suite enabling diffusion-weighted imaging for the detection of acute and hyper-acute stroke. EchoPlus uses motion sensing gradient pulses in three directions to generate isotropic diffusion-weighted images in conjunction with T2 FLAIR images. B-value selection ranges from 0 to 10,000 s/mm2 providing the flexibility to balance diffusion sensitivity and background suppression. In addition, the DWI-EPI suite encompasses multiple techniques that enable single-shot and multi-shot imaging as well as multi-NEX capability and ASSET compatibility. EchoPlus images can be post-processing in FuncTool.

ASSET (Array Spatial Sensitivity Encoding Technique) is a parallel imaging technique that uses the geometry of multi-element coils to accelerate data collection and reduce RF deposition. As a result, the user may choose to reduce scan time, increase in-plane resolution, or increase slice coverage. ASSET is an option employed in conjunction with compatible pulse sequences that span a broad range of applications: 2D FGRE, eFGRE3D, 3D TOF-SPGR, 3D TOF-GRE, 2D-FSE-XL, 2D FRFSE, 2D-FSE-IR, SSFSE, 2D T1 FLAIR, 3D FLAIR and DW-EPI and Diffusion Tensor. ASSET benefits body imaging by reducing breath-hold time, vascular imaging by enhancing spatial and temporal resolution and diffusion imaging by reducing echo-train length and susceptibility artifact.

BRAVO (BRAin VOlume) Imaging:
This IR-prepared 3D Gradient Echo imaging technique affords isotropic, whole-brain coverage with 1x1x1 mm resolution. Coupled with parallel imaging, this sequence produces superior gray-white matter contrast in just 2 to 3 minutes.

MERGE (Multi-Echo Recombined Gradient Echo):
MERGE is an imaging technique uniquely designed to image the C-spine. By acquiring and summing multiple gradient-echoes at various echo-times, MERGE improves gray-white matter contrast within the cord and provides excellent visualization of the neuroforaminal canals.

SmartPrep enables both automated bolus detection and automated bolus chasing for time-course vascular imaging. SmartPrep uses a special tracking pulse sequence positioned over a blood vessel volume by the user to monitor MR signal intensity changes. Data acquisition is automatically triggered when the threshold signal intensity is reached. SmartStep adds automated table stepping for multi-station time-course vascular exams. SmartStep integrates scout series, graphic prescription, PreScan ahead, automated bolus detection, table motion and coil switching. The SmartPrep suite is compatible with elliptic-centric encoding and ZIP reconstruction for optimum image quality.

FTMRA (Fluoro-Trigger MRA) enables real-time monitoring and manual triggering for vascular time-course imaging. FTMRA allows the user to view real time images of the area of interest and then manually trigger data acquisition at the optimum time. The

switch over takes less than one second. FTMRA eliminates the need to position a tracking pulse in areas that may prove challenging and puts the user in complete control of exam triggering. 3D FIESTA and FIESTA-C (Fast Imaging Employing Steady-state Acquisition) combines 3D volumetric data acquisition with fluid sensitive steady-state imaging. Tissues with a high ratio of T2/T1 such as CSF and blood have high signal intensity, and the 3D volumetricacquisition enables high resolution imaging of small structures such as the internal auditory canal, middle ear or joints. FIESTA-C adds phase cycling to the excitation pulse in order to minimize the build-up of artifacts in
the residual transverse magnetization. Double-Triple IR-FSE adds inversion recovery pulse and chemical fat saturation capability to the Fast Spin Echo sequence for black-blood and morphological cardiac imaging. The inversion pulse is optimized to suppress blood flow artifact and can be used alone or in conjunction with chemical fat saturation. The addition of a chemical fat saturation pulse eliminates competing signal from fatty tissues surrounding the heart and coronary arteries.

2D FIESTA (Fast Imaging Employing Steady-state Acquisition) is a gradient echo technique that capitalizes on the residual transverse magnetization created by short TR to create images in which tissues with a high ratio of T2/T1 such as CSF and blood have high signal intensity. The result is fluid sensitive imaging, and this property yields high contrast between the blood and myocardium for cardiac imaging.

3D Fat Sat FIESTA (Fast Imaging Employing Steady-state Acquisition) combines 3D volumetric data acquisition with fluid sensitive steady-state imaging and fat saturation for coronary artery imaging. The 3D volumetric acquisition enables high resolution imaging of small structures such as the coronary arteries in a short breath-hold time. The addition of a chemical fat saturation pulse eliminates competing signal from fatty tissues surrounding the coronary arteries.

ConnectPro is designed to significantly improve productivity, reduce manual transcript errors, and synchronize scan options. ConnectPro enables the 3.0 DICOM worklist server class for the MR system. ConnectPro makes it possible to query a DICOM compatible HIS/RIS by name, modality, or schedule date and download patient demographics directly to scanner. The ConnectPro package also includes Performed Procedure Step, which automatically notifies the HIS/RIS and PACS systems of procedure status. Separate gateway hardware may be required to connect non-DICOM compatible HIS/RIS systems.

LAVA (Liver Acquisition with Volume Acceleration) is a 3D spoiled gradient echo technique optimized for multi-phase liver imaging. LAVA combines in-plane ASSET acceleration (up to 2.5X), partial data filling (25%) and shortened TR to enable 25% higher resolution and 25% more coverage with 25% less scan time than previously possible. The acceleration techniques used by LAVA enable reduced scan time and extended coverage without compromising in-plane resolution, and the result is high quality axial and reformatted images. LAVA also uses an optimized inversion pulse and a view ordering technique that yields enhanced image contrast and robust, uniform fat suppression. As a result, LAVA enables reliable, high quality liver imaging in a short breath-hold. Included is a single channel transmit receive head coil.

Warranty
This product includes a one year warranty

Availability
Since GoldSeal Refurbished Equipment may be offered Simultaneously to Several Customers, its sale to You is Subject to Availability and subject to Prior Sale at the Time You Offer to purchase It. If the Equipment is no Longer available, (1) GE Will Attempt to Identify Other GoldSeal Refurbished Equipment in Inventory that meets your needs, and (2) if Substitute equipment is Not Acceptable to You, GE will cancel your Order and refund any deposit you have paid GE for the cancelled order

Line	Qty.	Catalog	
17	1.00	L3335CL	GS 3.0T HDXT 16CH FXD MAG

Line	Qty.	Catalog	
18	1.00	M1060MA	Vibroacoustic Dampening Kit

Material in the Vibroacoustic Dampening Kit can significantly attenuate the transmission of gradient-generated acoustic noise

through the building structure to nearby areas, including adjacent rooms and floors above or below the MR suite. If this kit is applied during the installation of a new magnet, no additional service charges are necessary. However, installation of the Vibroacoustic Dampening kit under an existing magnet requires special steps. The steps to prepare the site and steps to install, such as modifications to the RF screen room, and other magnet rigging, modifications to the RF screen room, and other finishing work, are not covered in the pricing.

Line	Qty.	Catalog	
19	1.00	M3335NY	Signa 3.0T Phased Array 16-Channel Cables (Config A)

This is a required collection of high performance phased array cables engineered specifically for the Fixed Site 3.0T system.

Line	Qty.	Catalog	
20	1.00	M3340DA	HDxt Language Collector in English

This collector contains a keyboard kit and a warning sign kit in English.

Line	Qty.	Catalog	
21	1.00	S7502Y	10 kW Chiller Package - Quantity 2

Cooling of both the coldhead and the gradients requires two separate chillers. The air-cooled chiller consists of a refrigeration unit, coolant reservoir and pump contained within an enclosure that allows the unit to be operated indoors or outdoors. There is a remote panel that can stop or restart the chiller as well as display water temperatures. This remote panel can be placed in the equipment room to provide complete and convenient control over a chiller installed outdoors. Operates at either 50Hz or 60Hz.

Line	Qty.	Catalog	
22	1.00	M3335EY	3.0T Unified Coil Phantom Kit

The 3.0T Unified Coil Phantom Kit is a set of phantoms for the 3.0T system that is used on various surface coils to conduct quality assurance testing.

Line	Qty.	Catalog	
23	1.00	M1000MW	Operator Console Table

The Operator Console Table is designed specifically for the color LCD monitor and keyboard.

Qty.	Credits and Adjustments	
1.00	MR - IDEAL & Flex -$31,500 Duplicate Item Deduction	-31,500.00
1.00	MR Additional Discount	-132,600.00
1.00		0.00
1.00	MR Additional Discount	-40,000.00
1.00		0.00
1.00	1.5 HISPEED HD 8-CH 400-AP Trade-in	-135,000.00

Total Quote Net Selling Price: ***$2,067,522.00***

GE Healthcare

February 17, 2019
Quote Number: **2004702973.2**
Customer ID: **1-25JJ8D**
Agreement Expiration Date: **5/12/2019**

Optional Items

Please initial by net price in terms you wish to purchase

Catalog Number	Qty.	Description	Net Price	Initial
M7001KB	**1.00**	**3.0T TDI Anterior Array**	**$22,495.00**	

The Anterior Array facilitates chest, abdomen, pelvis, and cardiac imaging. The AA is lightweight, thin and flexible, and pre-formed to conform to the patient's size and shape. With 54 cm of S/I coverage, the AA permits upper abdomen and pelvis imaging without repositioning the coil.

- Elements: up to 36 combined with PA
- Length: 55.6 cm; Width: 67.4 cm
- S/I coverage: 54 cm
- R/L coverage: up to the full 50 cm FOV
- Parallel imaging in all three scan planes
- Head-first or feet-first positioning

Trade-in Addendum to GE Healthcare Quotation

This Trade-In Addendum ("Addendum"), effective on February 17, 2019, between the GE Healthcare business identified on the Quotation and **Carolinas Medical Center** ("Customer"), is made a part of Quotation # **2004702973.2 ^** ("Quotation") and modifies it as follows:

A. Customer: (i) certifies that it has full legal title to the equipment and/or mobile vehicle listed in Section E ("Trade-In Equipment"), free and clear of all liens and encumbrances; and (ii) conveys title and, if applicable, registration and license documents to GE Healthcare effective on the date of removal or receipt of the Trade-In Equipment. If GE Healthcare removes the Trade-In Equipment, it will do so at its expense at a mutually agreed time.

B. Customer is responsible for: (i) providing timely, unrestricted access to the Trade-In Equipment in a manner that affords GE Healthcare the ability to complete Equipment inspection and testing prior to de-installation within the timeframe required by GE Healthcare, failure of which to provide may result in termination of this Trade-in Addendum and related credits and/or payments; (ii) ensuring that the Trade-In Equipment and the site where it is located are clean and free of bodily fluids; (iii) informing GE Healthcare of site-related safety risks; (iv) properly managing, transporting and disposing of hazardous materials located on site in accordance with applicable legal requirements; (v) rigging, construction, demolition or facility reconditioning expenses, unless stated otherwise in the Quotation; and (vi) risk of loss and damage to the Trade-In Equipment until safety risks are remediated and the Trade-In Equipment is removed or returned.

C. Prior to removal or return to GE Healthcare, Customer must: (i) remove all Protected Health Information as such term is defined in 45 C.F.R. § 160.103 ("PHI") from the Trade-In Equipment; and (ii) indemnify GE Healthcare for any loss resulting from PHI not removed. GE Healthcare has no obligation in connection with PHI not properly removed.

D. GE Healthcare may reduce the trade-in amount or decline to purchase the Trade-In Equipment if: (i) the terms of this Addendum are not met; or (ii) it is missing components or is inoperable when removed or returned. All other terms and conditions of the Quotation remain in full force and effect.

E. Trade-In Equipment:

Equipment/Vehicle Mfr	Model & Description	Quantity	* ID / Serial #	Trade-In Amount
		1.00		$ 0.00
		1.00		$ 0.00
GENERAL ELECTRIC	1.5 HISPEED HD 8-CH 400-AP Trade-in	1.00	704355LCHMR	$ -135,000.00

This Addendum is executed when: (i) signed by the parties below; (ii) Customer receives this Addendum and signs the Quotation that references the Trade-In Equipment; or (iii) Customer receives this Addendum and issues a purchase order identifying either the terms of the Quotation (which includes a reference to the Trade-In Equipment) or the Governing Agreement identified on the Quotation as governing the order (PO# _____)†.

Carolinas Medical Center

Signature: _____

Print Name: _____

Title: _____

Date: _____

GE Healthcare

Signature: _____

Print Name: _____

Title: _____

Date: _____

^ A Quotation number must be provided on this document.

* In the event the Trade-In Equipment does not have a System ID, please record the serial number of each component that comprises the Trade-In Equipment.

† If you are relying upon the purchase order to reflect acceptance of the terms contained herein, please update this document with the applicable PO number upon receipt of the PO. Failure to do so may result in delays surrounding deinstallation of the System(s).

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. Magnetic Resonance ("MR").

11.1. Magnetic Maintenance and Cryogens. Customer is responsible for: (i) cryogen loss due to power loss or water chiller failure for the MR's shield cooler or condenser system during installation; (ii) costs for cryogen replacement plus transfill labor at GE Healthcare's then-applicable rates; (iii) post-assembly supply and installation of cryogens, unless cryogen loss is caused by a defect in material or workmanship within the scope of GE Healthcare's warranty. MR magnetic fields attract ferro-magnetic articles and are capable of rapidly accelerating them toward the magnet, creating danger to persons in the vicinity and possible system damage. Magnetic and radio frequency fields may adversely affect the operation of pacemakers, equipment containing magnetic reed switches and aneurysm or surgical clips.

11.2. MR Uptime Commitment. GE Healthcare will provide an uptime commitment during warranty for MR Equipment (excluding peripherals) if Customer provides GE Healthcare with: (i) access to the MR 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 MR Equipment. The "Uptime Commitment" for MR 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 MR Equipment. "Downtime" is the number of hours during which the MR Equipment is subject to a Critical Malfunction. Downtime starts when Customer notifies GE Healthcare that the MR Equipment is inoperable and unavailable for use due to GE Healthcare's design, manufacturing, material or performance failure ("Critical Malfunction"). Downtime ends when the MR 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.

12. 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.

13. Software as a Service Terms.

13.1. 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.

13.2. 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.

13.3. Payment. Payment terms are in the Quotation. Travel, living and incidental project-related expenses are Customer's responsibility and will be invoiced separately as incurred.

13.4. 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.

13.5. 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.

13.6. 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.

13.7. 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. 13.8. 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.

13.9. 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.

13.10. 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.

13.11. 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

Quotation

Quote No. Q-00025635

Sales Support
tel (800) 633-7231
fax (412) 406-0952
radiologysolutions.bayer.com

Bayer HealthCare LLC
1 Bayer Drive
Indianola, PA 15051

This quotation has been prepared for: Carolinas Healthcare System

Issued on 2/22/2019 **Valid until** 4/23/2019 **Trade-in required** No

Your Bayer Sales Team:

Anthony Capuzzi 724-940-7453, , anthony.capuzzi@bayer.com

Quotation Overview

PREMIER RADIOLOGY T7 & T8 Pricing Applied

Bayer's diagnostic imaging products, software, and equipment service help healthcare teams in radiology address their critical performance, quality, uptime, and scheduling requirements.

Please note: If pricing and terms of this [order/quote] are based upon your current Group Purchasing Organization (GPO) affiliation, any change to your current affiliation may require a new quote or updated terms and pricing.

>See Products and Services Details in this quote for an itemized breakdown of quoted products.

Imaging Products and Services

Product Name	Total List Price	Total Discounts	YOUR PRICE
MRXperion - Medrad® MRXperion™ MR Injection System(s) and Related Products/Services			$39,775.00
TOTAL(Local taxes, shipping and/or handling to be invoiced when applicable)			**$39,775.00**

TOTAL	**$39,775.00**
GRAND TOTAL (Local taxes, shipping and/or handling to be invoiced when applicable)	**$39,775.00**

If your organization is tax exempt, please notify Sales Support at 1-800-633-7231.

All Pricing is in U.S. Currency.

Quotation continued

Quotation prepared for: Carolinas Healthcare System **Issued on** 2/22/2019 **Valid until** 4/23/2019

This quotation has been prepared for: Carolinas Healthcare System

Issued on 2/22/2019 **Valid until** 4/23/2019 **Trade-in required** No

Your Bayer Sales Team:

Anthony Capuzzi 724-940-7453, , anthony.capuzzi@bayer.com

If you are using this quote as a purchase order, please complete the Acceptance and Billing information below:

Acceptance and Billing

Your signature below indicates your acceptance of this Agreement, including the terms and conditions included as part of this document. Please complete the information below, along with your Purchase Order referencing Quote # Q-00025635, and email this form to Sales Support at risalessupport@bayer.com AND your SC, Anthony Capuzzi, at anthony.capuzzi@bayer.com.

If pricing and terms of this order are based on your current Group Purchasing Organization (GPO) affiliation, any change to your current affiliation may require a new quote or updated terms and pricing.

Payment terms
30 days due net

Terms of Delivery
PITTSBURGH

Customer contact
Chris Hollar

Address
1000 Blythe Blvd
Charlotte, NC 28203

Billing Information
1000 Blythe Blvd
Charlotte, NC 28203

Customer Number
3827302

Phone
7045127247

Additional Customer Comments

PO#
Write PO number

PO Amount
Write PO amount

Customer Approver
Write customer name

Customer Approver Title
Write customer title

Billing Email Address (if applicable)
Write email address

Customer Approver Signature
X
Please print and sign

Date
MM/DD/YYYY

Quotation prepared for: Carolinas Healthcare System

Issued on 2/22/2019 **Valid until** 4/23/2019

Bayer Product Terms and Conditions

GROUP PURCHASING AGREEMENT

If Customer is a member of a group purchasing organization ("GPO") who has a contract with Bayer, the terms of that GPO Agreement will supersede the terms herein.

The following terms and conditions will not apply to the license of Bayer's Informatics Software. Both Radiation Dose Management software (sometimes referred to as "RDM") and Contrast Dose Management (sometimes referred to as "CDM") software are subject to a separate license agreement.

ACCEPTANCE

Bayer's products and services are sold only under the terms and conditions stated on this quotation. Acceptance of any Purchase Order is expressly and exclusively made conditional on your assent to these terms and conditions. Any different or additional terms and conditions that may appear in your Purchase Order or any other document sent by you, shall have no effect. Bayer expressly objects to and rejects all inconsistent or additional terms, conditions and limitations contained on any of your forms or other writings. If you do not communicate your objection to these terms and conditions in writing and within a reasonable time, or if you accept the goods covered by this Quote, you will be deemed to have accepted these terms and conditions and they will control in all instances. If the Products include embedded software or if you are purchasing software, BY HAVING THE SOFTWARE INSTALLED AND USING THE SOFTWARE PURCHASED HEREUNDER, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS QUOTE, DO NOT INSTALL OR USE THE SOFTWARE AND NOTIFY BAYER IMMEDIATELY.

PRICING

Prices are based on costs and conditions existing on the date of this Quote and may be changed by Bayer before final acceptance. The pricing for products and services provided pursuant to this Quote may reflect or be subject to discounts, rebates, or other price reduction programs. Please be advised that you are obligated to: a) fully and accurately disclose the amount of any such discounts, rebates, or other price reductions in your cost reports or claims for reimbursement to Medicare, Medicaid, or health care programs requiring such disclosure and b) provide such documentation to representatives of the Secretary of the Department of Health and Human Services and state agencies upon request. Unless noted otherwise, the value of any product listed as $0.00 on this Quote may constitute a discount that you should evaluate when filing such reports. You may request additional information from Bayer in order to meet your reporting or disclosure obligations, by writing to the address set forth in this Quote.

All payments are due net thirty (30) days on the total invoiced amount. For all new customers Bayer requires a thirty percent (30%) pre-payment for all capital equipment orders, unless otherwise agreed to by Bayer. Bayer must approve any payment terms other than net thirty (30) days.

SHIPPING

All shipping dates are tentative. Bayer will make every reasonable effort to meet shipping dates referenced in this Quote. However, Bayer will not be liable for its failure to meet any such date.

INSTALLATION

The cost of installation is not included in the product price and is your responsibility unless otherwise stated. For details on equipment installation, you should consult with your Bayer Sales Representative or refer to your Products Manual, which is included with your equipment.

If this Quote includes installation of an overhead counterpoise system (OCS) it is your responsibility to ensure a suitable mounting location for the system. The counterpoise ceiling plate is required to be installed prior to Bayer installation of the counterpoise system and installed in accordance with the specifications listed in the installation manual. The OCS ceiling plate should always be installed by a qualified Structural Engineer and/or Architect. In addition, if applicable building codes require the use of a conduit, you are responsible for ensuring that a conduit is available prior to Bayer's installation.

If this Quote includes a Spectris Solaris with an Integrated Continuous Battery Charging System (iCBC), installation will require a standard power outlet in the scan room, or authorization to install a filter through the penetration panel.

LICENSE

If the Products include embedded software, or if you are purchasing software, Bayer grants to you a non-exclusive license to use such software provided by Bayer, solely in connection with, or to operate, the Products. Use of the software for any other purpose is strictly prohibited. This license is effective on the date you begin using the Products and software and will continue in effect unless you return the Products or software or if the license is terminated because you breach any provision of these Terms. Upon termination you shall immediately cease use of all software and shall return the Products and software to Bayer. The software copyright is owned by Bayer and is protected by United States copyright laws and international treaty provisions. Bayer does not transfer title to the software to you, but retains the rights to make and license the use of all copies. You shall not copy, translate, disassemble, or decompile nor create or attempt to create, by reverse engineering or otherwise, the source code from the object code of the software. You are not permitted to modify or make derivative works of the software and ownership of any unauthorized modification or derivative work shall vest in Bayer.

Quotation continued

Quotation prepared for: Carolinas Healthcare System

Issued on 2/22/2019 **Valid until** 4/23/2019

PRODUCT WARRANTY

NEW PRODUCTS: Bayer warrants that all new Bayer products are free from defects in workmanship or material under proper, normal use and service for a period of one year (12 months) from shipment, unless a longer period is provided on the warranty with the products, or as otherwise provided herein.

REFURBISHED: Bayer warrants that all refurbished Bayer products shall perform in accordance with the documentation provided, under proper, normal use and service for a period of the shorter of a) 90 days from installation or b) six months from shipment, unless a longer period is provided on the warranty with the products, or as otherwise provided herein.

DISPOSABLE PRODUCTS: If this Quote includes disposable products, Bayer's warranty shall be limited to repair or replacement of any defective disposable product upon receipt of the defective product and a Bayer Return Goods Authorization. You acknowledge that the disposables and the equipment are a system and your actions regarding your equipment may invalidate your warranty on the disposables.

During the warranty period, there shall be no charge for any action deemed necessary by Bayer, including parts, travel, or labor to fulfill the terms of the warranty, during local business hours of 8:30 a.m. to 5:00 p.m., Monday through Friday, except Bayer holidays.

SERVICES WARRANTY

If this Quote includes a service agreement that covers Corrective Maintenance, there will be no charge, for the period stated on the agreement, for any action (parts, labor, travel) deemed necessary by Bayer to service the equipment, excluding those items listed under "Exceptions". Bayer will perform on-site Corrective Maintenance during the hours specified on the maintenance program purchased. Buyer shall pay, as an additional charge for on-site Corrective Maintenance, all field labor and travel time, outside normal hours at Bayer's current service rates, including any appropriate premiums.

WARRANTY ON REPAIRS: All materials, labor and service provided hereunder are warranted to be free of defects in material or workmanship for the longer of the term of this agreement or ninety (90) days from the date provided.

PREDICTIVE MAINTENANCE SCHEDULE: If this Quote includes a service agreement, Bayer shall perform Predictive Maintenance on the Product(s) during the hours specified in the maintenance program purchased. For Injector Products, Bayer will perform Predictive Maintenance within the first sixty (60) days of the effective date of the agreement or within twelve (12) months from the last PM provided by Bayer, unless otherwise agreed. Predictive Maintenance performed outside of PM Hours will be charged an additional one half (1/2) of Bayer's current hourly service rate, including any applicable premiums.

UPTIME GUARANTEE: If this Quote includes a service agreement that includes an uptime guarantee the following language applies: THIS PROVISION IS NOT APPLICABLE FOR PRODUCT PURCHASES—CUSTOMERS ARE ONLY ENTITLED TO UPTIME GUARANTEES IF THEY PURCHASE SELECTED SERVICE AGREEMENTS. For any calendar quarter during the term of this service agreement, and as per the terms of the service agreement, Bayer guarantees that the Product(s), will maintain a level of uptime equal to or greater than 97%.

Uptime is defined as the state when the Product(s) is working and/or available for use to your satisfaction. Downtime is defined as the state when the system is not operable due to breakdown, performance of repairs, or failure to perform according to specifications. The period of downtime shall be from notification of the manufacturer's service call center (1-800-633-7237) until the Product(s) is returned/presented to the designated representative properly functioning and ready for use. Scheduled routine preventive maintenance, scheduled upgrades of Product(s) or software, operator error in use of the Product(s), failures designated under "Exceptions" of the terms of the service agreement, and external failures (i.e., power loss) shall not be considered downtime. The effectiveness level is computed as follows:

Uptime will be calculated using the following formula:
Uptime = (T-TNF) x 100

Where "T" is the total number of hours (24 hours/day x 7 days/week x 13 weeks) and "TNF" is the number of covered hours (less any time a loaner or consigned spare part is made available) the Product(s), or any component of the Product(s) is not functional during the quarter. "TNF" will be measured beginning with the time of initial notification to Bayer that the Product(s) is inoperable for clinical use and the time the Product(s) is available again for clinical use. If any portion of the total functionality of the Product(s) is unavailable for operational use, the Product(s) will be considered down.

Downtime will not be calculated for (i) hours that are outside of contracted coverage terms, (ii) any malfunction or damage described under "Exceptions" in the manufacturers extended warranty or extended service agreement terms, (iii) scheduled preventive maintenance, or any other scheduled event, including those for the convenience of You, (iv) malfunctions caused by operator error, or (v) abuse of the Product(s), dead batteries, use of the Product(s) beyond its intended use or failure resulting from changes to the operator environment (i.e., scanner software, upgrades, changes, new magnet, room construction, etc.).

You will calculate uptime after each calendar quarter and will notify Bayer of any incident of non-conformance within 15 days of any such non-conformance. If uptime is less than 97%, then Bayer, upon verification, will extend the term of the service agreement without charge by one week for every full day that the Product(s) or any component of the Product(s) thereof is not operational beyond the allowable 3% level.

Quotation prepared for: Carolinas Healthcare System

Issued on 2/22/2019 **Valid until** 4/23/2019

EXCEPTIONS TO PRODUCT WARRANTY AND SERVICE AGREEMENT COVERAGE

Your actions may invalidate this warranty. If Bayer determines that an equipment or disposable problem is due to any of the following, you agree to pay Bayer for all labor, travel, material handling and shipping at Bayer's, or Bayer's agents, standard rates:

Malfunctions and Damage

a) Malfunction or damage due to abuse, misuse or spillage of any type of fluid in or on the unit.

b) Malfunction due to operator error, including failing to follow specified provisions of the Operations Manual.

c) Malfunction or damage due to unauthorized modification or repair. Unauthorized actions may jeopardize functionality, reliability, or operator and patient safety. Therefore any claim caused by unauthorized modification or repair shall not be covered by this warranty and Bayer is relieved from any further obligation. Bayer must review and authorize all modifications and repairs. This service may be obtained by contacting the Bayer Service Department.

d) Malfunction or damage due to the use of non-Bayer or non-approved accessories. The use of accessories in connection with the equipment may jeopardize functionality, reliability or operator and patient safety. Therefore any claim caused by the use of non-Bayer or non-approved accessories (such as non-Bayer disposables or in the case of any PET/CT product, the use of vials or vial shields that are not approved by Bayer) shall not be covered by this warranty and Bayer is relieved from any further obligation.

e) Damage by fire, floods, or other disaster commonly known as "Acts of God".

f) If the Products include any Counterpoise system, any system malfunction, damage or failures due to improper installation or not meeting Bayer's specific requirements for level and plumb and/or loading as specified in the Bayer manuals.

g) If the Products include any Counterpoise system, any ceiling or wall support structure used to mount or support an Injector.

h) Overhead Counterpoise System is excluded from Bayer's warranty. Bayer does not in any way warrant such structure.

i) Failures caused by network outages or improper network configuration.

j) Specific services plans may include additional exceptions so please review the details of your service plan.

WARRANTY EXCLUSIONS

EXCEPT AS PROVIDED IN THE ABOVE WARRANTY SECTION, BAYER EXPRESSLY DISCLAIMS ALL WARRANTIES OR CONDITIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, NON INFRINGEMENT AND FITNESS FOR A PARTICULAR PURPOSE (WHETHER OR NOT IS AWARE OF YOUR INTENDED USE OF THE PRODUCT), AND ALL SUCH WARRANTIES ARE EXPRESSLY EXCLUDED. IN NO EVENT SHALL BAYER BE LIABLE FOR ANY LOST PROFITS OR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OR OPERATION OF BAYER'S PRODUCT OR SERVICE. BAYER WILL NOT BE RESPONSIBLE FOR DAMAGES THAT EXCEED THE PAYMENT, IF ANY, RECEIVED BY BAYER FOR THE PRODUCT OR SERVICES FURNISHED, OR TO BE FURNISHED, UNDER THIS AGREEMENT. Some states do not allow the exclusions on limitation of incidental or consequential damages, so the above limitations may not apply.

This Limited Warranty gives you specific legal rights and you may also have other rights.

SOFTWARE WARRANTY

If the Products include embedded software or if you are purchasing software, Bayer warrants that the software will substantially conform to the functional specifications contained in the Operations Manual for one year following delivery. This warranty shall not apply if you use the software in a manner that is not authorized or not in accordance with the user instructions or if you modify the Products or the software or if a party other than Bayer provides service to the Products or software. Bayer does not warrant that the software will operate uninterrupted or that it will be free from minor defects or errors that do not materially affect its performance. Your sole and exclusive remedy for any damages or loss in any way connected with the software whether due to Bayer's negligence or breach of any other duty shall be, at Bayer's option: i) to bring the performance of the software into substantial compliance with the functional specifications or ii) return of an appropriate portion of any payment by you with respect to the portion of the software that is not functioning.

INDEMNIFICATION

Bayer agrees to indemnify, defend and hold you harmless from any liability, loss, expense, cost, claim or judgment (including attorneys fees), arising out of any claim by a third party for property damage, or personal injury or death where the product or services were alleged to have caused or contributed to the damage, injury or death, provided that this indemnification does not extend to injuries, damages or death to the extent caused by the negligence, reckless disregard or intentional acts of you or any third party.

FORCE MAJEURE

Bayer will not be responsible for delays or non-performance directly or indirectly caused by any acts of God, fire, explosion, flood, war, accident, action by governmental authority, inability to procure supplies and raw materials, delays in transportation, work stoppage, court order, and other causes beyond Bayer's reasonable control.

Quotation continued

Quotation prepared for: Carolinas Healthcare System

Issued on 2/22/2019 **Valid until** 4/23/2019

COMPLIANCE WITH LAWS/EXPORT

In addition to any rights and remedies specifically identified here in this Quote, Bayer shall have all rights and remedies conferred by law. Bayer shall not be required to perform its obligations under this Quote if you have defaulted (e.g., failed to pay) under this Quote or any other contract involving Bayer. This Agreement shall be construed in accordance with the laws of the Commonwealth of Pennsylvania, United States of America. You warrant that you are and will remain in compliance with all export and re-export requirements, laws and regulations of the United States of America and any other applicable export and re-export laws and regulations.

HIPAA

Bayer represents that it is not a Business Associate as defined in the Health Insurance Portability and Accountability Act ("HIPAA"). The functions Bayer is required to perform hereunder do not require the use or disclosure of Protected Health Information ("PHI"). To the extent any disclosure of PHI does occur, it is incidental and covered under the incidental disclosure rule found in 45 CFR 164.502(a)(1). In addition, to the extent any such incidental disclosure does occur, Bayer agrees to keep all such information confidential.

SERVICE AGREEMENT CANCELLATION

Bayer may terminate any Service Agreement by giving written notice to you if you have not made payment by the due date or if you do not give Bayer access to the equipment at the scheduled time for service. You may cancel this Agreement at any time by giving sixty (60) days prior written notice to the Bayer Service Department. If the Agreement is terminated for any reason Bayer shall refund to you an amount equal to the amount you prepaid for the service that year less the assessed value of any Engineered Predictive Maintenance ("EPM") performed and the assessed value of any remaining agreement covered. If the EPM was performed and at least one onsite emergency service event was performed during the agreement period, the agreement shall be considered fulfilled and no refund for that service year will be due to you.

VirtualCare® REMOTE SERVICE. Bayer may provide remote diagnostic and monitoring services on the products under this Agreement using Bayer's proprietary hardware and software (the "Maintenance Materials"). Bayer provides the Maintenance Materials to you for use with the VirtualCare service. You have no right to use the Maintenance Materials except for the VirtualCare service and title to the Maintenance Materials remains with Bayer at all times. You may not sell, assign or transfer the Maintenance Materials to any third party. If you terminate VirtualCare service for any reason, you must contact Bayer to facilitate the return of the hardware to Bayer. If you fail to return the hardware to Bayer or breach the use provisions set forth herein, Bayer may remove the hardware from your site. The Maintenance Materials are and will remain Bayer's sole and exclusive property and Bayer does not grant you any licensed rights in the Maintenance Materials. In the event this Agreement is terminated or is not renewed, within sixty (60) days of contract termination or expiration Bayer will disable the VirtualCare system so that all auto alerts originating with the VirtualCare system will be muted and Bayer will no longer receive such notices. If the VirtualCare system is disabled by Bayer or taken offline by you, Bayer will no longer continue its current practice of automatic remote monitoring and error code detection, or proactive event assessment and diagnostics. You understand that the VirtualCare connection may still exist but that no information will be relayed to Bayer from your systems.

Attachment D

PROPOSED TOTAL CAPITAL COST OF PROJECT

Project name: 3316932 CERP2019 LCH 3.0T MRI Unit

Provider/Company: Atrium Health

(1)	Purchase price of land	
(2)	Closing costs	
(3)	Site Preparation	
(4)	Construction/Renovation Contract	$1,565,840
(5)	Landscaping	
(6)	Architect/Engineering Fees	$86,212
(7)	Medical Equipment	$2,631,069
(8)	Non-Medical Equipment	
(9)	Furniture	
(10)	Consultant Fees (CON Fees, Legal Fees)	
(11)	Financing Costs	
(12)	Interest During Construction	
(13)	Other (IS, Security, Internal Allocation, Mobile MRI Rent)	$732,954
(14)	**Total Capital Cost**	$5,016,075

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

DAMIAN H

(Signature of Licensed Architect or Engineer)

4/1/2019

DATE

WRIGHT McGRAW BEYER ARCHITECTS, P.A. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50842 NORTH CAROLINA CHARLOTTE, N.C.

PAUL DAMIAN HUNEYCUTT REGISTERED ARCHITECT 11421 NORTH CAROLINA CHARLOTTE, N.C.

Sales taxes have been included in these equipment costs. However, because Atrium Health is entitled to a sales tax refund under N.C. Gen. Stat. § 105-164.14(b) and 105-467, the sales tax that Atrium Health initially incurs for this medical equipment purchase will be refunded to Atrium Health, and thus will reduce the capital costs that Atrium Health actually incurs for the equipment by $183,479.

Attachment E

STATE OF NORTH CAROLINA
Department of Health and Human Services
Division of Facility Services

CERTIFICATE OF NEED

for

Project Identification Number F-7219-05
FID# 943070

ISSUED TO: **The Charlotte-Mecklenburg Hospital Authority**
d/b/a Carolinas Medical Center
1000 Blythe Boulevard
Charlotte, NC 28203

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: **The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center shall acquire no more than one dedicated pediatric MRI scanner/Mecklenburg County**

CONDITIONS: **See Reverse Side**

PHYSICAL LOCATION: **Carolinas Medical Center**
1000 Blythe Boulevard
Charlotte, NC 28203

MAXIMUM CAPITAL EXPENDITURE: **$3,008,678**

TIMETABLE: **See Reverse Side**

FIRST PROGRESS REPORT DUE: **May 31, 2007**

This certificate is effective as of the 23rd day of August 2005.

Greg B. Hoffman

Chief, Certificate of Need Section
Division of Facility Services

CONDITIONS

1. The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center shall materially comply with all representations made in its certificate of need application.

2. Prior to issuance of the certificate of need, The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center shall provide the Certificate of Need Section with documentation of the availability of a radiologist, certified by the American Board of Radiology, with training and experience in interpreting images produced by an MRI scanner configured to perform cardiac MRI studies.

3. Prior to issuance of the certificate of need, The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center shall provide the Certificate of Need Section with a copy of a contract or a working agreement with two pediatric radiologists qualified as described in 10A NCAC 14C.2705(f)(1).

4. The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center shall not acquire, as part of this project, any equipment that is not included in the project-s proposed capital expenditure in Section VIII of the application or that would otherwise require a certificate of need.

5. The Charlotte-Mecklenburg Hospital d/b/a Carolinas Medical Center shall submit an annual report to the Medical Facilities Planning Section and the Certificate of Need Section, which includes the protocols for scanning pediatric MRI patients and the annual volume of weighted MRI procedures performed, by type.

6. Within two years following operation of the dedicated fixed pediatric MRI scanner, The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center shall obtain accreditation from the Joint Commission for the Accreditation of Healthcare Organizations, the American College of Radiology or a comparable accreditation authority, as determined by the Certificate of Need Section, for magnetic resonance imaging.

7. The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas Medical Center shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Certificate of Need Section in writing prior to issuance of the certificate of need.

TIMETABLE

Ordering equipment	May 1, 2007
Contract award	June 1, 2007
50% completion of construction	July 15, 2007
Occupancy/offering of service(s)	October 1, 2007

Attachment F

TOMORROW TODAY

SIGNA™ Premier

Fueled by SIGNA™Works

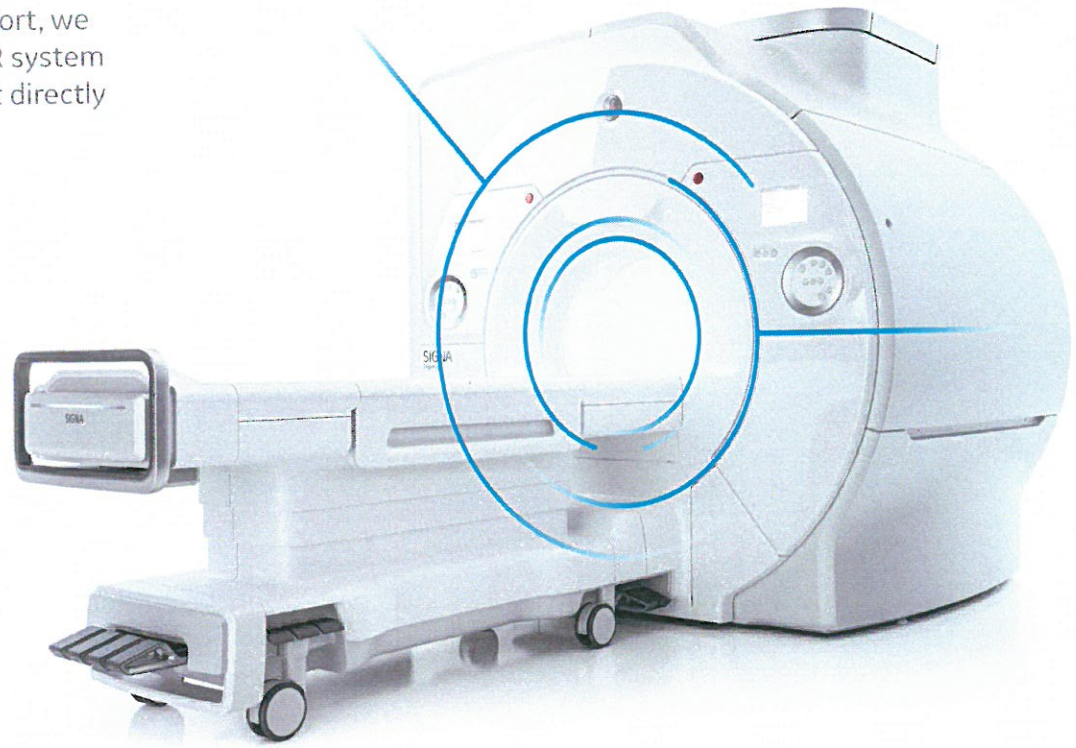
gehealthcare.com/mr

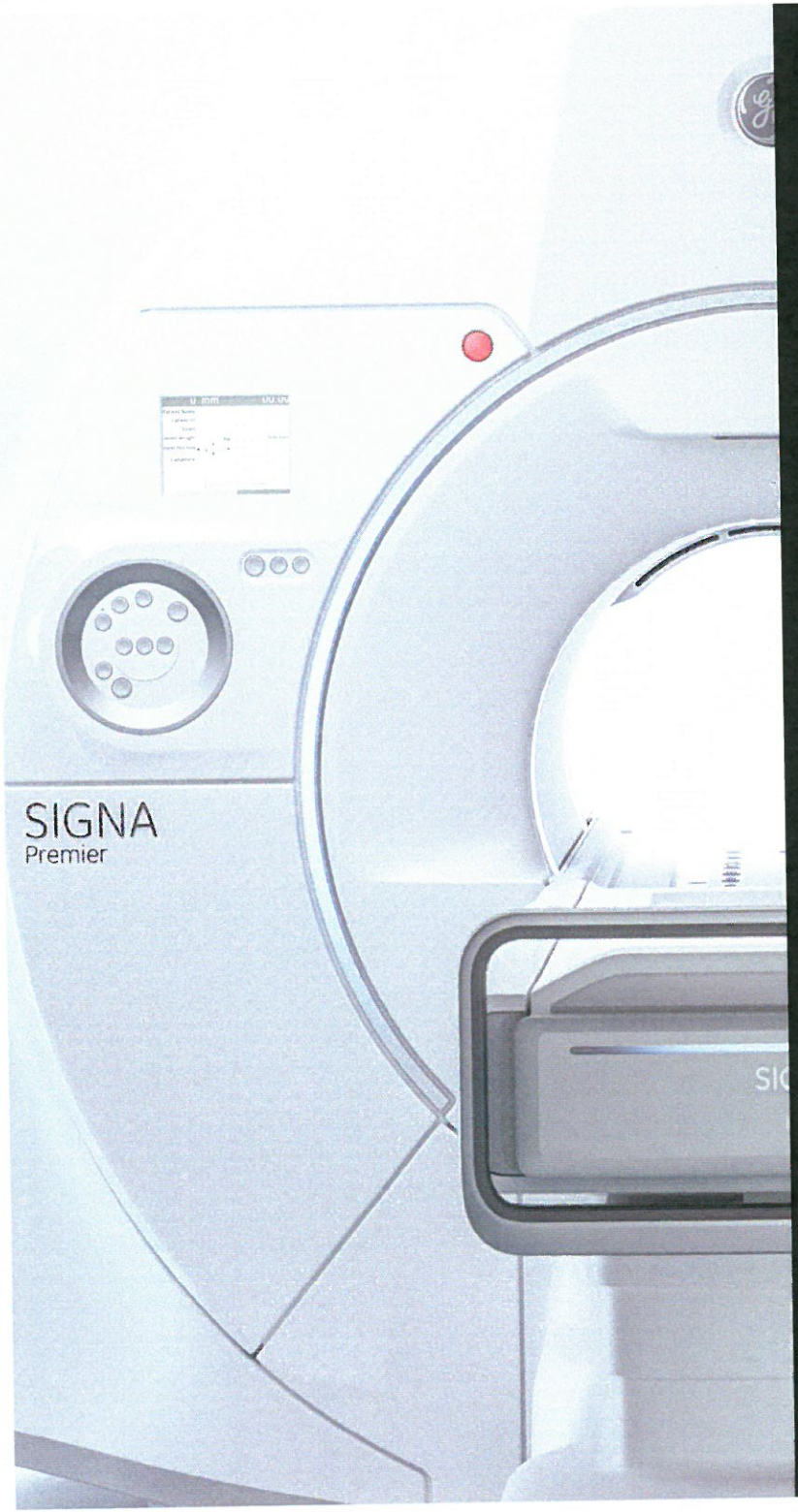

SIGNA
Premier

Tomorrow's MR...Today

There is a real-world need for a shift in engineering philosophy towards disease-specific, outcomes-based technology. This need is so great that we've formed strategic partnerships with organizations that are investing millions of dollars in the research and development of neuro applications to enable progress in Traumatic Brain Injury (TBI) evaluation. To help with this effort, we built tomorrow's MR, the SIGNA™ Premier, an advanced MR system equipped with innovative coil and gradient technology that directly links to cloud-based analytics.

It's the future of MR technology and it's ready today.





POWER

The power to turn on minds

Experience our innovative SuperG gradient coil technology

Introducing SIGNA™ Premier with

SuperG

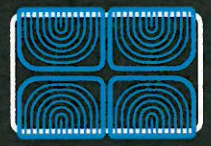
70 cm bore with 60 cm performance

You should have access to high-performance MR image quality. That's why, with SIGNA™ Premier, we started with the 70 cm patient bore. From there, we found a way to maintain the thermal stability of a high-performance gradient in a wide bore. It's called SuperG.

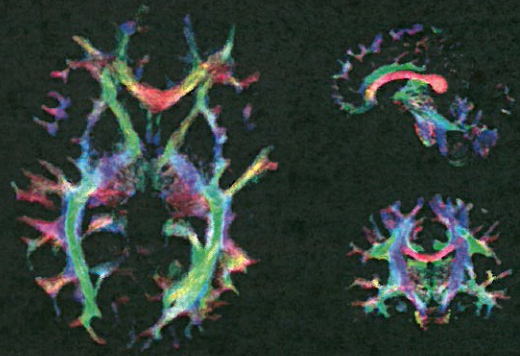
This innovative gradient coil technology allows SIGNA™ Premier to maximize the duty cycle for Human Connectome protocols (Multi-shell DTI and high-resolution fMRI) and high-resolution body, musculoskeletal and cardiac imaging without sacrificing patient comfort or bore size. As a result, SIGNA™ Premier is the only MR that combines 60 cm performance in a true 70 cm bore.

SuperG gradient design

All-hollow conductor design with independent cooling circuits to enable long duty cycles



Force and torque-balanced design for cutting-edge stability and minimal vibration



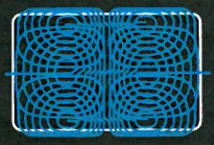
Multi-shell Diffusion Tensor b1000, b2000, and b3000 Super-resolved 'track density' at 300 microns

80

mT/m amplitude

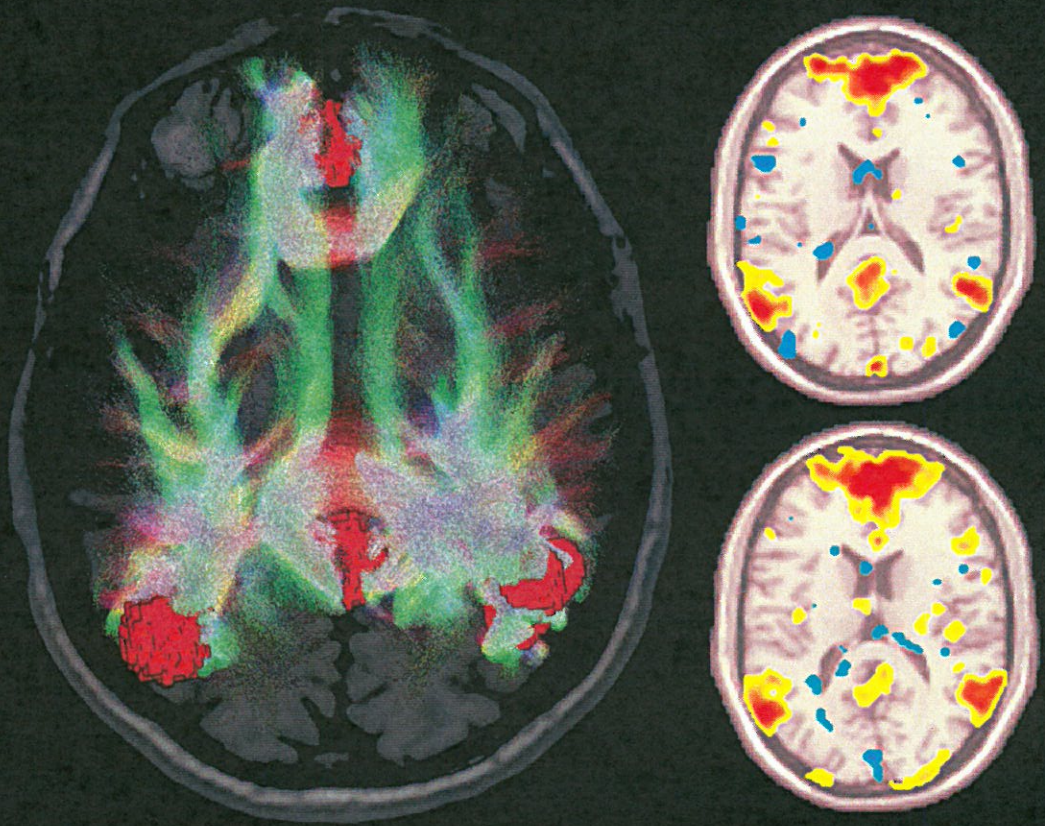
200

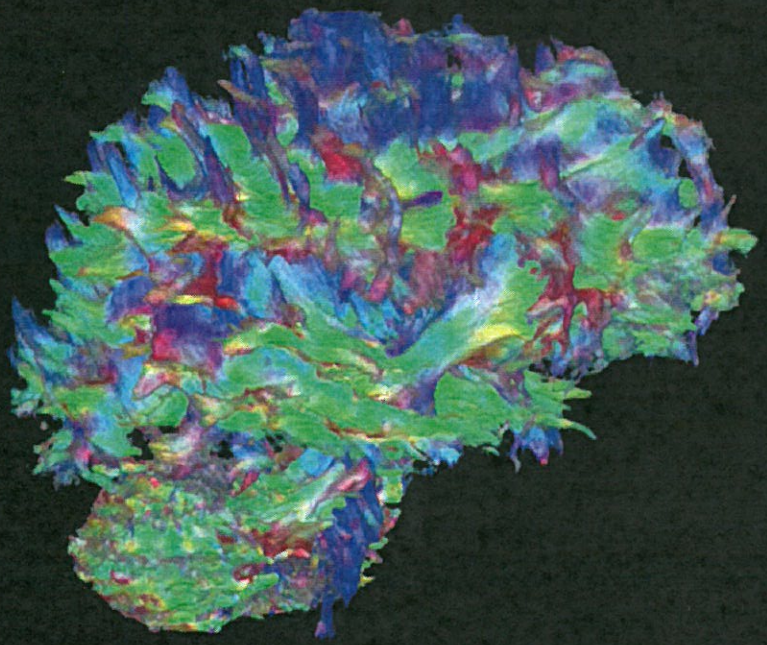
T/m/s slew rate



Active, passive and higher order shimming

Greater consistency and stability for advanced fMRI and other demanding applications





With great speed comes great clarity

Speed plays an important role in making research protocols practical for clinical use. SIGNA™ Premier includes three accelerating techniques, HyperBand, HyperSense and HyperCube, which provide astonishing imaging with unsurpassed speed. Used together with SuperG, our high-performance gradient coil, and an industry-leading number of channels, these technologies enable advanced imaging protocols in routine exam slots.

HyperBand

Excites multiple slices during a single acquisition to accelerate scan speed

HyperCube

Selective excitation for higher spatial resolutions and reduced scan times

HyperSense

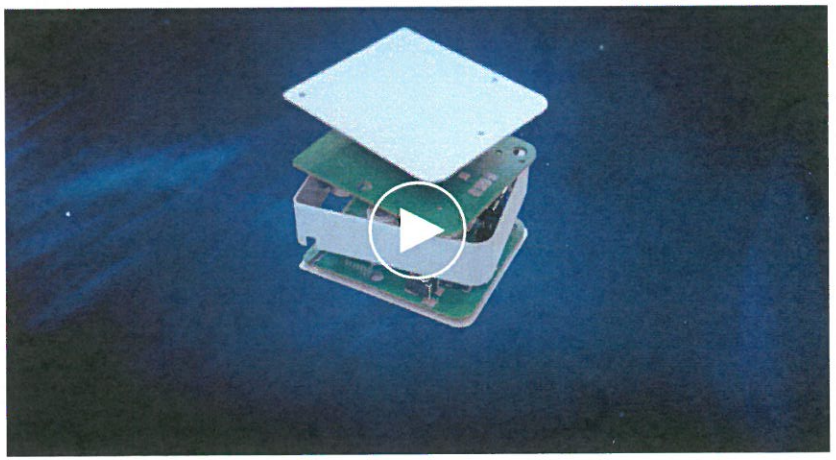
Utilizes proprietary compressed sensing technology for up to 8x reduction in scan time while maintaining resolution

CONSISTENCY

Engineering with patients in mind

We set out to build the MR of the future and to do that, we needed to revolutionize the patient experience. This led us to develop the innovative AIR Technology*, a revolutionary lightweight coil design that comfortably conforms to a patient's body.

Experience freedom.



*AIR Technology is not CE-marked and cannot be placed on the EU market or put into service until it has been made to comply with the Medical Device Directive requirements for CE marking. Not available for sale in all regions.

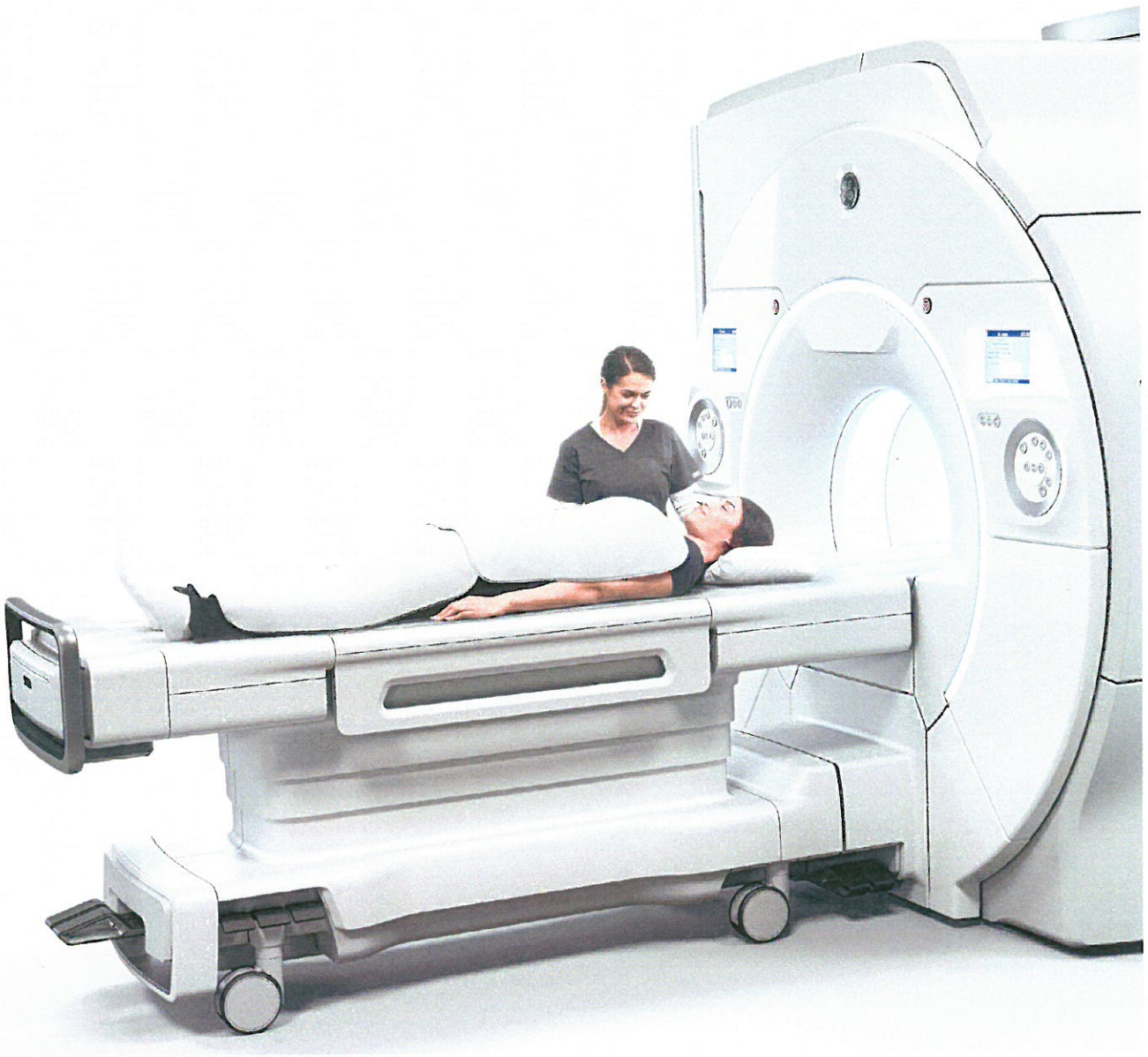
Form fitting for every form

Freedom in coil positioning is the ultimate design goal behind AIR Technology*. Its flexible coil design improves the scan experience while increasing signal quality. As a result, AIR Technology is reinventing the way imaging should be.

AIR Technology

- Industry-leading flexible design
- Comfortably conforms to the size and shape of every patient
- Improves signal quality by bringing the elements closer to the patient
- Anterior Array coil covers 65 cm of anatomy, enabling multi-station exams without having to reposition the coil

Click to play



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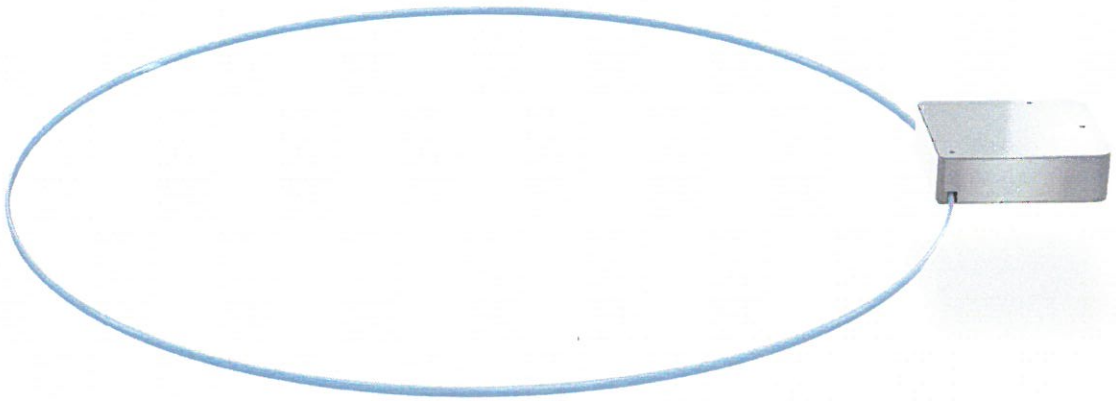


Click to play

The revolution starts with a single loop

To design a lighter, form-fitting coil that conforms to the unique shape of every patient, we started with the underlying coil technology. AIR Technology* Coil elements are comprised of two components, the Inca conductor and E-mode module. The minimal design of this powerful technology is not only lighter, it leads to faster scanning and improved SNR, regardless of condition. It's also what enables the flexibility to create coil geometries without compromising image quality.

Simplified design increases reliability

Weighs less than

0.35

grams per cm^2

Revolutionary coil design that is

60%

lighter or more**

*AIR Technology is not CE-marked and cannot be placed on the EU market or put into service until it has been made to comply with the Medical Device Directive requirements for CE marking. Not available for sale in all regions.

**Compared to previous generation technology

146 channels of industry-leading coverage

Unlike traditional electromechanical designs, AIR Technology* removes overlap constraints to enhance signal performance and provide higher parallel imaging acceleration. Patients and technologists benefit from a lightweight, flexible design and radiologists get the extra channels they need for outstanding image quality. In the end, everybody wins with AIR Technology.

Click to play

Highest channel count in the industry

Head-neck imaging

68

channels over 50 cm FOV

Body imaging

60

channels over 50 cm FOV

More than

140

channels for whole-body, multi-station imaging

*AIR Technology is not CE-marked and cannot be placed on the EU market or put into service until it has been made to comply with the Medical Device Directive requirements for CE marking. Not available for sale in all regions.

Embrace all patient forms with new functionality

48-channel Head Coil and Coil Suite

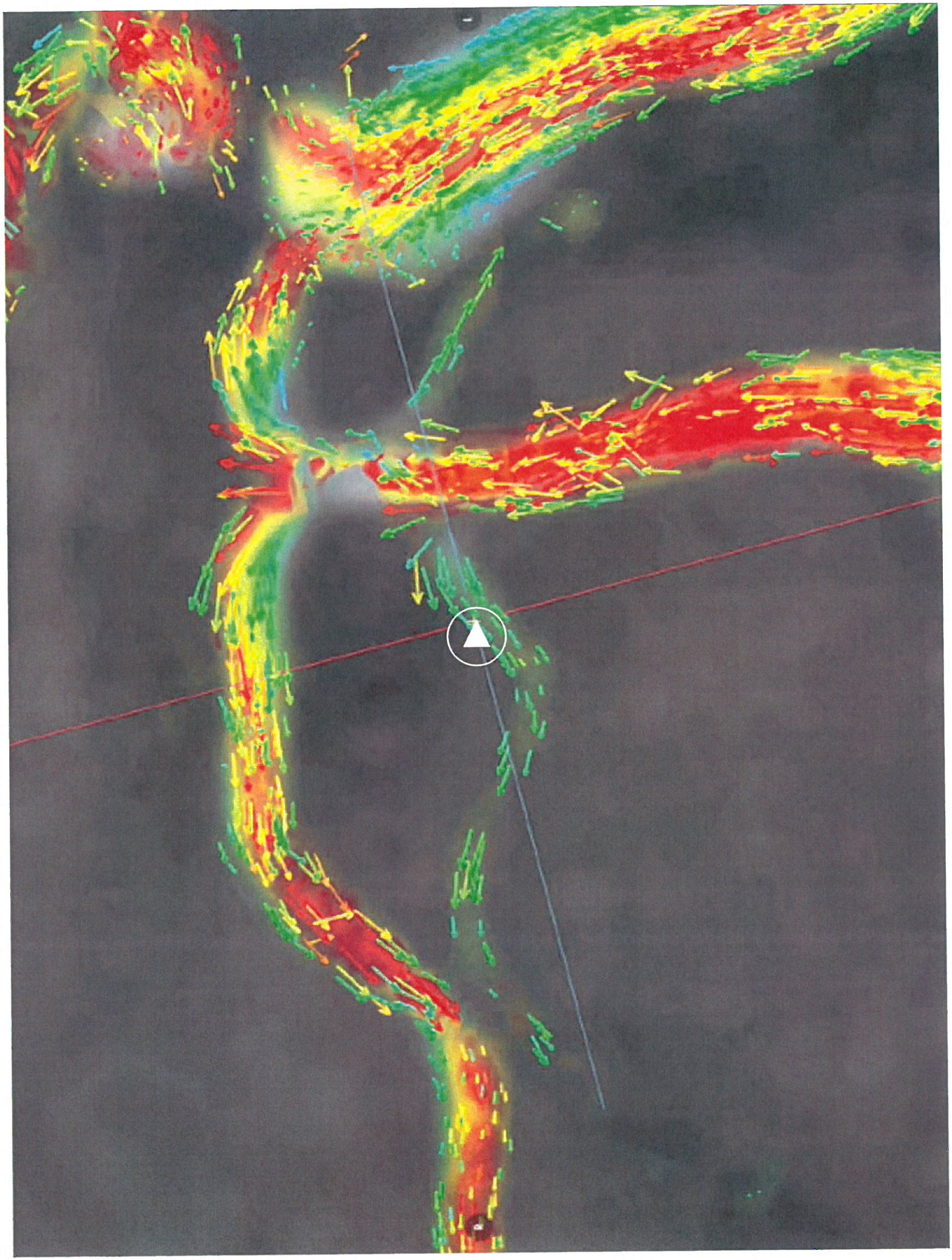
The 48-channel Head Coil leverages AIR Technology to deliver phenomenal performance for every patient. Its fit-adaptable design adjusts to most patient sizes and because it brings the gradient closer to the anatomy, it improves signal quality as well.

- Excellent penetration for high diagnostic confidence, even in the center of the image
- Maximizes the clinical capabilities of advanced imaging applications
- Compatible with both EEG and fMRI simultaneously

Fits

99.99%

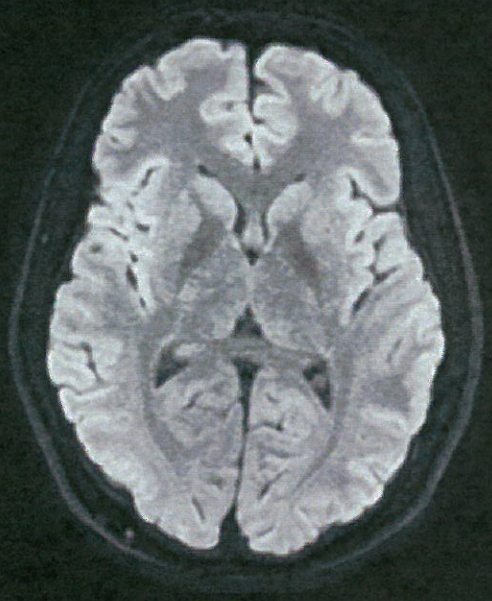
of the patient population



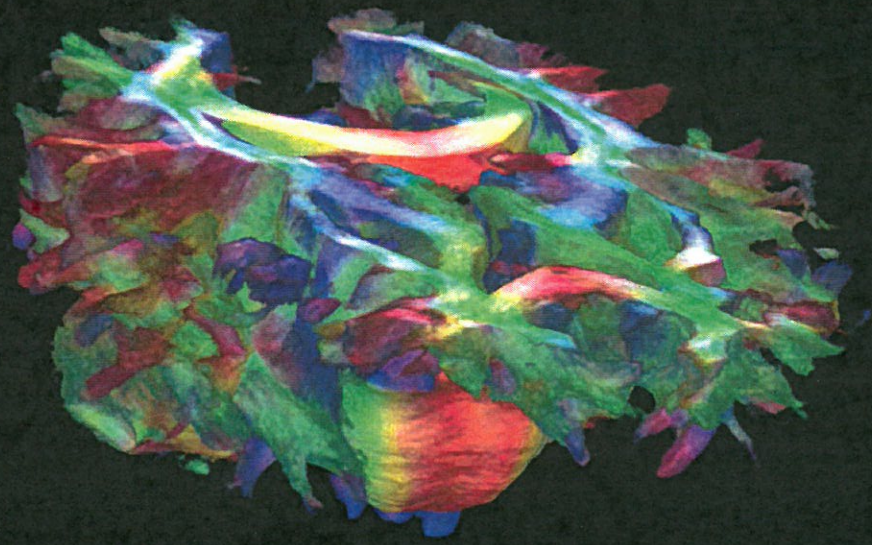
INTELLIGENCE

Outstanding images with spectacular detail

Advanced Diffusion



MUSE DWI high resolution
0.9 x 0.8 x 3 mm

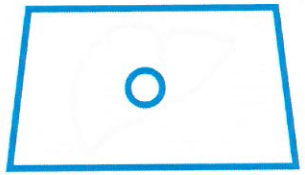


Multi-shell DTI
2.5 mm isotropic
b = 1,000 and 2,500 s/mm^2

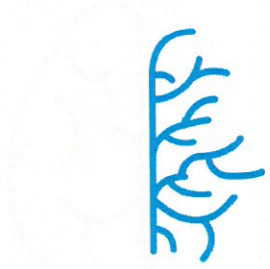
Diffusion imaging has never been so intelligent

The current standard for diffusion imaging is limited by anatomical regions that are prone to large distortions. SIGNA™ Premier uses intelligent solutions and an advanced diffusion package, including PROGRES, SuperG Boost and MUSE, to automatically detect and correct distortion, artifacts and motion. This is achieved without any user intervention, additional scan time or complicated workflow.

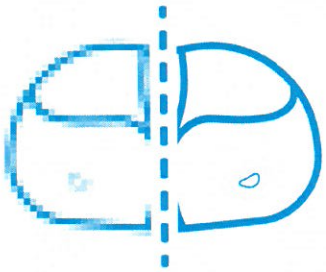
Resolving the limits of diffusion distortion, diffusion SNR and diffusion resolution.



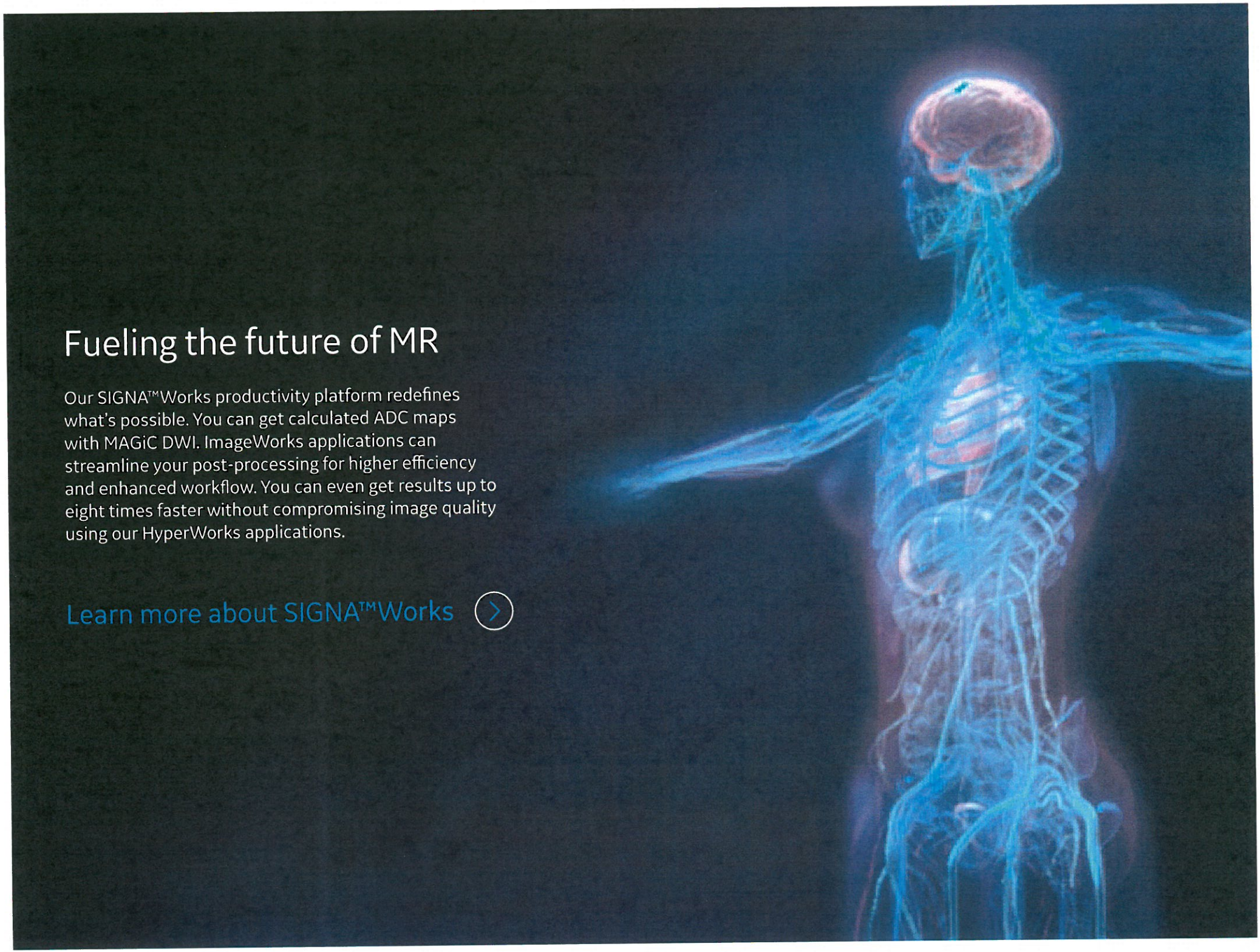
Improved co-registration



Improved visualization of the most challenging areas



Higher resolution without any restrictions

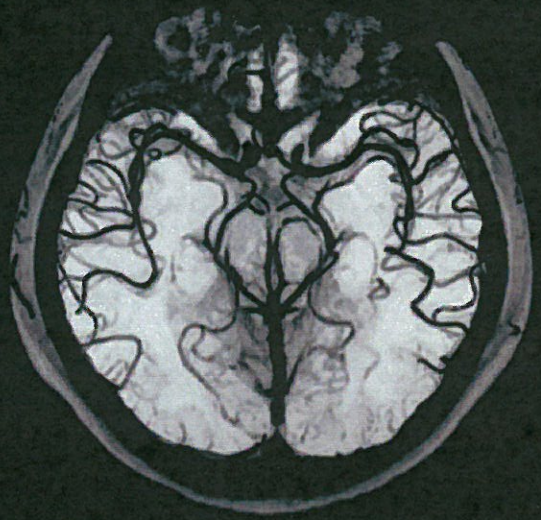

Fueling the future of MR
Our SIGNA™Works productivity platform redefines what's possible. You can get calculated ADC maps with MAGiC DWI. ImageWorks applications can streamline your post-processing for higher efficiency and enhanced workflow. You can even get results up to eight times faster without compromising image quality using our HyperWorks applications.
Learn more about SIGNA™Works

CLINICAL GALLERY

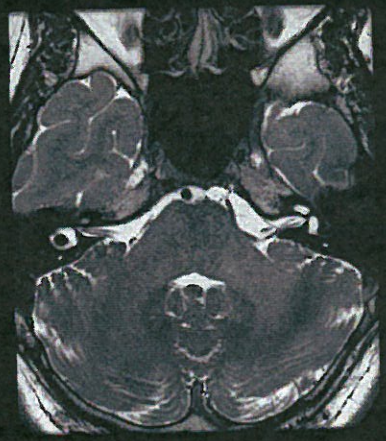
NeuroWorks

48-channel Head Coil

Offering neuro applications from positioning to post-processing and faster imaging with greater diagnostic value.



T1 Cube Flex
Water image
Vascular - Black Blood imaging



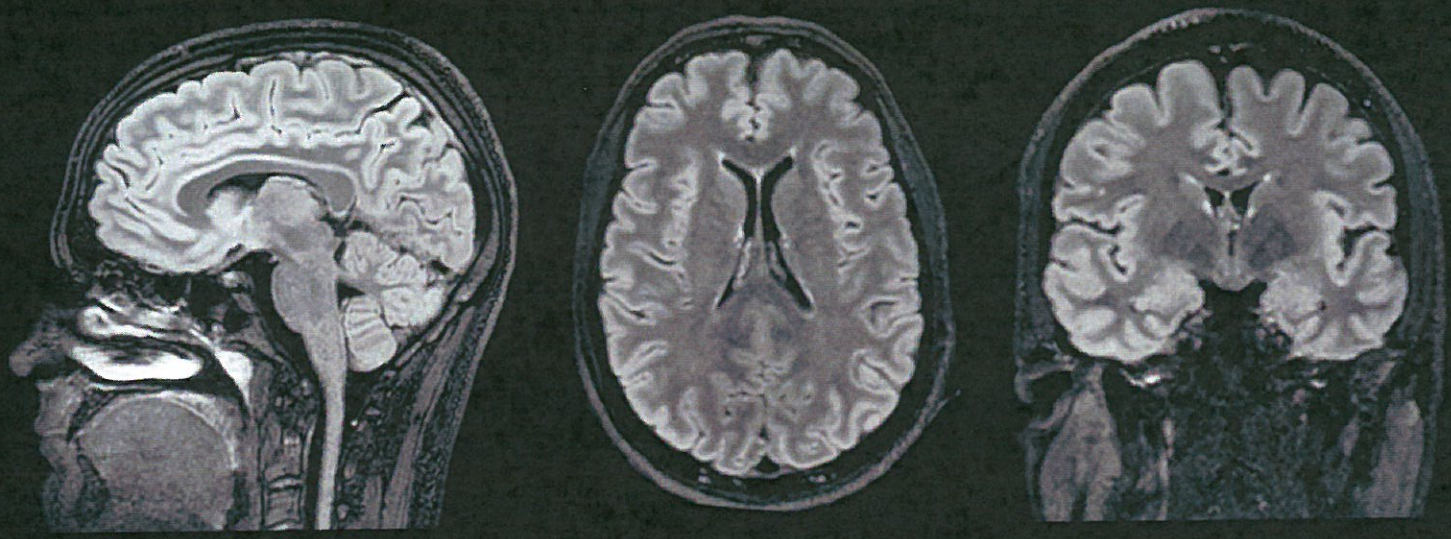
Axial T2 Cube IAC
0.5 x 0.5 x 0.6 mm

Axial T2 Cube IAC
0.5 x 0.5 x 0.6 mm
Perpendicular reformat

CLINICAL GALLERY

NeuroWorks

48-channel Head Coil



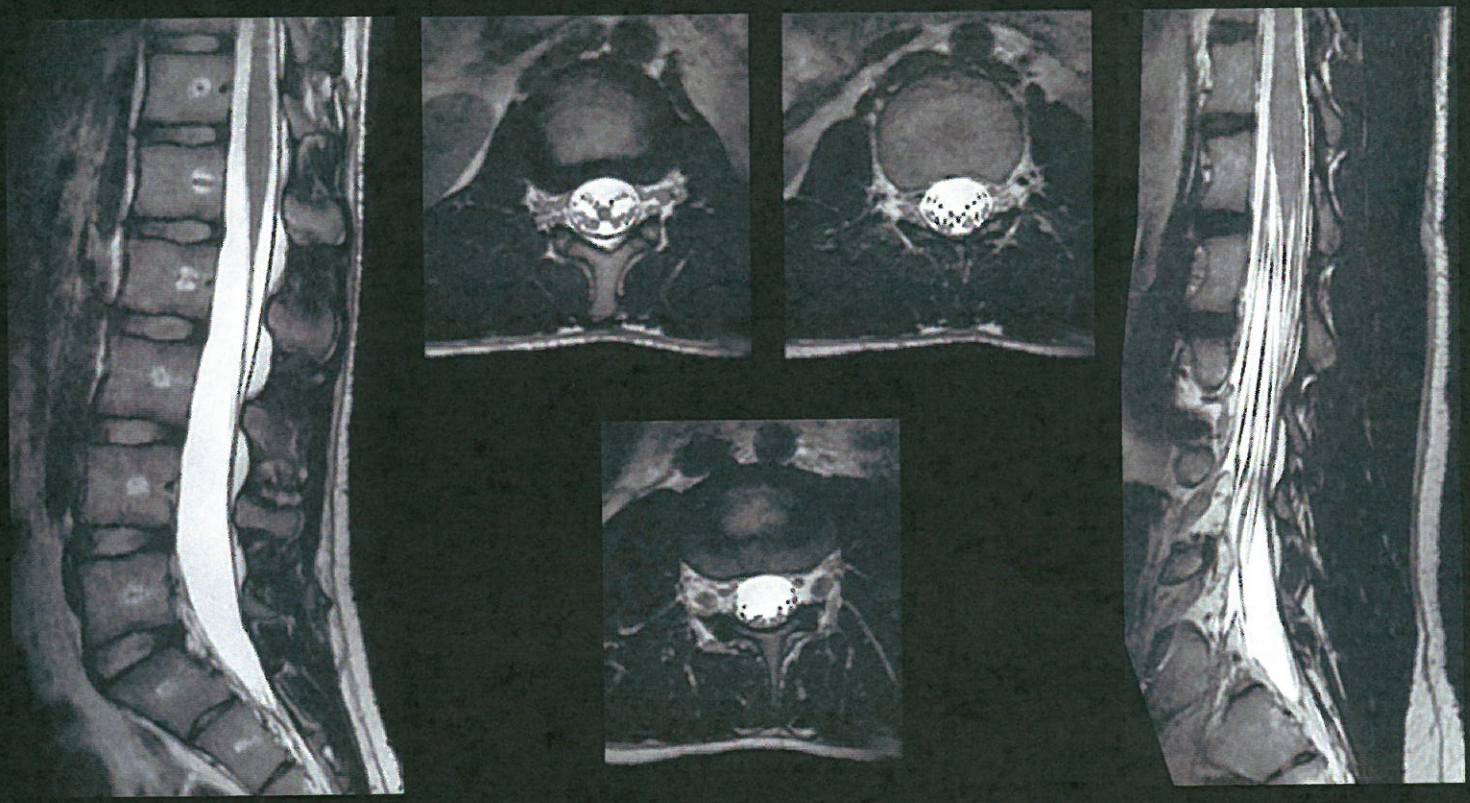
T2 FLAIR Cube with HyperCube and HyperSense
1 x 1 x 1 mm

CLINICAL GALLERY

NeuroWorks

Spine

AIR Technology Coils



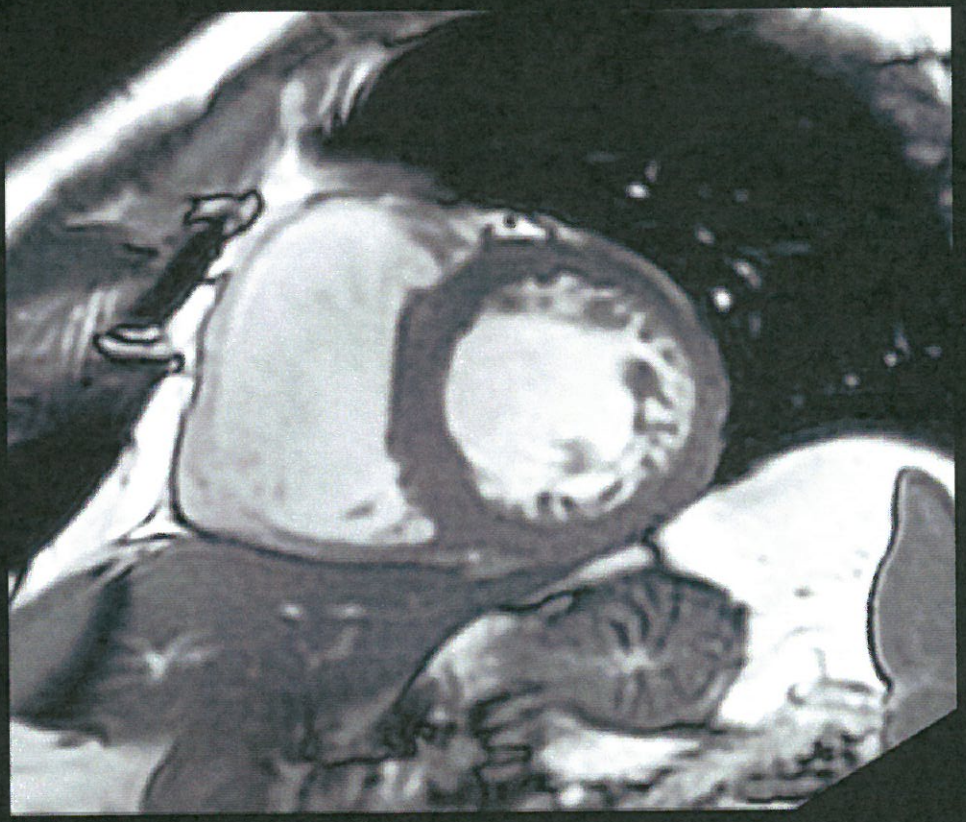
T2 HyperCube with HyperSense
Sagittal acquisition
0.8 mm isotropic

CLINICAL GALLERY

CVWorks

CardioMaps

Intuitive cardiac techniques that adapt to different patient types. Assess morphology, flow, function and tissue viability and gain crucial insights into vascular structure and flow dynamics.

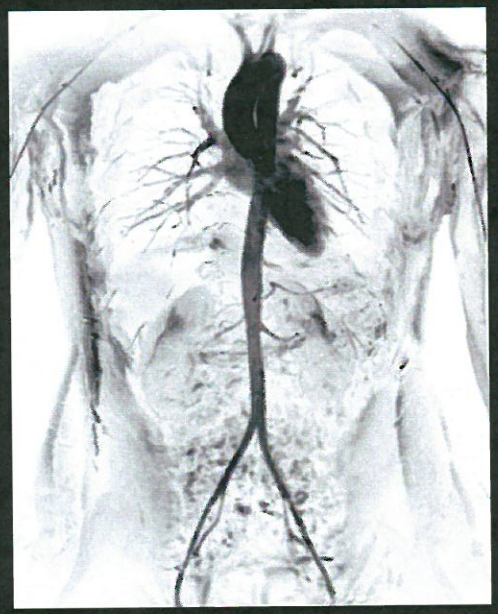


Short Axis FIESTA

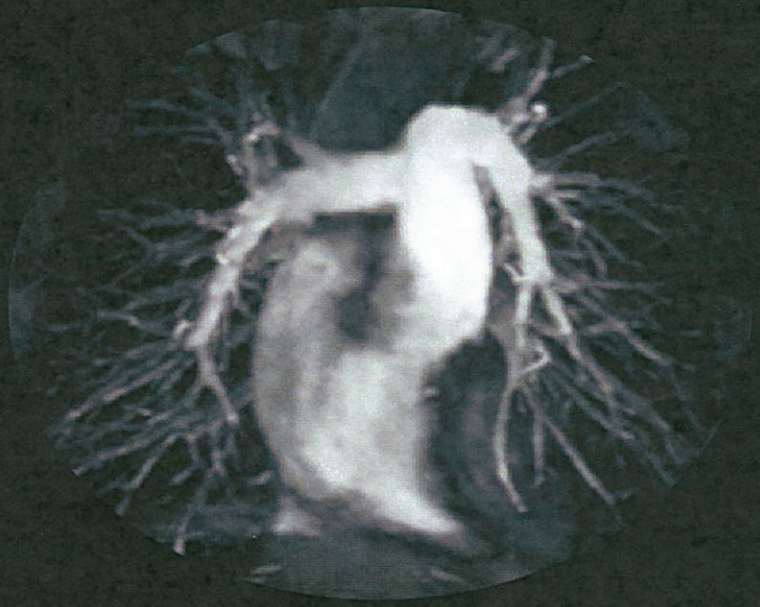
CLINICAL GALLERY

CVWorks

Vascular imaging



TRICKS
Arterial phase
4 seconds per phase
1 x 2 x 3 mm



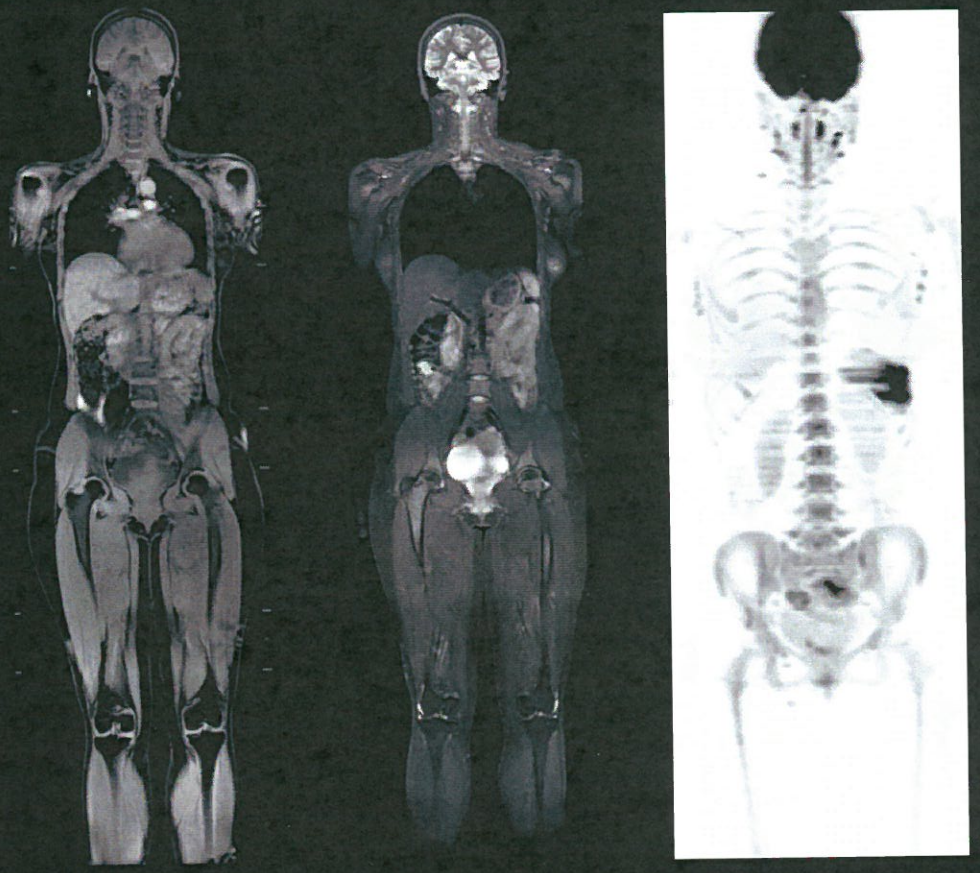
TRICKS
Early arterial phase
Pulmonary arteries
4 seconds per phase
1 x 2 x 3 mm

CLINICAL GALLERY

BodyWorks

Whole-body imaging

Images whole-body, abdominal and pelvic anatomy with speed and flexibility.



Coronal LAVA Flex

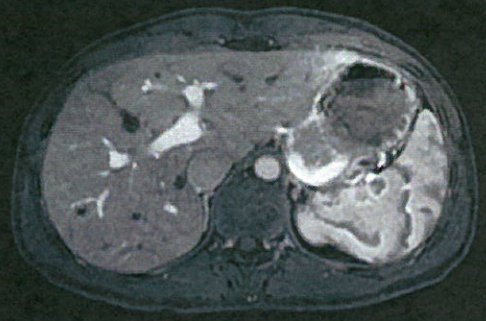
Coronal T2 Flex

Coronal MIP - DWI

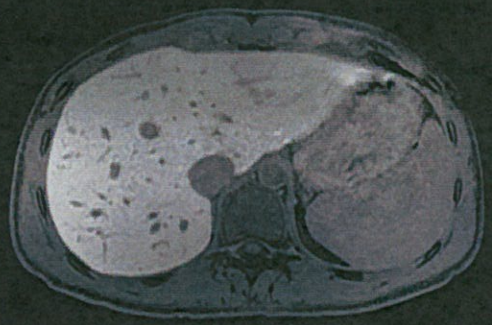
CLINICAL GALLERY

BodyWorks

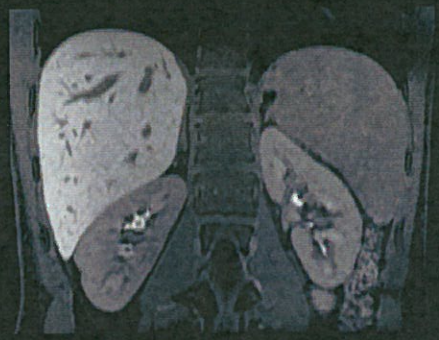
Liver



Axial LAVA Arterial 3.2 mm



Axial LAVA Navigated 1.6 mm
20 minutes post-injection

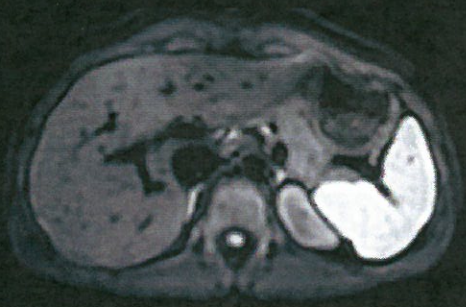


Axial LAVA Navigated
Coronal reformat
1.1 x 1.6 x 1.6 mm

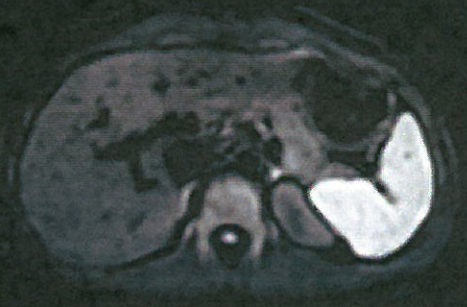
CLINICAL GALLERY

BodyWorks

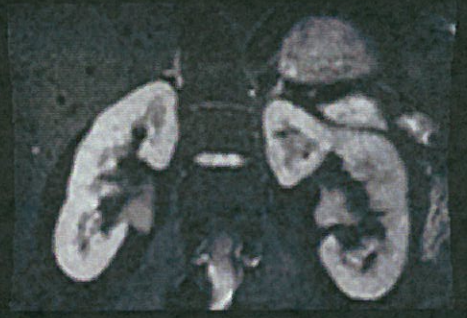
Liver and kidneys



Axial DWI b500



Axial MAGiC DWI b1000

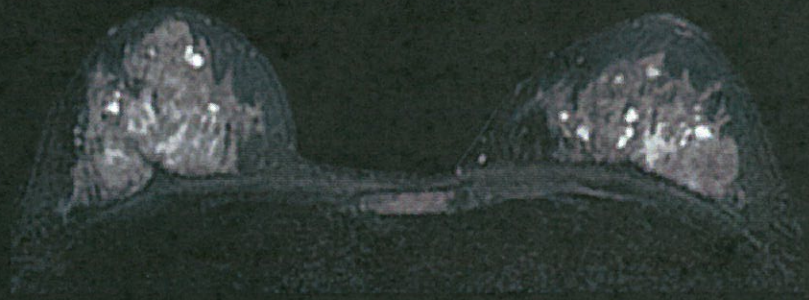


Coronal MUSE of the kidneys

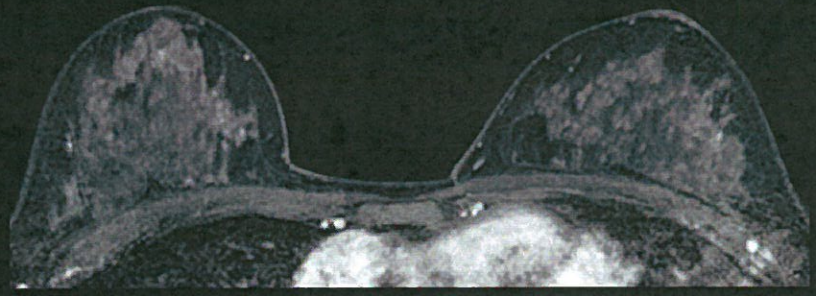
CLINICAL GALLERY

BodyWorks

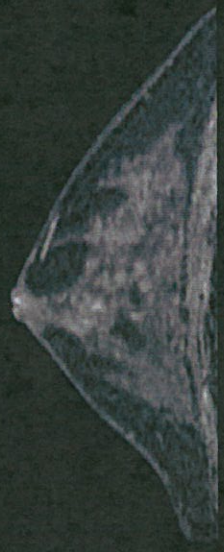
Breast



Axial T2 FatSat
2 mm



Axial 3D VIBRANT
Arterial phase
0.7 x 0.7 x 1.4 mm



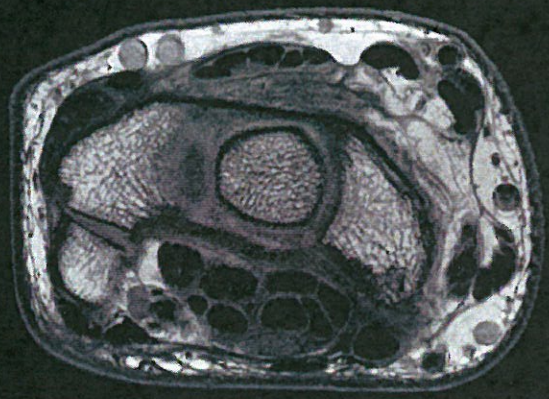
Sagittal reformat

CLINICAL GALLERY

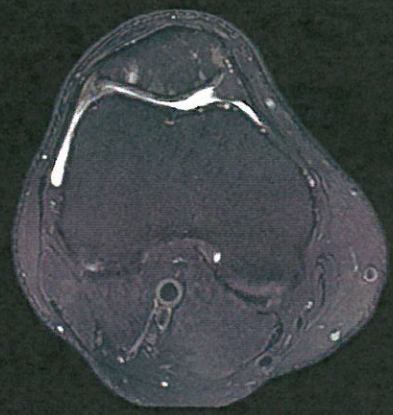
OrthoWorks

Musculoskeletal

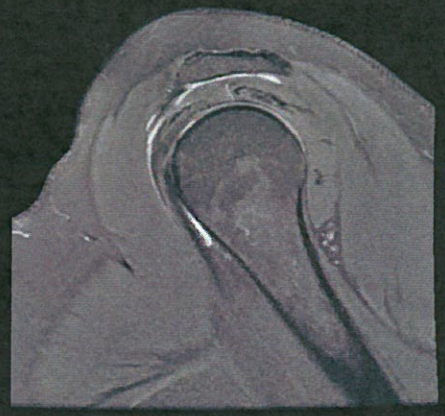
This extensive library of imaging techniques enables you to image bone, joint and soft tissue with remarkable tissue contrast.



Axial PD high resolution
0.2 x 0.2 x 1.2 mm

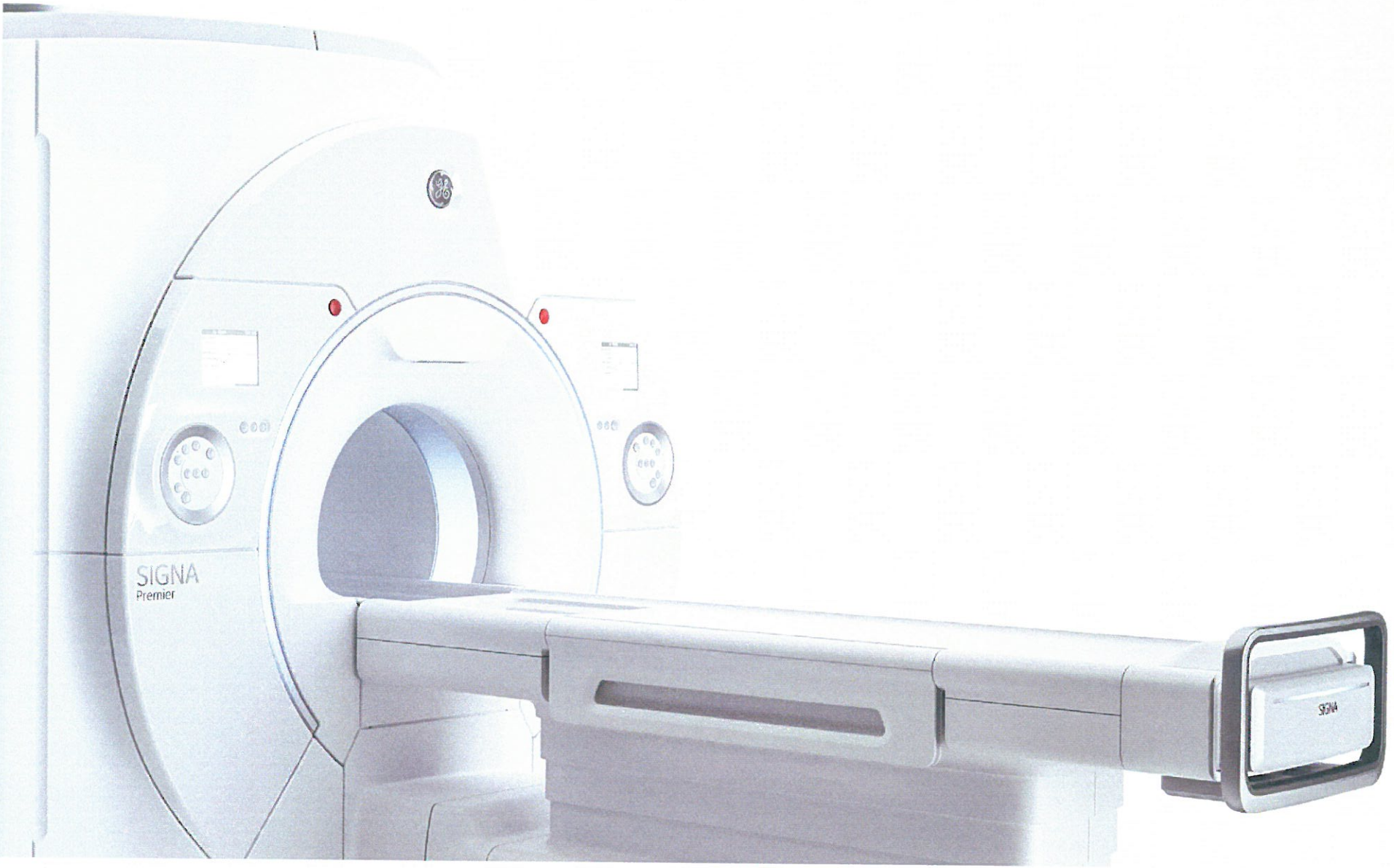


Axial PD FatSat
0.4 x 0.5 x 3 mm



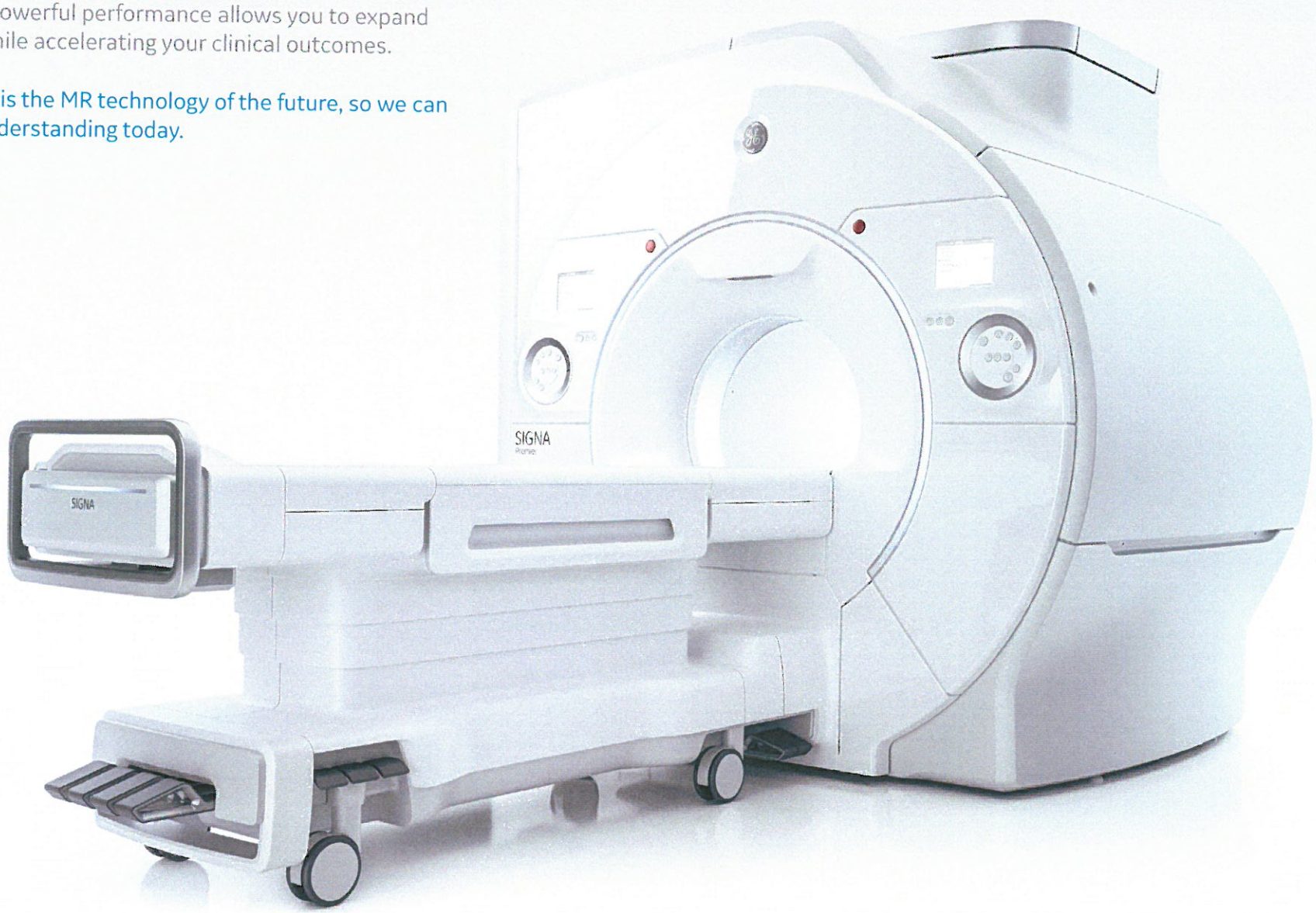
Sagittal PD FatSat
0.5 x 0.5 x 3 mm

The future is now



Today's clinical challenges are rapidly trending towards more specificity and sensitivity. SIGNA™ Premier was built with the consistency, power and intelligence to meet this growing trend. Adaptable technology gives you greater control over variability. And powerful performance allows you to expand your research while accelerating your clinical outcomes.

SIGNA™ Premier is the MR technology of the future, so we can build a better understanding today.



GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. GE (NYSE: GE) works on things that matter – great people and technologies taking on tough challenges.

From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

Imagination at work

JB56472XX

Attachment G

EQUIPMENT COMPARISON – LCH MRI Replacement

	Existing Equipment	Replacement Equipment
Type of Equipment (List each component)	1.5T Signa Excite	Signa Premier 3.0T XT Lift MR System
Manufacturer of Equipment	GE	GE
Tesla Rating for MRIs	1.5	3.0
Model Number	1.5T Signa Excite	Signa Premier 3.0T XT Lift
Serial Number	R5529	Not Available Until Installed
Provider's Method of Identifying Equipment	Internal Asset # / Serial #	Internal Asset # / 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	August 2007	May 2019
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Title
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.)	$3,008,678	$5,016,075
Total Cost of Equipment	$1,510,499	$2,631,069
Fair Market Value of Equipment	$1,510,499	$2,631,069
Net Purchase Price of Equipment	$1,510,499	$2,631,069
Locations Where Operated	3rd Floor, LCH	3rd Floor, LCH
Number Days in Use/To Be Used in N.C. per Year	365	365
Percent of Change in Patient Charges (by procedure)	0%	0%
Percent of Change in Per Procedure Operating Expenses (by procedure)	0%	0%
Type of Procedures Currently Performed on Existing Equipment	MRI procedures for all body parts	N/A
Type of Procedures New Equipment is Capable of Performing	N/A	MRI procedures for all body parts

Attachment H

LCH 1.5T MRI Volumes

Month	Volume
Mar-18	192
Apr-18	218
May-18	218
Jun-18	210
Jul-18	176
Aug-18	177
Sep-18	177
Oct-18	201
Nov-18	197
Dec-18	162
Jan-19	171
Feb-19	152
Total	2,251

Attachment I

GE Healthcare Technologies

GE Healthcare
PO Box 414
Milwaukee, WI 53187

January 29th, 2019

John W. Howard
Manager, Cross-Sectional Imaging (CT & MRI)
Carolinas Medical Center/Levine Children's Hospital
704-355-5855 Office | 704-355-4088 Pager 1672

RE: GE Signa HDxt 1.5T MRI (704355LCHMR)

Dear John,

Thank you for allowing General Electric Healthcare (GEHC) the opportunity to earn your business. Levine Children's Hospital (LCH) is a valued customer and we truly appreciate the partnership we share.

The purpose of this letter is to inform you that General Electric Healthcare will be responsible for removing your existing GE Signa HDxt 1.5T MRI Scanner as part of your upcoming GE Signa Premier 146ch 3T MRI purchase and estimate the de-installation and removal will be completed at no additional charge to LCH. LCH will be responsible for the cost of any scan room construction, renovation, clearing the rig path, rigging costs, and opening the scan room access panel. We will work closely with your facilities planning department to insure proper timing of the de-installation. The system will be de-installed, removed, and shipped by our GE team to our Goldseal business in Waukesha, WI. We understand and confirm that this unit may not be returned to the State of North Carolina without proper authorization from the North Carolina Certificate of Need (CON) section of DHSR.

Thank you again for the opportunity to earn your business. If you have any additional questions, feel free to call me at any time.

Sincerely,

-Herb

Herb Klann
Account Manager, GE Healthcare
Diagnostic & Interventional Imaging

M 724-504-8778
Herb.Klann@GE.com