



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

Pat McCrory
Governor

Richard O. Brajer
Secretary DHHS

Mark Payne, Director
Health Service Regulation

August 19, 2016

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

Exempt from Review

Record #: 2031
Facility Name: Caldwell Memorial Hospital
FID #: 933051
Project Description: Renovate and expand existing space
County: Caldwell

Dear Ms. Zerman:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of August 12, 2016, the above referenced proposal is exempt from certificate of need review in accordance with G.S 131E-184(g). Therefore, you may proceed to offer, develop, or establish the above referenced project without a certificate of need.

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



Healthcare Planning and Certificate of Need Section

www.ncdhhs.gov

Telephone: 919-855-3873 • Fax: 919-715-4413

Location: Edgerton Building • 809 Ruggles Drive • Raleigh, NC 27603

Mailing Address: 2704 Mail Service Center • Raleigh, NC 27699-2704

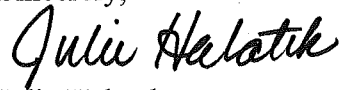
An Equal Opportunity/ Affirmative Action Employer



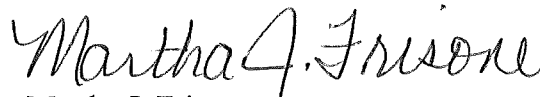
Dee Jay Zerman
August 19, 2016
Page 2

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

Sincerely,



Julie Halatek
Project Analyst



Martha J. Frisone
Assistant Chief Certificate of Need

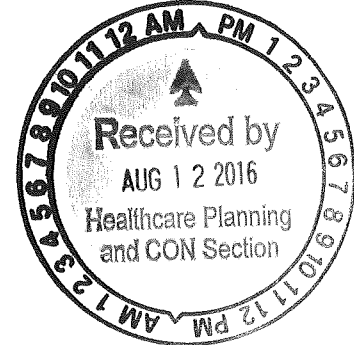
cc: Construction Section, DHSR
Acute and Home Care Licensure and Certification Section, DHSR
Paige Bennett, Assistant Chief, Healthcare Planning, DHSR

 CALDWELL
UNC HEALTH CARE

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

August 12, 2016

Julie Halatek, Project Analyst
Certificate of Need Section
Division of Health Service Regulation, DHHS
Mail Service Center 2704
Raleigh, NC 27699-2704



RE: Exemption Notices / Renovation and expansion of space pursuant to NCGS § 131E-184(g) and Replacement of existing MRI scanner pursuant to NCGS §131E-184(f) / Caldwell Memorial Hospital / Caldwell County / FID 933051

Dear Ms. Halatek:

Caldwell Memorial Hospital is planning to renovate, refurbish and expand portions of the hospital and main campus as part of a Master Facility Plan. Caldwell Memorial Hospital would also like to replace its existing MRI Scanner when the existing MRI space is refurbished and renovated. Caldwell Memorial Hospital is requesting confirmation that this refurbishment, renovation, expansion is exempt from review pursuant to NCGS §131E-184(g). Caldwell Memorial Hospital is also requesting confirmation that the replacement of MRI scanner is exempt from review pursuant to NCGS §131E-184(f).

NCGS §131E-184(g) provides that *The Department shall exempt from certificate of need review any capital expenditure that exceeds the two million dollar (\$2,000,000) threshold set forth in G.S. 131E-176(16)b if all of the following conditions are met:*

- (1) The sole purpose of the capital expenditure is to renovate, replace on the same site, or expand the entirety or a portion of an existing health service facility that is located on the main campus.*
- (2) The capital expenditure does not result in (i) a change in bed capacity as defined in G.S. 131E-176(5) or (ii) the addition of a health service facility or any other new institutional health service facility or any other new institutional health service other than that allowed in G.S. 131E-176(16)b.*
- (3) The licensed health service facility proposing to incur the capital expenditure shall provide prior written notice to the Department along with supporting documentation to demonstrate that it meets the exemption criteria of this subsection.*

The Master Facility Plan work will be performed in several phases. The two story entrance at the front of the hospital will be filled in with new floor space, a new two story mechanical building to house switch gear and generators will be added adjacent to the main building, and two new air handlers will be added on existing third floor roof and fifth floor roof areas. Additionally, a considerable amount of the existing hospital space on the first and second floor

will be renovated and refurbished, including the following: financial counseling, patient services, surgical services, procedures, pre- and post-care, on-call rooms, equipment storage, anesthesia, radiology, cardiology, information technology, gift shop, volunteers, classrooms, conference rooms, bio medical, file processing, sterile processing, and associated patient support, waiting and staff spaces. Also, as part of the surgical services renovation several ORs will be enlarged.

The entire project involves 54,315 SF of space. Of this amount, only 7,560 SF of space will be added to the main hospital building, not including the utility and parking components outside of the main building as identified in the attached exhibits. The projected cost of the Master Facility Plan renovations, refurbishment and expansion is estimated to be approximately \$20,918,775. See Exhibit 1. This \$20,918,775 does not including the cost of the proposed replacement MRI equipment, which is \$1,226,116.80 as discussed later below, or its fair market value of \$1,381,116.80.

(1) Main Campus: The vast majority of the proposed project's SF involves the renovations of certain portions of the 1st and 2nd floors of Caldwell Memorial Hospital and the addition of 7,560 SF of space to the main hospital building. The additional space will be used for an enlarged front entrance, enhanced front service areas, front canopy, 2nd floor support space, and an electrical room. Other work included in the project involves utility upgrades, generators, fuel tank, medical gas farm, electrical transformer, retaining walls, parking lot enhancement, and similar upgrades all of which are on the Main Campus but outside the main building.

The clinical renovations and expanded spaces will be part of the 1st and 2nd floors of Caldwell Memorial Hospital, which is the main building on the Caldwell Memorial Hospital's Main Campus. The building's address is 321 Mulberry Street, Lenoir, NC 28645. Most of the spaces involved are physically located inside the main hospital building, all components of the project have the same physical address, and all components of the project are on the Main Campus. The distance from the main building to those portions of the project outside the main building are identified in Exhibit 2. Exhibit 3 contains the architectural site plan for the project which reflects the entire project's components and extents, as well as floor plans of the spaces involved. The office of the administrative and financial control of the hospital are located on the 5th floor of the same building being renovated are also indicated on the site plan in Exhibit 2.

(2) New Institutional Health Service: As confirmed in this correspondence, the renovation and expansion project will not result in a change of bed capacity, the addition of a health service facility, or any other new institutional health service other than that allowed in G.S. 131E-176(16)b. The proposed replacement of the existing MRI scanner is not part of the Master Facility Plan and it is addressed below. While some equipment and furniture will be replaced as required in these areas, other than the separately proposed replacement of the existing MRI Scanner, no additional units of major medical equipment will be acquired. No new services are being proposed to be provided, as the renovation is planned to allow existing services to be house and provided in an enhanced environment. The number of beds, operating rooms, endoscopy rooms or any other CON regulated equipment or service will not be increased.

(3) Prior Written Notice: This request shall serve of prior written notice of this activity.

NCGS §131E-184(f) provides that *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) [sic, should be (22a)] 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.*

As noted above, the spaces included in Master Facility Plan project includes radiology and its associated support space. The projected cost of the Master Facility Plan renovations, refurbishment and expansion is estimated to be approximately \$20,918,775 not including the cost of the proposed replacement MRI equipment, which is \$1,226,116.80 as indicated below, and fair market value of \$1,381,116.80. With respect to the MRI replacement, the size of the MRI suite is approximately 1,843 SF, which is approximately half of the radiology space identified in Exhibit 4. The gray hatched area on the 2nd floor plan in Exhibit 4 is the MRI suite. The MRI suite project cost per SF based on the estimated total project cost for the Master Facility Plan's \$20,918,775 for a total of 54,315 SF becomes \$358.14 per SF. This attributes a refurbishment and upfit cost of \$709,809.49 to the MRI suite's 1,843 SF. Adding this \$709,809.49 to the replacement MRI's fair market value of \$1,381,116.80, demonstrates that the replacement would be \$2,090,926.29 thereby exceeding the \$2M threshold.

The existing MRI scanned was placed into service in 2006, has not had any updates since it was installed, and is approaching the end of its usefulness for our patients. The proposed replacement MRI Scanner is a wide bore scanner allowing most patients to be scanned feet first, thus reducing cases of claustrophobia. The new scanner will allow us to perform breast MRI, which now have had to be referred to another scanner. It will also allow us to perform MRA studies, especially on patients who cannot receive contrast. Because of the master facility plan construction process described above, and the age of the equipment, it is more cost efficient to replace the MRI scanner when the space is under renovation. Otherwise, we would have to deconstruct the newly renovated area to install a new replacement MRI scanner. Exhibit 5 contains a copy of the original Certificate of Need issued for the existing MRI scanner.

This replacement also meets the requirements of NCGS §131E-184(f) as follows:

- (1) the equipment being replaced is located on the main campus.*

The existing equipment is located on the first floor of Caldwell Memorial Hospital in the Radiology Department, which is Caldwell Memorial Hospital's main campus. NCGS §131E-176(14n) defines "Main Campus" as *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 building and grounds adjacent to the main building.”

Exhibit 2 contains maps reflecting the Caldwell Memorial Campus and the campus buildings. The existing MRI scanner is located in the Radiology Department on the first floor of Caldwell Memorial Hospital. This is where replacement equipment will also be located. Caldwell Memorial Hospital is a licensed health service facility. See Exhibit 6 for a copy of Caldwell’s current license, DHSR Acute Care License No. H0061. The financial and administrative control is provided in offices physically located on the 5th floor of Caldwell Memorial Hospital, the same building that provides clinical and inpatient services on the Caldwell’s main campus. The locations of the financial officer and administrative officer are indicated on a map contained in Exhibit 2.

(2) The Department has previously issued a certificate of need for the equipment being replaced.

Exhibit 5 contains a copy of the original certificate of need issued for the existing MRI scanner, which is to be replaced.

(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 subdivision.

This correspondence serves as prior written notice in accordance with this requirement.

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

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

Equipment Comparison

MRI Scanner	Existing Equipment	Replacement Equipment
<i>Type of Equipment (List each component)</i>	MRI Scanner	MRI Scanner
<i>Manufacturer of Equipment</i>	GE	GE
<i>Tesla Rating for MRIs</i>	1.5 T	1.5T
<i>Model Number</i>	Signa HD 1.5T	Optima MR450w 32ch GEM
<i>Serial number</i>	276187m2	Not yet available
<i>Provider’s Method of Identifying Equipment</i>	By model & serial #s	By model & serial #s
<i>Specify if Mobile or Fixed</i>	Fixed	Fixed
<i>Mobile Trailer Serial Number/ VIN #</i>	Not applicable	Not applicable
<i>Mobile Tractor Serial Number/ VIN #</i>	Not applicable	Not applicable
<i>Date of Acquisition of Each Component</i>	Installed 9/2006	TBD
<i>Does Provider Hold Title to Equipment or Have a Capital Lease?</i>	Own	Will own
<i>Specify if Equipment Was/Is New or Used When Acquired</i>	New	Will be new
<i>Total Capital Cost of Project (Including Construction, etc.)</i>	\$1.9 M approximately	\$1,226,116.80 equipment

		– see discussion above regarding cost
<i>Total Cost of Equipment</i>	\$1.2 M approximately	\$1,226,116.80
<i>Fair Market Value of Equipment</i>	Currently \$155,000	\$1,381,116.80
<i>Net Purchase Price of Equipment</i>	\$1.2 M approximately	\$1,226,116.80
<i>Locations Where Operated</i>	Caldwell Memorial Hospital	Caldwell Memorial Hospital
<i>Number of Days In Use/To be Used in N.C. Per Year</i>	365 days	365 days
<i>Percent of Change in Patient Charges (by Procedure)</i>	Not applicable	Existing procedures will have no change in patient charges. New patient charges will result due to new functionality of replacement equipment.
<i>Percent of Change in Per Procedure Operating Expenses (by Procedure)</i>	Not applicable	Existing procedures will have no change in patient charges. A few new types of charges will result due to functionality of replacement equipment.
<i>Type of Procedures Currently performed on Existing Equipment</i>	MRI scans	Not applicable
<i>Type of Procedures New Equipment is Capable of Performing</i>	Not applicable	MRI scans

As noted in the chart above, the total cost of the replacement MRI equipment will be \$1,226,116.80. The installation could easily be performed during the refurbishment planned for the radiology department. A valid quote for the replacement MRI scanner is attached as Exhibit 7.

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

Response: The machine to be replaced is a GE Signa HD 1.5T MRI which was installed in 2006 and was purchased for approximately \$1,200,000. The current equipment and the replacement equipment will perform the same general basic functions although it will possess expanded technological capabilities due to technological improvements. See equipment comparison chart and other discussion above. Caldwell Memorial Hospital does not intend to increase patient charges or current per procedure operating expenses, which is well within the 10% threshold for the first 12 months after its acquisition as contained 10A NCAC 14C .0303 Replacement Equipment. Based on this and other information included in this request, the replacement equipment is comparable medical equipment as defined in 10A NCAC 14C .0303.

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

Response: A copy of the original brochure and the original quote for the existing GE Signa HD 1.5T MRI are not available. A copy of a brochure for a replacement GE Optima 450W is attached as Exhibit 8.

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

Response: A copy of the original brochure and the original quote for the existing GE Signa HD 1.5T MRI are not available. A copy of a brochure for a replacement GE Optima 450W is attached as Exhibit 8.

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

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

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

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

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

Response: A copy of the quote received from the vendor for the replacement equipment is contained in Exhibit 7. The existing MRI scanner has a minimal trade-in value as indicated in the quotes and the equipment comparison table.

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

Response: See Exhibit 9 for a copy of a confirmation letter from GE Healthcare Technologies.

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

Response: Caldwell Memorial Hospital's existing MRI scanner is currently in use as indicated and certified on the most recent Licensure Renewal Application form. The equipment will remain in use until it is replaced. See Exhibit 10 for copies of pages from the 2016 Licensure Renewal Application pertaining to the MRI scanner.

Please do not hesitate to contact me at 984-974-1234 if you need any additional information. Thank you for your prompt consideration of this matter.

Sincerely,



Dee Jay Zerman
System Director of Regulatory Planning
UNC HCS



Caldwell Memorial Hospital
Design Development Conceptual Estimate
First and Second Floor Addition and Renovation
Lenoir, North Carolina

Contact: Mike Kesterson
Date: 4/18/2016
Total SF: 58,130

WORK TRADE:	TOTAL:
1 SITE DEVELOPMENT	\$ 485,515
2 PHASING & LOGISTICS	\$ 282,250
3 SELECTIVE DEMOLITION	\$ 331,614
4 CONCRETE	\$ 380,953
5 MASONRY	\$ 340,982
6 STRUCTURAL STEEL	\$ 585,562
7 ROUGH CARPENTRY	\$ 81,879
8 GENERAL REQUIREMENTS	\$ 256,844
9 HOISTING, CRANE, RIGGING, EQUIPMENT	\$ 330,367
10 FINISH CARPENTRY, MILLWORK, & CASEWORK	\$ 302,100
11 ROOFING, METAL PANELS	\$ 458,540
12 SPRAY FIREPROOFING	\$ 65,261
13 CAULKING, WATERPROOFING, FIRESTOPPING	\$ 186,667
14 DOORS, FRAMES, & HARDWARE	\$ 368,454
15 GLASS & GLAZING SYSTEMS	\$ 479,492
16 DRYWALL ASSEMBLIES	\$ 888,429
17 CEILING TREATMENTS	\$ 315,985
18 FLOORING & ACCESSORIES	\$ 544,035
19 PAINTING	\$ 103,612
20 SPECIALTIES	\$ 467,888
21 EQUIPMENT & APPLIANCES - NIC	\$ -
22 WINDOW TREATMENTS	\$ 13,579
23 SPECIAL CONSTRUCTION - NIC	\$ -
24 CONVEYING SYSTEMS - (Exterior Lift Only)	\$ 40,000
25 FIRE SPRINKLERS	\$ 204,825
26 PLUMBING SYSTEMS	\$ 1,404,716
27 HVAC & MECHANICAL SYSTEMS	\$ 3,646,537
28 ELECTRICAL SYSTEMS	\$ 4,653,698
29 ICRA/ILSM	\$ 480,295
30 BUILDING PERMIT FEES - ALLOWANCE	\$ 73,611

	SUBTOTAL	\$	17,773,688
31	GENERAL CONDITIONS	\$	1,185,417
32	PROJECT INSURANCES	\$	233,714
33	SUBCONTRACTOR DEFAULT BONDS	\$	215,216
34	PERFORMANCE & PAYMENT BOND	\$	-
	SUBTOTAL	\$	19,408,035
35	FEE	\$	377,062
36	CONTINGENCY		
	Contingency	\$	920,134
37	ALLOWANCES		
	Relocate Existing Services/ Utilities	\$	-
	MEP/ FS Services and Conditions in Existing Hospital	\$	-
	Remove Existing Storage Tank EC Addition	\$	32,000
	Remove/ Fill (2) Existing Storage Tanks CEP Expansion	\$	64,000
	Temporary Generator		By Owner
	Aesthetics and Programming	\$	-
	Existing/ Concealed Conditions	\$	450,000
38	PRE-CONSTRUCTION SERVICES	\$	43,600

DESIGN DEVELOPMENT ESTIMATE

\$ 21,294,831

Capital Improvement Projects Under Separate Contracts

A	Remove existing storage tank for electrical room addition	Included in estimate
B	Remove (2) existing storage tanks for CEP expansion	Included in estimate
C	Relocate existing main bulk oxygen storage tank	Included in estimate
D	Primary electrical service/ transformer	Included in estimate
E	Fire alarm/ fire sprinkler renovations (remaining facility)	\$ -
E-2	Fire alarm panels (includes panel for 1st and 2nd floor)	\$ 30,000
F	ED replace existing fire alarm devices	\$ -
G	Existing elevator modernization (2)	\$ 350,000
H	Painting of existing building veneer	\$ -
I	Electrical panel and feeder change out	\$ -
J	Electrical pipe and wire (6) ATS	\$ 438,000

CAPITAL IMPROVEMENT PROJECTS - DD ESTIMATE

\$ 818,000

ACCEPTED VALUE ENGINEERING

\$ (1,194,056)

TOTAL

\$ 20,918,775

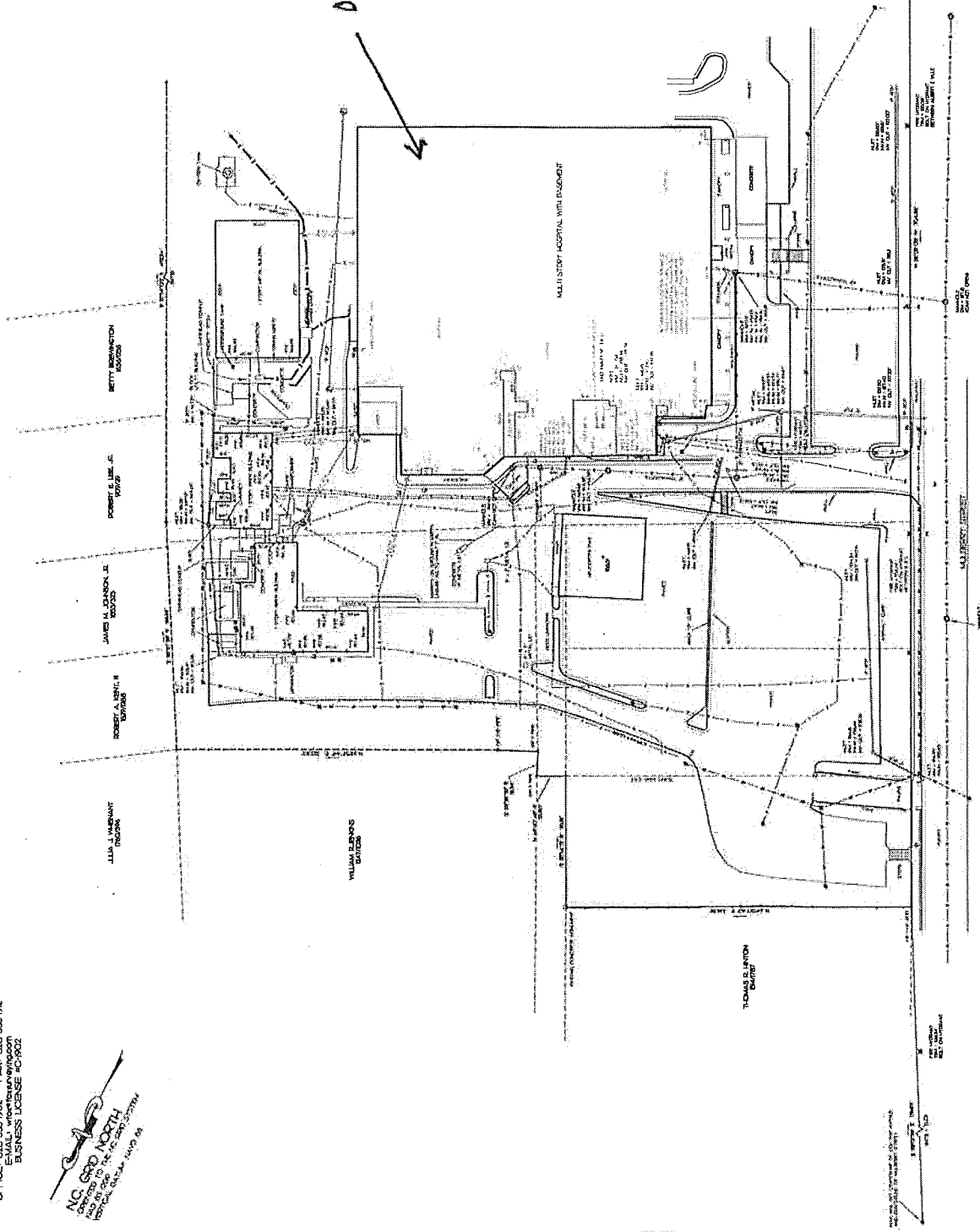
FOX SURVEYING COMPANY, P.C.
 770 NC HIGHWAY 15 SOUTH
 TAYLORSVILLE, NC 28681
 OFFICE: (704) 765-6892
 FAX: (704) 765-6892
 EMAIL: info@foxsurveying.com
 BUSINESS LICENSE #C-1902



CADWELL LIVING HEALTH CARE

DATE	12-25	PROJECT	344-D
REVISION	DOWN TO SHOW UNDERGROUND UTILITIES	REVISION	DOWN TO SHOW UNDERGROUND UTILITIES

*5TH FLOOR OF THE HOSPITAL
 ARE LOCATED ON THE CONTRACT
 AND FINISHED BY ADMINISTRATIVE
 OFFICES OF HOSPITAL.*



SPECIAL NOTES

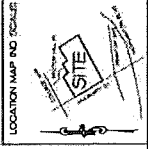
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE SURVEYING AND MAPPING ACTS AND REGULATIONS OF THE STATE OF NORTH CAROLINA.
 2. THE CLIENT HAS REVIEWED AND APPROVED THIS PLAN FOR THE PURPOSES OF THE PROJECT.
 3. THE CLIENT HAS REVIEWED AND APPROVED THIS PLAN FOR THE PURPOSES OF THE PROJECT.
 4. THE CLIENT HAS REVIEWED AND APPROVED THIS PLAN FOR THE PURPOSES OF THE PROJECT.



Exhibit 2

LEGEND

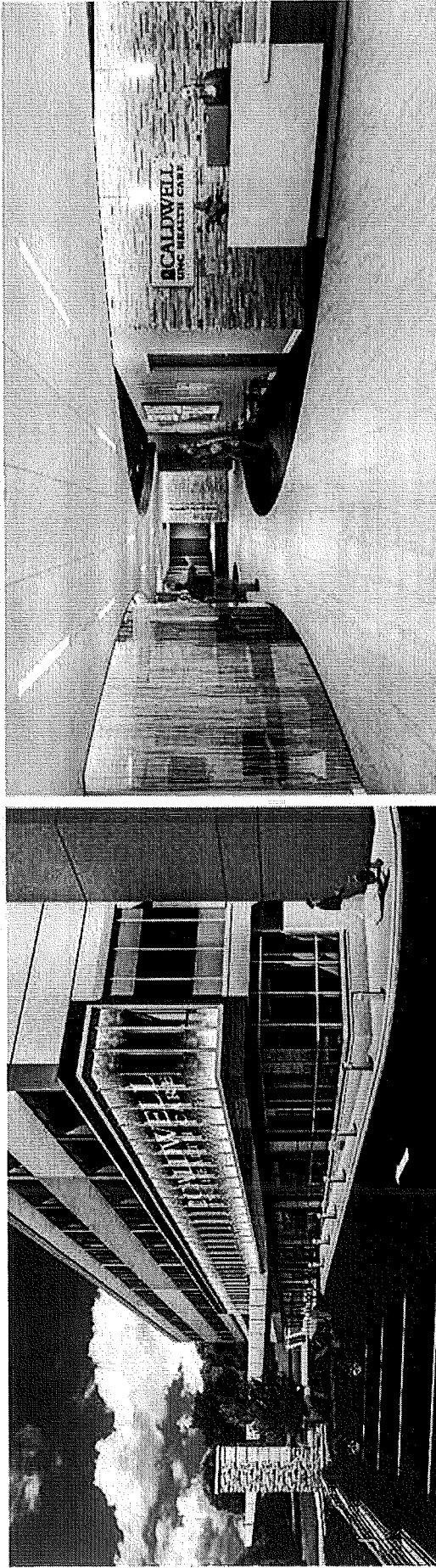
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- EXISTING LINOLEUM
- EXISTING RUBBER MAT
- EXISTING FLOORING
- EXISTING CEILING
- EXISTING WALL
- EXISTING ROOF
- EXISTING FOUNDATION
- EXISTING STRUCTURE
- EXISTING UTILITIES
- EXISTING MECHANICAL
- EXISTING ELECTRICAL
- EXISTING TELEPHONE
- EXISTING CABLE
- EXISTING SATELLITE
- EXISTING ANTENNA
- EXISTING EQUIPMENT
- EXISTING FURNITURE
- EXISTING FIXTURES
- EXISTING LIGHTING
- EXISTING VENTILATION
- EXISTING CLIMATE CONTROL
- EXISTING SECURITY
- EXISTING ACCESSIBILITY
- EXISTING COMPLIANCE
- EXISTING REGULATIONS
- EXISTING STANDARDS
- EXISTING PRACTICES
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- EXISTING POLICIES
- EXISTING PROTOCOLS
- EXISTING AGREEMENTS
- EXISTING CONTRACTS
- EXISTING ORDINANCES
- EXISTING STATUTES



JOHN W. FOX
 REGISTERED PROFESSIONAL SURVEYOR
 STATE OF NORTH CAROLINA
 EXPIRES 12/31/2025

Caldwell UNC Health Care FIRST AND SECOND FLOOR ADDITION AND RENOVATION

321 Mulberry Street SW, Lenoir, NC 28645
100% DESIGN DEVELOPMENT



OWNER

CALDWELL
UNC HEALTH CARE
321 Mulberry Street, SW
Lenoir, NC 28645
caldwellmemorial.org

CIVIL ENGINEER

benesch
Alfred Benesch & Company
321 Mulberry Street
Charlotte, NC 28208
704-521-9680
www.benesch.com

CONSTRUCTION MANAGER

VANNON
2005 W. W. W. W. W.
Vannoy Construction
4024 Banninger Drive
Charlotte, NC 28217
704-527-1715
www.vannoy.com

ARCHITECT

Clark Patterson Lee
5322 Fairview Road
Charlotte, NC 28210
800-374-9000
www.clarkpatterson.com

MEP ENGINEERS

Charlotte Engineers, LLP
5339 W. W. W. W. W.
Charlotte, NC 28212
704-521-3000
charlotteengineers.com

PROJECT LOCATION



STRUCTURAL ENGINEER

Fitzpatrick
ENGINEERING
CORP.
Fitzpatrick Engineering Group, PLLC
Structural Engineers
19520 West Calamba Avenue
Suite 311
Cornelius, NC 28031
704-987-9114
www.legaststructural.com

MEDICAL EQUIP / LOW VOLTAGE

Healthcare Technology Consulting
1693 Central George Patton Drive
Franklin, TN 37067
615-374-3100
www.ghatinc.com
only one team covers it all

OWNER

CALDWELL
UNC HEALTH CARE
321 Mulberry Street, SW
Lenoir, NC 28645
caldwellmemorial.org

ARCHITECT

Clark Patterson Lee
5322 Fairview Road
Charlotte, NC 28210
800-374-9000
www.clarkpatterson.com

MEP ENGINEERS

Charlotte Engineers, LLP
5339 W. W. W. W. W.
Charlotte, NC 28212
704-521-3000
charlotteengineers.com

PROJECT LOCATION



Exhibit 3

CALDWELL UNC HEALTH CARE
D SECOND FLOOR ADDITION AND RENOVATION
321 MULBERRY ST, SW
LENOIR, NORTH CAROLINA

NOT FOR
CONSTRUCTION
DD SET

NOT FOR
CONSTRUCTION
DD SET

NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6



CLARK PATTERSON LEE
5322 Fairview Road
Charlotte, NC 28210
800-374-9000
www.clarkpatterson.com



CLARK PARTNERSHIP
 ARCHITECTS
 1000 W. 10th St., Suite 100
 Durham, NC 27703
 Tel: 919.487.1000
 Fax: 919.487.1001
 www.clarkpartnership.com

NO. 101	DATE	DESCRIPTION

**NOT FOR
CONSTRUCTION
DD SET**

**NOT FOR
CONSTRUCTION
DD SET**

**CAIDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION**
 221 MILLBERRY ST. SW
 LENOR, NORTH CAROLINA

DATE: 12/11/13
 DRAWN BY: J. BRYAN
 CHECKED BY: J. BRYAN
 PROJECT NO.: 13-0000-0000
 SHEET NO.: 13-0000-0000

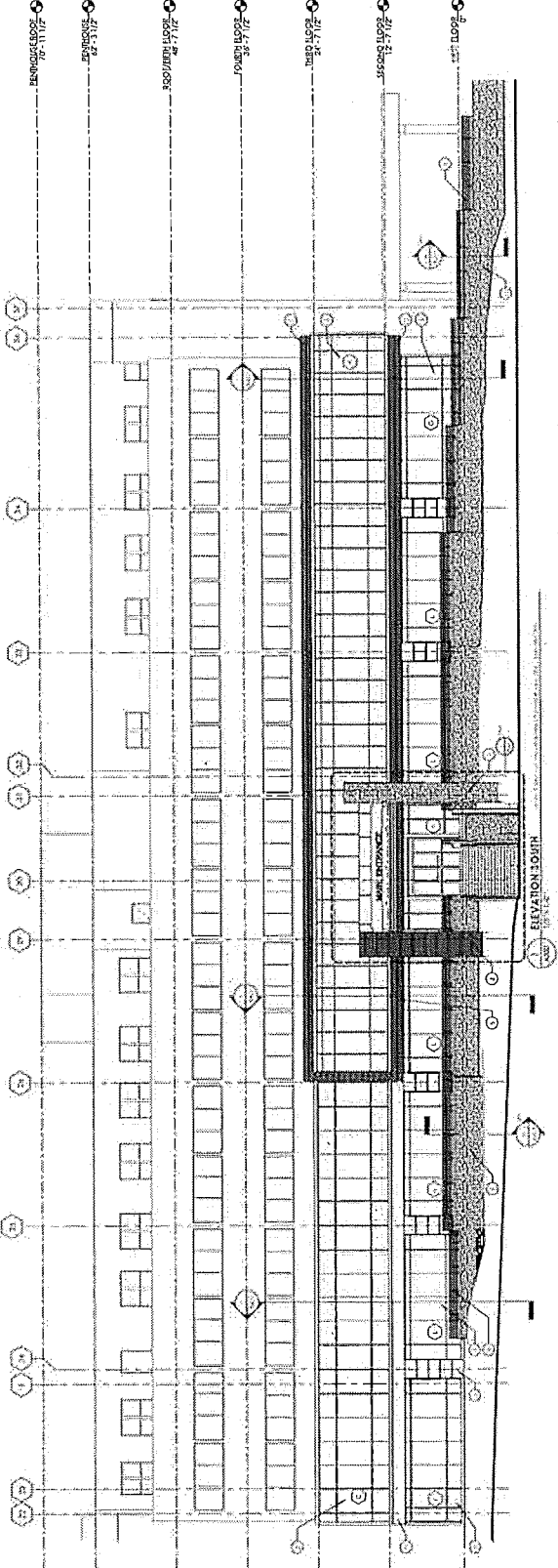
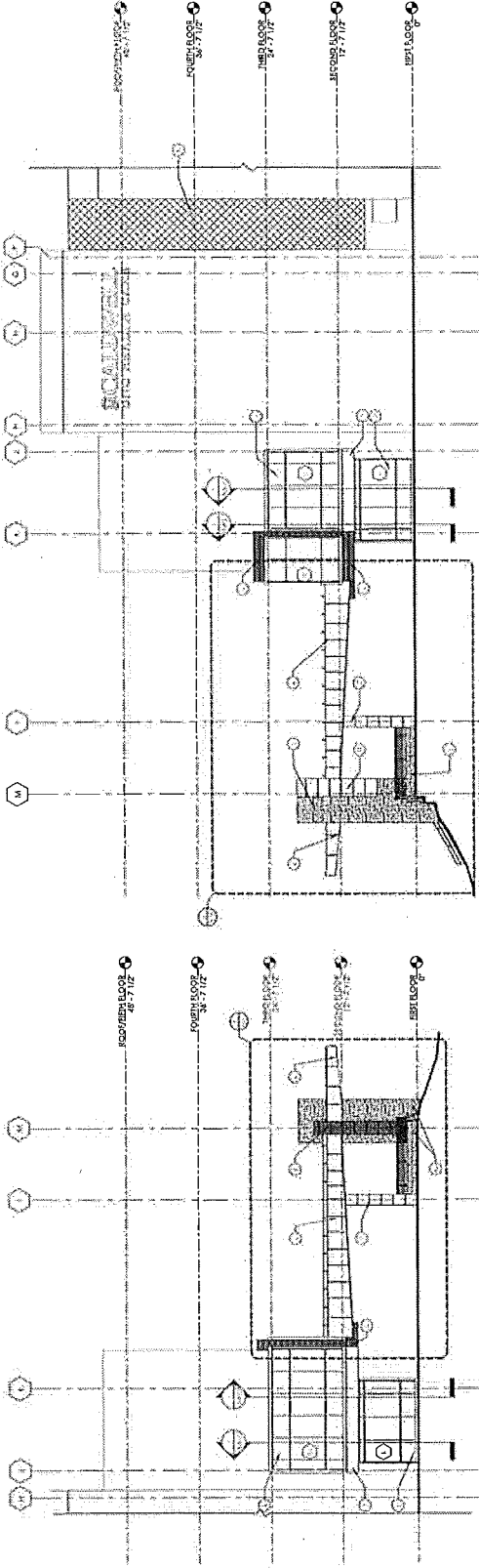
SCALE: AS SHOWN
 1" = 8'-0"

GENERAL ELEVATION NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC) AND THE 2012 INTERNATIONAL PLUMBING AND MECHANICAL CODE (IMC).
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL ELECTRICAL CODE (IEC).
3. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL FIRE AND SAFETY CODE (IFSC).
4. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
5. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
6. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
8. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
9. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
10. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).

EXTERIOR ELEVATION KEYNOTES

1. FINISHES SHALL BE AS SHOWN ON THE ELEVATION DRAWINGS.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC) AND THE 2012 INTERNATIONAL PLUMBING AND MECHANICAL CODE (IMC).
3. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL ELECTRICAL CODE (IEC).
4. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL FIRE AND SAFETY CODE (IFSC).
5. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
6. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
8. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
9. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).
10. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODE (IMPC).



CLARK PATTERSON LEE
 ARCHITECTURAL FIRM, LLC
 1000 W. GREEN ST., SUITE 200
 WASHINGTON, NC 27583
 TEL: 919.433.8800
 WWW.CPARCHITECTS.COM

DATE	DESCRIPTION
12/17/15	REVISED
08/11/15	ISSUED FOR PERMIT
07/14/15	ISSUED FOR PERMIT
06/11/15	ISSUED FOR PERMIT

NOT FOR CONSTRUCTION
DD SET

NOT FOR CONSTRUCTION
DD SET

CALDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION
 321 MUIBERRY ST., SW
 LENOR, NORTH CAROLINA

DATE	BY
12/17/15	CP
08/11/15	CP
07/14/15	CP
06/11/15	CP

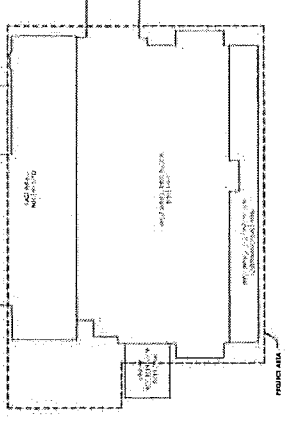
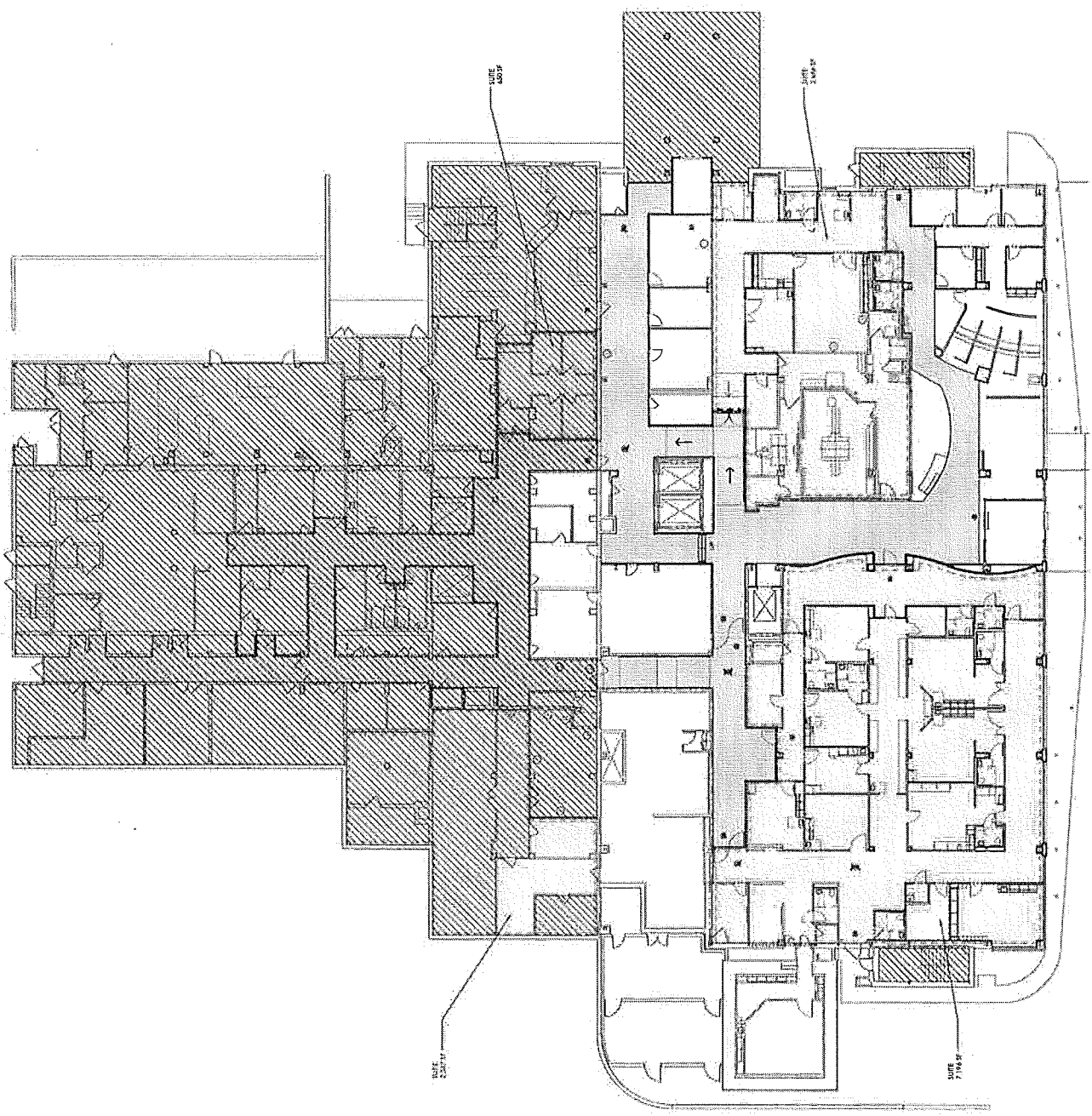
UNIVERSITY OF NORTH CAROLINA
NB
G003

SYMBOL LEGEND

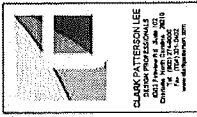
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[Symbol]	EXISTING INFRASTRUCTURE
[Symbol]	NEW INFRASTRUCTURE

KEY NOTES

1. ALL NEW CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE (IBC) AND ALL APPLICABLE LOCAL ORDINANCES.
2. ALL EXISTING CONSTRUCTION SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
3. ALL NEW CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE (IBC) AND ALL APPLICABLE LOCAL ORDINANCES.
4. ALL EXISTING CONSTRUCTION SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.



FIRST FLOOR LIFE SAFETY PLAN
 SHEET 1.0



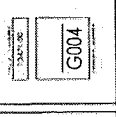
DATE	DESCRIPTION

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DO SET

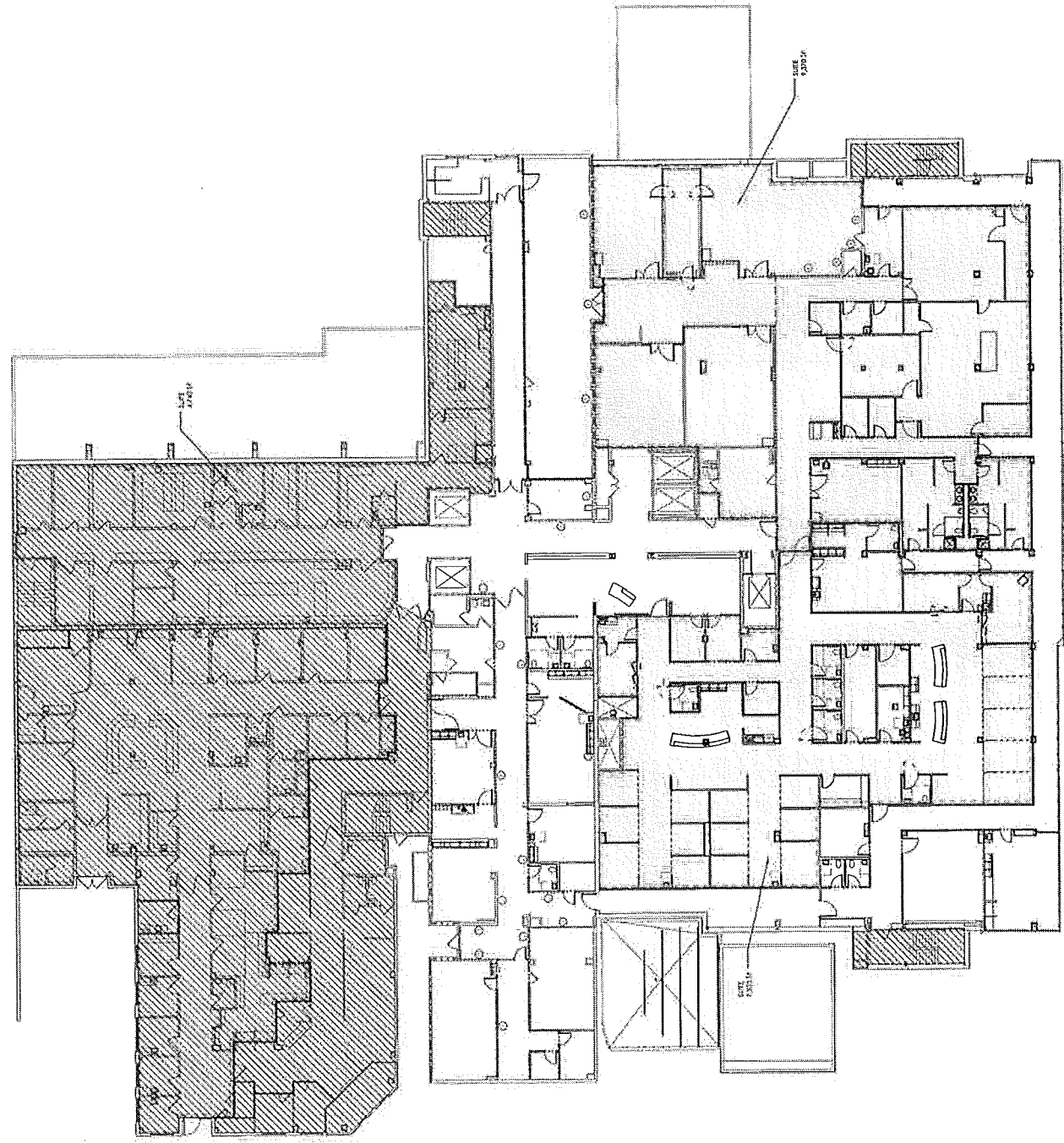
CALDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION
231 MULBERRY ST. SW
LENOR, NORTH CAROLINA

PROJECT NO.	130703
DATE	08/11/10
SCALE	AS SHOWN
SECOND FLOOR LAYOUT PLAN	

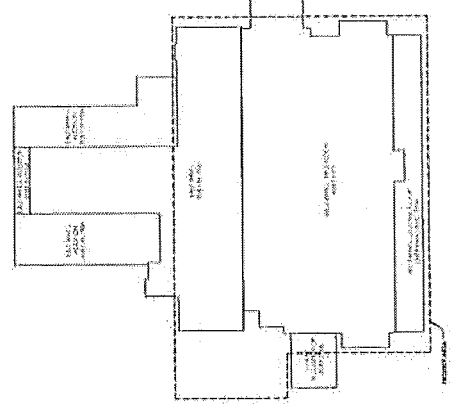


SYMBOL LEGEND	
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	NEW WALL
	EXISTING DOOR
	NEW DOOR
	EXISTING WINDOW
	NEW WINDOW
	EXISTING FLOOR
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	EXISTING CEILING
	NEW CEILING
	EXISTING ROOF
	NEW ROOF
	EXISTING STAIRS
	NEW STAIRS
	EXISTING RAMP
	NEW RAMP
	EXISTING ELEVATOR
	NEW ELEVATOR
	EXISTING SHAFT
	NEW SHAFT
	EXISTING CORE
	NEW CORE
	EXISTING COLUMN
	NEW COLUMN
	EXISTING BEAM
	NEW BEAM
	EXISTING SLAB
	NEW SLAB
	EXISTING FOUNDATION
	NEW FOUNDATION
	EXISTING SITE WORK
	NEW SITE WORK

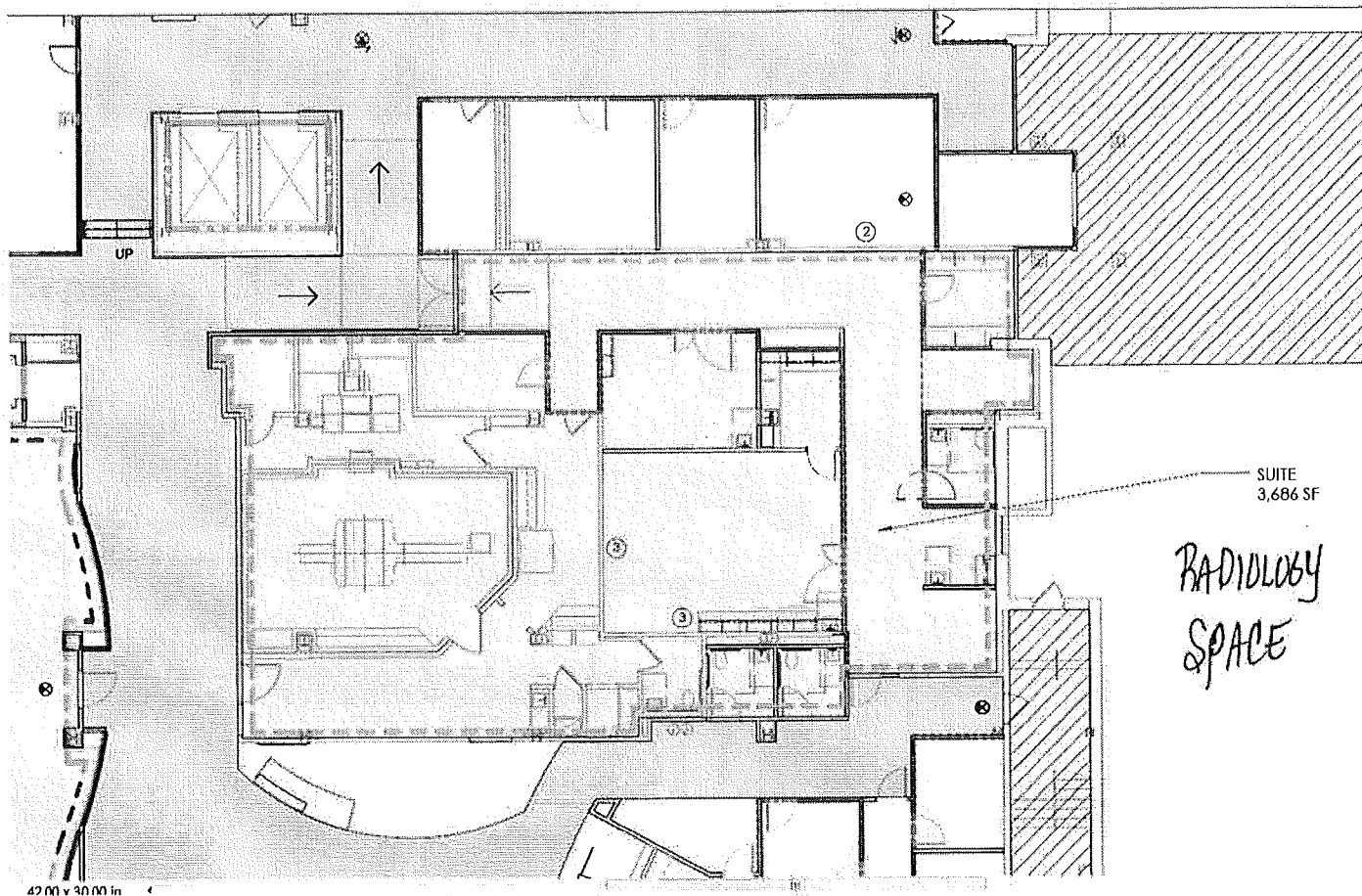
- KEY NOTE**
- WORK TO BE DONE BY CONTRACTOR (NOT TO SCALE)
 - WORK TO BE DONE BY ARCHITECT (NOT TO SCALE)
 - WORK TO BE DONE BY OTHER (NOT TO SCALE)
 - WORK TO BE DONE BY OTHER (NOT TO SCALE)



SECOND FLOOR LAYOUT PLAN



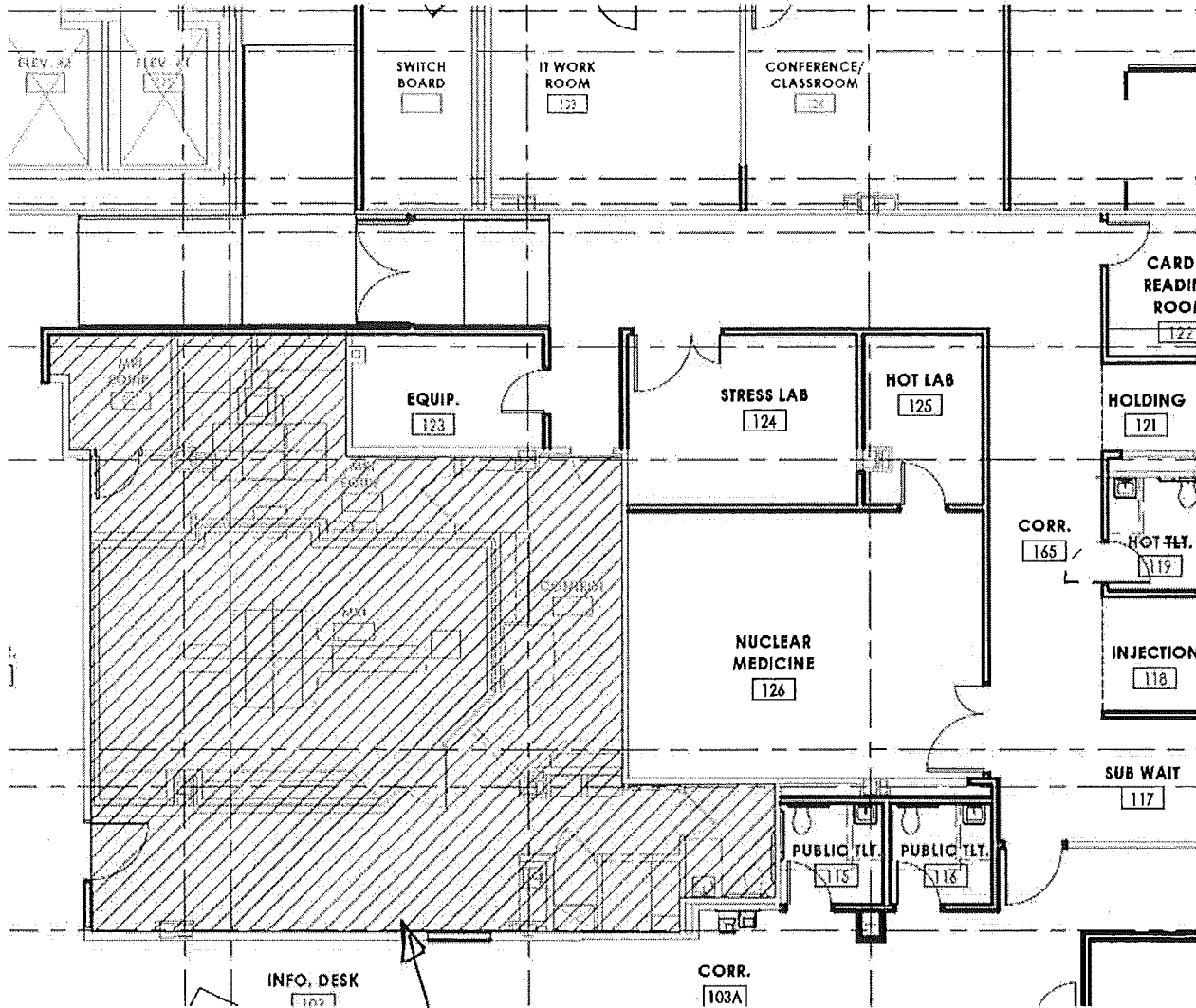
CALDWELL MEMORIAL HOSPITAL - MASTER FACILITY PLAN FIRST FLOOR



SUITE
3,686 SF

RADIOLOGY
SPACE

42.00 x 30.00 in



SPACE ATTRIBUTED
TO MRI SUITE
1843 SF

STATE OF NORTH CAROLINA
Department of Health and Human Services

Division of Facility Services

CERTIFICATE OF NEED

for

Project Identification Number O-7222-05
FID# 933051

ISSUED TO: Caldwell Memorial Hospital
321 Mulberry Street, SW
Lenoir, NC 28645

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: Caldwell Memorial Hospital of North Carolina shall acquire a fixed MRI scanner/Caldwell County

CONDITIONS: See Reverse Side


PHYSICAL LOCATION: Caldwell Memorial Hospital
321 Mulberry Street, SW
Lenoir, NC 28645

MAXIMUM CAPITAL EXPENDITURE: \$1,899,799

TIMETABLE: See Reverse Side

FIRST PROGRESS REPORT DUE: December 1, 2005

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



Chief, Certificate of Need Section
Division of Facility Services

CONDITIONS

1. Caldwell Memorial Hospital, Inc. shall materially comply with all representations made in the certificate of need application.
2. Caldwell Memorial Hospital, Inc. 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.
3. Prior to issuance of the certificate of need, Caldwell Memorial Hospital, Inc. shall acknowledge acceptance of and agree to comply with all conditions stated herein in writing to the Certificate of Need Section.

TIMETABLE

Contract award (Notice to Proceed)	September 1, 2005
25 % completion of construction (25% of contract in place)	October 1, 2005
50 % completion of construction	November 1, 2005
75 % completion of construction	December 1, 2005
Completion of construction	January 1, 2006
Occupancy/offering of service(s)	February 1, 2006

State of North Carolina

Department of Health and Human Services
Division of Health Service Regulation

*Effective January 01, 2016, this license is issued to
Caldwell Memorial Hospital, Inc.*

*to operate a hospital known as
Caldwell Memorial Hospital, Inc.
located in Lenoir, North Carolina, Caldwell 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.*

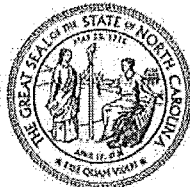
*Facility ID: 933051
License Number: H0061*

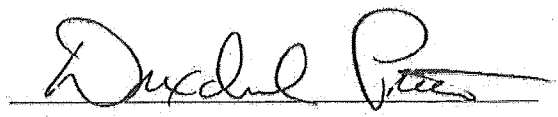
Bed Capacity: 110
General Acute 110

Dedicated Inpatient Surgical Operating Rooms: 1
Dedicated Ambulatory Surgical Operating Rooms: 3
Shared Surgical Operating Rooms: 4
Dedicated Endoscopy Rooms: 2

Authorized by:


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




Director, Division of Health Service Regulation



GE Healthcare

Date: 08-05-2016
 Quote #: PR13-C1598
 Version #: 9

Caldwell Memorial Hospital Inc
 321 Mulberry St SW
 Lenoir NC 28645-5720

Attn: Tim Harris
 321 Mulberry St SW Lenoir
 NC 28645

Customer Number : 1-23196K
 Quotation Expiration Date: 09-29-2016

The terms of the Master Purchasing Agreement, Strategic Alliance Agreement or GPO Agreement referenced below as the Governing Agreement shall govern this Quotation. No additional or different terms shall apply unless agreed to in writing by authorized representatives of both parties.

Governing Agreement:	MedAssets
Terms of Delivery:	FOB Destination
Billing Terms:	80% on Delivery/ 20% on Acceptance or First Patient Use
Payment Terms:	Upon Receipt
Total Quote Net Selling Price:	\$1,226,116.80

INDICATE FORM OF PAYMENT:
 If "GE HFS Loan" or "GE HFS Lease" is NOT selected at the time of signature, then you may NOT elect to seek financing with GE Healthcare Financial Services (GE HFS) to fund this arrangement after shipment.

Cash/Third Party Loan

GE HFS Lease

GE HFS Loan

Third Party Lease (please identify financing company)

By signing below, each party certifies that it has not made any handwritten modifications. Manual changes or mark-ups on this Agreement (except signatures in the signature blocks and an indication in the form of payment section below) will be void.

Each party has caused this agreement to be executed by its duly authorized representative as of the date set forth below.

CUSTOMER

 Authorized Customer Signature Date

 Print Name Print Title

 Purchase Order Number (if applicable)

GE HEALTHCARE
 Scott Ramsey 08-05-2016

 Signature Date

Product Sales Specialist

Email: Floyd.Ramsey@med.ge.com
 Office: +1 919 621 1657
 Mobile: 919-621-1657
 Fax: 919-869-1618



GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

Total Quote Selling Price	\$1,381,116.80
Trade-In and Other Credits	\$155,000.00
Total Quote Net Selling Price	\$1,226,116.80

To Accept this Quotation

Please sign and return this Quotation together with your Purchase Order To:
Floyd Ramsey
Office: +1 919 621 1657
Mobile: 919-621-1657
Email: Floyd.Ramsey@med.ge.com
Fax: 919-869-1618

Payment Instructions

Please **Remit** Payment for invoices associated with this quotation to:
GE Healthcare
P.O. Box 96483
Chicago, IL 60693

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 the 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
 - The correct SHIP TO site name and address
 - The correct BILL TO site name and address
 - The correct Total Quote Net Selling 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 the applicable quote/agreement number with the reference on the purchase order.

In addition, source of funds (choice of: Cash/Third Party Loan or GE HFS Lease or GE HFS Loan or Third Party Lease through _____), must be indicated, which may be done on the quote signature page (for signed quotes), on the purchase order (where quotes are not signed) or via a separate written source of funds statement (if provided by GE Healthcare)."



GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

08-05-2016

GPO Agreement Reference Information

Customer: Tim Harris
Contract Number: PLEASE SEE MEDASSETS CONTRACT # BELOW
Start Date:
End Date: 07/31/2019

Billing Terms: 80% on Delivery/ 20% on Acceptance or First Patient Use
Payment Terms: Upon Receipt
Shipping Terms: FOB Destination

NOTICE REGARDING MAGNETIC RESONANCE ("MR") PRODUCTS. This notice applies only to the following GE Healthcare products: MR: Discovery MR750, Discovery MR750w, Discovery MR450 and Optima MR450w. GE Healthcare has reclassified several advanced software tools and associated documentation to a GE Healthcare Technical Service Technology package that GE Healthcare feels will bring greater value and interest to our customers. GE Healthcare will continue to provide trained Customer employees with access to the GE Healthcare Technical Service Technology package under a separate agreement. GE Healthcare will continue to provide customers and their third party service providers with access to software tools and associated documentation in order to perform basic service on the CT, MR and NM products listed above upon a request for registration for such access. This will allow GE Healthcare to react faster to the future service needs of GE Healthcare customers. If you have any questions, you can contact your sales Service Specialist.

Offer subject to the Terms and Conditions of the applicable Group Purchasing Agreements currently in effect between GE Healthcare and MedAssets includes MS03210 (MR).



GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

Item No.	Qty	Description
	1	Optima MR450w 1.5T GEM ES Optima MR450w 1.5T GEM ES Promos
1	1	<p data-bbox="597 527 1138 554">Optima MR450w 1.5T GEM MR System ES Platform</p> <p data-bbox="597 596 1539 764">The Optima MR450w 1.5T GEM MRI system from GE Healthcare is designed to deliver a comfortable patient-friendly environment while also delivering uncompromised clinical performance and streamlined workflow. The ES configuration includes the system electronics, operating software, imaging software, post-processing software and RF coil suite:</p> <ul data-bbox="597 772 1081 1136" style="list-style-type: none"> • eXtreme Gradient Technology • Acoustic Reduction Technology • OpTix RF Receive Technology • Volume Reconstruction Engine • Computing Platform and DICOM • GEM Express Patient Table with IntelliTouch • GEM Suite Coil Package • Express 2.0 Workflow • ScanTools and ES Tools <p data-bbox="597 1178 1539 1381">eXtreme Gradient Technology: The Optima MR450w delivers high temporal resolution through 3-axis gradient amplifier power supply and efficient gradient coil design as well as high spatial integrity through excellent magnet homogeneity and gradient linearity over a large FOV. In addition, the XRM gradients are non-resonant and actively shielded to minimize eddy currents, and use an innovative digital control architecture design to deliver high fidelity, accuracy and reproducibility.</p> <ul data-bbox="597 1390 1105 1629" style="list-style-type: none"> • Peak amplitude per axis: 34 mT/m • Peak slew rate per axis: 150 T/m/s • Peak current & voltage: 660 Amps, 1650 Volts • Digital PI feedback loop control • Maximum FOV: 50cm • Duty Cycle: 100% <p data-bbox="597 1671 1539 1734">Acoustic Noise Reduction Technology: The Optima MR450w GEM system features five levels of acoustic reduction technology to deliver an enhanced patient environment.</p> <ul data-bbox="597 1743 938 1810" style="list-style-type: none"> • Gradient & RF coil isolation • Acoustic dampening material



GE Healthcare

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Version #: 9

Item No.	Qty	Description
		<ul style="list-style-type: none"> • Vibro-acoustic isolation • Gradient waveform optimization <p>OpTix RF Receive Technology: The OpTix RF receive chain enables high bandwidth, high channel count reception with improved SNR over conventional MR receiver designs. The MR signal is digitized within the scan room and then optically transmitted to the reconstruction engine in the electronics room increasing SNR for all volume acquisitions.</p> <ul style="list-style-type: none"> • Coil input ports: 138 • Simultaneous channel/receivers: 32 • Receiver sampling per channel: 80 MHz • Receiver dynamic range at 1 Hz BW: >165 dB • Receiver resolution: up to 32 bits • Digital quadrature demodulation <p>Computing Platform: The Intel Xeon Nehalem Dual Core Processor computing platform 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.</p> <ul style="list-style-type: none"> • 8GB DDR3 Memory • 146GB SAS disk subsystem • 24" flat panel LCD with 1920x1200 resolution • Single tower configuration • DVD interchange <p>DICOM: The Optima MR450w GEM 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 Optima MR450w GEM for further details.</p> <p>M7000ZM (1 unit included in S7525SB) GEM Express Patient Table with IntelliTouch: The GEM Express table is a mobile patient transport device with an embedded high-density, GEM Posterior RF Array and touch sensitive IntelliTouch land-marking. The fully detachable GEM Express table is easily docked and undocked by a single operator and simple to move in and out of the exam room for patient transport and</p>



Item No.	Qty	Description
		<p>preparation. These features can be vital in instances where multiple patient transfers can negatively impact patient care or when emergency extraction is required.</p> <p>The GEM Express table and embedded GEM PA coil are designed to accommodate head-first or feet-first imaging for all supported exams. The table features three high-density coil connection ports: one at each end and one embedded for the GEM PA. Two additional coil connection ports are included in the docking mechanism.</p> <ul style="list-style-type: none"> • Maximum patient weight for scanning: 500 lbs • Maximum patient weight mobile: 500 lbs • Maximum patient weight for lift: 500 lbs • 205 cm symmetrical scan range • Automated vertical and longitudinal power drive • Fast longitudinal speed: 30 cm/sec • Slow longitudinal speed: 0.5 cm/sec • Integrated arm boards & non-ferrous IV pole • IntelliTouch & laser land-marking <p>GEM Suite Coil Package: The Geometry Embracing Method - GEM - Suite of coils is designed to enhance patient comfort and image quality while simplifying workflow by ensuring that the geometry of the surface coil matches the geometry of the patient. The ES Coil Package includes:</p> <ul style="list-style-type: none"> • T/R Body Coil & T/R Head Coil • GEM PA, HNU & AA Arrays • GEM Standard Flex Suite & Positioner • 3-channel Shoulder Array <p>M7000AA (1 unit included in S7525SB) The GEM Posterior Array is designed to provide optimal element geometry for each targeted anatomy by using different element geometries for the cervical-to-thoracic spine transition, thoracic and lumbar spine, and the body.</p> <ul style="list-style-type: none"> • Elements: 40 • Length: 100 cm; Width: 40cm • S/I coverage: 100cm head-first or feet-first • Parallel imaging in all three scan planes • Head-first or feet-first positioning <p>The GEM PA is designed to be used in conjunction with the GEM HNU, GEM AA or GEM</p>



GE Healthcare

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Version #: 9

Item No.	Qty	Description
		<p>Small AA (purchased separately), and the GEM PV Array (purchased separately), The GEM PA is invisible to additional surface coils placed directly on top of the table surface.</p> <p>M7000AB (1 unit included in S7525SB) The GEM Head and Neck Unit includes the head base-plate and three anatomically optimized anterior arrays: the anterior Neuro-vascular array, the anterior cervical spine array, the anterior open-face array.</p> <p>The GEM HNU may be positioned at either end of the GEM Express table to support head-first or feet-first imaging and may remain in place for all body, vascular, spine, and the majority of MSK exams. The GEM HNU base plate supports the patient's head and the Comfort Tilt variable-degree ramp can be positioned under the HNU base plate to elevate the coil to match the patient's head and neck position.</p> <ul style="list-style-type: none"> • Elements: up to 28 combined with PA and AA • Length: 49.5 cm; Width: 38.8cm • Height with NV Array: 36.8 cm • Height with Cervical Array: 33.6 cm • Height with Open Array: 25.7 cm • S/I coverage: up to 50 cm with PA and AA • Parallel imaging in all three scan planes • Head-first or feet-first positioning <p>M7000AD (1 unit included in S7525SB) The GEM Large Anterior Array facilitates chest, abdomen, pelvis, and cardiac imaging. The GEM AA is lightweight, thin and flexible, and pre-formed to conform to the patient's size and shape. The GEM AA permits upper abdomen and pelvis imaging without repositioning the coil.</p> <ul style="list-style-type: none"> • Elements: up to 36 combined with PA • Length: 55.6 cm; Width: 67.3cm • 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 <p>M7000SC (1 package included in S7525SB) and M7005BE (1 unit included in S7525SB) The GEM Flex Suite is a versatile set of high-density 16CH receive arrays designed to provide high quality imaging in a wide range of clinical applications. The high degree of flexibility is particularly advantageous when imaging patients that do not fit the constraints of rigid coils. This standard set includes:</p>



GE Healthcare

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Version #: 9

Item No.	Qty	Description
		<ul style="list-style-type: none"> • Large Flex Array: 23 cm x 70 cm • Medium Flex Array: 23 cm x 48 cm • GEM Flex Interface Module P-Connector • Positioning Devices <p>M7000AT (1 unit included in S7525SB) The 3-channel Shoulder Array offers the increased signal-to-noise characteristic of phased-array technology, along with unique sleeve design that delivers exceptional joint-imaging capabilities.</p> <p>Workflow: Express Workflow 2.0 incorporates features designed to streamline and automate exams.</p> <ul style="list-style-type: none"> • 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 <p>The In-Room Operator Console and dual-sided controls enable interaction with the host computer from the magnet room. The user has direct control or selection of:</p> <ul style="list-style-type: none"> • Display of patient name, ID, study description • Display and entry of patient weight • Display and entry of patient orientation and position • Cardiac gating waveform display • EKG lead confirmation with gating control • Respiratory waveform display • IntelliTouch Landmarking • AutoStart • Display of coil connection and status • Display of table location and scan time • Screen saver <p>Express Exam enables complete control of protocols for prescription, archiving, searching, and sharing. Protocols are organized into two libraries – GE authored and Site authored – and Protocol Notes allow customized notes to be saved with each protocol. ProtoCopy enables a complete exam protocol, from either a library or</p>



GE Healthcare

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Item No.	Qty	Description
		<p>previous exam, to be shared with a mouse click, and the Modality Worklist provides an automated method of linking exam and protocol information for a patient directly from a DICOM Worklist server.</p> <p>The Workflow Manager controls the execution of scan prescription, acquisition, processing, viewing and networking and may automate these steps, when requested by the user. Auto Coil Prescription automatically selects the optimum subset of elements, and AutoStart automatically starts the first acquisition as soon as the technologist exits the magnet room.</p> <p>Processing steps are automatically completed with Inline Processing once the data have been reconstructed and the images saved into the database. For certain tasks, the user must accept the results or complete additional steps prior to saving the images. These automatic Inline Processing steps can be saved into the Protocol Library.</p> <p>Inline Viewing allows the user to conveniently view, compare, and analyze images from the Scan Desktop by selecting the desired series from the Workflow Manager.</p> <p>ScanTools: ScanTools 25.1 and the ES clinical package deliver an expansive portfolio of advanced applications, imaging options, and visualization tools packaged with the system operating software to provide extensive clinical capability and enhanced productivity.</p> <p>Advanced Neuro Applications:</p> <ul style="list-style-type: none">• PROPELLER 3.0 motion robust radial FSE• PROPELLER 3.0 FSE-based diffusion imaging• 3D Cube 2.0 FSE-based 3D imaging• Dual Inversion 3D Cube imaging• Spin Echo & Fast Spin Echo Suites• T1-FLAIR & T2-FLAIR Suite• Gradient Echo & Fast GRE Suites• Spoiled Gradient Echo & Fast SPGR Suites• Echo Planar, EPI FLAIR & fMRI EPI Suites• EchoPlus with RTFA diffusion imaging• 3D FIESTA & 3D FIESTA-C steady-state imaging• 3D BRAVO IR-prepped fast SPGR imaging• 3D COSMIC modified steady-state imaging



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		<ul style="list-style-type: none">• 2D/3D MERGE multi-echo recombined GRE imaging• PROBE PRESS single voxel spectroscopy• BrainSTAT GVF & AIF parametric maps• Ready Brain automated brain exam prescription• DWI Prep <p>Advanced Spine & MSK Applications:</p> <ul style="list-style-type: none">• PROPELLER 3.0 motion-robust radial FSE• 3D Cube 2.0 FSE-based 3D imaging• Spin Echo & Fast Spin Echo Suites• Gradient Echo & Fast GRE Suites• 3D COSMIC modified steady-state imaging• 2D/3D MERGE multi-echo recombined GRE imaging• High Bandwidth FSE artifact reduction• Spectral Spatial Fat Suppression <p>Advanced Body Applications:</p> <ul style="list-style-type: none">• Body Navigators pencil-beam diaphragm tracker• PROPELLER 3.0 motion robust radial FSE• Spin Echo & Fast Spin Echo Suites• Gradient Echo & Fast GRE Suites• 3D Cube 2.0 FSE-based 3D imaging• 3D LAVA T1 DCE imaging with Turbo ARC• 2D/3D Dual Echo Fat-Water Imaging• 3D FRFSE MRCP & HYDRO imaging• Enhanced SSFSE single-shot FSE imaging• 2D FS FIESTA steady-state imaging• Multi-phase DynaPlan• SmartPrep automated bolus detection• Fluoro Trigger real-time bolus monitoring• Respiratory Compensation, Gating & Triggering• iDrivePro & iDrivePro Plus real-time imaging• SPECIAL IR Fat Saturation <p>Advanced Vascular Applications:</p>



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		<ul style="list-style-type: none">• 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• Magnetization Transfer& Flow Compensation• Peripheral & EKG Gating & Triggering• Respiratory Compensation, Gating & Triggering <p>Advanced Cardiac Applications:</p> <ul style="list-style-type: none">• 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• iDrivePro Plus real-time inter-active imaging• Blood Suppression• Cardiac Navigator diaphragm tracker• Cardiac Compensation, Gating & Triggering• Respiratory Compensation, Gating & Triggering• Cine Paging (128 images/4 windows @ 30fps) <p>Advanced Imaging Tools:</p> <ul style="list-style-type: none">• ARC & Turbo ARC data-based parallel acceleration• ASSET 3.0 image-based parallel acceleration• Real Time Field Adjustment for DWI• Chemical Shift Direction Selection• 2D/3D GradWarp compensation• Acoustic Reduction Technology• IR Prep, DE Prep & T2 Prep• Full Echo Train & Tailored RF• Spectral Spatial Fat Suppression• SPECIAL IR Fat Suppression• ASPIR Fat Suppression



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		<ul style="list-style-type: none">• Matrix ZIP 512 & ZIP 1024• 3D Slice 2X ZIP & 4X ZIP• Square Pixel & Rectangular FOV• No Phase Wrap & No Frequency Wrap• Extended Dynamic Range <p>Advanced Processing & Display:</p> <ul style="list-style-type: none">• Inline Viewing & Inline Processing• Image Fusion & Image Pasting• SCIC & PURE surface coil intensity correction• Multi-planar Volume Reformat• Interactive Vascular Reformat• ClariView Image Filtering• Compare Mode & Reference Image• Cine Paging (128 images/4 windows @ 30fps) <p>Advanced FuncTool Analysis:</p> <ul style="list-style-type: none">• ADC maps & eADC mapping• Correlation Coefficient analysis• NEI Negative Enhancement Integral analysis• MTE Mean Time To Enhance analysis• Positive Enhancement Integral analysis• Signal Enhancement Ratio analysis• Maximum Slope Increase analysis• Maximum Difference Function analysis• Difference Function analysis <p>Neuro Expert Package</p> <ul style="list-style-type: none">• eDWI• SWAN• DTI• FiberTrak <p>The eDWI application includes the acquisition sequence and post-processing tools. It is designed to provide high signal-to-noise-ratio diffusion images of the brain and liver with short-acquisition time. Its multi-B feature is designed to provide measurement of</p>



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		<p>apparent diffusion coefficient (ADC) map with reduced effect of perfusion. In addition, "3 in 1" B value combining technique, applies diffusion weighting to all three gradients simultaneously, helping improve sensitivity. Its smart NEX feature significantly reduces the acquisition time. Inversion recovery has been deployed to provide robust fat suppression.</p> <p>SWAN is a volumetric 3D acquisition technique that is sensitive to differences in susceptibility between different tissues. This technique acquires multiple-echoes at different echo times to highlight regions with increased T2* (susceptibility-induced) decay. Utilizing multiple-echoes, SWAN generates images with higher SNR when compared with similar techniques that rely on a single echo.</p> <p>Diffusion Tensor Imaging (DTI) creates contrast based on the degree of diffusion anisotropy in cerebral tissues such as white matter. The DTI method expands Echo planar imaging capability to include diffusion imaging sequence using motion sensing gradient pulses along 6 to 155 orientations in order to generate tensor component images. With the Express Workflow, fractional anisotropy (FA) and Volume Ratio Anisotropy (VRA) maps may be automatically created after image acquisition without any user intervention.</p> <p>FiberTrak is a host computer post processing tool expands the capability of Diffusion Tensor imaging by generation of 2D color orientation maps, 2D eigenvector maps, and 3D tractography maps from the diffusion tensor image data. The resulting datasets may be easily saved and archived for later use.</p> <p>Vascular Expert Package</p> <ul style="list-style-type: none">• Inhance Suite 2.0• TRICKS• Flow Analysis <p>The Inhance Suite application consists of several sequences designed to provide high-resolution images of the vasculature with short-acquisition times and excellent vessel detail. These sequences include: Inhance Inflow IR: Inhance Inflow IR is an angiographic method, which has been developed to image renal arteries with ability to suppress static background tissue and venous flow. This sequence is based on 3D FIESTA, which improves SNR, as well as produce bright blood images.</p> <p>Inhance 3D Velocity: Inhance 3D Velocity is designed to acquire angiography images in brain and renal arteries with excellent background suppression in a short scan time. By combining a volumetric 3D phase contrast acquisition with parallel imaging,</p>



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		<p>efficient k-space traversal, and pulse sequence optimization, Inhance 3D Velocity is capable of obtaining complete Neurovascular imaging in 5-6 minutes.</p> <p>Inhance 3D Deltaflow is a 3D non-contrast enhanced MRA application for peripheral arterial imaging. Inhance 3D Deltaflow is based on the 3D Fast Spin Echo technique and it utilizes the systolic and diastolic flow differences to help generate arterial signal contrast. A subtraction of the systolic phase from the diastolic phase images results in arterial only images, with venous and background suppression.</p> <p>Inhance 2D Inflow: The Inhance 2D Inflow pulse sequence is designed to acquire angiography images of arteries, which follow almost a straight path, i.e. femoral, popliteal, carotid arteries, etc.</p> <p>TRICKS provides high resolution multi-phase 3D volumes of any anatomy for fast accurate visualization of the vasculature. With segmented complex data recombination, TRICKS can accelerate 3D dynamic vascular imaging without compromising spatial detail. TRICKS also uses elliptic centric data collection for optimized contrast resolution and auto-subtraction for optimized background suppression. The result is time course imaging that does not require timing or triggering, provides high temporal and high spatial resolution, and enables the extraction of optimum phases of data. As a result, TRICKS enables reliable, high quality vascular imaging.</p> <p>Flow Analysis automates the review and analysis of gated phase contrast magnetic resonance (MR) images and generates a report for the referring physician. This version is available on the host computer. Flow Analysis has an automated edge detection algorithm that propagates through all the phases of the cine phase contrast series. The flow analysis measurement tab displays a summary chart of peak velocities in addition to individual velocity results from each phase of the cardiac cycle. A background correction may also be applied which is particularly suited to slow flowing fluid such as cerebrospinal fluid. Customizable Macros are a feature of Flow Analysis 4.0. These Macros allow the user to quickly write a report specific to the patient being assessed with simple mouse clicks. The macros are customizable to reflect the language used by the reporting physician. Flow Analysis offers the capability to archive reports or cine images as seen in a DICOM format so they may be viewed on any DICOM viewer.</p>
2	1	<p>Optima MR450w with GEM Magnet Design</p> <p>To improve the patient experience and provide high image quality, no other</p>



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component of an MRI system has greater impact than the magnet. The Optima MR450w system features a short, wide bore magnet that delivers a large field of view. The magnet geometry has been optimized to reduce patient anxiety by providing more space in the bore and more exams with the patient's head outside of the magnet. The 50cm field of view provides uniform image quality and can reduce exam times since fewer acquisitions may be necessary to cover large areas of anatomy. Complemented by GE's active shielding technology, the Optima MR450w has very flexible installation specifications to provide easy siting. And with zero-boil-off magnet technology, helium refills are effectively eliminated, thus reducing operating costs and maximizing uptime.

Magnet:

- Manufactured by GE Healthcare.
- Operating field strength 1.5T (63.86 MHz).
- Active magnet shielding.
- Zero boil-off Cryogenes.
- Magnet length 145cm.
- Patient Aperture 76 cm.
- Patient Bore Diameter 70cm.
- Patient Bore Length 105cm.
- Maximum Field of View 50 cm x 50 cm x 50 cm.

Magnet Homogeneity: Typical ppm and Guaranteed ppm shown.

- 10cm DSV 0.007 and 0.02.
- 20cm DSV 0.035 and 0.06.
- 30cm DSV 0.11 and 0.18.
- 40cm DSV 0.5 and 0.7.
- 45cm DSV 1.2 and 1.6.
- 50x50x45cm 2.3 and 3.6.
- 50cm DSV 3.3.

DSV = Diameter Spherical Volume. Homogeneity for an elliptical volume of 50cm (x,y) by 45cm (z) dimension volume is shown for reference. Fringe field (axial x radial):

- 5 Gauss = 4.0 m x 2.5 m.
- 1 Gauss = 6.2 m x 3.7 m.

Quiet Technology:

GE has implemented Quiet Technology on critical components of the Optima MR system to reduce



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3	1	<p>acoustic noise and improve the patient environment. This technology enables full use of the eXtreme Gradient Platform for excellent image quality, while maintaining a safe environment for the patient. The technology encompasses the gradient coil, RF body coil, and magnet mounting.</p> <p>Optima MR450w 1.5T GEM 32ch System Electronics</p> <p>Patient expectations of MR have shifted in recent years, as patients have begun to demand a better, more comfortable scanning experience. Increasing the size of the bore is a good first step, but it's only the beginning. The right system should overcome traditional limitations of wide-bore MR, offering both excellent images and a user-friendly experience. Patients should be more comfortable during their scan, and clinicians more comfortable in making a diagnosis. All the while, organizations should expect their MR system to help them deliver solid financial returns, maintain a high standard of patient safety, and increase the quality of their care.</p> <p>The Optima MR450w with GEM 1.5T MRI scanner from GE Healthcare offers a range of new functionality, provides a more patient-friendly environment, and is a clinical workhorse system for practices of all sizes and specialties.</p> <p>Volume Reconstruction Engine Architecture: The backbone of any high-channel count system is the reconstruction architecture. The MR450w utilizes the latest multi-core processing engine acquisition to disk technology, and bulk-access memory to deliver the necessary processing power to reconstruct data from high channel count coils. With 36,000 2D FFTs/sec an impressive volume to ensure you are not hampered in image reconstruction speed. The result is reliable and efficient processing MR data that enhances exam productivity.</p>
4	1	<p>Vibroacoustic Dampening Kit</p> <p>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.</p>



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5	1	<p>Main Disconnect Panel</p> <p>The Main Disconnect Panel safeguards the MR system's critical electrical components, by providing complete power distribution and emergency-off control.</p>
6	1	<p>Preinstallation Collector and Cable Concealment Kit</p> <p>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. The following are the main components in the Preinstallation collector:</p> <ul style="list-style-type: none">• Heat exchange cabinet for distribution of chilled water.• Primary Penetration wall panel for support of the penetration cabinet.• Secondary Penetration wall panel for support of gradient filters, helium cables, and chilled air and water.• Helium cryocooler hose kit. <p>The Cable Concealment Kit accommodates a wide-range of scan room ceiling heights and is designed to provide a clean-look installation by concealing the overhead cabling from view.</p>
7	1	<p>MR450w Dock and 32-Channel Switch Collector</p> <p>The MR450w Dock and 32-Channel Switch collector provides the interface between the magnet and GEM Express Patient Table with IntelliTouch. Also included is the RF signal switching hardware that routes the input signals to the respective OpTix receivers.</p>
8	1	<p>Optima MR450w Cable Configuration - A</p> <p>To accommodate various electronic and scan room configurations and sizes, the MR450w has preset lengths of cables and connector kits to speed system installation. This cable collection is compatible with fixed and relocatable building configurations.</p>
9	1	<p>English Keyboard</p> <p>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.</p>
10	1	<p>Operator's Console Table</p> <p>Wide table designed specifically for the color LCD monitor and keyboard.</p>
11	1	<p>1.5T Calibration Phantom Kit</p>



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		This 1.5T calibration kit contains a large volume shim phantom, a daily quality assurance phantom, an echo-planar calibration phantom, and the associated loader shells.
12	1	Calibration Kit Phantom Holder Cart
13	1	Standard service package delivered for the warranty period.
14	1	Breast Expert Package - GEM 1.5T <ul style="list-style-type: none"> • VIBRANT • 1.5T 8-channel GEM Breast Array <p>VIBRANT is a fast, high resolution T1-weighted imaging sequence and application optimized for evaluation of breast tissue. VIBRANT uses parallel imaging acceleration to quickly acquire multi-phase data without compromising spatial resolution. This 3D gradient echo technique, optimized for sagittal or axial acquisitions, uses an optimized inversion pulse and dual-shimming technology that yields enhanced image contrast and robust, uniform, bilateral fat suppression.</p> <p>For improved tissue contrast, VIBRANT is compatible with Flex imaging (sold separately). VIBRANT Flex acquisition will provide a water-only, fat-only, in-phase and out of phase data sets in a single acquisition and produce images with significantly reduced chemical shift and susceptibility artifacts.</p> <p>The GEM Breast Array generates high-definition breast images, designed for optimized use with ASSET and ARC parallel imaging techniques to accelerate image acquisition for both 2D and 3D data sets. The eight element phased-array coil helps ensure excellent temporal and spatial resolution, patient after patient. The array is compatible with VIBRANT, VIBRANT Flex, IDEAL, Fast Spin Echo, Fast Gradient Echo, spectroscopy and diffusion imaging sequences, and includes a set of MR compatible biopsy grids.</p>
15	1	1.5T Small Flex Coil with Interface - P Connector <p>The Small Flex Coil is the smallest of a versatile set of high density 16-channel receive coils designed to give high quality images in a wide range of applications. The smallest of these three coils is optimized for the reduced field of view and improved image quality needed in hand, wrist, and elbow imaging applications. Together with an extra interface assembly, this coil is ideal for MR sites doing a higher volume of musculoskeletal scans.</p>



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		<p>The high degree of flexibility is particularly advantageous when imaging patients that do not fit the constraints of rigid coils, improving the patient and technologist experience, and enabling most exams to be completed with the same level of image quality expected from dedicated coils.</p> <p>The Small Flex Coil is compatible with the Discovery MR450 and Optima MR450w systems with the standard Express Patient Table and also with the MR450w systems with the GEM Express Patient Table.</p> <p>Includes:</p> <ul style="list-style-type: none"> • 1.5T Small Flex Coil. • Flex Interface Module 16-channel Fixed, P-Connector. • Flex Interface Module Cover.
16	1	<p>GE MR Heat Exchanger Manual Cryogen Compressor Water Bypass Option</p> <p>Add a level of magnet protection with a Manual Cryogen Compressor Bypass. In case of a power failure, you can cycle municipal or facility water through the cryogen compressor and reduce cryogen loss and reduce the likelihood of quenching.</p> <p>FEATURES AND BENEFITS</p> <ul style="list-style-type: none"> • Easy to install and simple to use • Helps switch over water supply to your cryogen compressor in the event of loss of power to reduce cryogen loss • Includes fluid supply pressure gauge, temperature gauge and flow rate meter for easy verification of operation • Manual operation reduces unintentional switch-overs and coolant dumping during brown-outs and supply power glitches <p>COMPATIBILITY</p> <p>Must be used with a GE MR Heat Exchanger:</p> <ul style="list-style-type: none"> • E8911CA • E8911CB • E8911CC • E8911CD • E8912CA • E8912CB • E8912CC • E8912CD <p>NOTES:</p>



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17	1	<ul style="list-style-type: none"> • Item is NON-RETURNABLE and NON-REFUNDABLE <p>GE Optima MR450w Heat Exchangers - 49kW (20Tons)</p> <p>Cooling for your GE Healthcare MR system has never been so easy. GE Healthcare has partnered with the Glen Dimplex Group, a world leader in cooling systems, to offer heat exchangers designed to meet the needs of your MR System. Now you can look to GE Healthcare for your entire MR purchase and support.</p> <p>This heat exchanger is highly reliable and the only unit verified to perform with the new platform of GE Healthcare MR systems. As part of your integrated GE Healthcare solution, you'll work with a single contact throughout the whole installation. A Project Manager of Installation will help with building layout, room designs, delivery and installation - every step until your system is ready to scan. Our team will work seamlessly with architects, contractors and your internal team to help ensure timely, cost-effective completion.</p> <p>Once your cooling system is running, you'll get fast, highly-skilled service support managed through GE Healthcare - with the same quality and response time you expect from your MR system.</p> <p>FEATURES AND BENEFITS</p> <ul style="list-style-type: none"> o Designed to provide stable fully dedicated cooling for your MR system's needs o Water/glycol outdoor-air-cooled heat



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exchangers to support your highest exam volumes
and your full range of diagnostic procedures

- o Redundant fluid pumps with automatic switchover let you keep operating with no loss of cooling even if one pump goes down
- o Quad compressor, dual tandem refrigeration circuit design saves on energy while your system smoothly transitions through the 10% to 100% heat load capacity cycles of patient scanning and idling
- o Quiet operation between patient exams and overnight - ideal for facilities in residential areas
- o Comes with installation support, installation visits, preventative maintenance visit and 1 full year of parts and labor warranty
- o Installation support includes: support through GE's Project Manager of Install, GE's Design Center, technical support from the Glen Dimplex company, two (2) installation visits
- o Comprehensive and quality service rapidly delivered through our CARES service solution
- o 65 gallons of 100% glycol concentrate for complete system filling and diluting
- o Wall mounted remote display panel provides the ability to monitor the system's operation and indicates possible system errors
- o Filter kit with flow meter helps to ensure purity of water prior to entry to the MR system
- o Highly recommended that Vibration Isolation Spring Kit (E8911CJ) be added for systems that will be roof top mounted



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		<p>SPECIFICATIONS</p> <ul style="list-style-type: none"> o Net Cooling Capacity: 49 kW / 20 Ton o Maximum Coolant Flow: 35 gpm (132 l/m) o Coolant Outlet Temperature: 48 F (8.9 C) o Coolant Temp Stability: E 1.8 F (E1.0 C) o Max Coolant Pressure : 70 Psi (4.8 Bar) o Refrigerant: R407C o Ambient Temp Range: -20 to 120 F (-30 to 50 C) o Condenser Air Flow (Approx): 18,000 Cfm o Tank Capacity: 100 gal (378 l) o Flow Meter Range: 4-40 gpm o Filters: 50 micron cartridge filters o Supply Voltage: 460v / 3 phase / 60 Hz o Coolant Connections: 2" NPTF o Overall Size (L x W x H) 44" x 136" x 84.5" <p>COMPATIBILITY:</p> <ul style="list-style-type: none"> o GE MR450w or MR System <p>NOTES:</p> <ul style="list-style-type: none"> o Item is NON-RETURNABLE and NON-REFUNDABLE
18	1	<p>TiP MR System Upgrade Training 10 Days Onsite 10 Hours TVA</p> <p>10 Days plus 10 Hours TVA training for New MR system Installation Training. Onsite days are delivered in 3 site visits.</p> <p>Onsite training is delivered Monday through Friday between 8AM and 5PM. T&L expenses are included. This training program must be scheduled and completed within 36 months after the date of product delivery.</p>
	1	<p>AW upgrade and CAD</p> <p>AW VOLUMESHARE 7</p>
19	1	<p>AW Hardware Upgrade to VolumeShare 7 with Two Flat Panel Monitors and 32GB of RAM. All applicable existing licenses will be transferred at system install.</p> <p>NOTE: The AW Workstation that is to be Upgraded with this purchase becomes the</p>



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		<p data-bbox="581 401 1495 464">Property of GE Healthcare. Upon Installation Of the New AW Workstation, the current AW Unit must be De-Installed and Returned To GE Healthcare.</p> <p data-bbox="581 485 1203 512">NOTE: A Signed Trade-in Addendum Required Upon Order.</p> <p data-bbox="581 533 1507 667">AW VolumeShare 7 is a multi-modality image review, comparison and post processing workstation built with simplicity and power at its core. Powerful software is optimized to take advantage of state of the art 64 bit technology and multiple cores to ensure leading edge performance.</p> <p data-bbox="581 688 976 716">AW VolumeShare 7 features include:</p> <p data-bbox="581 737 699 764">Hardware:</p> <ul data-bbox="605 793 1511 1094" style="list-style-type: none">• HP Z440 Workstation• CPU: Intel Xeon E5-1660v3 (Haswell) Eight-Core @ 3.0 GHz with 20MB L3 Shared Cache each with Dual QPI @ 8 GT/s• RAM: 32GB (8x4GB) Four-channel DDR4 ECC RDIMM @ 2133 MHz• GRAPHICS: NVIDIA Quadro NVS310 with 1 GB Video RAM• 1x 256GB SATA3 SSD for OS and Apps• 2x 512GB SATA3 SSD in RAID 0 for 1TB data storage• 2x 19" 1280x1024 color monitors <p data-bbox="581 1121 688 1148">Software:</p> <ul data-bbox="605 1178 1516 1776" style="list-style-type: none">• GE Healthcare HELIOS 6 operating system• Volume Viewer for advanced post-processing• Demo Exams for training and exploration• Fast access to information you need through optional RIS integration & priors post-fetch• Efficient workflow through dynamic load, end review and Key Image Notes features• Productivity package to pre-process exams and allow up to 8 simultaneous sessions• Applications usage monitor to track and view usage of your system• Smart layouts with Volume Viewer General review protocol that optimizes comparison and single exam layouts• Enhanced multi-modality contouring tool with support for PET SUVs• Support for external DICOM USB media and preference management tool to exchange preferences across users• Support for optional, broad suite of multi-modality advanced applications



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20	1	<p>AW VolumeShare 7 Software Only Upgrade</p> <p>Includes:</p> <ul style="list-style-type: none">• SW Only upgrade to VolumeShare 7• Pre-Processing• Upgrade to 24GB RAM <p>Software upgrade to AW VolumeShare 7. AW VolumeShare 7 Software Upgrade REQUIRES HPZ800 Hardware</p>
21	1	<p>AW VolumeShare 7 (z800) RAM capacity Upgrade Kit</p> <p>Increasing RAM is important to support processing of larger volumes of data generated with sophisticated post processing applications, larger average slice counts or multi-dimensional modalities such as MR and GSI.</p>
22	1	<p>CADstream 5.5 with SureLoc on AW</p> <p>CADstream includes hardware and post processing software that facilitates analysis and management of breast image data. Image processing is performed automatically, using predefined templates for non-rigid image registration, subtraction, parametric maps, maximum intensity projection and multi-planar reformat. CADstream also generates reports that include images and graphs that can be exported in PDF or DICOM formats.</p> <p>CADstream includes SureLoc - a tool that helps radiologists to more efficiently calculate coordinates for MR-guided interventions at the point of procedure. SureLoc reports needle position in real time and displays images and needle position in the patient's orientation.</p> <p>The following new features are available on CADstream 5.5:</p> <ul style="list-style-type: none">• CADalog, CADstream's study library provides instant access to CADstream-processed studies.• Easily view and align patient studies side by-side for comparison.• Automatically calculate differences between studies, including changes in lesion sizes and diameters.• Report changes between studies using the CADstream Portfolio.• Multiple configurations provide improved scalability to accommodate MRI program growth, including increases in study volume, physicians reading locations.• CADstream integrates at the work-list level with many PACS, including Merge, GE, Carestream, McKesson and Sectra.



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23	2	<p>The BIRADS-centric user interface guides use through the recommended assessment for location size, morphology and kinetics analysis, and automates reporting.</p> <ul style="list-style-type: none"> • Smart, adaptive motion correction automatically registers in 2D or 3D, depending on patient movement. • Allows users to select the worst curve within a lesion. • Provides the ability to grow or shrink region of interest for improved reporting of DCIS or treated lesions. • Improved reports and renderings enhance communication with referring physicians and patients. <p>2 Days TiP Onsite Training Advantage Windows Workstation--MR</p> <p>One 2 day TiP onsite visit for MR Advantage Windows Workstation training. Includes T&L expenses. Days provided consecutively.</p> <p>This training program must be scheduled and completed within 12 months after the date of product delivery.</p>
24	1	<p>UPS</p> <p>POWER QUALITY</p> <p>700 VA Partial System UPS - MR</p> <p>Tested with all MR system computers, the 700VA Partial System UPS provides reliable, clean, consistent power for the data processing portion of the MR imaging system. The use of the double conversion UPS enables the MR system data processing portion electronics to operate when there is a power anomaly or total power loss. Valuable data and the system operating software are protected, if there is an extended outage the UPS allows for an orderly shutdown of the system.</p> <p>FEATURES/BENEFITS</p> <ul style="list-style-type: none"> • True double-conversion, online technology provides reliable operation and uninterrupted glitch free power • Automatic frequency selection eases startup, i.e., 50 or 60 Hz compatible • Integral Electronic Static Bypass switch means zero transfer time • Improves user productivity, system reliability, reduces service costs and increases system uptime • Advanced Battery Management (ABM) software monitors / indicates battery health and improves battery service life <p>SPECIFICATIONS</p>



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Item No.	Qty	Description
		<ul style="list-style-type: none"> • Dimensions (H x W x D): 9.09" x 6.3" x 13.9" • Weight: 26 lbs. • Input Voltage Range: Single Phase 80-138 V • Input Frequency Range: 47-70 Hz • Rating: 700 VA / 630 W
		COMPATIBILITY
		<ul style="list-style-type: none"> • MR Systems
		NOTES
		<ul style="list-style-type: none"> • This is a partial system UPS - it covers only the computer, not the entire MR imaging system. After a power event portions of the system will have to be reset before operation can resume • Customer is responsible for rigging and arranging for installation with a certified electrician • ITEM IS NON-RETURNABLE AND NON-REFUNDABLE
		Caring MR Suite
	1	NonProducts
25	1	Caring MR Suite Electronics \$110,000

Quote Summary:

2006 Signa HD 1.5T HDMR	(\$155,000.00)
Total Quote Net Selling Price	\$1,226,116.80

(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)



GE Healthcare

Date:
Quote #:
Version #:

08-05-2016
PR13-C1598
9

Options

(These items are not included in the total quotation amount)

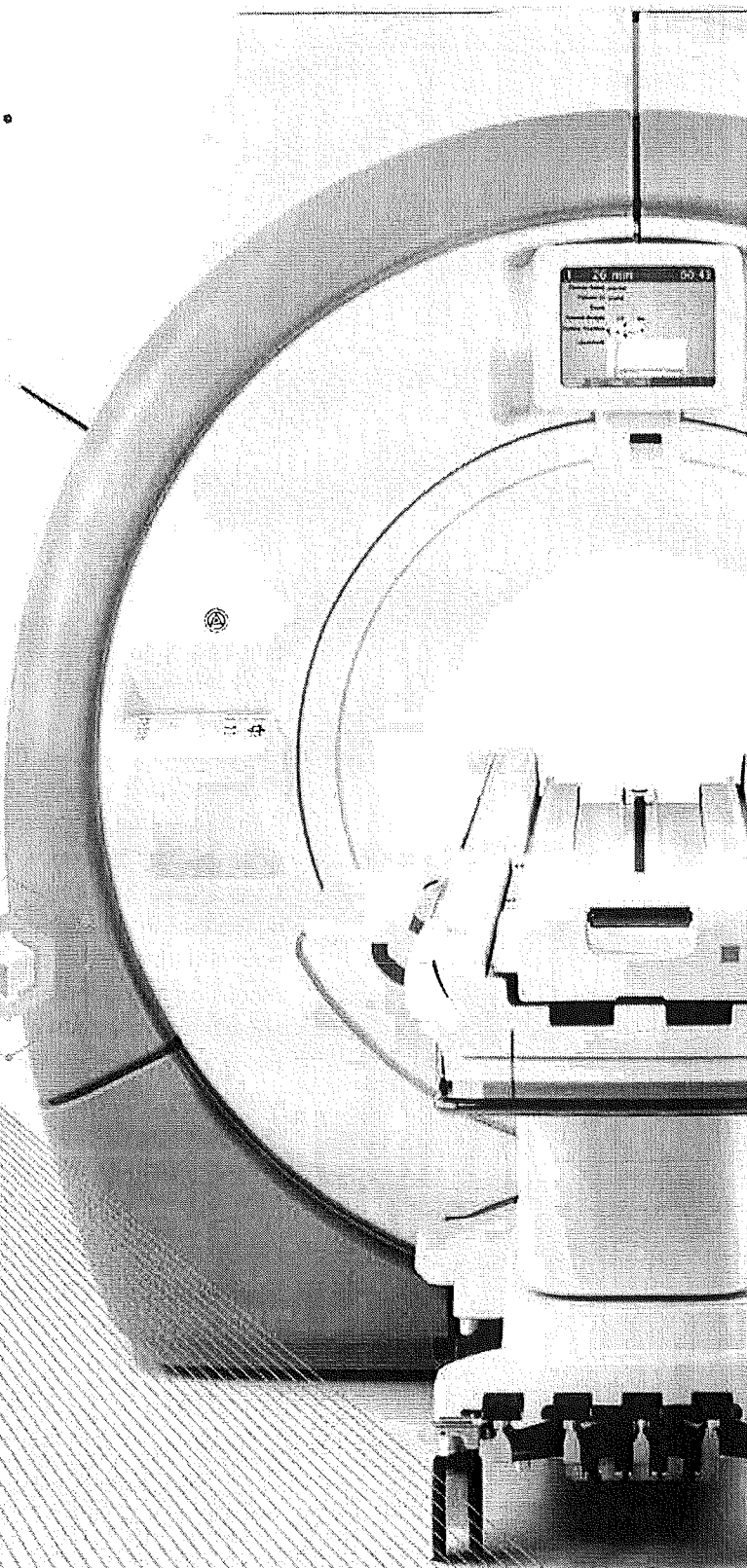
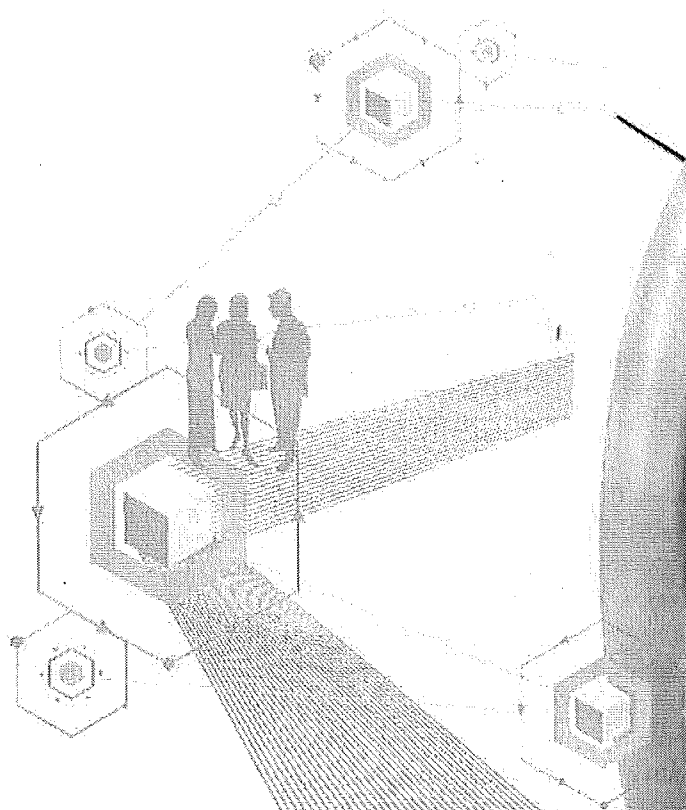
Item No.	Qty	Description	Ext Sell Price
26	1	<p>Optima MR450w 1.5T GEM ES 1.5T MR-Touch</p> <p>MR-Touch is a non-invasive method to measure relative tissue stiffness with MR.</p> <p>MR-Touch is a new acquisition and reconstruction technique that combines hardware, and acquisition and reconstruction algorithms to produce Elastograms, color-coded anatomical images showing varying degrees of elasticity or stiffness. The image contrast is related to relative stiffness of soft tissue and is generated from the real-time data acquisition during tissue palpation with low amplitude and low frequency sound waves. The hardware component is comprised of an active sound wave generator and a passive transducer that produces small vibrations in the area of the patient to be scanned. The MR-Touch acquisition software is an evolutionary improvement to the gradient echo sequence. The acquisition software also triggers the sound wave generator to produce synchronized vibrations on the surface of the patient during the data acquisition. The reconstruction algorithms generate images that show the propagation of sound waves through the tissue (phase images) and also the corresponding strain wave and relative stiffness images. Parallel imaging is used to accelerate image acquisition and provide for whole liver coverage in a few breath holds.</p>	\$139,000.00

(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)

GE Healthcare

The right capabilities.
The right experience.
The right investment.

Optima™ MR450w



A black and white photograph of a large MRI scanner. The patient bed is extended into the circular bore of the machine. A control panel with a screen is visible inside the bore. The GE logo is on the right side of the bore's inner wall.

The world of MR is always changing.

Patient expectations of MR have shifted in recent years, as people have begun demanding a better, more comfortable scanning experience. Increasing the size of the bore is a good first step—but it's only the beginning.

The right system should overcome traditional limitations of wide-bore MR, offering both excellent images and a user-friendly experience. Patients should be more comfortable during their scan, and clinicians more comfortable in making a definitive diagnosis. All the while, organizations should expect their MR system to help them deliver solid financial returns, maintain a high standard of patient safety, and increase the quality of their care.

Today, the right way has arrived.

The Optima MR450w is wide-bore MR done right.

Thanks to cutting-edge technologies, we've advanced the capabilities of wide-bore MR by delivering both uncompromised image quality and high productivity — all with an expansive 50cm field of view.

But it's about more than the bore. Built on a fully redesigned MR platform, the Optima MR450w offers a range of advanced new functionality, making it a workhorse system for practices of all sizes and specialties.

It is also extremely accessible. Its cost and capabilities make it a great choice for first-time MR customers who can make it their only scanner, as well as established MR users seeking a versatile, hard-working system. Its 1.5T field strength is the industry's best-known and most-used. And its bore diameter and field of view make MR scans accessible to more patients who need them.

The Optima MR450w is the right MR system in so many ways.



The right capabilities

Advanced functionality gives clinicians the tools they need to make definitive diagnoses — and help grow practices.

The right experience

Exclusive ease-of-use features help make life easier for both patients and technologists.

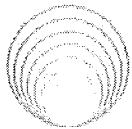
The right investment

Administrators can drive new levels of productivity, scanning a broader patient population on a more predictable schedule.

The right capabilities to help you to diagnose *and* grow.

The Optima MR450w delivers exquisite image quality to aid in your diagnosis. To meet your high quality expectations, the advanced capabilities of our Discovery™ MR platform have been applied in the Optima MR450w, making it both versatile and powerful.

FROM ADVANCED TECHNOLOGIES...



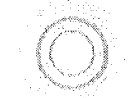
Redesigned magnet
A completely new 145cm long magnet is designed to ensure uniform tissue contrast in a patient-friendly space.



eXtreme gradients
Strong whole-body gradients deliver 34 mT/m amplitude and 150 T/m/s slew rate on each axis, yielding scans that are fast, accurate, and highly reproducible.



OpTix RF digital receiver
An exclusive optical RF system increases signal clarity and maximizes signal intensity for clean, crisp images.



Anatomy-optimized RF coils
High-density coils focus elements around the anatomy of interest and provide extended coverage where needed, for optimal image quality in virtually every procedure.

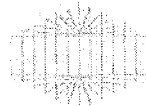


Express patient table
A fully removable table minimizes time between scans to help boost productivity.



Acoustic Reduction Technology
Reduce an acquisition's acoustic noise with virtually no compromise to image quality.

...COME POWERFUL ABILITIES.



Large field of view
With a 50cm field of view, you can cover more anatomy in fewer scans.



Unmatched breast imaging
Thanks to applications like IDEAL and VIBRANT-FLEX, no comparable solution can capture so much so well.



Two-station whole-spine imaging
Acquire an entire spine in a fraction of the time—and with multiple contrasts.



Holistic Liver Assessment
An industry first, MR-Touch opens up new opportunities for care by identifying variations in liver tissue stiffness.

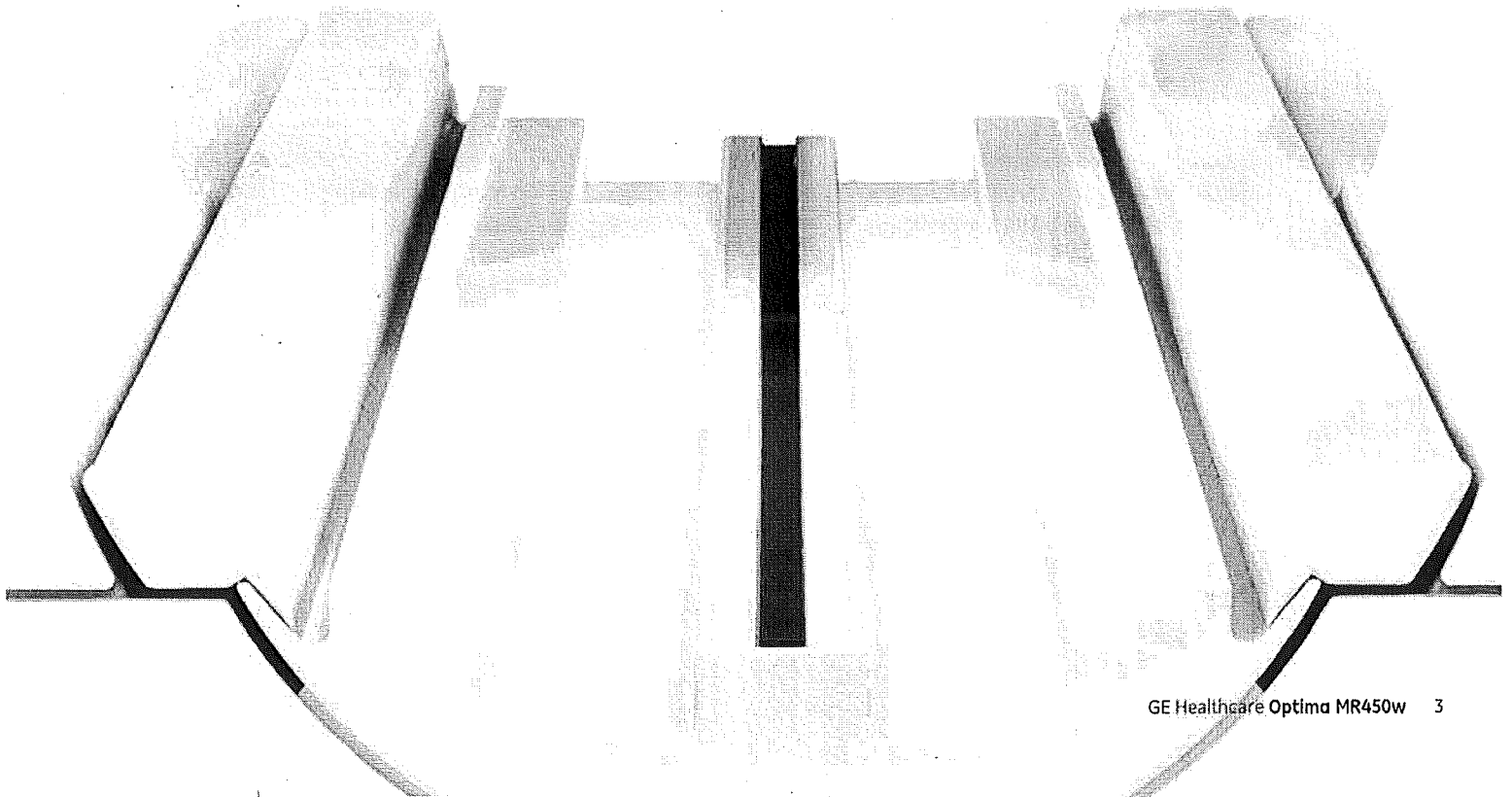


3-D Arterial Spin Labeling (3D ASL)
Generate a full-coverage, high-SNR 3D image of the brain, great for evaluating cerebrovascular conditions such as stroke.

Growing your offerings — and your practice

Along with these capabilities, the system's wider bore opens up additional pathways for diagnosis and treatment. Greater patient positioning freedom and access enables interventional procedures. Such procedures give practices new ways to care for patients, opening new opportunities for increased patient referrals.

70cm



The right experience — for patients

The Optima MR450w comes with a 70cm bore, offering a more comfortable experience for your patients — especially larger individuals, children, and those prone to claustrophobia. And the improved patient experience goes beyond the bore — next-generation clinical applications help reduce exam time and improved patient comfort features result in a cooler, quieter experience.



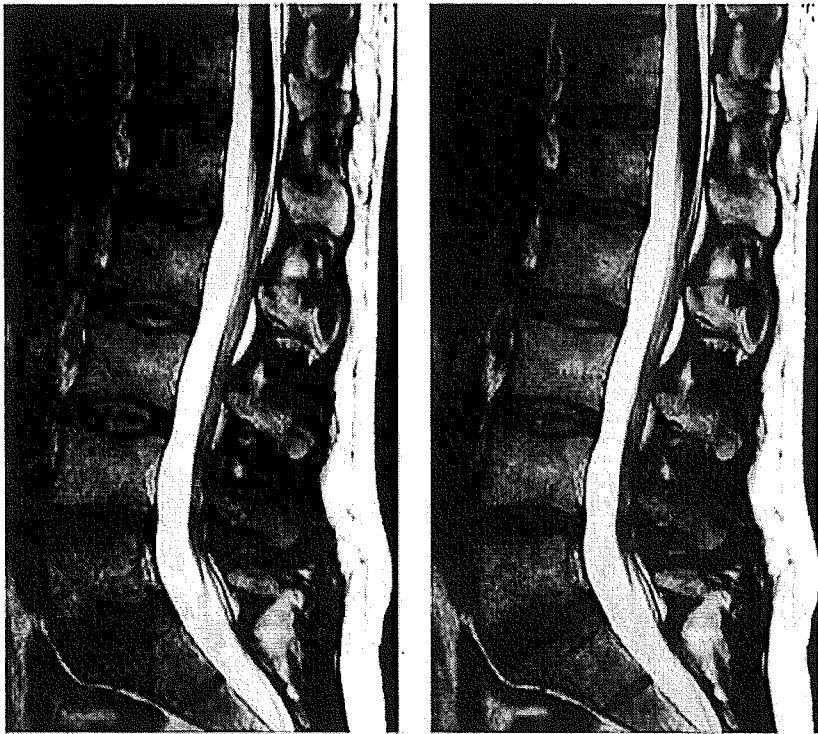


Image A

Image B

► A work of ART

Acoustic Reduction Technology delivers a quieter patient experience.

The right MR experience goes beyond bore size and positioning — patients today are also demanding a quieter MR acquisition. New Acoustic Reduction Technology (ART) delivers just that, reducing acoustic noise.

ART is a highly useful application that's usable in brain, spine and MSK scans. And because ART reduces noise by optimizing the gradient performance, there's virtually no compromise to image quality.

Image B, captured at the same resolution and scan time as image A, was acquired using ART. The acquisition was 10 dBA quieter — with virtually no compromise to image quality.

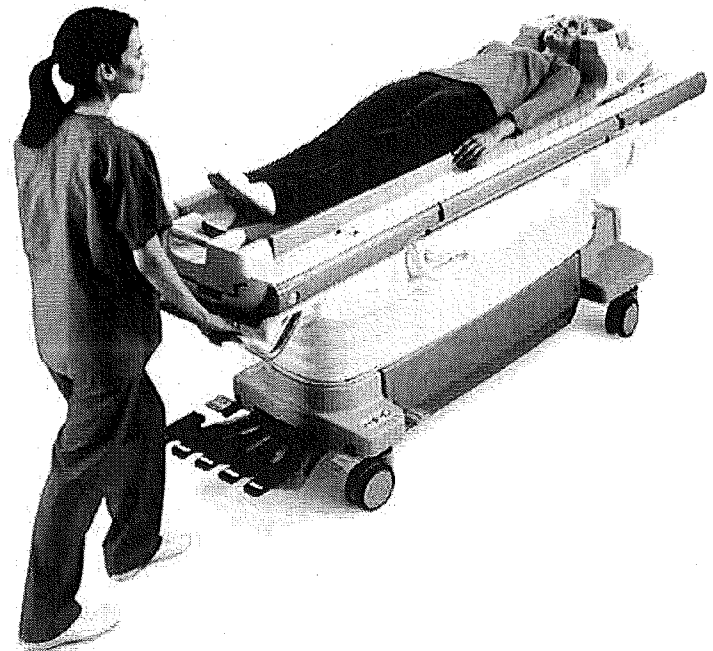
► Express Patient Table

Transfer patients once to improve throughput.

Easily docked and undocked by a single technologist, the Express detachable patient table helps improve workflow and efficiency by minimizing time between scans. It allows for faster patient positioning accuracy compared to fixed table designs, and can support up to 500 lbs.

Patients are able to prep in private, and single transfers of patients directly onto the MR table create a more comfortable patient experience. In the event of an emergency, just one technologist can typically undock the table and safely transport the patient out of the room in under 30 seconds.

Beyond productivity, the table enables new kinds of growth for your practice, including interventional radiology and advanced breast imaging.



The right experience — for technologists

Staying on schedule has an added benefit—it may help increase the job satisfaction of technologists, aiding in their retention. This can help enable administrators to hold onto talent longer, saving on turnover and training costs.



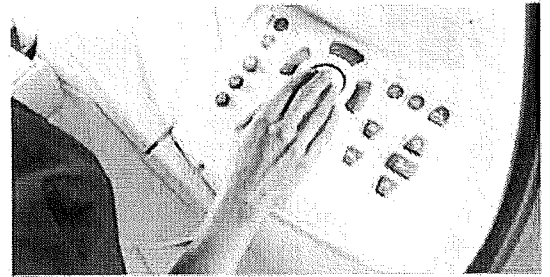
In-Room Operator Console

Fast exam setup — at your fingertips

Mounted conveniently on the front of the magnet, the high-resolution color console of the Optima MR450w consolidates patient set-up information and operator controls in one place that's easy to see. View patient, system and scan information, control and select parameters, change scanner configurations, and initiate scans in real time right in the room. Save footsteps by eliminating multiple trips to and from the control room.

When AutoStart™ is selected on the iROC, the system will start scanning automatically when the scan room door is closed.

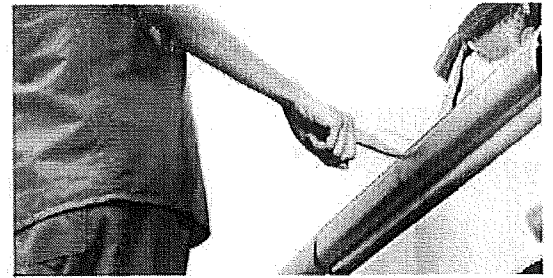
Optional



Dual-sided scanner control panels

With one touch

Control the scanner from either side of the patient table and easily access cardiac or peripheral gating leads and IV lines. Backlit buttons indicate the next logical step in the exam process, simplifying patient setup.



IntelliTouch patient positioning

Start scanning in just two simple steps.

Set up your patients in as little as 30 seconds, and in just two simple steps. Along with the use of the detachable table, IntelliTouch patient positioning shortens in-room set-up time by up to 70% over fixed-table designs.

To operate, simply press the IntelliTouch strip on either side of the patient table at the landmark location, then press the Advance to Scan button to begin scanning.

Optional



The right investment — for administrators.

In today's economic environment, productivity and throughput are top-of-mind for administrators everywhere. The Optima MR450w allows you to keep up with evolving expectations around comfort, capabilities, and definitive diagnosis. With an advanced suite of clinical applications — including IDEAL, LAVA-Flex, VIBRANT-Flex, and Cube — you can handle more patients with fewer scans, helping boost the efficiency of your practice and making scheduling more predictable.

Buying GE is a good long-term investment. With the GE Continuum, we can help you maintain your clinical capabilities and your competitive edge. And our world-class service organization will keep uptime high, year after year.

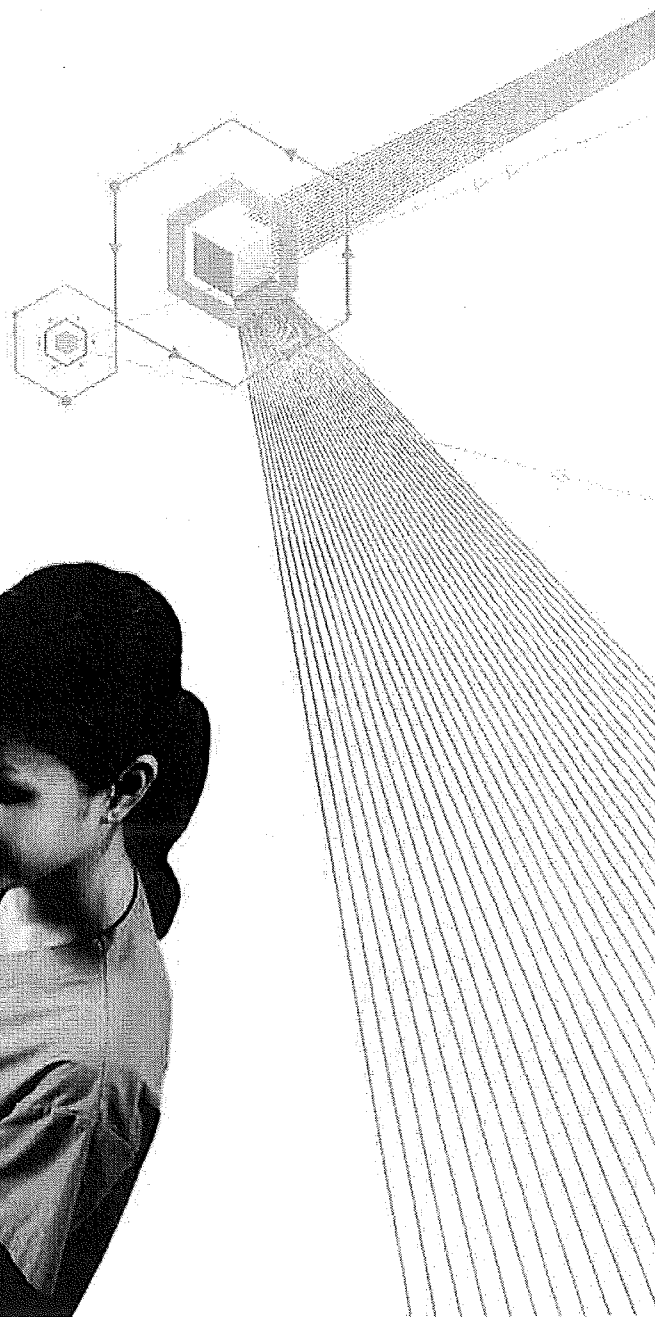
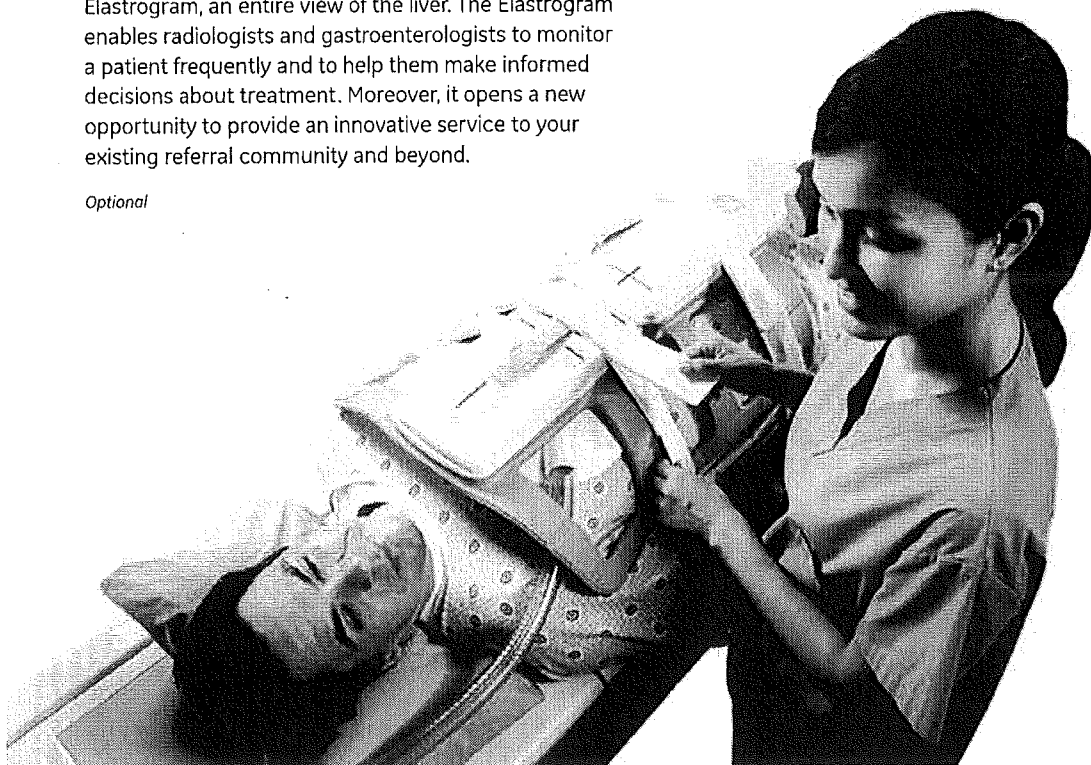
■ Introducing MR-Touch

MR Elastography for non-invasive, holistic liver assessment.

Patients who suffer from chronic liver diseases such as fibrosis and cirrhosis often require ongoing observation by a gastroenterologist. This can entail invasive procedures that don't always provide a full picture of the liver.

The new MR-Touch, developed by GE with the Mayo Clinic, approaches liver exams by using acoustic waves to identify variations in tissue stiffness. This provides an Elastogram, an entire view of the liver. The Elastogram enables radiologists and gastroenterologists to monitor a patient frequently and to help them make informed decisions about treatment. Moreover, it opens a new opportunity to provide an innovative service to your existing referral community and beyond.

Optional





Reliable service, right away

Keeping your MR system up and running is critical to keeping a practice productive. To help reduce failures and interruptions to patient flow, we maintain one of the world's largest and most experienced service forces.

In addition, the MR systems from GE build upon existing product service capabilities to move from detection to prediction, allowing the ability to analyze more data than ever and potentially eliminate faults before they occur.

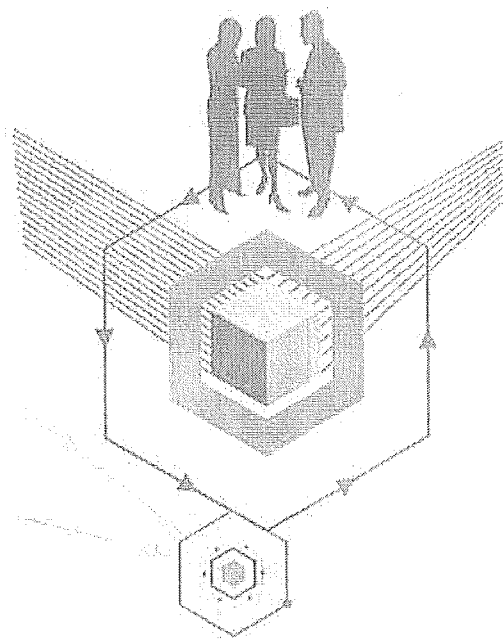
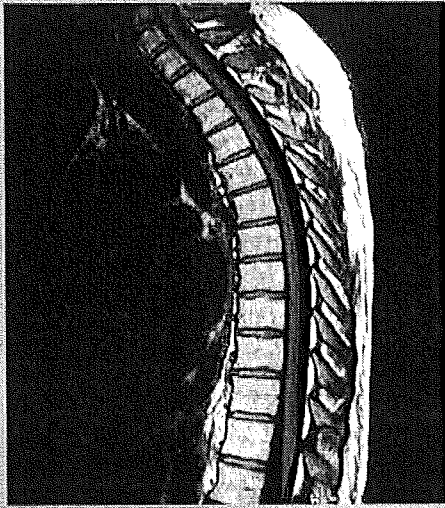


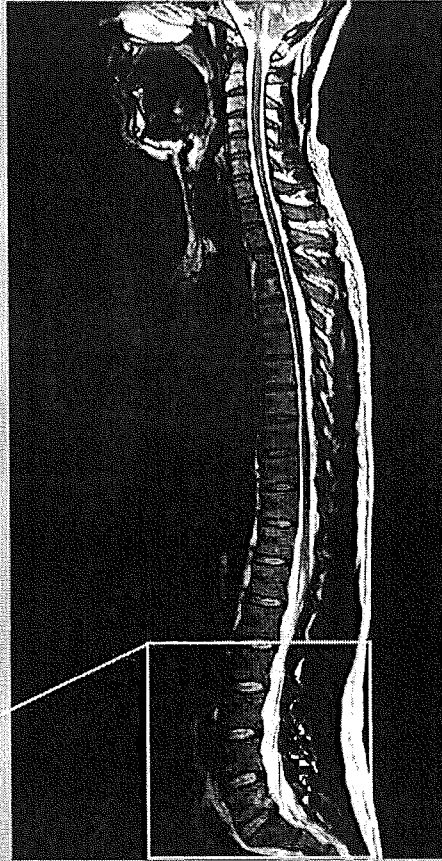
Image Gallery

The following pages illustrate how the Optima MR450w generates stellar images across areas of care.

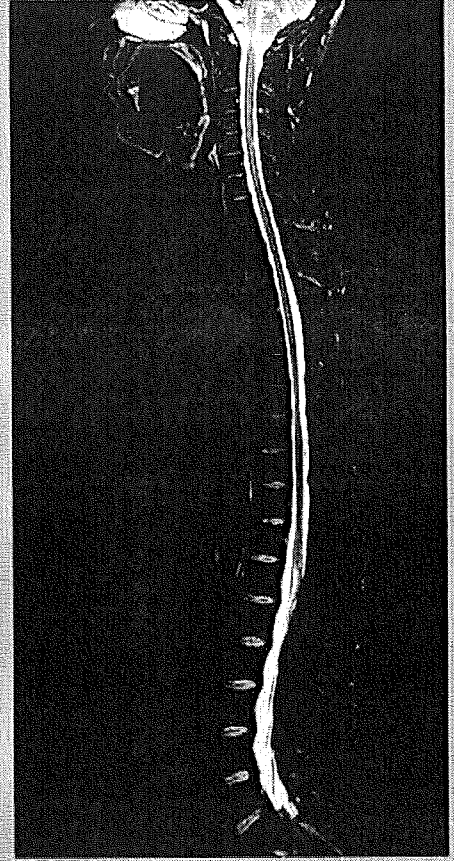
Two-station Whole Spine



T1 FLAIR

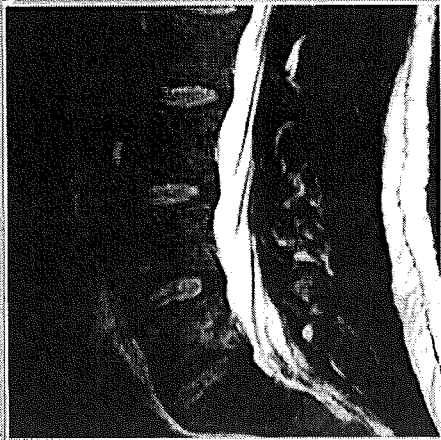


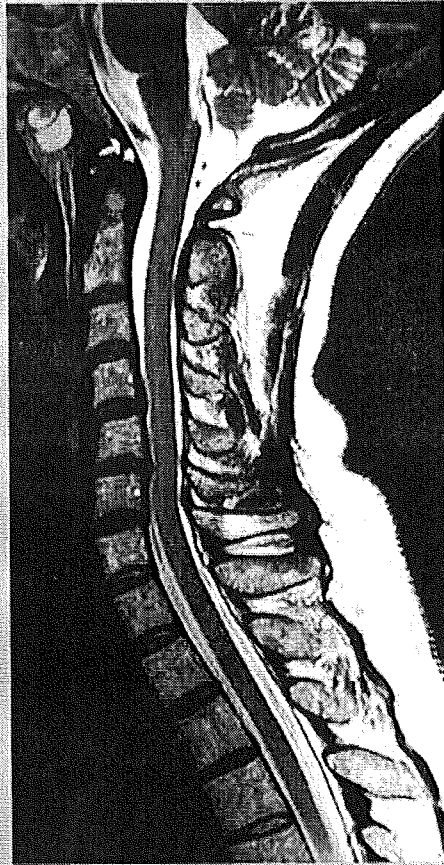
IDEAL In-phase



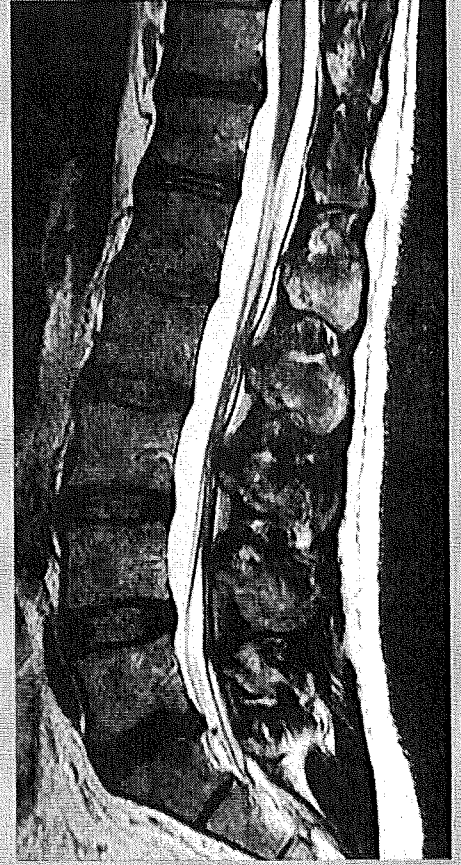
IDEAL Water-Only

Spine





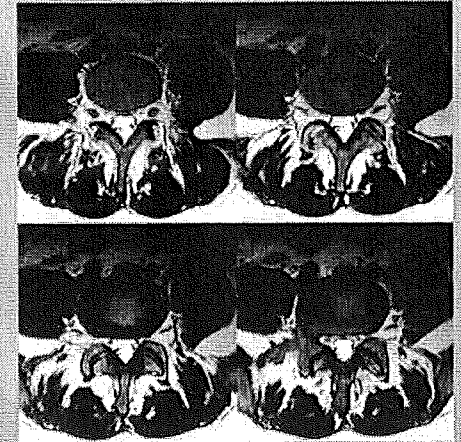
frFSE T2



frFSE T2 with ARC (acquired in 36-sec.)

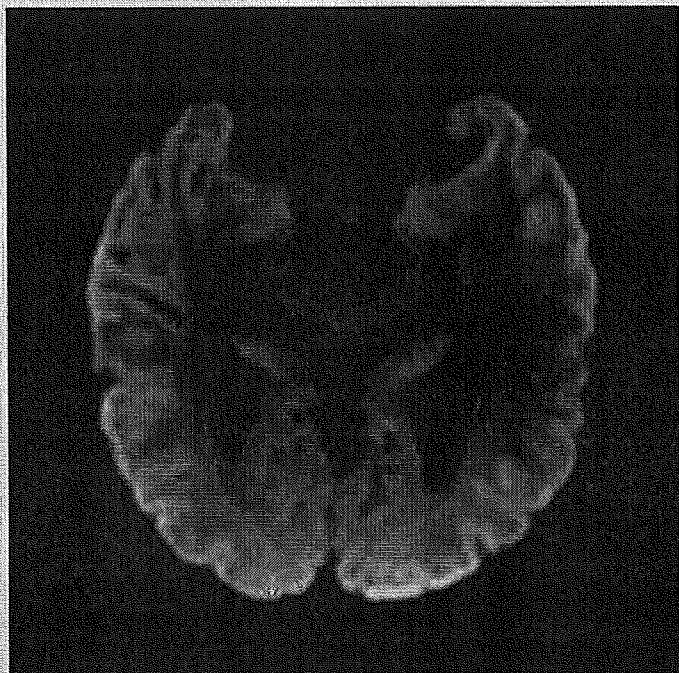


3D MERGE



frFSE T2

Neuro

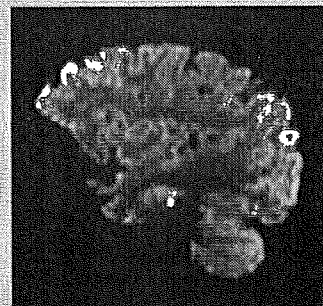


High-Resolution Tetrahedral DWI

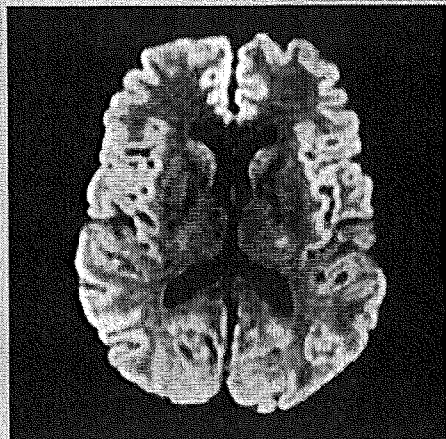
Diffusion imaging is a demanding application for gradients in any environment. Combining extreme gradient technology and tetrahedral gradient encoding provides superior T2* loss susceptibility and more SNR.



Reformat

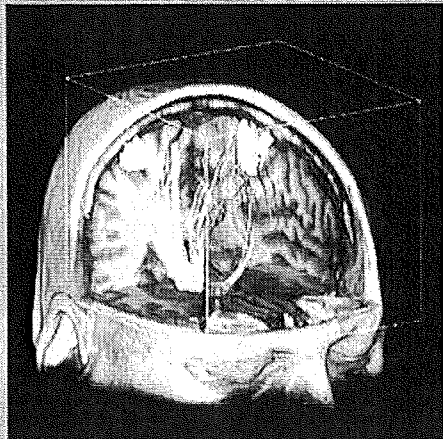


Reformat



3mm DTI with 20 Directions

The Galera MR450w delivers uncompromised high-resolution, 20-direction diffusion tensor images. Using a robust and efficient seeding process, FiberTrak effectively generates three-dimensional renderings of the diffusion along white matter tracts.



BrainWave Fusion

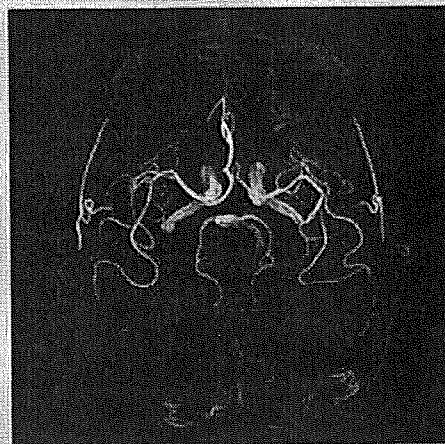
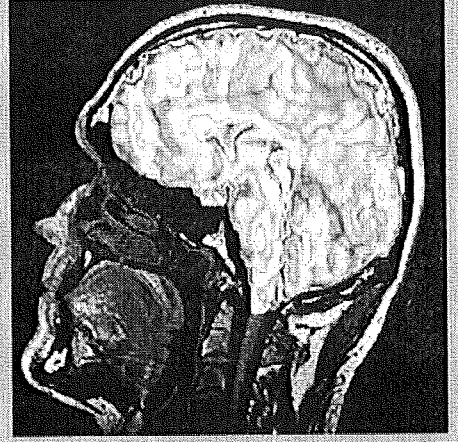
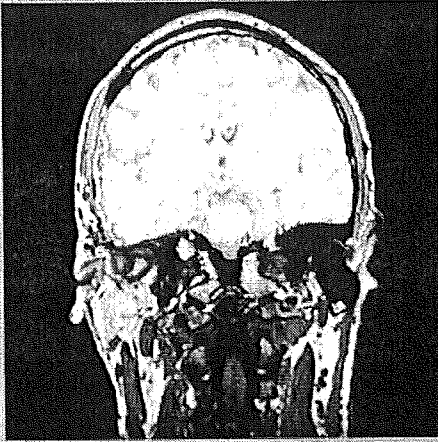
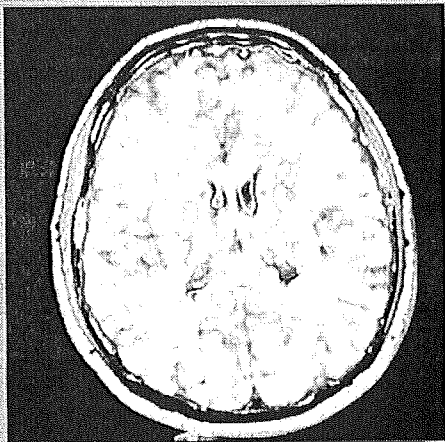
BrainWave Fusion provides the ability to fuse high-resolution anatomical images with fMRI activation maps and diffusion tensor fiber maps.



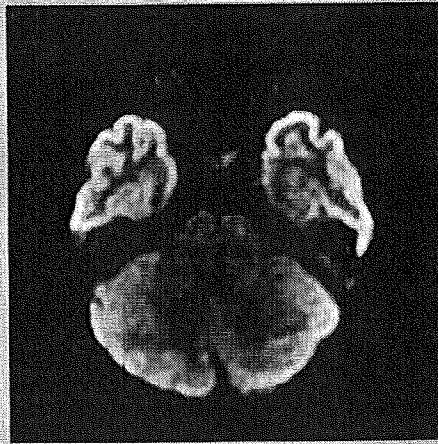
FiberTrack of 22-direction DTI overlaid on 512 x 512 PROPELLER T2

3D Arterial Spin Labeling (3D-ASL)

This technique offers full-brain coverage, delivering robust, high-SNR 3D images. It works by generating a 3D-FSE acquisition with spiral readout, with pulsed continuous labeling close to the image slab. Background suppression is then added for motion insensitivity. The application is great for evaluating cerebrovascular conditions such as stroke.



High-resolution 3D TOF MRA demonstrating the benefits of the additional SNR provided by OptiX®.



PROPELLER DWI

PROPELLER DWI corrects for susceptibility artifacts at air/tissue interfaces, which are commonly seen in the temporal lobes when using standard EPI sequences. It also reduces artifacts from dental hardware/surgical implants.



SWAN

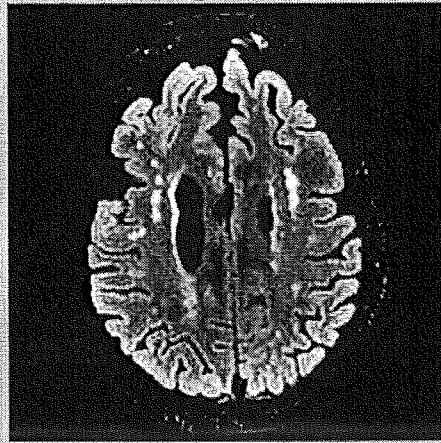
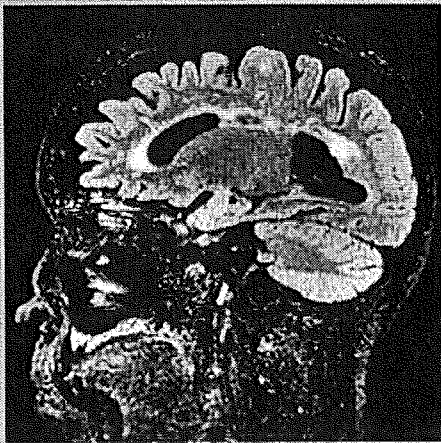
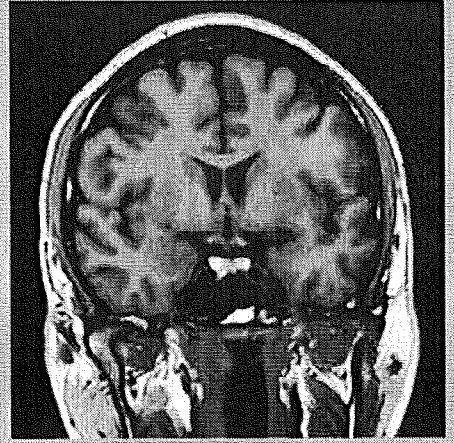
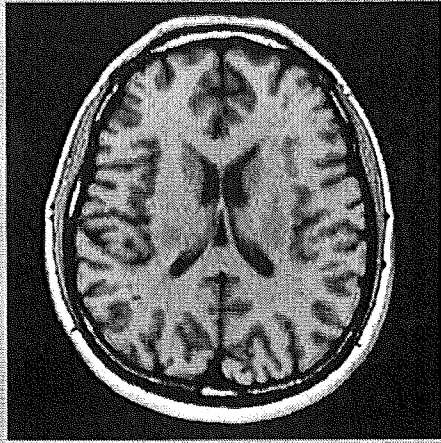
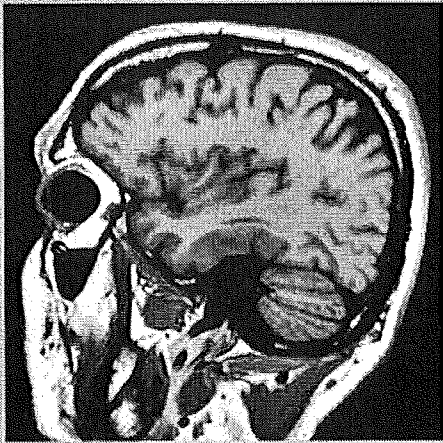
SWAN is a unique 3D T2*-weighted technique that provides the ability to clearly delineate small vessels. As a 3D application, SWAN benefits from the added SNR of the OptiX optical RF technology.

Neuro

Continued

Cube T1

Cube is a volumetric imaging technique with isotropic resolution – scan once and reformat into any plane with excellent resolution. Cube utilizes a unique, advanced acquisition technique, ARC, which reduces scan times for 3D imaging and allows you to reduce voxel size in order to enhance the quality of the reformatted planes.



Cube T2 FLAIR

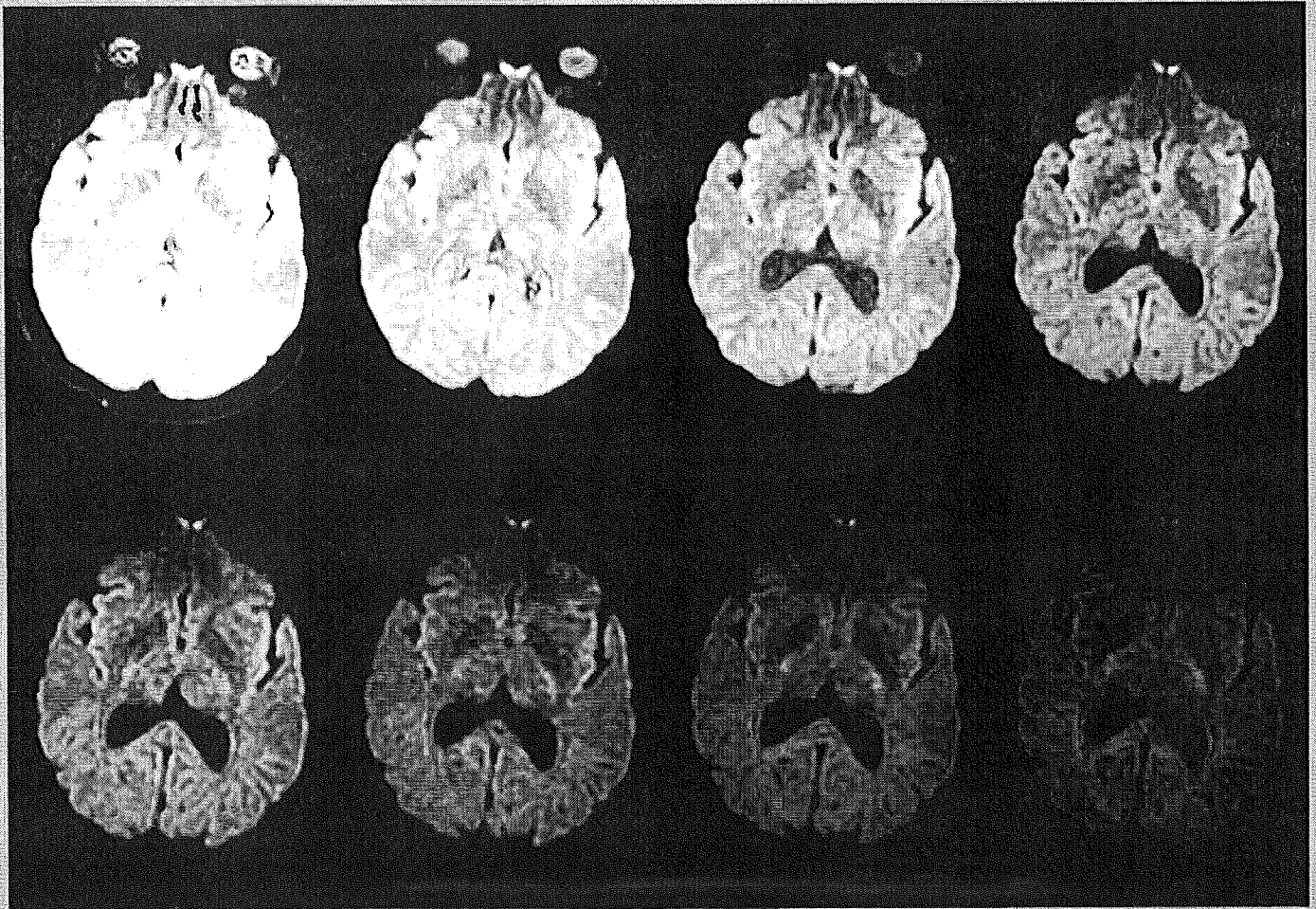
Cube is compatible with multiple contrasts making it a versatile technique for rapid but uncompromised neuro imaging.

Neuro

Continued

Multi b-value eDWI

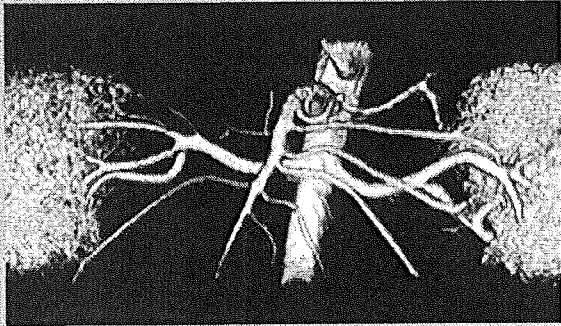
This new technique represents the next level in diffusion imaging with advantages: SNR, less scan time, and more accurate ADC. It applies an MRI single shot sequence with adjustable multiple b-values, using either IR-prep or SSFP, pulsar for MRI capable to be operated with respiratory or cardiac triggered sequences.



Multi b-value eDWI of the brain showing b-values ranging from 250 to 2000.

Non-contrast Angiography

Inhance Inflow IR eliminates the need for contrast on renal MRA studies, and does it without adding time-consuming setup. Combined with the Expert user interface with automated fat and background suppression, prescription is dramatically improved.



Inhance Inflow IR



Inhance Inflow IR

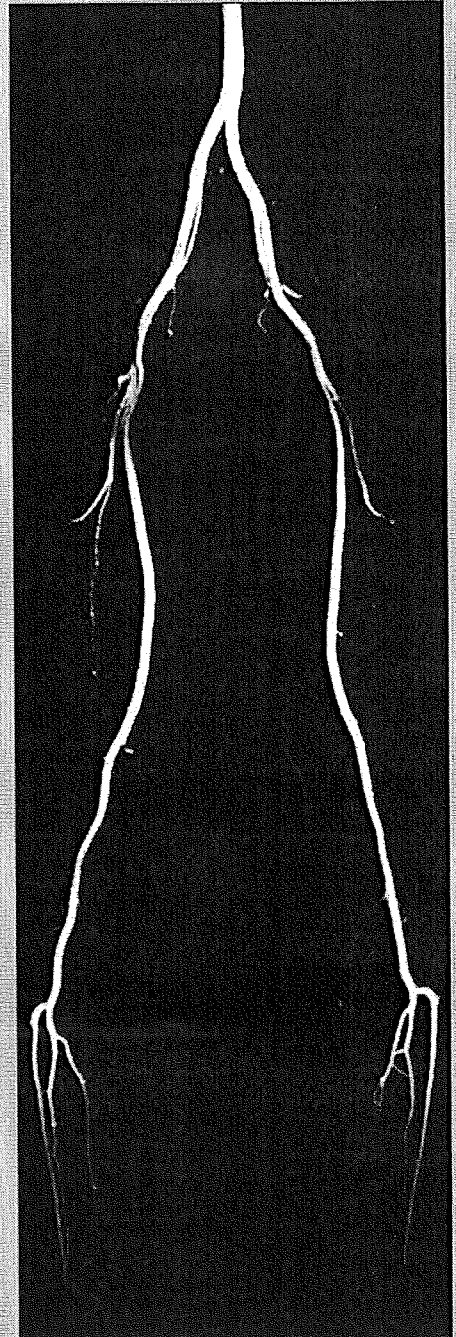


Inhance 3D Velocity

Inhance 3D Velocity is a non-contrast enhanced technique designed to acquire angiographic images of the brain and renal arteries with excellent background suppression in short scan times. The technique is capable of obtaining the whole neurovascular anatomy in 5-6 minutes.

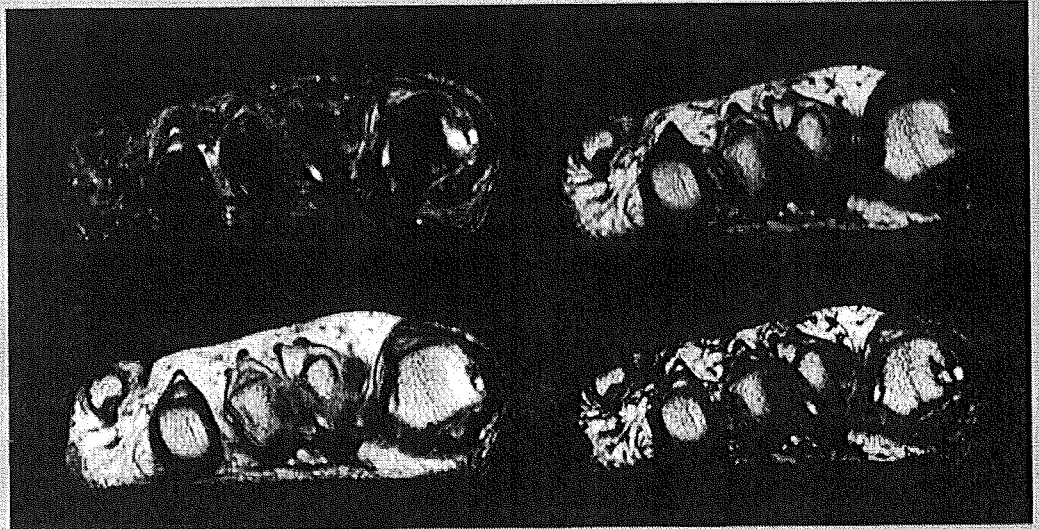
Inhance 3D DeltaFlow

This application delivers excellent contrast and surrounding tissue subtraction—all without use of a contrast agent. It subtracts the systolic from the diastolic phase, helping eliminate venous and background signal.



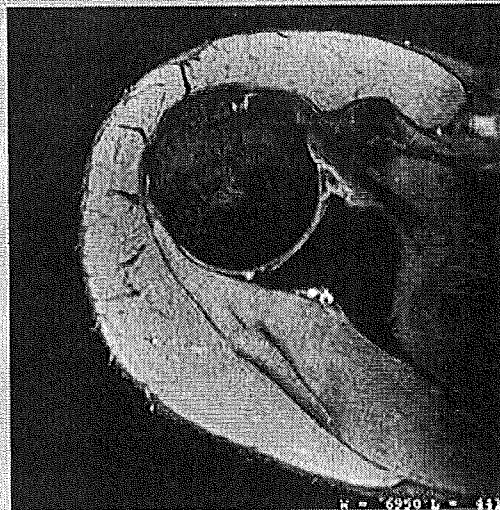
MSK

With the Optima MR450w, patients can be imaged in a more comfortable position.



IDEAL

3D MERGE is designed to deliver enhanced resolution and SNR for musculoskeletal spine imaging. It also benefits from the additional SNR of the Optima RF technology.

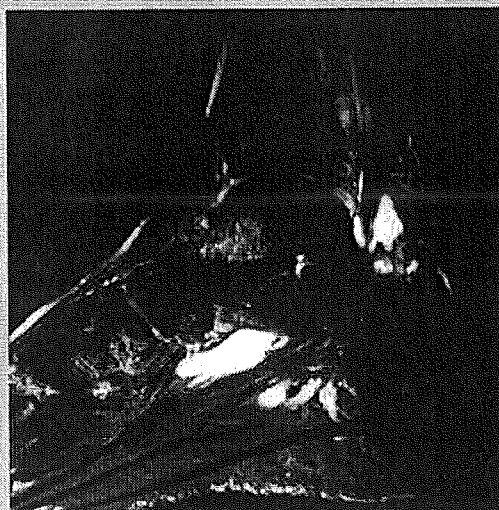


3D MERGE

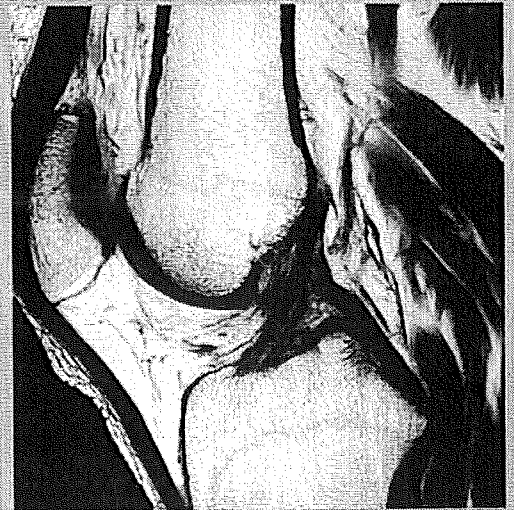


T2 Fat Sat

The performance of the new Optima MR450w magnet delivers uncompromised off-center imaging with uniform fat saturation performance in a wide bore environment.



T2 Fat Sat



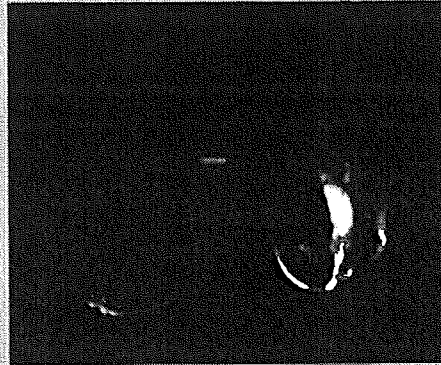
PD (640 x 320 resolution in 3/37)

Breast

IDEAL provides a robust, high-resolution alternative to TSE fat sat or STIR for T2 fat-suppressed breast imaging.

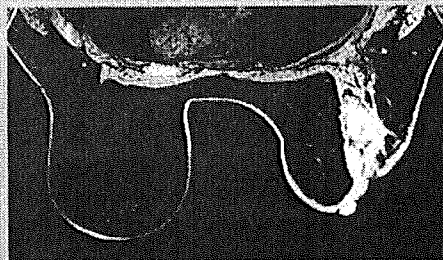


IDEAL Water Only

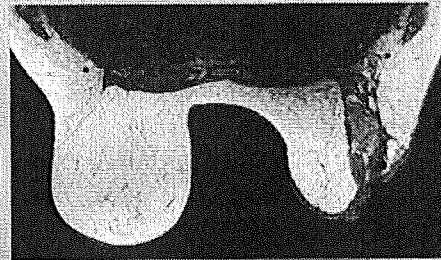


DWI

The Optima MR450W performs excellent breast diffusion imaging. Breast diffusion can be performed with the HD Breast Array or with the integrated body coil, which allows for a larger imaging field.

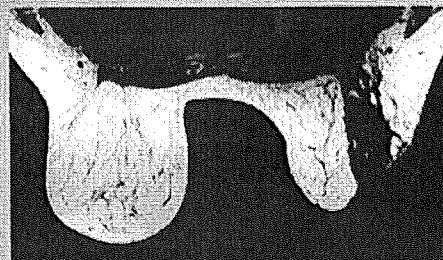


VIBRANT-Flex Water Only



VIBRANT-Flex In-phase

VIBRANT-Flex generates up to 4 contrasts with high-resolution in just one short scan and virtually eliminates fat suppression failures in breast imaging—even over a large FOV with irregular anatomy. As a result, you gain 4X more data and enhanced ability to “do it once and do it right” on an exam that you don’t want to repeat!



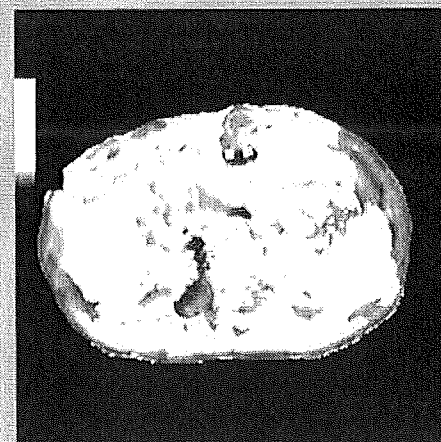
VIBRANT-Flex Fat Only



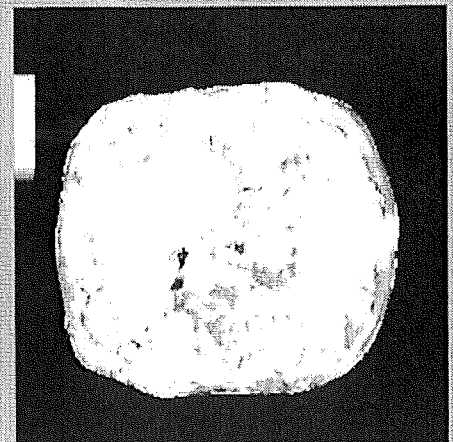
VIBRANT-Flex Out-of-phase

Liver

In these elastograms—acquired with MR-Touch—relative stiffness is shown on a color scale ranging from softest (purple) to hardest (red). The stiffness of normal liver tissue is very low, as seen in the left example. The red in the right image shows high tissue stiffness.



MR-Touch Elastogram (volunteer)

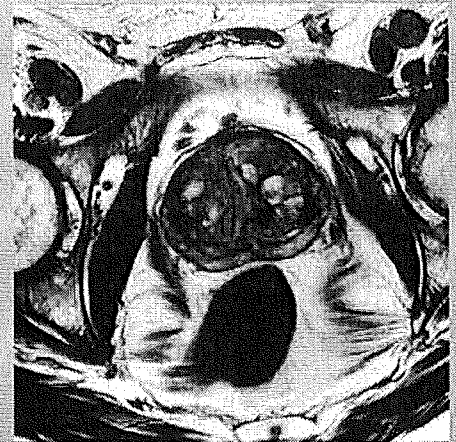


MR-Touch Elastogram (patient with cirrhosis)

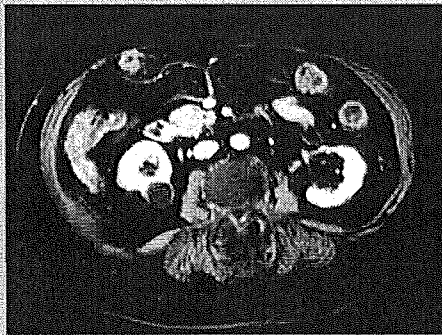
Abdominal



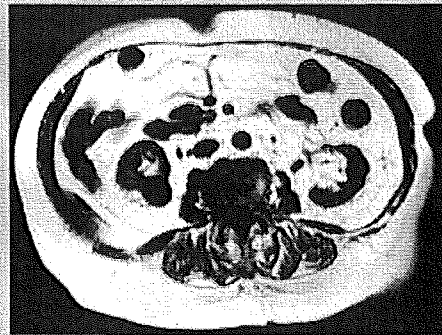
gDWI



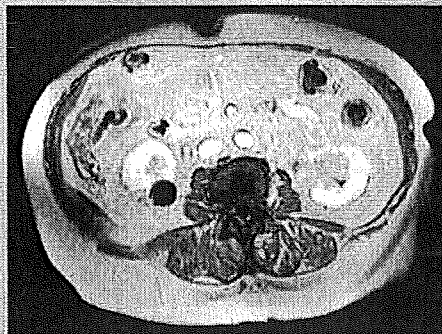
T2 FSE



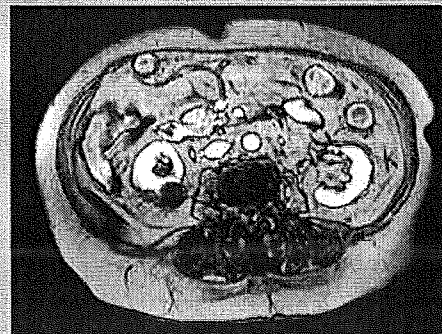
LAVA-Flex Water Only



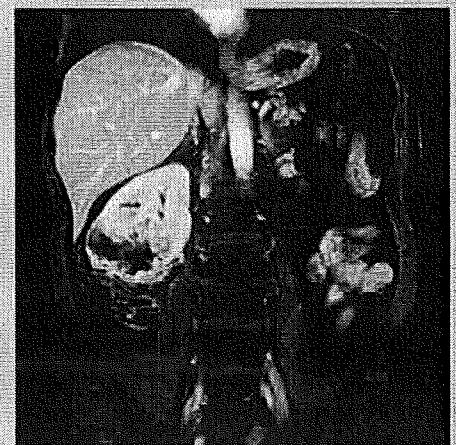
LAVA-Flex Fat Only



LAVA-Flex In-phase



LAVA-Flex Out-of-phase



LAVA-Flex

LAVA-Flex generates up to 4 contrasts with high-resolution in just one short scan, and virtually eliminates fat suppression failures even over a large FOV whole abdomen.

The extreme gradients and Optix RF technology enable the Optima MR450w to deliver excellent large FOV diffusion imaging. With ARC, this 21-slice SSFSE series was acquired in 18 seconds.

The right choice.

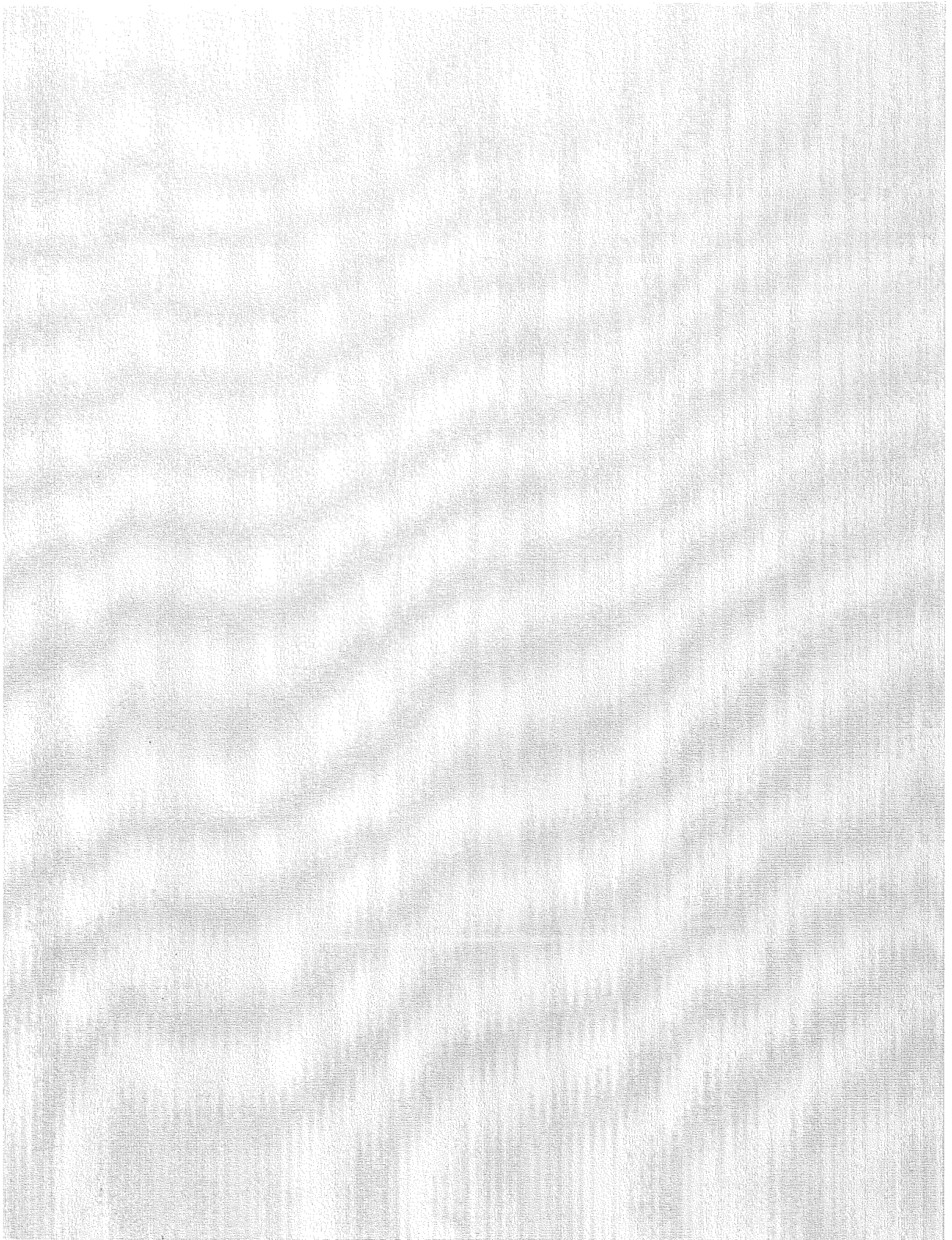
For those seeking to realize the true potential of wide-bore MR, the Optima MR450w is the clear choice. That choice brings more than excellent patient care — it also provides a range of benefits for every key stakeholder in your practice.

Radiologists get the high-quality images they demand for definitive diagnoses.

Administrators get satisfied patients, precise scheduling, and opportunities for growth.

And technologists get to handle more patients with less hassle, capturing images with more consistency.





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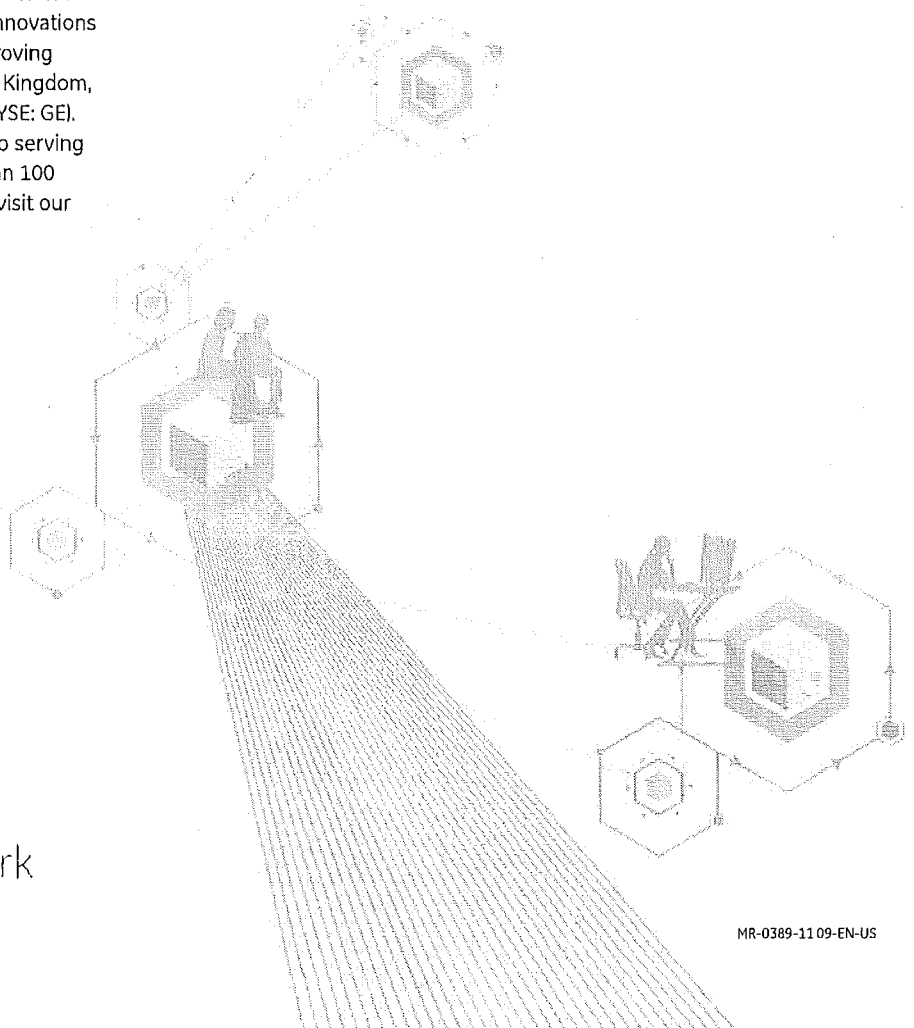
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General Electric Company, doing business as GE Healthcare.

About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our "healthymagination" vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality around the world. Headquartered in the United Kingdom, GE Healthcare is a unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employees are committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at www.gehealthcare.com.

GE Healthcare
3000 North Grandview
Waukesha, WI 53188
USA



imagination at work

GE Healthcare
PO Box 414
Milwaukee, WI 53187

August 9th, 2016

Tim Harris
Director of Radiology
Caldwell Memorial Hospital
321 Mulberry St. SW
Lenoir, NC 28645

RE: GE Signa HD 1.5T MRI

Dear Tim,

Thank you for allowing General Electric Healthcare (GEHC) the opportunity to earn your business. UNC Caldwell Memorial Hospital 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 1.5T MRI Scanner as part of your upcoming GE Optima MR450w 32ch GEM 1.5T MRI purchase and estimate the de-installation and removal will be completed at no additional charge to UNC Caldwell Memorial Hospital. UNC Caldwell Memorial Hospital 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,

F. Scott Ramsey
MR Product Manager, NC
General Electric Healthcare
919-621-1657
scott.ramsey@ge.com

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

For Official Use Only

License # H0061

Medicare # 340041

FID #: 933051

PC LS

Date 1/13/16

License Fee:

\$2,375.00

2016
HOSPITAL LICENSE
RENEWAL APPLICATION

Legal Identity of Applicant: Caldwell Memorial Hospital, Inc.
(Full legal name of corporation, partnership, individual, or other legal entity owning the enterprise or service.)

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

PRIMARY: Caldwell Memorial Hospital, Inc.
Other: d/b/a Caldwell
Other: _____

Facility Mailing Address: P.O. Box 1890
Lenoir, NC 28645

Facility Site Address: 321 Mulberry St SW
Lenoir, NC 28645
County: Caldwell
Telephone: (828)757-5100
Fax: (828)757-5512

Administrator/Director: Laura J Easton
Title: PRESIDENT/CEO
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Chief Executive Officer: Laura J. Easton Title: President / CEO
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

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

Name: JACKIE G. BERRY Telephone: (828) 757-5214
E-Mail: jackie.berry@unchealth.unc.edu

PAID
CK NO. 229319
DATE 1-12-16
\$2,375

All responses should pertain to October 1, 2014 through September 30, 2015.

Imaging Procedures

(Campus – If multiple sites: Hospital - CMH)

20 Most Common Outpatient Imaging Procedures Table - Enter the number of the top 20 common imaging procedures performed in the ambulatory setting or outpatient department in the table below by CPT code.

CPT Code	Description	Procedures
70450	Computed tomography, head or brain; without contrast material	723
70553	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material followed by contrast material(s) and further sequences	281
71010	Radiologic examination, chest; single view, frontal	124
71020	Radiologic examination, chest; two views, frontal and lateral	4,447
71260	Computed tomography, thorax; with contrast material(s)	920
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing	1
72100	Radiologic examination, spine, lumbosacral; two or three views	725
72110	Radiologic examination, spine, lumbosacral; minimum of four views	195
72125	Computed tomography, cervical spine; without contrast material	306
73030	Radiologic examination, shoulder; complete, minimum of two views	1,036
73110	Radiologic examination, wrist; complete, minimum of three views	366
73130	Radiologic examination, hand; minimum of three views	848
73510	Radiologic examination, hip, unilateral; complete, minimum of two views	602
73564	Radiologic examination, knee; complete, four or more views	94
73610	Radiologic examination, ankle; complete, minimum of three views	572
73630	Radiologic examination, foot; complete, minimum of three views	730
74000	Radiologic examination, abdomen; single anteroposterior view	676
74022	Radiologic examination, abdomen; complete acute abdomen series, including supine, erect, and/or decubitus views, single view chest	1,137
74176	Computed tomography, abdomen and pelvis; without contrast material	1,465
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	1,433

All responses should pertain to October 1, 2014 through September 30, 2015.

Imaging Procedures

(Campus – If multiple sites: Hancock Surgery Center-H50)

20 Most Common Outpatient Imaging Procedures Table - Enter the number of the top 20 common imaging procedures performed in the ambulatory setting or outpatient department in the table below by CPT code.

N/A

CPT Code	Description	Procedures
70450	Computed tomography, head or brain; without contrast material	
70553	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material followed by contrast material(s) and further sequences	
71010	Radiologic examination, chest; single view, frontal	
71020	Radiologic examination, chest; two views, frontal and lateral	
71260	Computed tomography, thorax; with contrast material(s)	
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing	
72100	Radiologic examination, spine, lumbosacral; two or three views	
72110	Radiologic examination, spine, lumbosacral; minimum of four views	
72125	Computed tomography, cervical spine; without contrast material	
73030	Radiologic examination, shoulder; complete, minimum of two views	
73110	Radiologic examination, wrist; complete, minimum of three views	
73130	Radiologic examination, hand; minimum of three views	
73510	Radiologic examination, hip, unilateral; complete, minimum of two views	
73564	Radiologic examination, knee; complete, four or more views	
73610	Radiologic examination, ankle; complete, minimum of three views	
73630	Radiologic examination, foot; complete, minimum of three views	
74000	Radiologic examination, abdomen; single anteroposterior view	
74022	Radiologic examination, abdomen; complete acute abdomen series, including supine, erect, and/or decubitus views, single view chest	
74176	Computed tomography, abdomen and pelvis; without contrast material	
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	

All responses should pertain to October 1, 2014 through September 30, 2015.

Imaging Procedures

(Campus – If multiple sites: Combined - CMH + HSC)

20 Most Common Outpatient Imaging Procedures Table - Enter the number of the top 20 common imaging procedures performed in the ambulatory setting or outpatient department in the table below by CPT code.

CPT Code	Description	Procedures
70450	Computed tomography, head or brain; without contrast material	723
70553	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material followed by contrast material(s) and further sequences	287
71010	Radiologic examination, chest; single view, frontal	124
71020	Radiologic examination, chest; two views, frontal and lateral	4,447
71260	Computed tomography, thorax; with contrast material(s)	920
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing	1
72100	Radiologic examination, spine, lumbosacral; two or three views	725
72110	Radiologic examination, spine, lumbosacral; minimum of four views	195
72125	Computed tomography, cervical spine; without contrast material	301e
73030	Radiologic examination, shoulder; complete, minimum of two views	636
73110	Radiologic examination, wrist; complete, minimum of three views	366
73130	Radiologic examination, hand; minimum of three views	848
73510	Radiologic examination, hip, unilateral; complete, minimum of two views	602
73564	Radiologic examination, knee; complete, four or more views	94
73610	Radiologic examination, ankle; complete, minimum of three views	572
73630	Radiologic examination, foot; complete, minimum of three views	730
74000	Radiologic examination, abdomen; single anteroposterior view	676
74022	Radiologic examination, abdomen; complete acute abdomen series, including supine, erect, and/or decubitus views, single view chest	1,137
74176	Computed tomography, abdomen and pelvis; without contrast material	1,465
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	1,433

All responses should pertain to October 1, 2014 through September 30, 2015.

10a. Magnetic Resonance Imaging (MRI) Procedures by CPT Codes

Indicate the number of procedures performed during the 12-month reporting period at your facility. For hospitals that operate medical equipment at multiple sites/campuses, please copy the MRI pages and provide separate data for each site/campus. Campus – *if multiple sites:* _____

CPT Code	CPT Description	Inpatient Procedures	Outpatient Procedures	Total Number of Procedures
70336	MRI Temporomandibular Joint(s)			
70540	MRI Orbit/Face/Neck w/o	1	0	1
70542	MRI Orbit/Face/Neck with contrast	2	11	13
70543	MRI Orbit/Face/Neck w/o & with	21	31	52
70544	MRA Head w/o			
70545	MRA Head with contrast			
70546	MRA Head w/o & with	4	7	11
70547	MRA Neck w/o			
70548	MRA Neck with contrast	220	327	547
70549	MRA Neck w/o & with	1	2	3
70551	MRI Brain w/o	56	231	287
70552	MRI Brain with contrast			
70553	MRI Brain w/o & with			
70554	MR functional imaging, w/o physician admin	0	1	1
70555	MR functional imaging, with physician admin			
71550	MRI Chest w/o	0	1	1
71551	MRI Chest with contrast			
71552	MRI Chest w/o & with	12	111	123
71555	MRA Chest with OR without contrast			
72141	MRI Cervical Spine w/o	3	43	46
72142	MRI Cervical Spine with contrast	10	25	35
72156	MRI Cervical Spine w/o & with			
72146	MRI Thoracic Spine w/o	4	20	24
72147	MRI Thoracic Spine with contrast	23	265	288
72157	MRI Thoracic Spine w/o & with			
72148	MRI Lumbar Spine w/o	11	97	108
72149	MRI Lumbar Spine with contrast			
72158	MRI Lumbar Spine w/o & with	4	4	8
72159	MRA Spinal Canal w/o OR with contrast			
72195	MRI Pelvis w/o	3	26	29
72196	MRI Pelvis with contrast	0	1	1
72197	MRI Pelvis w/o & with			
72198	MRA Pelvis w/o OR with contrast			
73218	MRI Upper Ext, other than joint w/o	5	1	6
73219	MRI Upper Ext, other than joint with contrast			
Subtotals for this page		380	1,204	1,584

All responses should pertain to October 1, 2014 through September 30, 2015.

10b. MRI CPT Code Procedure Summary (Summary of CPT Codes in Table 10a)

Inpatient Procedures*			Outpatient Procedures*			TOTAL** Procedures
With Contrast or Sedation	Without Contrast or Sedation	TOTAL** Inpatient	With Contrast or Sedation	Without Contrast or Sedation	TOTAL** Outpatient	
140	335	475	612	1,012	1,624	2,099

* An MRI procedure is defined as a single discrete MRI study of one patient (single CPT coded procedure). An MRI study means one or more scans relative to a single diagnosis or symptom.

** Totals must match totals in Table 10a on page 16 and must be greater than or equal to the totals in the MRI Patient Origin Table on page 34 of this application.

10c. Fixed MRI

Indicate the number of MRI scanners (units) operated during the 12-month reporting period at your facility. For hospitals that operate medical equipment at multiple sites/campuses, please copy the MRI pages and provide separate data for each site/campus. Campus – if multiple sites: _____

Fixed Scanners	Number of Units
Number of fixed MRI scanners-closed (<i>do not include any Policy AC-3 scanners</i>)	1
# of fixed MRI scanners-open (<i>do not include any Policy AC-3 scanners</i>)	
Number of Policy AC-3 MRI scanners used for general clinical purposes	
Total Fixed MRI Scanners	1

10d. Mobile MRI

Indicate the number of procedures performed on mobile MRI scanners (units) operated during the 12-month reporting period at your facility. For hospitals that use mobile equipment at multiple sites/campuses, please copy the MRI pages and provide separate data for each site/campus. Campus – if multiple sites: _____

Mobile Procedures	Inpatient Procedures*			Outpatient Procedures*			TOTAL Procedures
	With Contrast or Sedation	Without Contrast or Sedation	TOTAL Inpatient	With Contrast or Sedation	Without Contrast or Sedation	TOTAL Outpatient	
Scans on mobile MRI performed only at this site							

* An MRI procedure is defined as a single discrete MRI study of one patient (single CPT coded procedure). An MRI study means one or more scans relative to a single diagnosis or symptom.

All responses should pertain to October 1, 2014 through September 30, 2015.

Patient Origin - MRI Services

Facility County: Caldwell

In an effort to document patterns of utilization of MRI Services in North Carolina, hospitals are asked to provide county of residence for each patient served in your facility. The total number of patients reported here should be equal to or less than the total number of MRI procedures reported in Table 10a. on page 16.

County	No. of Patients	County	No. of Patients	County	No. of Patients
1. Alamance		37. Gates		73. Person	
2. Alexander	11	38. Graham		74. Pitt	
3. Alleghany		39. Granville		75. Polk	
4. Anson		40. Greene		76. Randolph	
5. Ashe	5	41. Guilford		77. Richmond	
6. Avery	4	42. Halifax		78. Robeson	
7. Beaufort		43. Harnett		79. Rockingham	
8. Bertie		44. Haywood		80. Rowan	1
9. Bladen		45. Henderson		81. Rutherford	
10. Brunswick	2	46. Hertford		82. Sampson	
11. Buncombe		47. Hoke		83. Scotland	
12. Burke	47	48. Hyde		84. Stanly	
13. Cabarrus		49. Iredell		85. Stokes	
14. Caldwell	1,978	50. Jackson	1	86. Surry	
15. Camden		51. Johnston	1	87. Swain	
16. Carteret		52. Jones		88. Transylvania	
17. Caswell		53. Lee		89. Tyrrell	
18. Catawba	16	54. Lenoir		90. Union	
19. Chatham		55. Lincoln		91. Vance	
20. Cherokee		56. Macon		92. Wake	
21. Chowan		57. Madison		93. Warren	
22. Clay		58. Martin		94. Washington	
23. Cleveland	1	59. McDowell	2	95. Watauga	12
24. Columbus		60. Mecklenburg		96. Wayne	
25. Craven		61. Mitchell		97. Wilkes	8
26. Cumberland		62. Montgomery		98. Wilson	
27. Currituck		63. Moore		99. Yadkin	
28. Dare		64. Nash		100. Yancey	
29. Davidson		65. New Hanover			
30. Davie		66. Northampton		101. Georgia	1
31. Duplin		67. Onslow		102. South Carolina	2
32. Durham		68. Orange		103. Tennessee	
33. Edgecombe		69. Pamlico		104. Virginia	6
34. Forsyth		70. Pasquotank		105. Other States	
35. Franklin		71. Pender		106. Other	
36. Gaston	1	72. Perquimans		Total No. of Patients	2,099

Are mobile MRI services currently provided at your hospital? Yes _____ No ✓