Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation

Sent to Office of Health Care Access
Via Federal Express Overnight
Thursday, 12.15, 2016 for Delivery Friday, 12.16.2016

Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation
Checklist

Instructions:

1. Please check each box below, as appropriate; and
2. The completed checklist *must* be submitted as the first page of the CON application.

☒ Attached is a paginated hard copy of the CON application including a completed affidavit, signed and notarized by the appropriate individuals.

☒ *(*New*).* A completed supplemental application specific to the proposal type can be found on OHCA's website at "OHCA Forms." A list of supplemental forms can be found on page 2.

☒ Attached is the CON application filing fee in the form of a certified, cashier or business check made out to the "Treasurer State of Connecticut" in the amount of $500.

☒ Attached is evidence demonstrating that public notice has been published in a suitable newspaper that relates to the location of the proposal, 3 days in a row, at least 20 days prior to the submission of the CON application to OHCA. *(OHCA requests that the Applicant fax a courtesy copy to OHCA (860) 418-7053, at the time of the publication)*

☒ Attached is a completed Financial Attachment
   1. OHCA Financial Workbook A
   2. DKH Financial Worksheet A - Supplemental

☒ Submission includes one (1) original hardcopy in a 3-ring binder and a USB flash drive containing:

   1. A scanned copy of each submission in its entirety, including all attachments in Adobe (.pdf) format.
   2 An electronic copy of the applicant's responses in MS Word (the applications) and MS Excel (the financial attachment).

For OHCA Use Only:

Docket No.: 16-32142-CON **Check No.:** 0576077
OHCA Verified by: SW **Date:** 12/26/16

THE ORIGINAL DOCUMENT HAS A WHITE REFLECTIVE WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW. DO NOT CASH IF NOT PRESENT.

THE CITIZENS NATIONAL BANK
PUTNAM, CT. 06260

51-213
111

Check Number
0576077

VOID VOID

DKH

Day Kimball Hospital

PO Box 6001 / Putnam, Connecticut 06260
(860) 928-6541 X2224

Date	AMOUNT
12/08/2016	*******500.00

*******500 DOLLARS 00 CENTS

PAY TO THE
ORDER OF

VOID

STATE OF CT, DPH
CONTRACTS/GRANTS MS#13GCT
PO BOX 340308
HARTFORD CT 06134-0308

Paul A. Beaulieu
Authorized Signature

[redacted]

DKH

Day Kimball Hospital
320 Pomfret Street/P.O. Box 6001
Putnam, Ct. 06260-6001

ACCOUNTS PAYABLE
Tel # (860) 928 - 6541 X2224
Fax # (860) 928 - 5341
Tax ID# 06-0646599
Tax Exempt # E-01604

Invoice Date	Description/Invoice #	Voucher Number	Gross Amount	Discount	Net Amount
12/07/16	MRI CON APPLIC FEE	284422	500.00	.0	500.00

Check Number	Vendor No.	Vendor Name	Check Date	Total Amount
0576077	9352	STATE OF CT, DPH	12/08/2016	*******500.00

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State of Connecticut
Department of Public Health
Office of Health Care Access

Certificate of Need Application
Main Form
Required for all CON applications

Contents:

Supplemental Forms

In addition to completing this **Main Form** and **Financial Worksheet (A, B or C)**, the applicant(s) must complete the appropriate **Supplemental Form** listed below. Check the box of the **Supplemental Form** to be submitted with the application, below. If unsure which form to select, please call the OHCA main number (860-418-7001) for assistance. All CON forms can be found on OHCA's website at OHCA Forms.

Check form included	Conn. Gen. Stat. Section 19a-638(a)	Supplemental Form
☐	(1)	**Establishment of a new health care facility (mental health and/or substance abuse)** - *see note below**
☐	(2)	**Transfer of ownership of a health care facility** (excludes transfer of ownership/sale of hospital – see "Other" below)
☐	(3)	**Transfer of ownership of a group practice**
☐	(4)	**Establishment of a freestanding emergency department**
☒	(5) (7) (8) (15)	**Termination of a service:** - inpatient or outpatient services offered by a hospital - surgical services by an outpatient surgical facility** - emergency department by a short-term acute care general hospital - inpatient or outpatient services offered by a hospital or other facility or institution operated by the state that provides services that are eligible for reimbursement under Title XVIII or XIX of the federal Social Security Act, 42 USC 301, as amended
☐	(6)	**Establishment of an outpatient surgical facility**
☐	(9)	**Establishment of cardiac services**
☐	(10) (11)	**Acquisition of equipment:** - acquisition of computed tomography scanners, magnetic resonance imaging scanners, positron emission tomography scanners or positron emission tomography-computed tomography scanners - acquisition of nonhospital based linear accelerators
☐	(12)	**Increase in licensed bed capacity** of a health care facility
☐	(13)	**Acquisition of equipment utilizing [new] technology** that has not previously been used in the state
☐	(14)	**Increase of two or more operating rooms** within any three-year period by an outpatient surgical facility or short-term acute care general hospital
☐	Other	**Transfer of Ownership / Sale of Hospital**

***This supplemental form should be included with all applications requesting authorization for the establishment of a **mental health and/or substance abuse treatment facility**. For the establishment of other "health care facilities," as defined by Conn. Gen. Stat § 19a-630(11) - hospitals licensed by DPH under chapter 386v, specialty hospitals, or a central service facility - complete *the Main Form* only.

**If termination is due to insufficient patient volume, or it is a subspecialty being terminated, a CON is not required.

Proposal Information

Select the appropriate proposal type from the dropdown below. If unsure which item to select, please call the OHCA main number (860-418-7001) for assistance.

Proposal Type (select from dropdown)	Choose an item.
Brief Description	**Relocation & Consolidation of a free standing old fixed MRI service, with a limited range of diagnostic procedures available, to the main Hospital campus MRI service with enhanced range of diagnostic procedures available to the community.**
Proposal Address	**Frees standing location is at 39 Kennedy Drive, Putnam CT. Hospital main campus is at 320 Pomfret Street, Putnam CT.**
Capital Expenditure	**$ -0-**

Is this Application the result of a Determination indicating a CON application must be filed?

☒ No

☐ Yes, Docket Number: Click here to enter text.

Applicant(s) Information

	Applicant One	**Applicant Two*** (if applicable)
Applicant Name & Address	Day Kimball Healthcare, Inc. D/B/A Day Kimball Hospital 320 Pomfret Street Putnam, CT 06260	
Parent Corporation Name & Address (if applicable)		
Contact Person Name	Douglas P. Glazier	
Title	Financial & Systems Consultant	
Email Address	dpglazier@daykimball.org	
Phone	860 928-6541 ext. 2026	
Fax Number		
Tax Status (check one box)	☐ For Profit ☒ Not-for-Profit	☐ For Profit ☐ Not-for-Profit

**For more than two Applicants, attach a separate sheet with the above information*

FOR OFFICE USE ONLY	
Docket #:	Staff Assigned :
Date Received:	

Affidavit

Applicant: **Day Kimball Healthcare, Inc.**

Project Title: **Relocation & Consolidation of Satellite MRI Services**

I, **Paul A. Beaudoin** (Name), **Vice Pres of Finance & CFO** (Position – CEO or CFO)

of **Day Kimball Health Care, Inc**. being duly sworn, depose and state that the said facility complies with the appropriate and applicable criteria as set forth in the Sections 19a-630, 19a-637, 19a-638, 19a-639, 19a-486 and/or 4-181 of the Connecticut General Statutes.

Signature

12/14/16
Date

Subscribed and sworn to before me on December 14, 2016

Notary Public/Commissioner of Superior Court

My commission expires: June 30, 2021

AMY L. FRANKLIN
Notary Public, State of Connecticut
My Commission Expires June 30, 2021

Executive Summary

The purpose of the Executive Summary is to give the reviewer a conceptual understanding of the proposal. In the space below, provide a succinct overview of your proposal (this may be done in bullet format). Summarize the key elements of the proposed project. Details should be provided in the appropriate sections of the application that follow.

Day Kimball Hospital (DKH) has provided MRI services at three locations:

- **Mobile MRI 1.5 Tesla on the Hospital main campus at 320 Pomfret Street, Putnam, CT (Scheduled 6 days per week)**
- **Mobile MRI 1.5 Tesla at 12 Lathrop Road, Plainfield, CT site (Scheduled 1 day per week - Saturday)**
- **A Fixed MRI 1.0Tesla at 39 Kennedy Drive, Putnam established December, 2010 ON Docket # 10-31602-CON (Services scheduled 5 days per week)**

DKH has proposed the relocation and consolidation of the MRI Services provided at 39 Kennedy Drive, Putnam to the Main Campus of the Hospital at 320 Pomfret Street, Putnam CT a distance of approximately 1 mile.

- **Expect no loss of services available to members of the community but an actual enhancement to the range of services available.**
  - **Transportations services available to Kennedy Drive also serve the Hospital's Main Campus.**
  - **On site physician enhances the complexity of services available at Main Campus.**
  - **Newer equipment on Main Campus provides an expanded range of service capabilities.**

- **Fixed Unit at Kennedy Drive is a refurbished 1998 GE 1.0 Tesia strength closed short bore CX Conquest and has become outdated.**
  - **The 1.0T equipment is 18 years old and no longer manufactured by GE or Phillips, Siemens and Toshiba.**
  - **Both the equipment vintage and location limited range & complexity of services available to the community**
  - **In an informal survey of other hospitals, 39 of 39 MRI's identified (closed units) were 1.5T machines or greater.**

- **Healthcare Radiology environment has undergone substantial market changes resulting in volume reductions in aggregate at all 3 MRI service sites which forced evaluation of cost considerations:**
  - **Approximate direct cost savings as a result of consolidation to main campus – fully implemented $300,941 per year.**

Pursuant to Section 19a-639 of the Connecticut General Statutes, the Office of Health Care Access is required to consider specific criteria and principles when reviewing a Certificate of Need application. Text marked with a "§" indicates it is actual text from the statute and may be helpful when responding to prompts.

Project Description

1. Provide a detailed narrative describing the proposal. Explain how the Applicant(s) determined the necessity for the proposal and discuss the benefits for each Applicant separately (if multiple Applicants). Include all key elements, including the parties involved, what the proposal will entail, the equipment/service location(s), the geographic area the proposal will serve, the implementation timeline and why the proposal is needed in the community.

   The proposal is to relocate & consolidate the fixed unit MRI <u>services</u> (1.0 Tesla equipment) from 39 Kennedy Drive, Putnam, CT. to the Hospital's main campus existing Mobile MRI operations (1.5 Tesla equipment) located 1 mile away with no anticipated changes in the population served.

   As noted in OHCA Table 1, the main campus already has extended hours of operations (16 hrs. 6 days per week) vs. Kennedy Drive (8 hrs. 5 days per week) which expands the availability to the community.

   As demonstrated in DKH Exhibit A, the range of services available to the community is also enhanced as a result of the new technology and physician on site presence at the main campus location.

   The major benefits to DKH, is a more efficient operations with significant annual cost reduction ($300,914 annually) and no loss of services available to the community.

   For the patients, the MR studies can be performed faster with higher image quality on the 1.5Tesla equipment.

2. Provide the history and timeline of the proposal (i.e., When did discussions begin internally or between Applicant(s)? What have the Applicant(s) accomplished so far?).

   The operations of the 39 Kennedy Drive, Putnam CT off site Fixed Unit MRI services were established under Day Kimball Healthcare, Inc. D/B/A Day Kimball Hospital (DKH) in December 2010 with the acquisition of the Refurbished 1998 GE 1.0 Tesla Signa Lx Magnet from a Radiology Group.

   It was the subject of a CON (docket number 10-31602-CON) approved December 22, 2010.

Discussions concerning the financial performance of this service location along with many other DKH programs began during the DKH financial crisis in 2013.

The program review became even more intense as the DKH financial crisis continued into 2014, volume remained low, high per unit costs and the multiple year equipment lease, facility lease, service contracts, service provider contracts were all coming up for renewal during the 4th quarter of calendar 2014.

The types/range of services which could be provide at the 39 Kennedy Drive MRI location were limited by a combination of 1) age of the equipment & range of capabilities compare to newer models and 2) lack of physician presence at the facility.

The Hospital main campus was located 1 mile away from the Kennedy Drive site, which had a more modern 1.5T Mobile MRI equipment with available capacity and physician presence which in combination allowed for a wider range of services to be available to the community.

DKH decided to relocate and consolidate the 39 Kennedy Drive operations to the Hospital's main campus as of 11/30/14. It expected to provide services to the same community with enhance capabilities available to the community 39 Kennedy Drive served and save approximately $300,941 per year.

3. Provide the following information:

   a. utilizing **OHCA Table 1**, list all services to be added, terminated or modified, their physical location (street address, town and zip code), the population to be served and the existing/proposed days/hours of operation;

   See attached

   b. identify in **OHCA Table 2** the service area towns and the reason for their inclusion (e.g., provider availability, increased/decreased patient demand for service, market share);

   See attached

4. List the health care facility license(s) that will be needed to implement the proposal;

   None

5. Submit the following information as attachments to the application:

   a. a copy of all State of Connecticut, Department of Public Health license(s) currently held by the Applicant(s);

See Exhibit B – State License

b. a list of all key professional, administrative, clinical and direct service personnel related to the proposal and attach a copy of their Curriculum Vitae;

See Exhibit C – Curriculum Vitae of Director of Radiology who joined Day Kimball Hospital in May, 2014.

c. copies of any scholarly articles, studies or reports that support the need to establish the proposed service, along with a brief explanation regarding the relevance of the selected articles;

Not Applicable, no new service being proposed.

d. letters of support for the proposal;

Not Applicable

e. the protocols or the Standard of Practice Guidelines that will be utilized in relation to the proposal. Attach copies of relevant sections and briefly describe how the Applicant proposes to meet the protocols or guidelines.

Not Applicable, service site is being consolidated to other existing sites.

f. copies of agreements (e.g., memorandum of understanding, transfer agreement, operating agreement) related to the proposal. If a final signed version is not available, provide a draft with an estimated date by which the final agreement will be available.

Not Applicable, there are no agreements to be executed for the consolidation to within existing DKH sites.

Public Need and Access to Care

§ *"Whether the proposed project is consistent with any applicable policies and standards adopted in regulations by the Department of Public Health;" (Conn.Gen.Stat. § 19a-639(a)(1))*

6. Describe how the proposed project is consistent with any applicable policies and standards in regulations adopted by the Connecticut Department of Public Health.

Not Applicable. The CON is to close a service site. There are no continuing operations at 39 Kennedy to apply DPH policies and standards too.

§ "The relationship of the proposed project to the statewide health care facilities and services plan;" (Conn.Gen.Stat. § 19a-639(a)(2))

7. Describe how the proposed project aligns with the Connecticut Department of Public Health Statewide Health Care Facilities and Services Plan, available on OHCA's website.

The closure of the Kennedy Drive site has no impact on Statewide Services Plan. The identical and enhanced MRI service capability is available on an expanded operations schedule within 1 mile of Kennedy Drive location.

§ "Whether there is a clear public need for the health care facility or services proposed by the applicant;" (Conn.Gen.Stat. § 19a-639(a)(3))

8. With respect to the proposal, provide evidence and documentation to support clear public need:

   a. identify the target patient population to be served;

      See OHCA Table 1 and Table 2 for Primary Service Area.

   b. discuss how the target patient population is currently being served;

      As described in the Executive Summary, and noted in OHCA Table 1, DKH provided the MRI services in three locations in the community.

   c. document the need for the equipment and/or service in the community

      Not Applicable, a service site is being consolidated, no equipment is being purchased and an enhanced range of services are available within 1 mile.

   d. explain why the location of the facility or service was chosen;

      Not Applicable, not a new service or location.

   e. provide incidence, prevalence or other demographic data that demonstrates community need;

      Not Applicable, not a new service or location.

   f. discuss how low income persons, racial and ethnic minorities, disabled persons and other underserved groups will benefit from this proposal;

      As discussed in other portions of the CON application, access is extended with an operations schedule which is 16 hours per day and the range of services available is also enhanced with location on the Hospital's main campus with more modern technology & physician presence.

   g. list any changes to the clinical services offered by the Applicant(s) and explain why the change was necessary;

      The same range of services continues to be provided to the 90,000+ primary service area population DKH serves at the remaining two physical sites.

h. explain how access to care will be affected; and

DKH expects to retain this Kennedy Drive population with enhanced access to services as a result of:

- **Main Campus has more than adequate capacity**
- **Less than 1 mile separation in locations**
- **Expanded range of service capabilities**
- **Extended operations schedule of 16 hrs. per day**
- **Availability of same transportation services options**

i. discuss any alternative proposals that were considered.

Briefly an investment in new equipment, establishing a Physician presence, and avenues to attract a greater volume of referrals were explored and discarded.

Each alternative required significant $$ investments by an already financially distressed DKH, into an operations that was substantially underperforming.

§ "Whether the applicant has satisfactorily demonstrated how the proposal will improve quality, accessibility and cost effectiveness of health care delivery in the region, including, but not limited to, (A) provision of or any change in the access to services for Medicaid recipients and indigent persons; (Conn.Gen.Stat. § 19a-639(a)(5))

9. Describe how the proposal will:

a. improve the quality of health care in the region;

As discussed in other sections of the CON, the range of MRI diagnostic services available at the Hospital's Main Campus is greater than 39 Kennedy Drive due to the technology issues and physician presence.

The 18 year old MRI 1.0Tesler low field magnets are no longer considered the standard. As noted in the attached article "Advances in Whole-Body MRI Magnets" page 2 (DKH Exhibit D).

All major manufacturers (GE, Philips, Siemens and Toshiba) had stopped the production & sale of the 1.0 Tesla equipment by 2005.

In the same article, "Their (referring to 1.0T machines) marginally-lower

cost was insufficient to outweigh the advantages of the commercial 1.5T systems in faster patient throughput and better image quality."

With no production or sales of the equipment for the last 10 years, there is minimal to no literature discussing the 1.0 Tesla machines.

As can be noted from the articles from ECRI in DKH Exhibit E - MR System Field Strengths and Bore Sizes and DKH Exhibit F- Do you Need a 3 Tesla MR system, all references and recommendations focus on the 1.5 Tesla or a 3.0 Tesla machine. No reference to the option of a 1.0 Tesla machine.

DKH Exhibit G – 2015 MR Market Outlook report (page 3) indicates the MRI installed Base for units < than 1.5 Tesla had decline from 39% in 2004 to 13% in 2015.

The Hospital Main Campus operates a newer 1.5Teslar machine making the improved quality and with an enhance range of services available to the Kennedy Drive patient population.

b. improve accessibility of health care in the region; and

The project does not enhance nor distract from the accessibility of health care in the region. The consolidation of the service to the main campus is a move of less than 1 mile.

All transportation options for the community members remain the same as the old Kennedy Drive location.

As previously noted, the actual MRI range of service capabilities are enhanced from those previously available at Kennedy Drive.

c. improve the cost effectiveness of health care delivery in the region.

As previously noted, the consolidation of Kennedy Drive to the Hospital's main campus is expected to generate a direct cost savings approximating $300,941 annually.

10. How will the Applicant(s) ensure that future health care services provided will adhere to the National Standards on culturally and Linguistically Appropriate Services (CLAS) to advance health equity, improve quality and help eliminate health care disparities in the projected service area. (More details on CLAS standards can be found at http://minorityhealth.hhs.gov/).

All three MRI sites were considered hospital based and as such were required to meet the same standards as the main hospital campus operations.

With the consolidation to the main hospital campus, the combined operations will continue to meet all necessary standards that are applied to hospital operations.

11. How will this proposal help improve the coordination of patient care (explain in detail regardless of whether your answer is in the negative or affirmative)?

    It will all be transparent to the patient, The 39 Kennedy Drive location has been operated as part of Day Kimball Hospital Radiology Department.

    It has been managed by the same personal at Day Kimball Hospital, utilize the same scheduling system, integrated into the same patient EMR and results reporting process.

    The same referring physicians already use both the satellite MRI location and the Hospital Main Campus MRI location. In addition, the physicians use other diagnostic services located at the Hospital main campus.

12. Describe how this proposal will impact access to care for Medicaid recipients and indigent persons.

    The proposed consolidation will have no impact on the access to care for Medicaid recipients and indigent persons or any other class of patients.

    DKH followed the same policy and procedures for all class of patients for all 3 MRI service locations with no anticipated changes to occur.

    Physically, the consolidation is less than a 1 mile change in destination and all the same means of transportation are available to the Hospital Main Campus.

13. Provide a copy of the Applicant's charity care policy and sliding fee scale applicable to the proposal.

    The policies for DKH are already on file with OCHA as part of the annual reporting requirements.

    The MRI at Kennedy Drive was operated as part of Day Kimball Hospital and as such followed the same policies.

§ "Whether an applicant, who has failed to provide or reduced access to services by Medicaid recipients or indigent persons, has demonstrated good cause for doing so, which shall not be demonstrated solely on the basis of differences in reimbursement rates between Medicaid and other health care payers;" (Conn.Gen.Stat. § 19a-639(a)(10))

14. If the proposal fails to provide or reduces access to services by Medicaid recipients or indigent persons, provide explanation of good cause for doing so

Not Applicable.

> *§ "Whether the applicant has satisfactorily demonstrated that any consolidation resulting from the proposal will not adversely affect health care costs or accessibility to care." (Conn.Gen.Stat. § 19a-639(a)(12))*

15. Will the proposal adversely affect patient health care costs in any way? Quantify and provide the rationale for any changes in price structure that will result from this proposal, including, but not limited to, the addition of any imposed facility fees.

No adverse impact on health care costs expected.

Financial Information

> *§ "Whether the applicant has satisfactorily demonstrated how the proposal will impact the financial strength of the health care system in the state or that the proposal is financially feasible for the applicant;" (Conn.Gen.Stat. § 19a-639(a)(4))*

16. Provide the Applicant's fiscal year: start date (mm/dd) and end date (mm/dd).

10/01 to 09/30

17. Describe the impact of this proposal on the financial strength of the state's health care system or demonstrate that the proposal is financially feasible for the applicant.

Don't anticipate any impact on State's health care system as no anticipated change in volume or reimbursement rates received by DKH.

DKH is projecting a direct cost reduction of approximately $300,941 per year.

18. Provide a final version of all capital expenditure/costs for the proposal using **OHCA Table 3**.

As noted on OHCA Table 3, there is no capital expenditure for this proposal.

19. List all funding or financing sources for the proposal and the dollar amount of each. Provide applicable details such as interest rate; term; monthly payment; pledges and funds received to date; letter of interest or approval from a lending institution.

Not Applicable.

20. Include as an attachment:

    a. audited financial statements for the most recently completed fiscal year. If audited financial statements do not exist, provide other financial documentation (e.g., unaudited balance sheet, statement of operations, tax return, or other set of books). Connecticut hospitals required to submit annual audited financial statements may reference that filing, if current;

    All audited financial statements through September 30, 2015 are on file with OHCA as required in annual data submissions.

    September 30, 2016 audited financial statements have not been finalized and published at this point in time.

    b. completed **Financial Worksheet A (non-profit entity), B (for-profit entity) or C (§19a-486a sale)**, available on OHCA's website under OHCA Forms, providing a summary of revenue, expense, and volume statistics, "without the CON project," "incremental to the CON project," and "with the CON project." **Note: the actual results reported in the Financial Worksheet must match the audited financial statement that was submitted or referenced.**

    See OHCA Worksheet A Attached

21. Complete **OHCA Table 4** utilizing the information reported in the attached Financial Worksheet.

    See OHCA Table 4 Attached

22. Explain all assumptions used in developing the financial projections reported in the Financial Worksheet.

    For simplicity of forecast and isolation of true historical cost impact the assumptions are as follows:

    - **No loss of units of service provided at Kennedy Drive will occur as a result of the 1 mile relocation & consolidation**
    - **Payor mix will remain constant**
    - **Reimbursement Rates will remain constant**
    - **No inflationary cost increase included in future projections**

23. Explain any projected incremental losses from operations resulting from the implementation of the CON proposal.

    Not Applicable, no incremental losses anticipated.

24. Indicate the minimum number of units required to show an incremental gain from operations

for each projected fiscal year.

Not Applicable, no incremental losses are expected to be generated from the CON in any year.

Proposal already has an incremental gain from operations through the identified cost reductions ($300,941).

Utilization

§ "The applicant's past and proposed provision of health care services to relevant patient populations and payer mix, including, but not limited to, access to services by Medicaid recipients and indigent persons;" (Conn.Gen.Stat. § 19a-639(a)(6))

25. Complete **OHCA Table 5** and **OHCA Table 6** for the past three fiscal years ("FY"), current fiscal year ("CFY") and first three projected FYs of the proposal, for each of the Applicant's existing and/or proposed services. Report the units by service, service type or service level.

    See attached OHCA Table 5 and OHCA Table 6.

26. Provide a detailed explanation of all assumptions used in the derivation/ calculation of the projected service volume; explain any increases and/or decreases in volume reported in OHCA Table 5 and 6.

    As noted above in question 25, there was no anticipated loss of units of service provided at Kennedy Drive when consolidation location 1 mile away at the Hospital's main campus occurs.

    Also, there was no expected net growth in the MRI services for the purposes of this evaluation.

    Given the Health Care market environment high deductible health plans and stricter pre-certification criteria DKH has experienced from all sites an overall decline in MRI procedures in 2016.

    Overall procedures have been held essentially flat for projected years 2017, 2018, & 2019.

27. Provide the current and projected patient population mix (number and percentage of patients by payer) for the proposal using **OHCA Table 7** and provide all assumptions. **Note: payer mix should be calculated from patient volumes, not patient revenues.**

    See attached OHCA Table 7.

    As previously noted, there is no expectation the patient population will change or in the payor mix will change. Shifting 100% of identical volume from one location to another.

§ "Whether the applicant has satisfactorily identified the population to be served by the proposed project and satisfactorily demonstrated that the identified population has a need for the proposed services;" (Conn.Gen.Stat. § 19a-639(a)(7))

28. Describe the population (as identified in question 8(a)) by gender, age groups or persons with a specific condition or disorder and provide evidence (i.e., incidence, prevalence or other demographic data) that demonstrates a need for the proposed service or proposal. **Please note: if population estimates or other demographic data are submitted, provide only publicly available and verifiable information (e.g., U.S. Census Bureau, Department of Public Health, CT State Data Center) and document the source.**

    The proposal is a consolidation of two similar operations of an MRI service located less than a mile apart. There is no expected change in the population serviced by gender, age groups or other patient cohorts.

    The assumption has been the Kennedy Drive existing MRI volume will shift the 1 mile to the Hospitals main campus.

29. Using **OHCA Table 8**, provide a breakdown of utilization by town for the most recently completed fiscal year. Utilization may be reported as number of persons, visits, scans or other unit appropriate for the information being reported.

    The last full year of operations for the 39 Kennedy Drive MRI operations was FY 2014. We are attempting to segregate and identify the patient origin for that time period.

    DKH has no reason to believe it is not essentially identical to the Hospitals main campus patient origin. The assumption has been the Kennedy Drive volume will shift the 1 mile to the Hospitals main campus. The closest alternative is 20 miles away in Plainfield, CT.

§ "The utilization of existing health care facilities and health care services in the service area of the applicant;" (Conn.Gen.Stat. § 19a-639(a)(8))

30. Using **OHCA Table 9**, identify all existing providers in the service area and, as available, list the services provided, population served, facility ID (see table footnote), address, hours/days of operation and current utilization of the facility. Include providers in the towns served or proposed to be served by the Applicant, as well as providers in towns contiguous to the service area.

    Please see OHCA Table 9, there are 4 MRI operation sites in the DKH 13 town primary service area. Three of which are run by DKH and one in Plainfield operated by Backus Hospital.

    We are not aware of potential operations that may exist in our secondary service area which would have to include across state lines into Massachusetts & Rhode Island.

31. Describe the effect of the proposal on these existing providers.

The proposal has a nominal if any impact on the two MRI operations located in Plainfield (DKH & Backus). Both sites are approximately 20 miles from the Kennedy Drive location.

Assumption is the Kennedy Drive patients will travel the 1 mile to the Main Hospital Campus in Putnam. Many are already DKH patients for other services.

32. Describe the existing referral patterns in the area served by the proposal.

The physicians who currently refer to Kennedy Drive also refer to the Hospital Main Campus MRI and to other hospital based diagnostic services.

33. Explain how current referral patterns will be affected by the proposal.

Expect no change in patterns as scheduling for both Putnam MRI service locations were already being done out of the same DKH Radiology Administration functions.

Majority of the physicians utilize DKH for other services as well.

§ "Whether the applicant has satisfactorily demonstrated that the proposed project shall not result in an unnecessary duplication of existing or approved health care services or facilities;" (Conn.Gen.Stat. § 19a-639(a)(9))

34. If applicable, explain why approval of the proposal will not result in an unnecessary duplication of services.

Not Applicable, proposal is consolidating services.

§ "Whether the applicant has satisfactorily demonstrated that the proposal will not negatively impact the diversity of health care providers and patient choice in the geographic region;" (Conn.Gen.Stat. § 19a-639(a)(11))

35. Explain in detail how the proposal will impact (i.e., positive, negative or no impact) the diversity of health care providers and patient choice in the geographic region.

No impact. There were no changes in providers in the region.

The same two providers continue the MRI operations in Plainfield (DKH & Backus).

Existing provider (DKH) continues the MRI operations in Putnam on the Hospital Main Campus.

Tables

TABLE 1
APPLICANT'S SERVICES AND SERVICE LOCATIONS

Service	Street Address, Town	Population Served	Days/Hours of Operation	New Service or Proposed Termination
Mobile MRI Service	**320 Pomfret St, Putnam**	**90,000+**	**Sunday – Thursday 7 am to 11 PM**	**Continues**
Mobile MRI Service	**Lathrop Rd, Plainfield**	**90,000+**	**Saturday 9 am – 1 pm Monday – Friday**	**Continues**
Fixed MRI Service	**39 Kennedy Dr. Putnam**	**90,000+**	**9 am to 5 pm**	**Consolidate to Main Campus**

[back to question]

TABLE 2
SERVICE AREA TOWNS

List the official name of town* and provide the reason for inclusion.

Town*	Reason for Inclusion
Ashford **Brooklyn** **Canterbury** **Chaplin** **Eastford** **Hampton** **Killingly** **Plainfield** **Pomfret** **Putnam** **Sterling** **Thompson** **Woodstock**	**These 13 towns have been defined as Day Kimball Hospital's primary service areas for many years.**

* Village or place names are not acceptable.

[back to question]

TABLE 3
TOTAL PROPOSAL CAPITAL EXPENDITURE

Purchase/Lease	Cost
Equipment (Medical, Non-medical, Imaging)	**-0-**
Land/Building Purchase*	**-0-**
Construction/Renovation**	**-0-**
Other (specify)	**-0-**
Total Capital Expenditure (TCE)	**-0-**
Lease (Medical, Non-medical, Imaging)***	**-0-**
Total Lease Cost (TLC)	**-0-**
Total Project Cost (TCE+TLC)	**-0-**

* If the proposal involves a land/building purchase, attach a real estate property appraisal including the amount; the useful life of the building; and a schedule of depreciation.

** If the proposal involves construction/renovations, attach a description of the proposed building work, including the gross square feet; existing and proposed floor plans; commencement date for the construction/ renovation; completion date of the construction/renovation; and commencement of operations date.

*** If the proposal involves a capital or operating equipment lease and/or purchase, attach a vendor quote or invoice; schedule of depreciation; useful life of the equipment; and anticipated residual value at the end of the lease or loan term.

[back to question]

TABLE 4
PROJECTED INCREMENTAL REVENUES AND EXPENSES

	FY 2016*	FY 2017*	FY 2018*
Revenue from Operations	$ **-0-**	$ **-0-**	$ **-0-**
Total Operating Expenses	**(220,988)**	**(300,941)**	**(300,941)**
Gain/Loss from Operations	$ **220,988**	$ **300,941**	$ **300,941**

* Fill in years using those reported in the Financial Worksheet attached.

[back to question]

TABLE 5
HISTORICAL UTILIZATION BY SERVICE

Service**	Actual Volume (Last 3 Completed FYs)			Actual CFY Volume*
	FY 2013***	FY 2014***	FY 2015***	FY 2016***
Mobile MRI at Main Hospital Campus	4,704	4,681	4,717	4,691
Mobile MRI at Plainfield, CT	440	360	283	276
Fixed MRI at 39 Kennedy Drive	642	591	115	-0-
Total	5,786	5,632	5,115	4,967

* For periods greater than 6 months, report annualized volume, identifying the number of actual months covered and the method of annualizing. For periods less than 6 months, report actual volume and identify the period covered.
** Identify each service type and level adding lines as necessary. Provide the number of visits or discharges as appropriate for each service type and level listed.
*** Fill in years. If the time period reported is not *identical* to the fiscal year reported in Table 4 of the application, provide the date range using the mm/dd format as a footnote to the table.

[back to question]

TABLE 6
PROJECTED UTILIZATION BY SERVICE

Service*	Projected Volume		
	FY 2017**	FY 2018**	FY 2019**
Mobile MRI at Main Hospital Campus	4,777	4,777	4,777
Mobile MRI at Plainfield, Ct	279	279	279
Fixed MRI at 39 Kennedy Drive	-0-	-0-	-0-
Total	5,056	5,056	5,056

* Identify each service type by location and add lines as necessary. Provide the number of visits/discharges as appropriate for each service listed.
** If the first year of the proposal is only a partial year, provide the first partial year and then the first three full FYs. Add columns as necessary. If the time period reported is not *identical* to the fiscal year reported in Table 4 of the application, provide the date range using the mm/dd format as a footnote to the table.

[back to question]

TABLE 7
APPLICANT'S CURRENT & PROJECTED PAYER MIX

Payer	Estimated Actual CY FY 2016**		Projected					
			FY 2017**		FY 2018**		FY 2019**	
	Discharges	%	Discharges	%	Discharges	%	Discharges	%
Medicare*	1,654	33.30%	1,683	33.30%	1.683	33.30%	1,683	33.30%
Medicaid*	1,082	21.79%	1,102	21.79%	1,102	21.79%	1,102	21.79%
CHAMPUS & TriCare	25	.51%	26	.51%	26	.51%	11	.51%
Total Government	**2,761**	**55.60%**	**2,811**	**55.60%**	**2,811**	**55.60**	**2,811**	**55.60**
Commercial Insurers	1,866	37.56%	1,899	37.56%	1,899	37.56%	1,899	37.56%
Uninsured	50	1.01%	51	1.01%	51	1.01%	51	1.01%
Workers Compensation	290	5.83%	295	5.83%	295	5.83%	295	5.83%
Total Non-Government	**2,206**	**44.40%**	**2,245**	**44.40%**	**2,245**	**44.40%**	**2,245**	**44.40%**
Total Payer Mix	**4,967**	**100.00%**	**5,056**	**100.00%**	**5,056**	**100.00%**	**5,056**	**100.00%**

* Includes managed care activity.
** Fill in years. Ensure the period covered by this table corresponds to the period covered in the projections provided. New programs may leave the "current" column blank.

[back to question]

TABLE 8
UTILIZATION BY TOWN

Town	Last Full Year Utilization FY 2014**
Primary Service Area:	
Ashford	2
Brooklyn	44
Canterbury	11
Chaplin	1
Eastford	8
Hampton	3
Killingly	175
Plainfield	48
Pomfret	40
Putnam	95
Sterling	8
Thompson	54
Woodstock	68
Outside Primary Service Area	21
Out of State Patient Origin	14

* List inpatient/outpatient/ED volumes separately, if applicable
** Fill in most recently completed fiscal year.

[back to question]

TABLE 9
SERVICES AND SERVICE LOCATIONS OF EXISTING PROVIDERS

Service or Program Name	Population Served	Facility ID*	Facility's Provider Name, Street Address and Town	Hours/Days of Operation	Current Utilization
Mobile MRi	??	??	Backus Hospital Plainfield, CT	??	??
See Table 1	See Table 1		3 Sites operated by DKH Previously identified	See Table 1	

* Provide the Medicare, Connecticut Department of Social Services (DSS), or National Provider Identifier (NPI) facility identifier and label column with the identifier used.

[back to question]

Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation

Exhibit A

Day Kimball Hospital					
Comparison of Services Provided					
MRI Kennedy Dr. vs. MRI Hospital Main Campus					
CREV#	CHRG#	CHARGE DESCRIPTION	1.0 Tesla Fixed MRI Service 39 Kennedy Dr. Peak Yr. Utilization		Mobile 1.5 Tesla MRI Service Hospital main campus
4270	6500102	MRI-ABDOMEN W/O CONT			Available
4270	6500110	MRI-ABDOMEN W/CONTRA	Not Available		Available
4270	6500128	MRI-ABDOMEN W/WO CON	Not Available		Available
4270	6500219	MRI-C SPINE W/O CONT	64		Available
4270	6500227	MRI-C SPINE W CONTRA	Not Available		Available
4270	6500235	MRI-C SPINE W/WO CON	Not Available		Available
4270	6500300	MRI-CHEST W/O CONTR	1		Available
4270	6500318	MRI-CHEST W/CONTRAST	Not Available		Available
4270	6500326	MRI-CHEST W/WO CONTR	Not Available		Available
4270	6500409	MRI-FACE W/O CONTRAS			Available
4270	6500417	MRI-FACE W/CONTRAST	Not Available		Available
4270	6500425	MRI-FACE W/WO CONTR	Not Available		Available
4270	6500508	MRI-HEAD W/O CONTRAS	1		Available
4270	6500516	MRI-HEAD W CONTRAST	Not Available		Available
4270	6500524	MRI-HEAD W/WO CONTRA	Not Available		Available
4270	6500607	MRI-IAC'S W/WO CONTRAST	Not Available		Available
4270	6500615	MRI-IACS-WO			Available
4270	6500623	MRI-UPEXT JOINT W/CONTRAST LT	Not Available		Available
4270	6500631	MRI-UPEXT JOINT W/CONTRAST RT	Not Available		Available
4270	6500649	MRI-UPEXT JOINT W/O CON LT	1		Available
4270	6500656	MRI-PIT/SELLA W/WO CO			Available
4270	6500664	MRI-UPEXT JOINT W/O CONTRAST RT	1		Available
4270	6500672	MRI-UPEXT W W/O CONT LT	Not Available		Available
4270	6500680	MRI-UPEXT W W/O CONT RT	Not Available		Available
4270	6500706	MRI-HIP WO CONTR-LT	10		Available
4270	6500714	MRI-HIP WO CONTR-RT	11		Available
4270	6500722	MRI-HIP W&WO CON-LT	Not Available		Available
4270	6500730	MRI-HIP W&WO CON-RT	Not Available		Available
4270	6500748	MRI-HIP-W/CONT-RT	Not Available		Available
4270	6500755	MRI-HIP-W/CONT-LT	Not Available		Available
4270	6500805	MRI-LS SPINE W/O CON	185		Available
4270	6500813	MRI-LS SPINE W/CONT	Not Available		Available
4270	6500821	MRI-LS SPINE W/WO CO	Not Available		Available
4270	6501001	MRI-MRCP			Available
4270	6501100	MRI-NECK W/O CONTRAS			Available
4270	6501118	MRI-NECK W/CONTRAST	Not Available		Available
4270	6501126	MRI-NECK W/WO CONTRA	Not Available		Available
4270	6501209	MRI-ORBITS W/O CONTR			Available
4270	6501217	MRI-ORBITS W/CONTR	Not Available		Available

Day Kimball Hospital					
Comparison of Services Provided					
MRI Kennedy Dr. vs. MRI Hospital Main Campus					
CREV#	CHRG#	CHARGE DESCRIPTION	1.0 Tesla Fixed MRI Service 39 Kennedy Dr. Peak Yr. Utilization		Mobile 1.5 Tesla MRI Service Hospital main campus
4270	6501225	MRI-ORBITS W/WO CONT	Not Available		Available
4270	6501308	MRI-PELVIS W/O CONTR	4		Available
4270	6501316	MRI-PELVIS W/CONTRAS	Not Available		Available
4270	6501324	MRI-PELVIS W/WO CONT	Not Available		Available
4270	6501407	MRI-D SPINE W/O CONT	6		Available
4270	6501415	MRI-D SPINE W CONTRA	Not Available		Available
4270	6501423	MRI-D SPINE W/WO CON			Available
4270	6501506	MRI-TMJ BILAT			Available
4270	6501514	MRI-TMJ UNILAT-LT			Available
4270	6501522	MRI-TMJ UNILAT-RT			Available
4270	6501605	MRI-SHLDR WO CON-LT	49		Available
4270	6501613	MRI-SHLDR WO CON-RT	75		Available
4270	6501621	MRI-SHLDR W CON-LT	Not Available		Available
4270	6501639	MRI-SHLDR W CON-RT	Not Available		Available
4270	6501647	MRI-SHLDR W/WO CO-LT	Not Available		Available
4270	6501654	MRI-SHLDR W/WO CO-RT	Not Available		Available
4270	6501704	MRI-SHLDR-ARTHRO-LT			Available
4270	6501712	MRI-SHLDR-ARTHRO-RT			Available
4270	6501803	MRI-KNEE WO CON-LT	140		Available
4270	6501811	MRI-KNEE WO CON-RT	109		Available
4270	6501829	MRI-KNEE W CONT-LT	Not Available		Available
4270	6501837	MRI-KNEE W CONT-RT	Not Available		Available
4270	6501845	MRI-KNEE W/WO CO-LT	Not Available		Available
4270	6501852	MRI-KNEE W/WO CO-RT	Not Available		Available
4270	6501902	MRI-WRIST WO CON-LT	6		Available
4270	6501910	MRI-WRIST WO CON-RT	12		Available
4270	6501928	MRI-WRIST W CON-LT	Not Available		Available
4270	6501936	MRI-WRIST W CON-RT	Not Available		Available
4270	6501944	MRI-WRIST W/WO CO-LT	Not Available		Available
4270	6501951	MRI-WRIST W/WO CO-RT	Not Available		Available
4270	6502009	MRI-ELBOW WO CON-LT	4		Available
4270	6502017	MRI-ELBOW WO CON-RT	2		Available
4270	6502025	MRI-ELBOW W CON-LT	Not Available		Available
4270	6502033	MRI-ELBOW W CON-RT	Not Available		Available
4270	6502041	MRI-ELBOW W/WO CO-LT	Not Available		Available
4270	6502058	MRI-ELBOW W/WO CO-RT	Not Available		Available
4270	6502108	MRI-UPEX NO JT WO-LT	4		Available
4270	6502116	MRI-UPEX NO JT WO-RT	1		Available
4270	6502124	MRI-UP EX NO JT W-LT	Not Available		Available

Day Kimball Hospital					
Comparison of Services Provided					
MRI Kennedy Dr. vs. MRI Hospital Main Campus					
CREV#	CHRG#	CHARGE DESCRIPTION	1.0 Tesla Fixed MRI Service 39 Kennedy Dr. Peak Yr. Utilization		Mobile 1.5 Tesla MRI Service Hospital main campus
4270	6502132	MRI-UP EX NO JT W-RT	Not Available		Available
4270	6502140	MRI-UPEX NOJT W/WO-LT	Not Available		Available
4270	6502157	MRI-UPEX NOJT W/WO-RT	Not Available		Available
4270	6502207	MRI-BREASTS W/WO CON	Not Available		Available
4270	6502215	MRI-BRST-UNI W/WO-LT	Not Available		Available
4270	6502223	MRI-BRST-UNI W/WO RT	Not Available		Available
4270	6502231	MRI-MAMMO-CAD			Available
4270	6502249	MRI-LEFT KNEE WO SHAPEMATCH TECH			Available
4270	6502264	MRI-RT KNEE WO SHAPEMATCH TECH			Available
4270	6502272	MRI BREASTS W/O CONTRAST			Available
4270	6502280	3D RENDERING W/INTER CT,MRI,US			Available
4270	6502306	3D RECONSTRUCTION INDEPEND WS			Available
4270	6502405	MRI-ANKLE WO CON-LT	12		Available
4270	6502413	MRI-ANKLE WO CON-RT	15		Available
4270	6502421	MRI-ANKLE W CONT-LT	Not Available		Available
4270	6502439	MRI-ANKLE W CONT-RT	Not Available		Available
4270	6502447	MRI-ANKL W/WO CO-LT	Not Available		Available
4270	6502454	MRI-ANKL W/WO CO-RT	Not Available		Available
4270	6502504	MRI-LOEX NO JT WO-LT	14		Available
4270	6502512	MRI-LOEX NO JT WO-RT	8		Available
4270	6502520	MRI-LO EX NO JT W-LT	Not Available		Available
4270	6502538	MRI-LO EX NO JT-W-RT	Not Available		Available
4270	6502546	MRI-LOEX NOJT W/WO-LT	Not Available		Available
4270	6502553	MRI-LOEX NOJT W/WO-RT	Not Available		Available
4270	6502603	MRV-WO CONTRAST			Available
4270	6502611	MRV-W&WO	Not Available		Available
4270	6502629	MRI PIT/SELLA W/O CONTRAST			Available
4270	6502637	MRI-PIT/SELLA W/CONTRAST	Not Available		Available
4270	6590301	MRI-GADO PER ML			Available
4270	6600050	MRA-LO EX W/WO CO-LT	Not Available		Available
4270	6600068	MRA-LO EX W/WO CO-RT	Not Available		Available
4270	6600076	MRA-LOWER EXT W/WO-BILAT	Not Available		Available
4270	6600100	MRA-UP EX W/WO CO-LT	Not Available		Available
4270	6600118	MRA-UP EX W/WO CO-RT	Not Available		Available
4270	6600209	MRA-CHEST W/WO CONTR	Not Available		Available
4270	6600258	MRA-HEAD W/O CONTR	1		Available
4270	6600266	MRA-HEAD W/CONTRAST	Not Available		Available
4270	6600274	MRA-HEAD W/WO CONTR	Not Available		Available
4270	6600316	MRA-NECK W/O CONTRA	1		Available

Day Kimball Hospital					
Comparison of Services Provided					
MRI Kennedy Dr. vs. MRI Hospital Main Campus					
CREV#	CHRG#	CHARGE DESCRIPTION	1.0 Tesla Fixed MRI Service 39 Kennedy Dr. Peak Yr. Utilization		Mobile 1.5 Tesla MRI Service Hospital main campus
4270	6600324	MRA-NECK W/WO CONTRA	Not Available		Available
4270	6600365	MRA-AB W/WO CONTRAST	Not Available		Available
4270	6600407	MRA-PELVIS W/WO CONT	Not Available		Available

Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation

Exhibit B

STATE OF CONNECTICUT

Department of Public Health

LICENSE

License No. 0043

General Hospital

In accordance with the provisions of the General Statutes of Connecticut Section 19a-493:

Day Kimball Hospital of Putnam, CT d/b/a Day Kimball Hospital is hereby licensed to maintain and operate a General Hospital.

Day Kimball Hospital is located at 320 Pomfret Street, Putnam, CT 06260-1836.

The maximum number of beds shall not exceed at any time:

18 Bassinets
104 General Hospital Beds

This license expires **September 30, 2017** and may be revoked for cause at any time.

Dated at Hartford, Connecticut, October 1, 2015. RENEWAL.

Satellites:

Plainfield Medical Building, 31 Dow Road, Plainfield, CT
Thompson Medical Building, 415 Riverside Drive, Thompson, CT
Plainfield Healthcare Center, 12 Lathrop Road, Plainfield, CT

Jewel Mullen, MD, MPH, MPA
Commissioner

Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation

Exhibit C

Julius Kocsondy MBA, MOT

West Hartford, CT 06107
jkocsondy@comcast.net

H: (860) 521-3925
C: (860) 608 -1338

SUMMARY

Comprehensive healthcare management experience, including: Certified Radiology Administrator, program planning, financial management and budgeting, project management, continuous quality improvement, and human resources management. Manage programs at the hospital and multiple satellite sites. Core competencies include:

Creative problem-solver	**Customer Focused**	**Deadline Sensitive**
Motivator	**Strong Analytical skills**	**Innovative**
Cross Functional Coordination	**Strong Interpersonal Skills**	**Collaborator**
Effective Communicator	**Detail Oriented**	**Patient Safety**

PROFESSIONAL EXPERIENCE

William W. Backus Hospital, Norwich, CT

Director of Diagnostic Imaging **2000 - Present**

Direct staff and operations for 25 cost centers, including 7 satellites and over 120 employees encompassing Radiology, Computerized Tomography, Interventional Radiology, Magnetic Resonance Imaging, Nuclear Medicine, Ultrasound and PET/CT. Responsible for strategic planning, regulatory compliance, budgeting, capital budget and oversight and monitoring of existing programs. In addition to several physical plant improvements, the department has been transformed into a completely digital department including HIS/RIS, PACS, digital mammography, direct digital radiography and computed radiography. Have successfully passed JCAHO, Nuclear Regulatory Commission, Connecticut DEP, Connecticut DPH and MQSA inspections and achieved ACR Accreditation and Re-accreditation of our CT, MRI, US, Breast US, Digital Mammography, and PET CT services. In addition, the department has earned additional ACR distinction as a Breast Center of Excellence.

- Oversaw complete renovation of the hospital's Diagnostic Imaging Department and the construction of 4 major outpatient imaging centers in addition to 3 minor centers.
- Diagnostic Imaging has ranked at the top or near the top of all hospital departments in the employee satisfaction survey conducted by an outside agency.
- Implemented patient satisfaction improvement programs to address issues identified by Press Ganey surveys.
- Purchase all Diagnostic Imaging equipment, negotiate service agreements, evaluate and purchase software and operational equipment and supplies.
- Developed the Diagnostic Imaging Department's continuous quality improvement program.
- Developed the Diagnostic Imaging Department's patient and employee safety program. Led the effort to have MRI safety inserted into the hospital wide employee orientation program. Initiated the hospital wide fluoroscopy safety and monitoring program.
- Developed and implemented a comprehensive dose reduction program reducing CT dose by 20-50%.
- Implemented HRO (High Reliability Organization) safety principles throughout the department and its satellites.

- 100% on time completion of employee performance appraisals, competencies, and educational records.

- Served on multiple hospital wide committees such as: Safety Committee, Constant State of Readiness Team, Radiation Safety Committee, CPOE Committee, (LSS) Physician Office Practice Committee and several *ad hoc* committees.

- Collaborated with the finance department in developing a hospital wide cost accounting program, electronic budgeting software and various charge capture and revenue enhancement projects.

- Implemented cost reduction initiatives in Diagnostic Imaging ranging from staffing, benchmarking, contrast and radiopharmaceuticals, standardization of medical surgical supplies and unnecessary spending. Also, collaborated with the purchasing department in various cost reduction initiatives. Implemented $650,000 in cost reductions in FY 2013 and identified another $250,000 to be implemented in FY 2014.

- Collaborated with Nursing Department to provide pre-admission testing, pre-procedure preparations and post procedure recovery to Diagnostic Imaging patients who are cared for by Diagnostic Imaging nurses during the procedure by applying excess capacity elsewhere in the hospital and assure standardization of treatment and the same level of care throughout the hospital.

- Proficient in Meditech, KRONOS, Healthstream, Hiring Manager, Report to Web, MD Buyline, KLAS among others.

University of Connecticut Health Center, John Dempsey Hospital, Farmington, CT

Director of Imaging and Therapeutics 1994 - 1999

Directed staff and operations for eleven cost centers and over 100 employees encompassing Radiology, Radiation Oncology, Nuclear Medicine, and Rehabilitation Services Departments. Worked closely with Chairmen, Clinical Chiefs and Faculty leadership to assure joint planning, oversight of programs, new program development and monitoring of existing programs.

- Restored positive budget performance in Imaging after years of negative variances.

- Designed and implemented comprehensive cost reduction initiatives including workflow analysis and redesign, resource allocation, cross training, vendor negotiations and skill mix changes, resulting in cost savings in excess of $1,250,000.

- Successfully passed site visits and complied with regulations involving JCAHO, NRC, MQSA and a variety of state surveys, all without citations/recommendations. Part of the Hospital team that secured JCAHO Accreditation with Commendation and named most cost efficient hospital in the state.

- Participated or led major hospital-wide task forces such as patient care redesign, surgical inpatient redesign, performance appraisal redesign, billing system redesign and development of care paths and case management functions.

Director of Rehabilitation Services 1988 - 1994

- Directed staff and operations of four cost centers and over 40 employees for the Rehabilitation Services Department.

- Developed and implemented the strategic plan for the hospital's Sports Rehabilitation and Assessment Center resulting in significant revenue and increased patient volume and retention.

- Introduced state-of-the-art therapies such as Aqua Therapy, Hand Therapy and TMJ clinic. These programs provided the hospital with a major competitive advantage and assured a leadership position in innovative treatments.

- Consistent with the University's mission, established a nationally recognized continuing education program for therapists, enhancing the University's reputation as a provider of multi-disciplinary education in the region.

- Developed and implemented revenue enhancements which resulted in over $500,000 in revenue.

- One of four Department Heads selected to assume Hospital Administrator On-Call duties.

- Chaired the Task Force on Management Development resulting in the creation of a comprehensive program for all hospital managers.

Director of Occupational Therapy

Directed staff and operations for the Psychiatric Occupational Therapy Program providing services to psychiatric in-patients, substance abuse patients, partial hospital patients and an out-patient clinic.

Member of the Executive Committee which created and developed the Capitol Region Mental Health Center. Provided consultation to the Day Treatment Program and functioned as an outpatient therapist.

EDUCATION

Master of Business Administration with concentration in healthcare management, University of Connecticut, Storrs, CT

Master of Occupational Therapy, Western Michigan University, Kalamazoo, MI

Bachelor of Science, Chemistry and Biology, Calvin College, Grand Rapids, MI

AFFILIATIONS

Member, American Healthcare Radiology Administrators

Earned CRA (Certified Radiology Administrator) designation by the AHRA based on credentials and a competitive exam.

Member, American Occupational Therapy Association

Licensed Occupational Therapist

PUBLICATIONS/PRESENTATIONS

Co author of Presentation by Dr. Jenifer Siegelman at RSNA Titled: Designing/Enhancing Patient Safety Initiatives with NEMA XR25 CT Dose Check: Stewardship Through Active Mitigation of CT Dose Events

Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation

Exhibit D

IEEE/CSC & ESAS European Superconductivity News Forum (ESNF), No. 14, October 2010
The published version of this manuscript appeared in *IEEE Transactions on Applied Superconductivity* **21**, Issue 3, 2104 - 2109 (2011)

Advances in Whole-Body MRI Magnets

Thomas C. Cosmus and Michael Parizh

***Abstract*— Magnetic Resonance Imaging (MRI) is the largest commercial application of superconductivity. MRI is a powerful diagnostic tool that the medical community considers as a procedure of choice for visualization of soft tissue. The recent decade has marked substantial progress in MRI magnets and systems. The 3.0 tesla horizontal field and 1.0 tesla vertical field open whole-body MRI systems have become commercially available. The superconducting magnet is the largest and most expensive component of an MRI system. The magnet configuration is determined by numerous competing requirements including optimized functional performance, patient comfort, ease of siting in a hospital environment, minimum acquisition and lifecycle cost including service. The factors that drive the magnet requirements are increased center field, maximized uniformity volume, minimized field decay and stray field, magnet compactness, long helium refill period, and more. Advances in the cryogenic technology and magnet design practice provide means for improvements in magnet performance while meeting the market requirement for continuous system cost reduction.**

***Index Terms*— Magnetic Resonance Imaging, MRI, superconducting magnets**

I. Introduction

The first practical superconducting magnets were built in the 1960‘s following the discovery of NbTi alloy. It was, however, the invention of Magnetic Resonance Imaging (MRI) that took superconductivity from the scientific laboratory to everyday use. MRI has transformed superconductivity from a scientific curiosity to a phenomenon that improves people‘s lives. It is also true that superconductivity benefited MRI by making it commercially feasible.

Since publication of the first human body images in 1977 [1], MRI has become one of the primary tools in medical diagnostics. MRI is the only chemically sensitive in-vivo imaging technique with high-resolution soft-tissue contrast. It allows physicians to peer deep inside the human body, producing clinically relevant images of soft tissue lesions and functional parameters of body organs, without the use of invasive procedures or ionizing radiation such as X-rays.

The low-field whole-body MRI magnets (<0.35 tesla) are a mix of resistive magnets with iron yoke and permanent magnets. Resistive magnets have the lowest installation cost among all types of MRI systems but require a large power consumption. The permanent-magnet MRI systems are heavy. Their installation cost is rather high but maintenance cost is low. The low-field magnets typically have relatively poor uniformity and stability. Poor uniformity results in poor image quality, although it might be adequate for some applications.

With few exceptions, MRI systems with a central field strength greater than 0.35 tesla use superconducting coils. MRI with superconducting magnets account for more than 75% of the installed MRI base. Advantages of superconducting MRI systems include, but are not limited to, better performance, higher signal-to-noise ratio as a result of higher field, higher resolution and lower lifecycle cost [2]-[4].

MRI uses the majority of superconducting materials produced worldwide. Averaged over the last decade, MRI magnets use about 60% of all superconducting wire (including copper), and about 40% of the NbTi alloy [5]. The higher fraction of conductor is due to the fact that MRI magnets use conductors with a high content of copper; a typical MRI conductor contains 80 to 90 volume percent of copper, and only 10% to 20% NbTi.

II. Superconducting Whole-Body MRI Systems

A. Installed MRI base

After 30 years of commercial production, the industry of superconducting MRI has reached a state of maturity. The demands of the healthcare industry for high efficiency, low cost, reliable systems resulted in technically-challenging, well-integrated magnet designs reproducible in volume production.

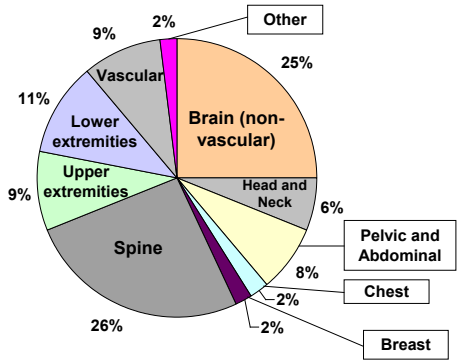

Figure 1. MRI procedures in developed countries, per modality (2007)

In 2008, the total installed base of superconducting MRI systems was about 26,500 units vs 14,600 systems in 2002. More than 2,500 superconducting MRI scanners are produced

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worldwide annually. An estimated 80 million MRI exams were performed worldwide in 2008, showing about 5% annual growth [6]. The US alone represents about 40% of the world MRI market, with about one system per 30,000 capita. In recent years, there is a significant increase in MRI systems installed in developing countries such as China, Brazil and India, typically in new facilities. In developing countries as many as 60% of the new scanners are being installed in new sites while in the USA 80% are replacement units and only 20% of the systems are installed in new facilities.

Spine and brain exams account for about 50% of all MRI procedures. Cardio-vascular and brain imaging demonstrate the highest growth rate, in part due to increased availability of higher field systems. Figure 1 illustrates the advantages of a versatile whole-body system. No single „dedicated" system such as one for extremities [7] or brain scanning would be able to serve more than 25% of the patients.

B. Field strength

Depending on field strength and shape, there are several types of superconducting MRI magnets. Thousands of commercial whole-body systems of 1.5 tesla and 3 tesla are produced worldwide. The very-high field 4.0 T to 9.4 T units are in the process of being evaluated at research sites and are for investigational use only. A unique 11.7 tesla scanner is being built to be installed in Saclay, France [8].

Table I summarizes typical parameters of MRI magnets. Within each column, magnet characteristics may vary significantly depending on uniformity, stray field, system dimensions, type of refrigeration, and other technical and commercial factors. The 1.5 T to 7 T magnets are assumed to be actively shielded (passively-shielded 7-tesla magnets use roughly half the conductor at a penalty of higher stray field and the need for a several-hundred ton iron shield). The weight in Table I includes cryogens and does not include the weight of other system components such as iron shielding, gradient coils or electronics. The Amp-Length is a product of the operating current and conductor length that is equal to the product of coil volume and engineering current density.

TABLE I
TYPICAL PARAMETERS OF CYLINDRICAL MRI MAGNETS

	1.5 T	**3 T**	**7 T**	**11.7 T** [8]
Length, cm	125-170	160-180	~300	400
Outer diameter, cm	190-210	190-210	>250	460
Stored energy, MJ	2 - 4	10 - 15	50 - 90	340
Weight, ton	3 - 6	5 - 10	>25	150
5-gauss line (Z x R), m	4 x 2.5	5 x 3	>7 x 5	9.6 x 7.5
Amp-Length, kA-km	15 - 25	35 - 60	120-180	~300

There is a drive towards making higher-field MRI systems. The high field systems potentially benefit from yet higher signal-to-noise ratio, contrast-to-noise ratio and higher scanning speed. On many occasions only high-field systems may provide sufficient image quality to identify abnormalities, especially in cases of brain and heart exams. There are, however, limitations that may restrict full realization of the high-field benefits [9]. Technological limitations for the magnet include such factors as an increase of the stray magnetic field, the need for stronger, higher linearity gradient coils, and, in some cases, reduction of the uniformity area in higher-field magnets. Table I illustrates that in 3 T systems the >5 gauss area with restricted access is about 50% larger than for 1.5 tesla scanners. High field changes relaxation kinetics in tissues, and may require changes in the scan protocols. Also, safety risk and patient discomfort factors may increase with magnetic field, although these can generally be managed.

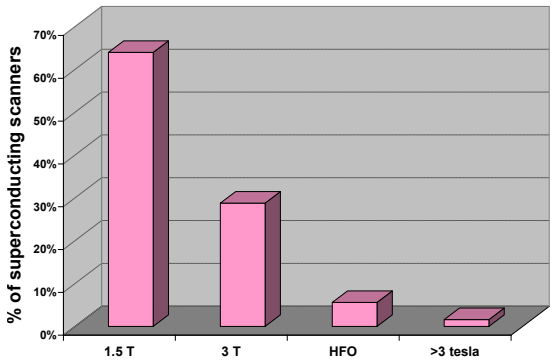

Figure 2. Delivered superconducting MRI systems by field strength (2008)

During the last decade, the lower-field superconducting 0.5 T and 1.0 T cylindrical scanners practically went out of production. Their marginally-lower cost was insufficient to outweigh the advantages of the commercial 1.5 T systems in faster patient throughput and better image quality. Until the late 1980's, the lower-field systems dominated the MRI market. In 2000, approximately 600 low-field systems were produced representing >20% market segment. By 2005, their production was practically stopped.

Figure 3. Philips' 3 tesla scanner in mobile configuration.

The 1.5 tesla units represent the majority of scanners produced in recent years (Figure 2). The 1.5 T systems are a good compromise between performance, patient comfort, ease of siting in a hospital environment, optimized installation, and life-cycle cost. Insurance reimbursement may also favor the 1.5 T systems: an average cost to purchase a 1.5 T whole-body

MRI system is $1.25M vs $2.0M for 3 T units while in many countries reimbursement per exam is about the same [10].

After several years of research use, the 3 tesla whole-body scanners from General Electric, Philips and Siemens entered the marketplace in the early 2000s. Initially, the commercial 3 T scanners were rather large and heavy, weighing 10,000 kg or more. The latest 3 tesla scanners have a significantly lower weight. Their dimensions and uniformity volume are now similar to 1.5 tesla scanners. The Philips' Achieva 3 T weighs only 5,600 kg (including cryogens) and may be delivered in either stationary or mobile configuration (Figure 3). Today, the 3 T systems are the fastest-growing segment in MRI industry.

About thirty higher-field whole-body 7 tesla to 9.4 tesla systems are installed at luminary sites around the world, usually university hospitals. Initially, these scanners were used solely for brain imaging that requires a relatively small image area with high uniformity. Now, a few research centers are extending imaging to cardiac, prostate, breast, extremity and other areas, with the ultimate goal being to expand the range of applications beyond high resolution anatomic and functional brain imaging. The high-field magnets are highly customized depending on the image volume, bore size, type of shielding, etc. The length of 7 tesla magnets varies from 2.6 m to 3.5 m. The whole-body 7 T system provided by Philips to several research sites has a magnet that weighs 32 tons and has steel shielding options of 218 tons and 406 tons (the magnet is built by Agilent Technologies). A similar Siemens 7 T scanner weighs 32 tons and requires 250 tons of wall shielding [11].

The last decade shows how definitions may change. In the 1980s, the 1.0 T MRI units were called high-field. In 1990s, the 1.5 T systems were called ‗high field' while 3 T MRI were ultra-high field. Today, 1.0 T cylindrical magnet is a low field unit, 1.5 T is the standard field, although 1.0 T Open magnet is considered a high-field unit for that geometry. The 3 T MRI are now high field units, and 7 T and higher-field MRI are called ‗ultra-high field'. In the future, advances in the magnet technology could rename the 3 T MRI to the standard field.

C. Magnet shape and orientation

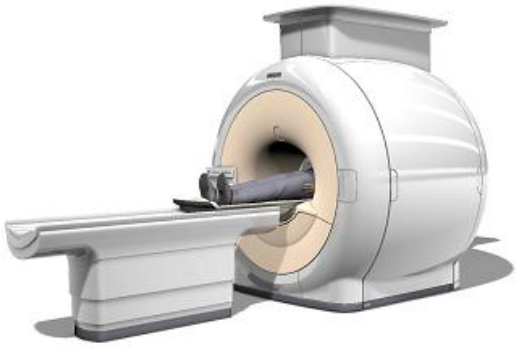

Figure 4. Cylindrical MRI scanner with patient bed

More than 95% of superconducting MRI magnets have a standard cylindrical shape (Figure 4). This mature magnet design provides a high-quality field for a large variety of applications. It allows minimization of the stray field, compact dimensions and low cost. This configuration permits mobile configuration that may move from location to location while at nominal field thus minimizing the setup time.

Figure 5. The 1.0 T high-field open (HFO) scanner Panorama from Philips

Cylindrical MRI systems have a known but accepted limitation: the narrow patient bore of typically 60-cm diameter and >100 cm length. This tunnel creates several issues: (a) obese patients may not fit into the tunnel, (b) a claustrophobic effect causes certain patients to reject the procedure creating financial loss for the image center and diagnostic loss for the patient, and (c) it restricts interventional medical procedures. More recently, the patient bore has become a limiting factor for certain image-guided medical procedures. The image-guided medical ablation is an example of such a procedure. It requires patient access of an open MRI with center field of at least 0.5 T. This procedure uses 3D MRI images to facilitate biopsy or treatment of tumors, e.g. liver cancer [12].

Figure 6. Resistive passively-shielded 0.6 T open magnet (Fonar Corp.)

There is a trade-off between more patient-friendly open MRI and the higher-field cylindrical systems that are the best for diagnostic information. Open MRI systems (Figures 5 and 6) are very challenging technically. Their installation cost may be higher than that of even 3 T systems. Open MRI are limited to a field of about 1 T. The open magnet uniformity volume is often smaller than in 1.5 T and 3 T cylindrical scanners. This might result in lower image quality and longer scanning time. The stray field may be higher than in 1.5 tesla scanners.

Fonar Corporation manufactures another type of open MRI. This resistive 0.6 T system (Figure 6) offers a unique variety

of patient positions during imaging including images of the spine and knee obtained while bearing weight. This system requires 225 kVA to power the magnet [13]. The field of >0.5 T and wide patient opening are feasible for passively-shielded system only. The same-shape superconducting unit would require about 20 tons of iron to shield the magnet.

III. Aspects of the Magnet Design

A designer of superconducting MRI magnets must address multiple trade-offs. Table II lists some of these trade-offs.

TABLE II
Requirements to MRI Magnets

Image quality • Field strength • Field homogeneity and stability in large volume
Costs to the customer • Low initial cost of the magnet and system • Low operational costs: low helium loss, long refill interval, low power consumption • Small stray magnetic field: outside MRI suite and at the location of MRI components • Light weight
Customer needs • Safety: the 5 gauss line limited to MRI suite, Emergency Run-down function, standards • Reliability: maximum uptime, long service time, no quenches in hospital • Short scanning time, high throughput • Compact/Accessible • Patient friendly: wide and short bore, open
Installation & service • Light weight, compact size • Fast installation/adjustment • Service at field

A. *Compactness and Accessability*

Patient comfort, the ability to perform medical procedures during scanning and ease of installation require magnets to be compact. Compactness includes short and wide patient bore, reduced cryostat outer diameter to minimize ceiling requirements, and low system weight.

The early MRI systems were large and heavy [3]: their length was about 250 cm and weight >10 tons. Since 1988, Philips introduced a family of compact 0.5 T to 3 T scanners with the magnet length of only 157 cm and outer diameter of 188 cm. Even the heaviest 3 tesla magnet in the family weighs less than 6 tons. This family sets the industry standard for MRI compactness and assured wide proliferation of MRI systems to ordinary hospitals and imaging centers around the world.

Recently, Siemens introduced the Magnetom family of even more compact magnets. Siemens 1.5 T Espree has an increased patient bore diameter of 70 cm and 125 cm length although the uniformity volume is smaller than in a typical smaller-bore magnet. It is too early to judge, however, the size of the future market segment for the wide-bore magnets. While these systems provide better access to the patient and a higher comfort level, in large market segments the question remains whether these benefits outweigh the higher system costs.

B. *Uniformity and persistence*

In order to provide high-quality images, MRI magnets must generate a magnetic field with very high temporal and spatial uniformity on the order of several parts-per-million (ppm) over the whole imaging volume. The typical guaranteed field decay in MRI magnets is less than 0.1 ppm/hour. The typical requirement for the commercial 1.5 T and 3 T magnets is that the field uniformity is on the order of 10 ppm peak-to-peak in about 50 cm diameter volume. MRI system designers may trade off a reduced image volume and system compactness either at a penalty of longer scanning time that assumes, for example, multiple scans to achieve extended coverage, or limit system application to dedicated examinations such as brain scanning.

The high spatial uniformity in MRI magnets is achieved by precise multi-coil design that typically consists of six to ten coils (Figure 7). The design uniformity in such magnets is on the order of 10 ppm over the imaging volume. Increase in the number of coils allows an improvement of the magnet uniformity with the penalty of the magnet complexity and cost. Increase of the peak field in coils is another disadvantage of the multi-coil configuration. In a long solenoid the peak field in conductor is about the same as the center field, while in multi-coil configuration the peak field in conductor is significantly higher. In an actively-shielded 1.5 T magnet, the peak field in coils may be 5 T or higher.

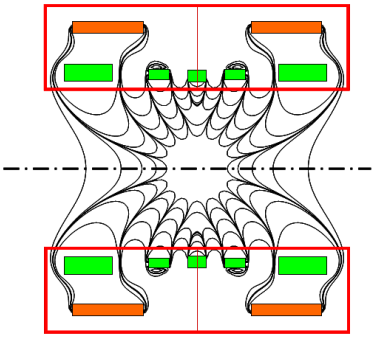

Figure 7 Typical coil configuration of a cylindrical actively shielded MRI magnet. The curved lines correspond to 10, 100, 1,000, 10,000 and 100,000 ppm uniformity.

In order to achieve the required uniformity, the coils must be precisely positioned with tolerances of fractions of a millimeter. Even using the best manufacturing practices, the standard commercial magnets have bare uniformity of several hundred ppm. Magnetic shimming is necessary to compensate for manufacturing variability and magnetic site environment. Shimming improves the magnet uniformity to the design value of 10 ppm over the image volume. Two shimming methods are used in MRI systems: active shimming using superconducting coils located in the cryostat, and/or passive shimming that uses small pieces of iron installed in the magnet bore. Either

shimming method is magnet- and site-dependent: the magnet should be re-shimmed when moved to a new location. Passive shimming is the most cost-effective and reliable solution for commercial scanners [14].

The very high temporal stability required by MRI systems is an order of magnitude better than modern high-current power supplies can provide. Therefore, commercial MRI magnets operate in persistent mode: all coils are connected in a closed superconducting loop with a persistent current switch. For 1.5 T magnets, the total resistance of the loop shall be less than a fraction of one nano-ohm. Even a small interruption of only 0.01 mm in a superconducting circuit is unacceptable. Broken NbTi filaments is an example of such an interruption. Nearly-perfect superconducting joints with guaranteed resistance of $<10^{-11}$ ohm are required. Non-linear current-voltage conductor characteristics should be taken into account to assure the magnet persistence.

C. Stray magnetic field and shielding

MRI systems must be designed and installed such that the magnetic field outside of the scanning suite does not exceed the industry-standard safe magnetic field of 5 gauss. Five gauss is the maximum field at which a reliable operation of devices such as heart pacemakers can be guaranteed.

Magnetic field outside of a dipole may be estimated as

$$B = B_c\,(R/r)^3\,(1 + 3\cos\theta)^{1/2}/2, \qquad (1)$$

where B_c is the magnetic field at the center of the dipole of radius R, and θ is the angle between the magnet axis and the direction to the field point r, $r >> R$. From Eq. (1) the 5-gauss field would be about eight diameters of a 1.5 tesla unshielded magnet in axial direction (θ = 0) and about six magnet diameters in radial direction (θ = 90º). This large area of restricted access is unacceptable.

Three types of shielding or their combination are used in the whole-body superconducting MRI systems:

1. Active shielding [15]: superconducting coils located at a larger diameter suppress magnetic field outside of the cryostat to values of Table I;
2. Passive (iron) shielding with iron attached to outer surfaces of the cryostat;
3. Iron shielding on the walls of the image suite.

Today, all commercial superconducting magnets and even some 7-tesla research MRI magnets are actively shielded. The compact, low-weight actively-shielded scanners dramatically reduce site setup cost associated with passive shielding. These magnets provide more stable magnetic field as they do not depend on ambient temperature variations. There is an increase of the conductor cost: typical actively-shielded MRI magnets require twice the amount of conductor than non-shielded magnets would use.

The increase in superconductor cost is smaller than the cost of passive shielding. A typical non-shielded 1.5 T magnet requires about 20 ton of iron regardless of whether iron is on the walls, or iron is applied to the outer surface of the cryostat [16]. In the US, room shielding may cost as much as $100,000.

D. Refrigeration

Development of commercial MRI systems has resulted in dramatic improvements in cryogenic performance. Early MRI magnets used liquid nitrogen thermal shields. These magnets had a helium boil off rate of about 0.4 liters per hour, requiring liquid helium (LHe) refill every 4.5 months, and nitrogen refill every one or two weeks. By the late 1980s, MRI systems adopted two-stage Gifford McMahon refrigerators that eliminated the need for the liquid nitrogen thermal shield, reducing helium consumption initially to less than 0.1 liters/hour. By 2000, LHe consumption was further reduced to less than 0.03 liters/hour resulting in a typical four-year interval between LHe refills [3].

In the last decade, zero boil off (ZBO) refrigeration became standard in commercial MRI systems, especially in 3 tesla and HFO units. ZBO refrigeration uses the same two-stage Gifford McMahon refrigerator but with advanced heat exchangers creating low enough temperatures to re-condense helium gas within the cryostat. ZBO magnets allow practically unlimited system operation without helium refill. In addition, ZBO units enable more compact magnet design, as only one thermal shield in the cryostat is required instead of two. Disadvantages of the ZBO configuration include higher refrigeration costs and higher power consumption.

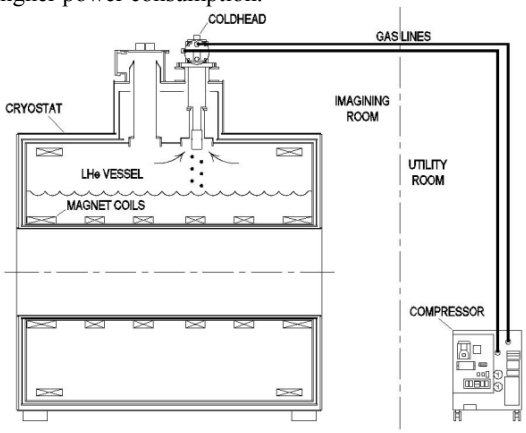

Figure 8. Principal schematic of ZBO refrigeration

The ability to create a ZBO unit depends on both excellent insulation and advanced refrigeration. Insulation techniques minimize all heat transport mechanisms (conduction, convection and radiation). A compact Cold Head directly integrated into the cryostat provides cooling (Figure 8). The Cold Head is connected to a remotely located compressor. Helium gas is circulated in a closed-loop fashion. The compressor compresses the helium gas and the Cold Head expands the helium gas to create low temperature cooling.

The refrigeration components are proven, reliable devices. However, because the components operate on a 24/7 basis, routine maintenance is required. Service intervals are extended, however, and are only required once every several years. Maintenance involves changing a filter medium in the compressor and the replacement of consumable items within the cold head. Both activities can be accomplished in a timely,

scheduled manner requiring only a few hours of system downtime and a minimum of inconvenience.

IV. Future Opportunities

We have already discussed future magnet opportunities and trade-offs including very high-field, wide bore and open magnets. In this section, we will evaluate new superconducting materials that may add customer-oriented features and reduce system cost, especially the lifecycle cost.

Present commercial MRI magnets utilize NbTi conductor. NbTi conductor is a mature, mechanically-strong, manufacturing-friendly material. It is routinely available in long lengths of 10 km or more. The high critical current density J_c of >3,000 Amp/mm^2 at 4 T, 4.2 K and high value of index N above 40 allow production of high engineering current density, compact, cost-effective magnets. The NbTi wire is well optimized for MRI production. It is the lowest cost superconducting material, priced at about $1/kAmp-m at 4 T, 4.2 K. Disadvantages of NbTi conductor include low critical temperature of 9.3 K and relatively low critical field of about 10.5 tesla at 4.2 K. These parameters require operation of NbTi magnets at liquid helium temperature resulting in high cryostat and refrigeration cost.

High-temperature superconductors (HTS) were considered for MRI application almost immediately after their discovery [17]. Unfortunately, HTS conductor is still rather expensive. An HTS conductor cost of $10/kAmp-m at 77 K, self field marks the threshold point where HTS conductor may be considered for commercial dedicated MRI. Dedicated MRI systems use significantly less conductor then the whole-body units but benefit from operation at increased temperature and reduced cost of refrigeration.

Recently discovered magnesium diboride MgB_2 with critical temperature T_c = 39K offers the potential to become the MRI material of the future. MgB_2 promises quench-free, cryogen-free MRI systems. Several research MgB_2 MRI magnet projects are underway [7], [18], [19]. The MgB_2 conductor cost is driven by processing rather than by the material cost. Today, the MgB_2 price is about $5/kAmp-m at 4 tesla, 4.2 K, i.e. it is significantly higher than that of NbTi. The conductor price is expected to be reduced in volume production.

There are still multiple material-related and magnet-related issues to be addressed. The highest critical current density achieved in MgB_2 samples is 30% below *Jc* in NbTi at 4 tesla, 4.2 K [20]. The *N*-value at 4 tesla is no better than 30 even in short samples. If not guaranteed to be more than 35 over 100% of the wire length, the low *N*-value will require either magnet operation at a relatively low fraction of critical current, or a driven-mode operation. Unless improved, these will result in higher material demand per magnet, and a less compact, more expensive magnet. Conductor should not require any additional treatment after coil is wound. Mechanical properties should be improved. Long conductor lengths of several km should be produced with guaranteed properties over 100% of the length. Magnet designers should develop efficient technologies for building MgB_2 magnets including, but not limited to, efficient winding technologies, quench protection, and superconducting joints. Refrigeration should be optimized for MgB_2 conductor: lower operating temperature results in lower conductor cost, while increasing the refrigeration cost.

V. Conclusion

The MRI industry is driven by the demand to provide high-quality service to patients in a cost-competitive environment. In the 30 years since introduction, superconducting MRI magnets for mainstream systems have reached a certain level of maturity. Volume production of MRI magnets has led to efficient, well integrated magnet designs. Still, there are opportunities for improvement to enable this excellent diagnostic tool to be available to patients worldwide.

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MRI Service Relocation & Consolidation

Exhibit E

ECRI Institute

Evaluations & Guidance - Guidance

MR Systems: What Field Strengths and Bore Sizes Are Hospitals Buying?

Published 2/12/2015

EXECUTIVE SUMMARY

When selecting an MR system, two of the most important factors you should consider are the unit's field strength and the unit's bore size.

1.5 T versus 3 T: Which Field Strength Should You Choose?

When it first became available, 3-tesla (T) technology was expected to become indispensable because of its increased image quality. However, while the market share of 3 T systems has increased, it still has not surpassed that of 1.5 T technology.

Three issues prevent 3 T from becoming more popular than 1.5 T:

1. **Cost.** A 3 T system costs about 50% more than a 1.5 T system, and reimbursement is the same.
2. **Safety.** Although 3 T systems are as safe as 1.5 T systems for most patients, many implants are not certified as safe at 3 T; therefore, providers will still need access to a 1.5 T system to image patients who have such implants.
3. **The improvement of 1.5 T technology.** 1.5 T technology is now suitable for all but the most technically demanding applications.

Still, hospitals are clearly interested in 3 T technology. ECRI Institute SELECTplus data shows that, from 2011 to 2014, 3 T has accounted for about 40% of member interest in purchases of MR, which is double that in 2010. There are two reasons for the increased interest:

1. Image artifact problems affecting MR body imaging have been addressed by all manufacturers, meaning the technology is no longer limited to head imaging.
2. Wide-bore (70 cm) 3 T systems are now available.

The bottom line is that while 3 T provides some benefits compared to 1.5 T, a 1.5 T system provides all the capabilities required for routine imaging and, in most cases, the increased cost of 3 T is difficult to justify. Therefore, ECRI Institute believes that 1.5 T will remain the predominant MR configuration in routine clinical use unless the cost of 3 T systems is substantially reduced.

Recommendations

- Facilities should consider a 3 T system if they expect to routinely perform the most advanced MR studies (e.g., for neurosurgical planning). But if the patients who benefit from 3 T are expected to be few and far between, then a 1.5 T system will be sufficient.
- Facilities that purchase 3 T systems should also have a 1.5 T system available to accommodate patients for whom use of 3 T is contraindicated (i.e., those with certain implants).

Bore Size: Wide-Bore Systems Now Dominate New MR Sales

MR system bore designs can be classified as follows:

- Narrow-bore (60 cm wide) systems are characterized by a large field of view and good image quality, and they can provide a full range of clinical applications. This design has long been the "standard" MR system design, although the narrow bore can increase patient anxiety and discomfort, potentially leading to delayed scans.
- Open (or clamshell) systems offer greater patient comfort; however, the low field strength (<0.3 T) of earlier systems limited their adoption. Though advancements have been made (for example, one new system offers a field-strength option of 1.2 T), this design still has disadvantages compared to narrow-bore and wide-bore designs.
- Wide-bore (70 cm wide) systems have been steadily adopted since their introduction in 2004. The wider design allows for improved patient comfort, and their technical specifications have improved such that they can be successfully used for most of the applications previously restricted to narrow-bore systems.

Today, all MR manufacturers in the United States offer wide-bore 1.5 T and 3 T systems for all routine clinical imaging needs. ECRI Institute's market data indicates that, despite the higher cost, the wide-bore systems now dominate the MR market at both 1.5 T and 3 T and are now the configuration of choice for new MR systems in the United States.

Recommendations

- A wide-bore system will meet routine MR scanning requirements for both 1.5 T and 3 T users.
- A narrow-bore 1.5 T system is a good choice for facilities that do not have the patient volume to justify the higher cost of a wide-bore system.
- A narrow-bore 3 T system should be considered by facilities that perform more advanced research applications that require the highest possible technical specifications.
- A high-field-strength open MR system is a good choice to augment a narrow-bore system to accommodate, for example, highly claustrophobic patients, patients needing greater access during studies, and very large patients.

Related Content

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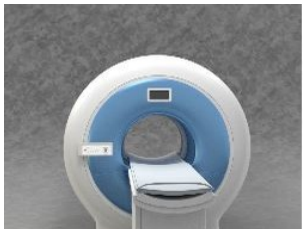
Recent Developments in MR Technology: Which Ones Do You Need?



When selecting a magnetic resonance (MR) system, two of the most important factors your facility should consider are the unit's field strength and the unit's bore size. We take a look at the choices healthcare institutions are making in these areas and discuss whether it would be worth it to upgrade to a 3-tesla (T) system from a 1.5 system. We also give recommendations on which bore design you should purchase—narrow, wide, or open—based on your facility's MR needs.

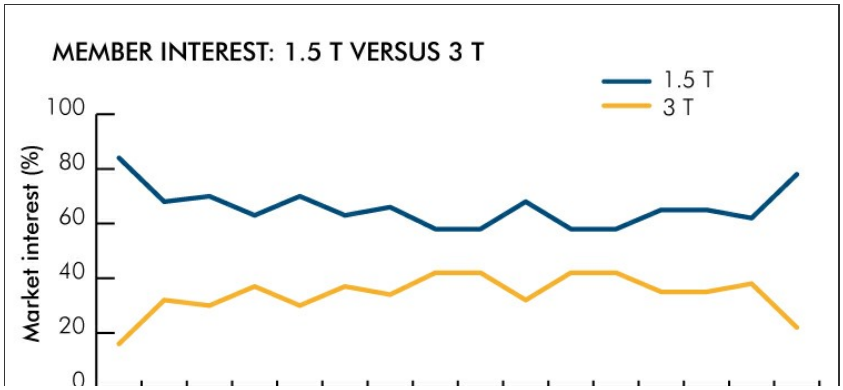
1.5 T versus 3 T: Which Field Strength Should You Choose?

When it first became available, 3 T technology was expected to become indispensable because of its increased image quality compared to 1.5 T. However, while the market share of 3 T systems has increased, it still has not surpassed that of 1.5 T technology.

Three issues prevent 3 T from becoming more popular than 1.5 T:

1. **Cost.** Undoubtedly, the main factor limiting adoption of 3 T technology is its increased cost compared to 1.5 T technology. This was true back in 2010, when narrow-bore systems, which were the dominant type at the time, cost about $600,000 more for 3 T than for 1.5 T. And it's still true today: For wide-bore systems, which currently lead the marketplace, the cost differential is $800,000. To give a sense of proportion, that's half the cost of a new 1.5 T system. Reimbursement is the same regardless of the field strength of the system, so the higher cost is economically justified only if the higher field strength translates into increased utilization.
2. **Safety.** For most patients undergoing an MR study, a 3 T system does not introduce any new safety concerns compared to systems with a lower field strength. However, there may be risks for patients implanted with certain devices. There are a large number of implantable devices—both on the market and already implanted—that have not yet been tested with 3 T technology and certified as safe, and a substantial number of them will never undergo the certification process. If the MR-conditional safety labeling does not specifically state that a device can be scanned with a 3 T system, then MR staff must locate and use a 1.5 T scanner to scan patients with such implants. This has slowed down or stalled adoption of 3 T MR at some institutions.
3. **The improvement of 1.5 T technology.** While 3 T may be preferable in terms of image quality, improvements have also been made to 1.5 T technology. In fact, aside from the most technologically demanding applications (e.g., neurosurgery planning), there are very few applications for which 1.5 T is not suitable.

Still, hospitals are clearly interested in 3 T technology. Data obtained from ECRI Institute's SELECTplus quotation analysis service shows that 3 T has accounted for about 40% of member interest in MR system purchases over the past four years; its growth has been very gradual and appears to be stabilizing. By contrast, in 2010, we reported that 3 T MR accounted for 20% of new MR installations.



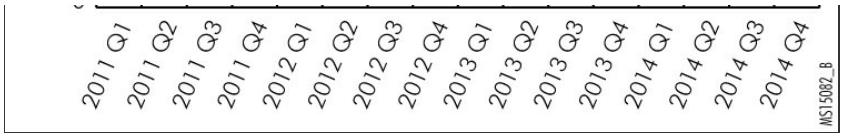


Figure 1. *ECRI Institute's market interest data for 1.5 T and 3 T (both standard and wide-bore) MR systems over the last four years. Market interest data is derived from ECRI Institute's SELECTplus quotation analysis service.*

Two technical factors have likely contributed to the increased interest in 3 T since 2010:

1. **Minimization of the dielectric effect.** The dielectric effect in MR imaging refers to an image artifact that was often encountered during body imaging using 3 T MR that resulted in regions of the image appearing dark. As a result, most early 3 T imaging was restricted to head imaging, which was not affected by this problem since the scanned area was smaller. All currently marketed 3 T systems have methods to avoid the problem, however, and body imaging is now a routine application for those systems.
2. **Availability of wide-bore 3 T systems.** Initially, 3 T systems had long, narrow (60 cm wide) bores, which are intimidating for many patients. Now, wide-bore (70 cm wide) systems dominate the MR market. In our 2010 Evaluation, only one 3 T system had a wide bore. Today, all MR manufacturers supply 3 T systems with the wider bores. As a result, a 3 T system is no different than a 1.5 T system from a patient comfort perspective.

The Bottom Line

A 1.5 T system provides all the capabilities required for routine imaging and will meet the needs of most hospitals. While 3 T technology provides some benefits compared to 1.5 T, most hospitals will find it difficult to justify the greater cost of 3 T technology given how few cases will benefit from it. (A 3 T system is best suited for the most technically demanding applications—typically those that require more specialized software and greater staff expertise to successfully perform, such as neurosurgical planning. In these cases, 3 T technology makes the studies easier to perform, and physicians will have more confidence in the results, meaning that additional studies will likely not be needed.)

ECRI Institute believes that, unless the cost of 3 T systems is substantially reduced, 1.5 T will remain the predominant MR configuration in routine clinical use.

Recommendations

1. Facilities that expect to perform advanced MR studies routinely (e.g., for neurosurgical planning) should consider a 3 T system. Otherwise, the patients who will benefit from 3 T will likely be few and far between, and a 1.5 T system will be sufficient.
2. Facilities that purchase 3 T systems should have a 1.5 T system available to accommodate patients for whom the 3 T technology is contraindicated (e.g., those with certain implants).

Wide-Bore Systems Now Dominate New MR Sales

When purchasing a new MR system, hospitals must decide which type of bore they need. MR system bore designs can be classified into three types:

- **Narrow-bore systems.** Narrow-bore systems have a bore width of 60 cm. This design has long served as the "standard" for MR systems. The narrow-bore design is characterized by a large field of view and good image quality, and it can provide a full range of clinical applications. However, the narrow design can increase patient anxiety and discomfort, potentially leading to delayed or canceled scans, which in turn can result in delayed

diagnosis and scheduling problems. In addition, some patients simply cannot fit into a 60 cm bore.

- **Open systems.** The open, or clamshell, design was introduced to address patient claustrophobia associated with the narrow-bore design. Many patients prefer this design over the narrow-bore design. At first, this design had low-field-strength open magnets (typically 0.1 to 0.3 T), which compromised image quality and led to long scan times. Some advancements have been made—for example, one manufacturer released an open system with a field-strength option of 1.2 T, which enables image quality and clinical applications more comparable to those of 1.5 T systems. Even so, open systems still have disadvantages compared to narrow-bore and wide-bore systems. These include the fact that they have a reduced field of view, they require a larger installation area, and they have heavier magnets. (We discuss the advantages and disadvantages of open systems in our July 2010 article—in it, we refer to these systems as vertical-field systems.)
- **Wide-bore systems.** Wide-bore systems have a bore width of 70 cm. Many patients prefer a wider bore, and these systems have been steadily adopted since their introduction in 2004. The first wide-bore systems were better than the open systems in terms of specifications and image quality, but they still did not match the specifications of high-end narrow-bore systems. Today, the technical specifications of wide-bore systems have improved such that they can be successfully used for most of the applications previously restricted to narrow-bore systems.

For a long time, narrow-bore designs dominated the marketplace. However, that trend has changed: Data from ECRI Institute's SELECTplus program indicates that, since 2011, wide-bore system purchases have largely replaced narrow-bore system purchases. The data also demonstrates a small but steady increase in interest in high-field-strength open systems. Currently, all five manufacturers selling MR systems in the United States offer wide-bore 1.5 T and 3 T systems, and, as mentioned above, one manufacturer supplies a high-field-strength open system.

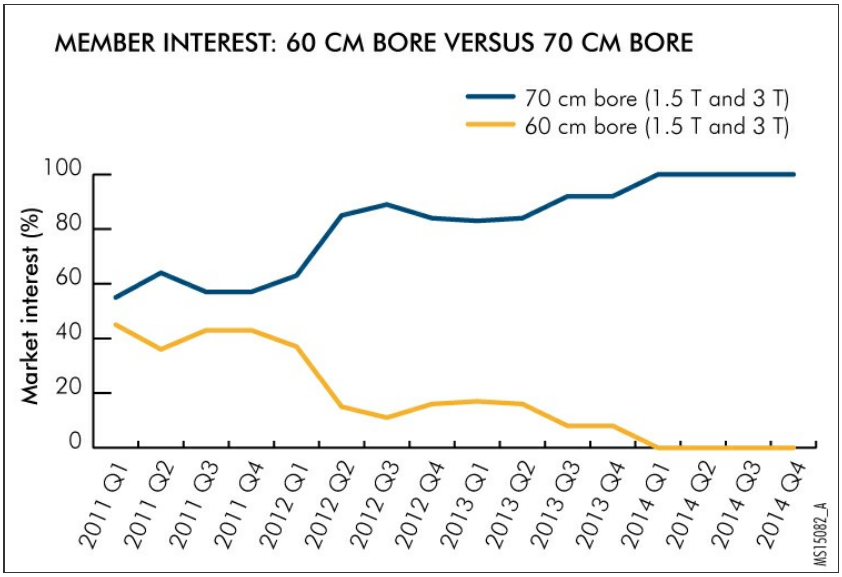


Figure 2. *ECRI Institute member interest in 60 cm and 70 cm bore systems over the last four years. Market interest data is derived from ECRI Institute's SELECTplus database.*

Despite the interest in wide-bore and open systems, new narrow-bore systems continue to be introduced into the market at both 1.5 T and 3 T. These systems hold two advantages over wide-bore and open systems: They cost less, and (in the case of 3 T) they can perform the most advanced MR applications with fewer performance compromises. The narrow-bore 1.5 T systems on the market today tend to be low-end systems in terms of cost and technical specifications, and are likely to be of interest only to facilities that need an MR system but lack the patient

volume to justify the additional cost of wide-bore. The narrow-bore 3 T systems, on the other hand, are more likely to be used by facilities that perform more advanced research applications that require the highest possible technical specifications, which are not available in wide-bore systems.

The Bottom Line

Wide-bore 1.5 T and 3 T systems are now the configuration of choice for new MR systems in the United States, though narrow-bore systems are unlikely to disappear anytime soon.

Recommendations

1. ECRI Institute recommends wide-bore systems for most purchasers, as they will meet routine MR scanning requirements for both 1.5 T and 3 T users.
2. A narrow-bore 1.5 T system is a good choice for facilities that need an MR system but that don't have the patient volume to justify the additional cost of a wide-bore system.
3. A narrow-bore 3 T system should be considered by facilities that perform more advanced research applications that require the highest possible technical specifications.
4. A high-field-strength open MR system is a good choice to augment a narrow-bore system to accommodate, for example, highly claustrophobic patients, patients needing greater access during studies, and very large patients.

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TOPICS AND METADATA

Topics

Technology Selection
;
Procurement Trends

Caresetting

Hospital Inpatient
;
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Roles

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Information Type

Guidance

UMDNS

Scanning Systems, Magnetic Resonance Imaging, Full-Body [18-108]
Scanning Systems, Magnetic Resonance Imaging [16-260]

PUBLICATION HISTORY

Published February 12, 2015

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Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation

Exhibit F

ECRI Institute

Evaluations & Guidance - Guidance

Do You Need a 3-Tesla MR System?

Published 2/18/2015

EXECUTIVE SUMMARY

Many studies have found improved image quality in 3-tesla (T) MR systems compared to those with lower field strengths, allowing more lesions to be detected with increased confidence. But the clinical value of these advances is difficult to gauge, since most clinical comparisons do not meet the standards expected in an evidence-based trial.

While 1.5 T remains the most commonly purchased field strength, 3 T MR has grown in popularity, despite its higher cost (currently about $800,000 more than a 1.5 T system). Today, 3 T systems can undertake all the work of a 1.5 T system and also obtain information that is not accessible with 1.5 T systems—but the utility of that information to date has been largely restricted to neurological studies.

The bottom line is that, if you're serving a neurosurgery program, the capabilities of 3 T systems should be seriously considered. For other applications, there is little evidence that 3 T is necessary or that it contributes to improved patient outcomes.

How 3 T can impact images. The physical interactions that control image quality and artifacts are complex; some improve the visibility of pathology and anatomy, while others can negatively impact it. For example, the dielectric effect—an image artifact resulting in regions of the image appearing dark—limited the quality of body imaging (including breast imaging) in the early days of 3 T, although all manufacturers now have a means to minimize, or even eliminate, the resulting signal loss.

In addition, the higher specific absorption rate of 3 T can cause increased tissue heating and requires carefully designed pulse sequences, as well as greater use of parallel imaging techniques to accelerate image acquisitions.

Furthermore, there are increased safety concerns about whether implants contain ferromagnetic materials or are subject to heating while in a 3 T magnetic field.

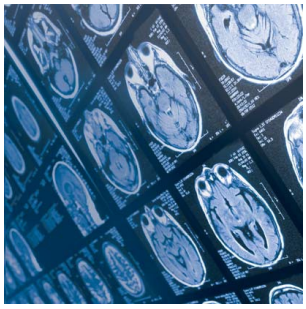
And adjusting imaging protocols will require considerable ongoing radiologist involvement, so radiologists must be readily accessible and committed to the acquisition of a 3 T system.

The clinical impact of 3 T technology. Although many clinical studies report that image quality is improved using 3 T, very few studies have found that the improved image quality results in improved patient management. In fact, one study found that differences between radiologists' interpretations were more significant than the differences in field strength.

Workflow improvements. Workflow may become more efficient, since the increased performance of 3 T can be used to decrease study time (for example, by using parallel imaging) rather than to improve image quality.

Related Content

Magnetic Resonance Imaging: The Essentials



For facilities weighing whether to purchase an MR system with a 1.5-tesla (T) or 3 T magnet, the short answer is: If you're serving a neurosurgery program, the capabilities of 3 T systems should be seriously considered. For other applications, while it improves image quality and diagnostic confidence, there is little evidence that 3 T is necessary or that it contributes to improved patient outcomes.

In MR imaging, the most important property affecting image quality is the field strength. An MR image is made from the signals emitted by protons in the patient. The signal is very small, so the number of signal-emitting protons needs to be maximized. As the applied magnetic field increases, the number of protons available for imaging also increases. The net result is that doubling the field strength should double the signal-to-noise ratio and therefore the image quality—though only in theory, as we'll discuss.

The first commercial 3 T MR systems became available around 2000 and were designed predominantly for head imaging. Since then, the use of 3 T has expanded. All the major manufacturers now sell full-body systems that are equipped for the full range of MR studies. (Head-only systems are no longer available, except for research at even higher field strengths.) The number of 3 T systems sold now accounts for 40% of new MR installations. While 1.5 T remains the most common field strength, the number of units and market share have declined since 2000, despite the higher cost of a 3 T system (about $800,000, or 50%, more than a 1.5 T system) and the higher construction costs. In other words, a number of facilities believe that the greater expense of 3 T is justified.

Since the introduction of 3 T MR for routine clinical use, many studies have compared 3 T systems with systems that have lower field strengths. Most of these studies have found improved image quality in the 3 T systems (though it is rarely doubled compared to 1.5 T), allowing more lesions to be detected with increased confidence. But the clinical value of these advances is difficult to gauge, since most clinical comparisons do not meet the standards expected in an evidence-based trial.

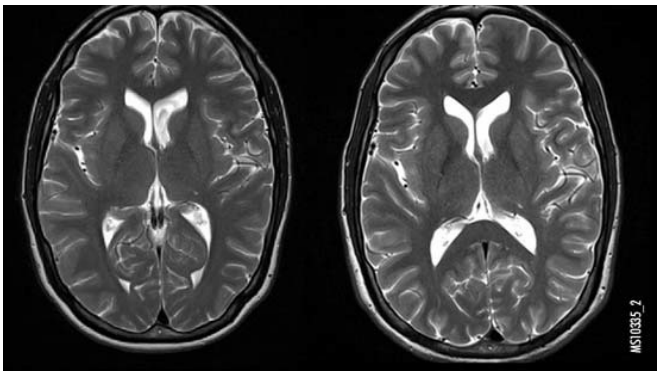
Given the inconclusive nature of these findings, the emphasis for 3 T research has moved to exploring what new clinical information can be obtained with 3 T MR. This is particularly true for advanced neurological studies, such as functional MR imaging, diffusion weighted imaging, and spectroscopy. 3 T systems today can undertake all the work of a 1.5 T system and, in addition, obtain information that is not accessible with 1.5 T systems—but the utility of that information to date has been largely restricted to neurological studies.

How 3 T can impact images. The physical interactions that control image quality and artifacts are complex. Some

of these interactions improve the visibility of pathology and anatomy, while others can negatively impact it. A number of reviews are available that discuss the intricacies of the physics and how the clinical images are affected (e.g., Kuhl et al. 2008, Chang et al. 2008). The following table summarizes some of the important physical properties that can impact image quality as the field strength is increased.

PHYSICAL PROPERTIES AFFECTING 3 T IMAGE QUALITY (COMPARED TO LOWER-FIELD-STRENGTH IMAGING)			
Property	**Effect**	**Clinical advantages**	**Clinical disadvantages**
Greater field strength	Improved signal-to-noise ratio	Improved image quality and spatial resolution, shorter study times	Increased safety concerns, particularly related to heating
Dielectric effect	Wavelength of radio-frequency signal is similar to abdominal dimensions	None	Artifact; inhomogeneous signal loss in abdominal and thoracic imaging (dark areas)
Larmor (resonant) frequency	Larmor frequency is doubled and frequency differences between tissues are doubled	Improved fat and water separation and improved spectroscopy	Chemical shift artifacts increase and increased tissue heating
Gadolinium contrast enhancement	Increase in contrast enhancement	Improved contrast-enhanced studies and possibly reduced contrast dose required	None compared to lower-field-strength systems
T1 relaxation time	T1 is increased (nonuniformly)	Improved blood-to-tissue contrast in contrast-free angiography	Reduced T1 contrast and longer acquisition times
Magnetic susceptibility	Increased magnetization of tissues	Increased contrast in BOLD (blood oxygen level dependence) imaging (used in functional MR imaging)	Increased artifact at tissue boundaries

In particular, the dielectric effect–an image artifact resulting in regions of the image appearing dark—has received a lot of attention, since it was the major reason for the poor body imaging experienced by early users of 3 T systems, including those performing breast imaging. All the manufacturers now have a means to minimize, or even eliminate, the resulting signal loss. This means 3 T can now be used routinely for body imaging.



1.5 T versus 3 T. *In these head images, note the improved image clarity in the 3 T image (right) compared to the 1.5 T image (left). Images are from two different patients.*

Patient safety may now be the greatest concern with 3 T. The higher specific absorption rate (SAR) of 3 T can cause increased tissue heating. To maintain the SAR within the legally defined thresholds, manufacturers must carefully design the pulse sequences, and users must make greater use of parallel imaging techniques. (Parallel imaging is a process in which redundant information acquired by multiple coil elements is used to significantly accelerate image acquisition.) In addition, the use of 3 T may be contraindicated in more patients due to the increased safety concerns with regard to implants—for example, whether implants contain ferromagnetic materials or are subject to heating while in the magnetic field. If a patient has an implant that isn't labeled for use with a 3 T system, a 1.5 T system may be required in order to scan that patient.

So while there are plenty of advantages in terms of image quality when moving to 3 T—most notably for neurological, contrast-enhanced, and angiography studies—users must also be aware of some potential drawbacks. Importantly, any facility wishing to implement a 3 T system must understand that adjusting imaging protocols will require considerable ongoing radiologist involvement, so radiologists must be readily accessible and committed to the project.

The clinical impact of 3 T technology. As discussed earlier, many clinical studies during the first decade of clinical 3 T use reported that image quality is improved using 3 T. The improved images often result in increased confidence for radiologists. However, very few studies have found that the improved image quality results in improved patient management (ECRI Institute 2008, Willinek and Schild 2008). In ECRI Institute's 2008 analysis, only one study out of 19 comparing 3 T to 1.5 T showed that 3 T MR benefited patients by prompting a change in patient management; the findings of this study were based on a statistical analysis of presurgical epilepsy patients (Knake et al. 2005).

A search of more recently published papers shows that many of those studies also found improved image quality, improved diagnostic confidence, and detection of more lesions for a wide range of studies. Usually this entailed finding more lesions in patients in whom lesions had already been detected. Yet definitive evidence supporting the use of 3 T remains elusive. For example, the improved resolution has been found to make no difference in sensitivity or specificity in meniscal tear diagnosis (Grossman et al. 2009). Wattjes et al. (2008) found that while 3 T improves the detection of inflammatory brain lesions, it did not affect the time of diagnosis of the underlying disease. These and many other studies reflect the complexity of measuring the clinical impact of 3 T. In fact, one study found that differences between radiologists' interpretations were more significant than the differences in field strength (Krampla et al. 2009).

Workflow improvements. Workflow may also become more efficient, since the increased performance of 3 T can

be used to decrease study time rather than to improve image quality (for example, by using parallel imaging).

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Willinek WA, Schild HH. Clinical advantages of 3.0 T MRI over 1.5 T. *Eur J Radiol* 2008 Jan;65(1):2-14.

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Scanning Systems, Magnetic Resonance Imaging [16-260]

PUBLICATION HISTORY

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ECRI Institute. Do you need a 3-tesla MR system? *Health Devices* 2015 Feb 18.

Day Kimball Healthcare, Inc.
MRI Service Relocation & Consolidation

Exhibit G

1400 East Touhy Ave, Suite 250
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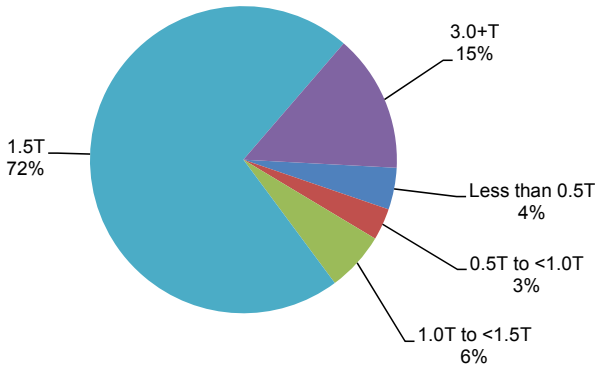
2015 MR Market Outlook Report

December 2015

MR Installed Base by Field Strength

By magnet field strength, the 1.5 Tesla magnets constitute the majority of the fixed MR systems, with 72% of the installed base, compared to 3.0+ Tesla at 15%, 1.0 to <1.5 Tesla at 6%, 0.5 to <1.0 Tesla at 3%, and <0.5 Tesla at 4%.

Distribution of Installed Base of MR Systems, by Magnet Field Strength, as of 2015 Survey

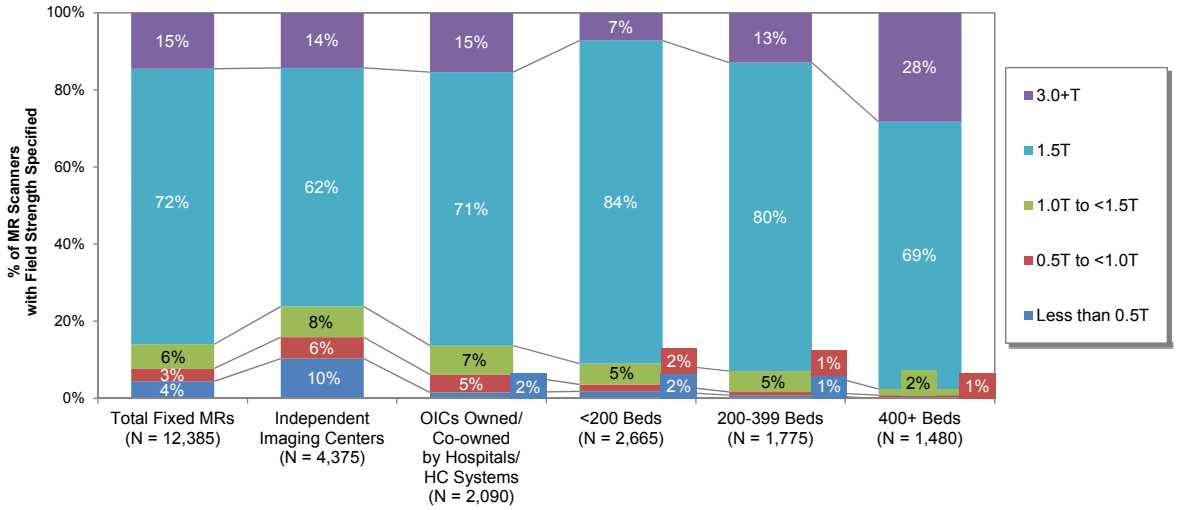


N = 12,385 MR Units with Manufacturer Specified

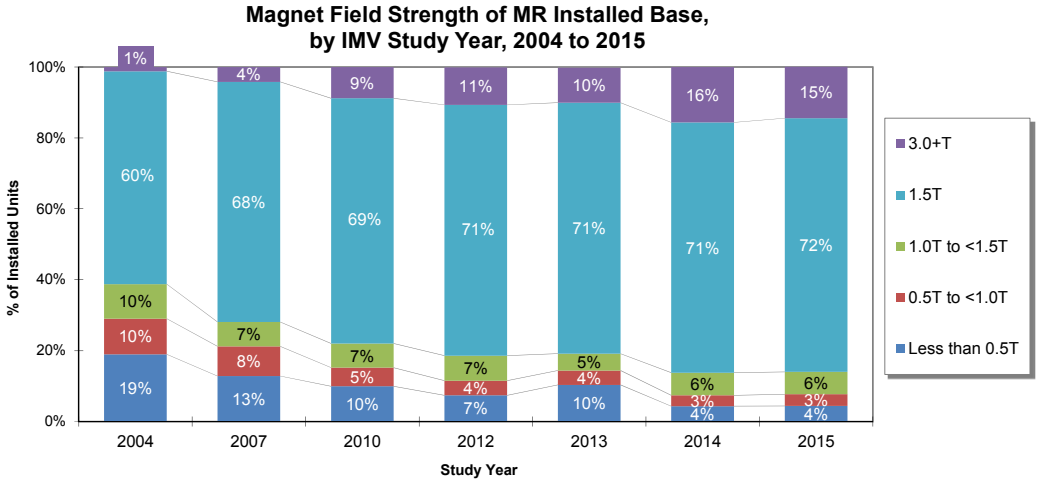
The larger hospitals are more likely to have the high field strength magnets, with 28% of the MR units in 400+ bed hospitals having 3.0+T magnets, compared to 7-15% of those installed in other site types.

The independent imaging centers are more likely to have lower field strength MR systems, with 24% of the MRs having <1.5T magnets, compared to 14% in OICs owned or co-owned by hospitals/HC systems, 9% in <200 bed hospitals, 7% in 200-399 bed hospitals, and 3% in 400+ bed hospitals.

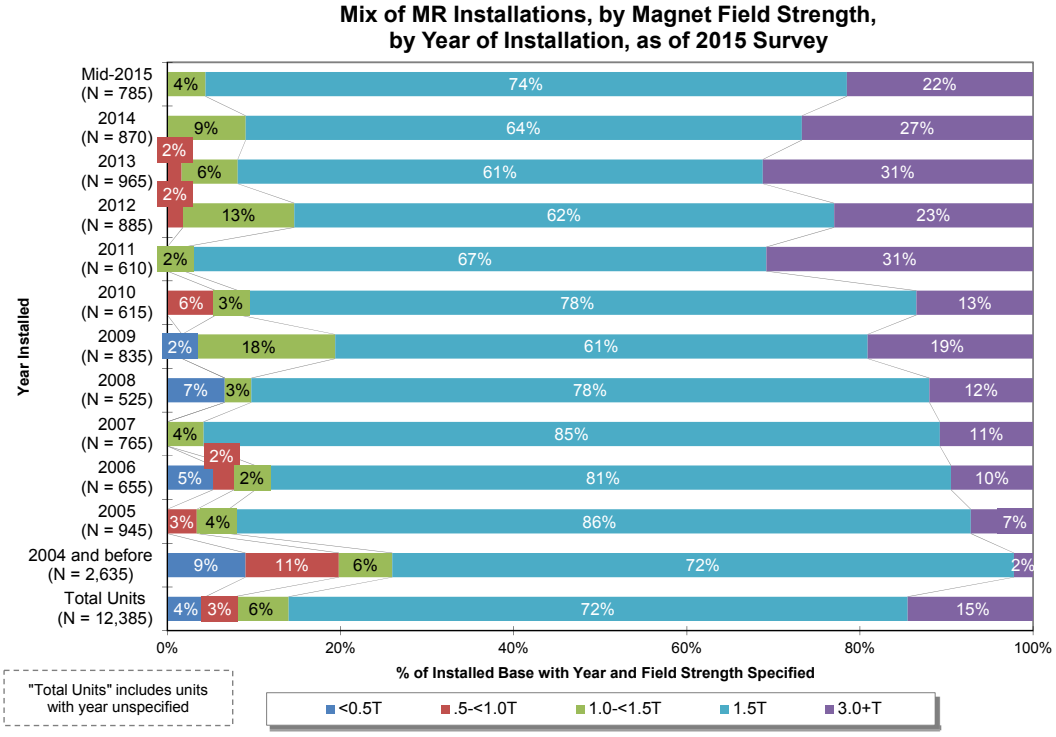
Distribution of Installed Base of MR Systems, by Magnet Field Strength, by Site Type, as of 2015 Survey



The proportion of the total fixed MR installed base with 1.5T magnets has grown from 60% of the installed base as of IMV's 2004 study to 72% as of this current study. The high field strength 3.0+T units have grown from 1% of the installed base as of 2004 to 15% as of this study, while MR units with <1.5T have declined from 39% of the installed base as of 2004 to 13% as of this study.

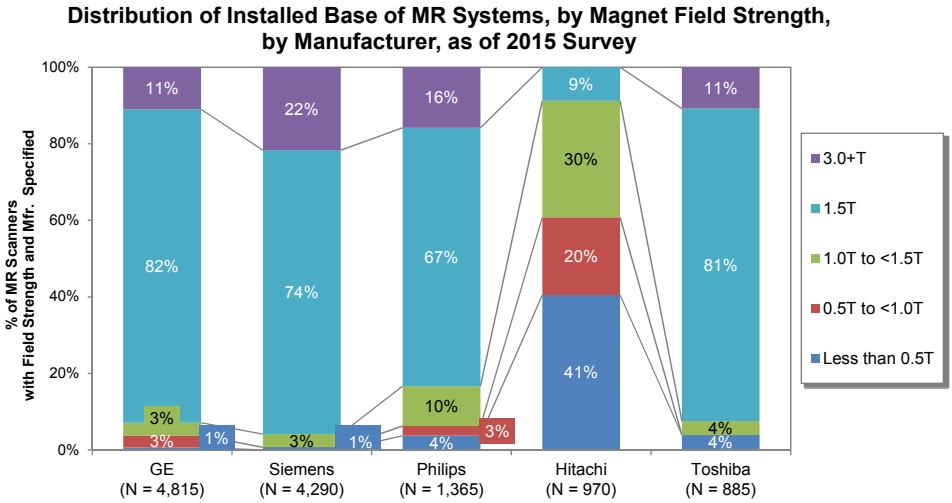


Annual installations of MR systems by field strength demonstrate the successive waves of the adoption of MR magnets. Over the past decade, 1.5T magnets have been the primary MR magnet type, ranging from 61% to 86% of the units installed each year. At the same time, 3.0+T magnets have grown from 2% of the units installed in 2004 and before to 27% of 2014 installations, and declining slightly to 22% in 2015 (based on a partial year of installations), while <1.5T magnets declined from 26% of the units installed in 2004 and before to 9% of 2014 installations and 4% of mid-2015 installations (based on a partial year of installations).



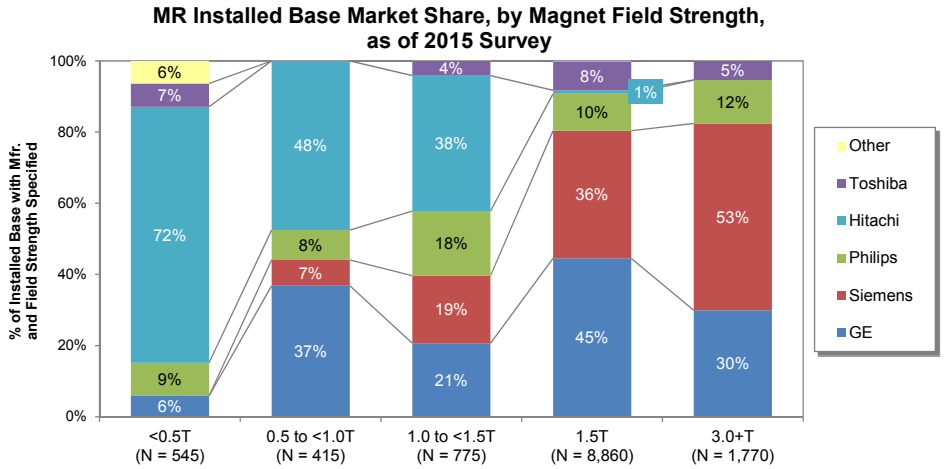
The MR equipment mix by field strength varies by MR manufacturer:

- GE: 82% of GE's installed MRs are 1.5T systems, 11% are 3.0+T systems, and 7% are <1.5T.
- Siemens: 74% of Siemens' MRs are 1.5T systems, 22% are 3.0+T systems, and 4% are <1.5T.
- Philips: 67% of Philips' MRs are 1.5T systems, 16% are 3.0+T systems, and 17% are <1.5T.
- Hitachi: 61% of Hitachi's MRs are <1.0T systems, 30% are 1.0T to <1.5T MRs, and 9% are 1.5T.
- Toshiba: 81% of Toshiba's MRs are 1.5T systems, 11% are 3.0+T systems, and 8% are <1.5T.



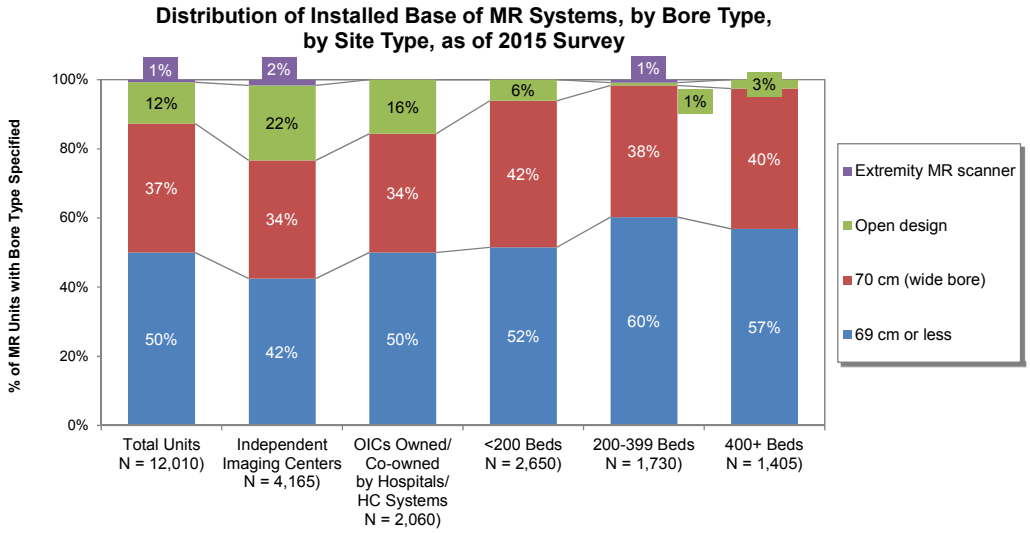
When the same data is viewed by magnet field strength, the following observations can be made:

- 3.0+T: Siemens has the lead in the very high field segment, with 53%, followed by GE (30%), Philips (12%), and Toshiba (5%).
- 1.5T: GE is #1, with 45% of the 1.5 T installed base, followed by Siemens (36%), Philips (10%), Toshiba (8%), and Hitachi (1%).
- 1.0 to <1.5T: Hitachi has 38% of the installations, followed by GE (21%), Siemens (19%), Philips (18%), and Toshiba (4%).
- 0.5 to <1.0T: Hitachi has the lead (48%), followed by GE (37%), Philips (8%), and Siemens (7%).
- <0.5T: Hitachi is #1, with 72%, followed by Philips (9%), Toshiba (7%), and GE (6%).



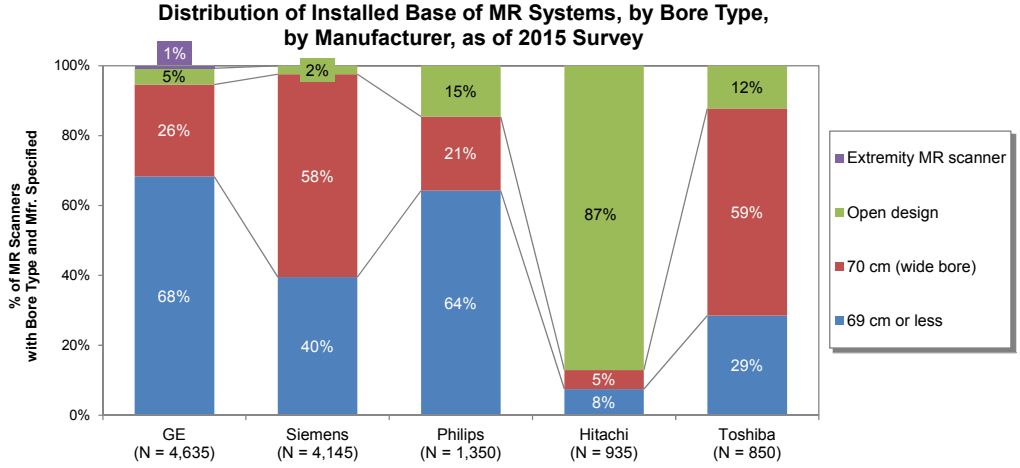
MR Installed Base by Bore Type

As of this 2015 survey, 12% of the fixed MR units installed are open design systems, 87% are cylindrical systems, which include 50% that have a bore width of 69 cm or less and 37% with a bore width of 70 cm (wide bore), while 1% are dedicated extremity units. The independent imaging centers are the most likely to have the open design systems (22%), due to the price point and marketability of the open systems to their patient and physician referral base, compared to 16% of the units installed in OICs owned or co-owned by hospitals/HC systems and 1-6% of the units installed in hospital locations.



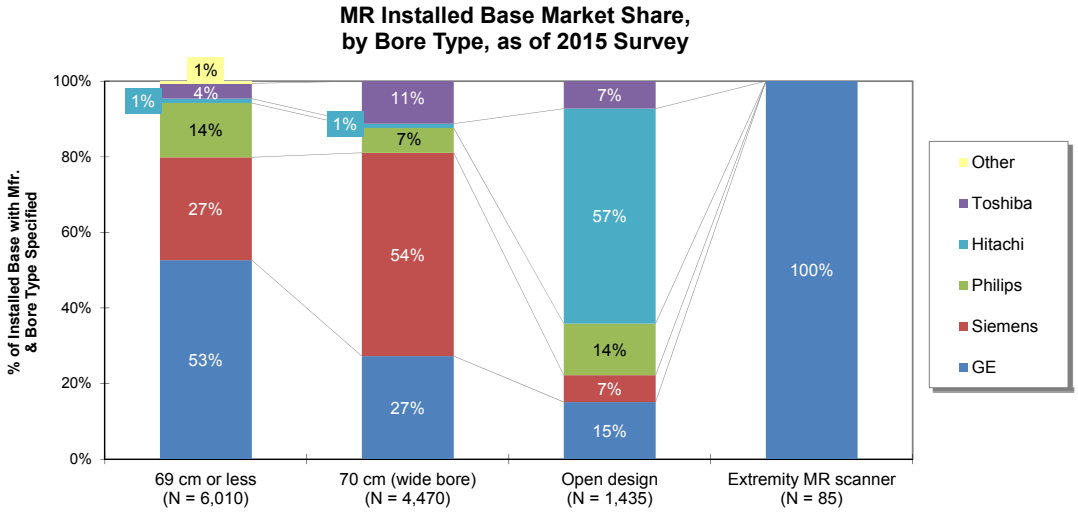
The MR equipment mix by bore type varies by MR manufacturer:

- GE: 68% of GE's installed MRs have a bore width of 69 cm or less, 26% have a bore width of 70 cm, 5% have an open design, and 1% have an extremity MR scanner.
- Siemens: 40% of Siemens' installed MRs have a bore width of 69 cm or less, 58% have a bore width of 70 cm, and 2% have an open design.
- Philips: 64% of Philips' installed MRs have a bore width of 69 cm or less, 21% have a bore width of 70 cm, and 15% have an open design.
- Hitachi: 87% of Hitachi's installed MRs have an open design, and 13% have cylindrical bores.
- Toshiba: 29% of Toshiba's installed MRs have a bore width of 69 cm or less, 59% have a bore width of 70 cm, and 12% have an open design.



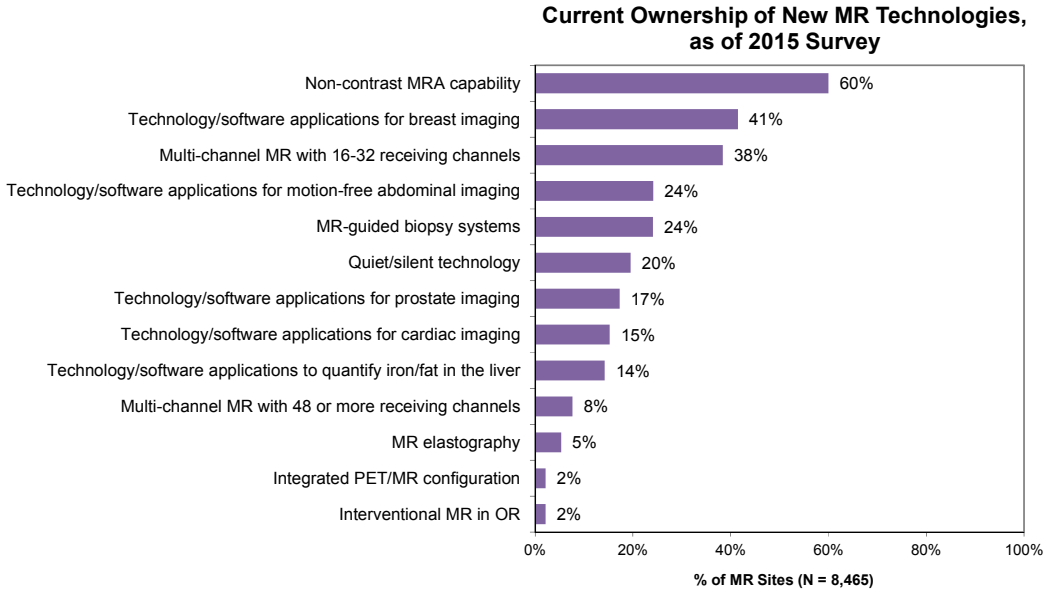
When the same data is viewed by bore type, the following observations can be made:

- 69 cm or less: GE is #1 with 53%, followed by Siemens (27%), Philips (14%), Toshiba (4%), and Hitachi (1%).
- 70 cm (wide bore): Siemens' strongest share is for this larger 70 cm bore type, with a 54% installed base share, followed by GE (27%), Toshiba (11%), Philips (7%), and Hitachi (1%).
- Open Design: Hitachi is #1 with 57% of the open design MR installed base, followed by GE (15%), Philips (14%), Siemens (7%), and Toshiba (7%).
- Extremity MR scanners: GE has 100% of the extremity MR installed base, due to its 2009 acquisition of ONI.

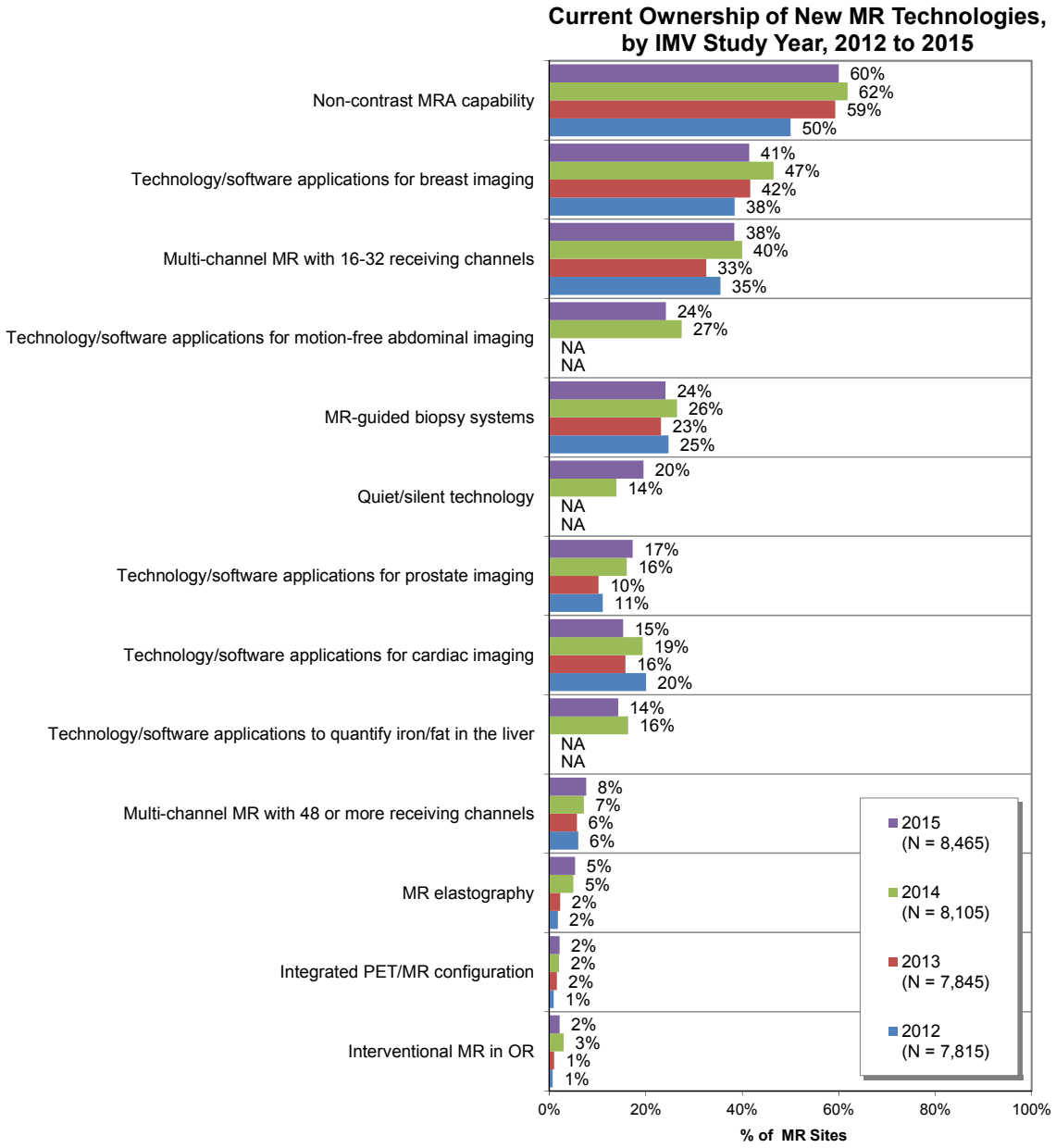


New MR Technologies Installed

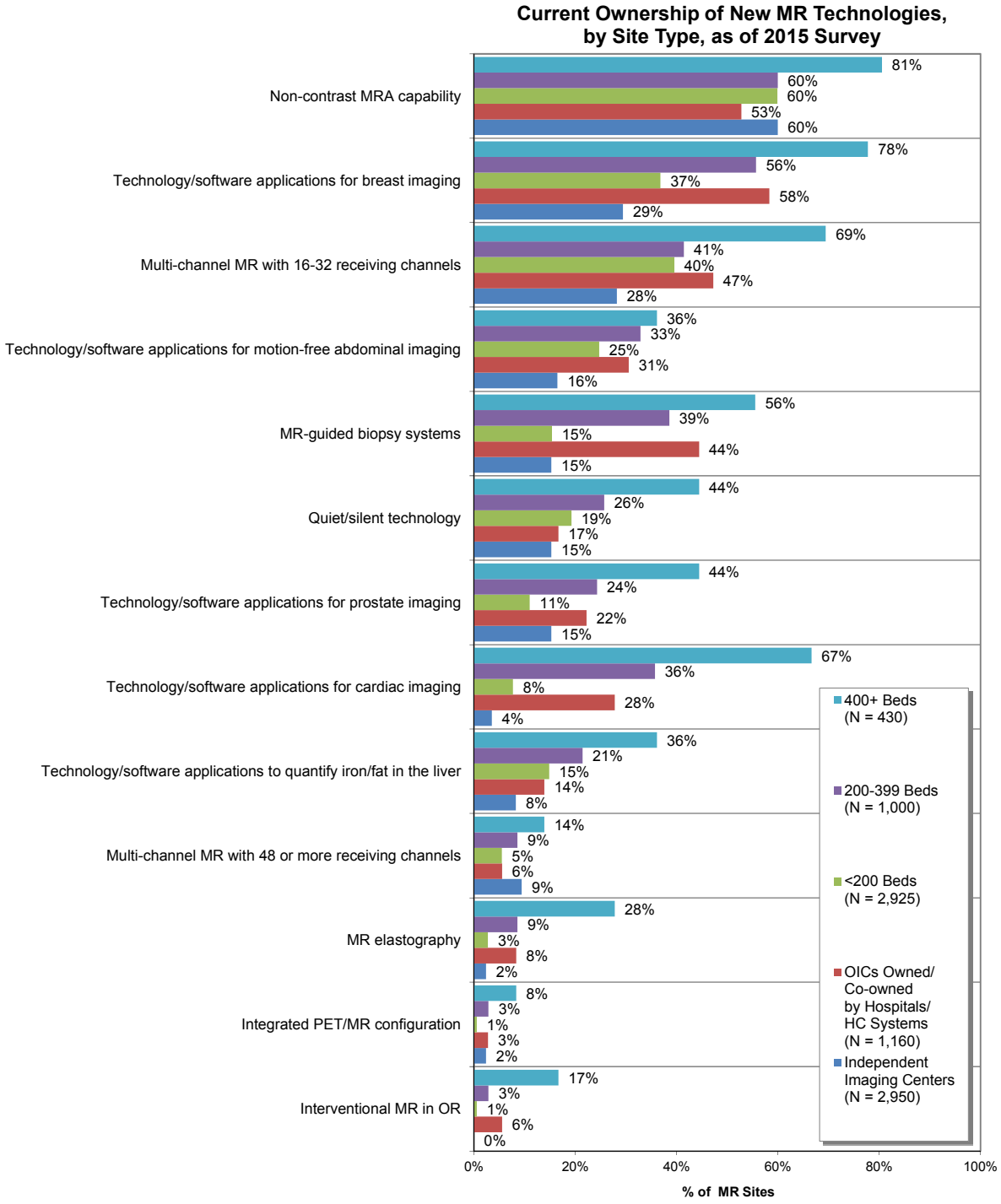
As of this 2015 survey, 60% of the MR sites have non-contrast MRA capability, 41% have technology/software applications for breast imaging, and 38% have multi-channel MR with 16-32 receiving channels. The next capabilities most often installed are technology/software applications for motion-free abdominal imaging (24%), MR-guided biopsy capability (24%), quiet/silent technology (20%), prostate imaging applications (17%), cardiac imaging applications (15%), and liver quantification applications (14%).



By IMV study year, the MR technologies with the greatest gains in adoption since 2012 are non-contrast MRA capability (from 50% to 60%) and technology/software applications for prostate imaging (from 11% to 17%).



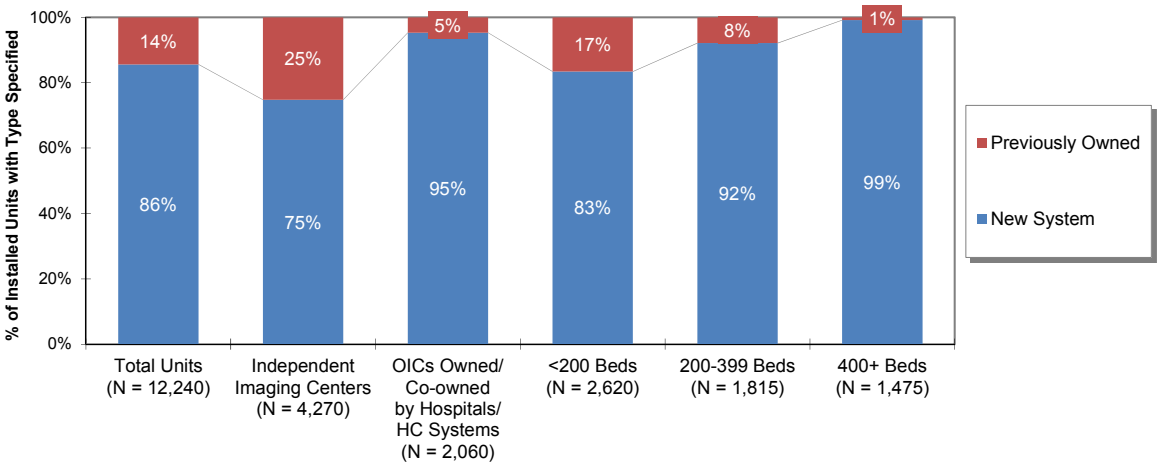
By site type, the larger 400+ bed hospitals are more likely to have these newer MR technologies.



Whether MR Systems Were Purchased New or Were Previously Owned

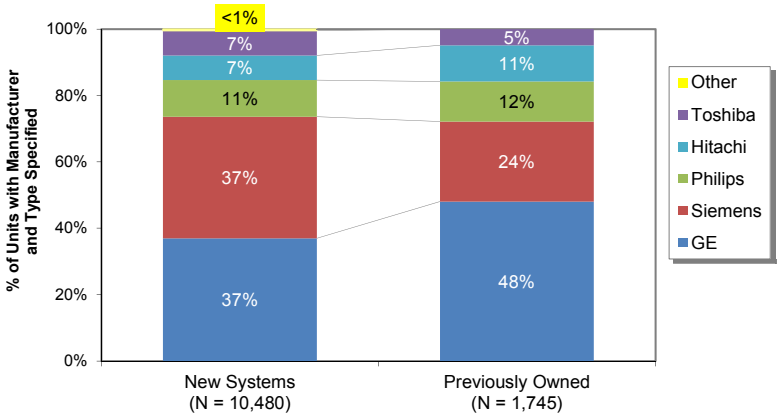
Of the current MR installed base, 86% of the units were purchased new and 14% were previously owned. Hospitals with <200 beds and independent imaging centers are most likely to have installed previously-owned MRs, with 17-25% of the installed MRs, compared to 1-8% of the units installed in the other site types.

Distribution of MR Installed Base, by Whether Purchased New or Previously Owned, by Site Type, as of 2015 Survey



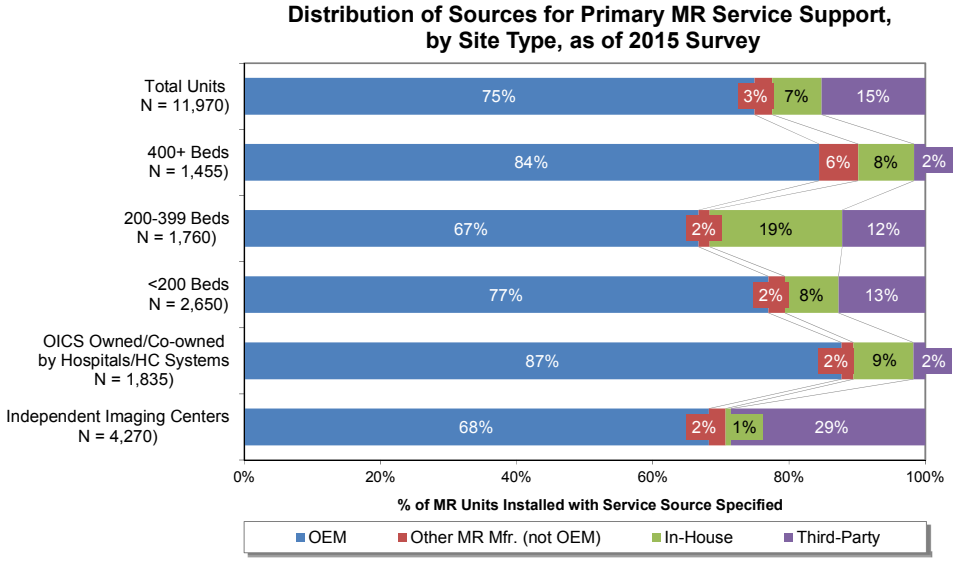
Of the MR systems that were purchased new, Siemens and GE each have 37% of the installations, followed by Philips with 11%, Toshiba with 7%, and Hitachi with 7%. Of the MR units that were previously owned, GE comprises 48% of the units, followed by Siemens (24%), Philips (12%), Hitachi (11%), and Toshiba (5%).

MR Unit Installed Base Share, by Whether the System was Purchased New or Previously Owned, as of 2015 Survey

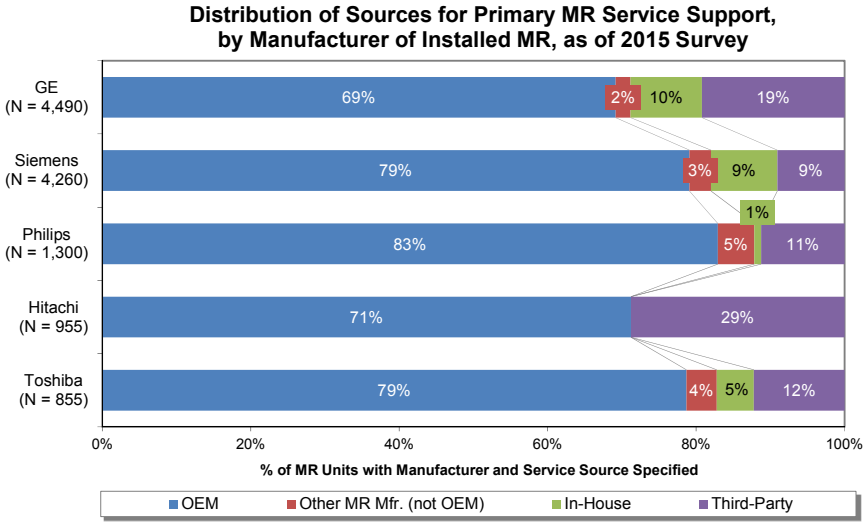


Sources of Primary MR Service Support

As of this 2015 survey, the "OEM" (Original Equipment Manufacturer) is the primary source of service support for three quarters (75%) of the installed MRs, followed by third-party service organizations (15%), in-house service (7%), and other MR manufacturers who are not the OEM (3%). By site type, the 200-399 bed hospitals are more likely to utilize in-house service for their primary MR service support, with 19% of the units using in-house service, compared to 8% of the units in both <200 and 400+ bed hospitals, 9% of the units in OICs owned or co-owned by hospitals/HC systems, and 1% of the units in independent imaging centers. Third-party service is most likely to be used by independent imaging centers, with 29% of the units, compared to 2-13% of the units in other site types.



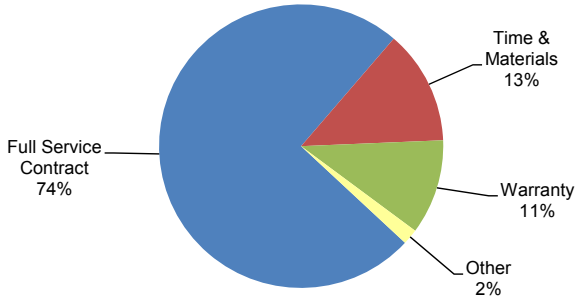
As of this survey, the majority of the manufacturers' installed MRs (69-83%) is serviced by the "manufacturer/OEM," with Philips having the highest percentage of 83%. Slightly larger proportions of GE and Siemens' installed MRs are serviced in-house (9-10%) compared to 0-5% of Hitachi, Philips, and Toshiba units. Third-party service providers are used most often for Hitachi MRs (29%), followed by GE MRs (19%), Toshiba MRs (12%), Philips MRs (11%), and Siemens MRs (9%).



Payment Arrangements for MR Service Support

Almost three quarters (74%) of MR units are currently being serviced under a full service contract while 13% are under a time and materials contract and 11% are under warranty. "Other" mentions include "parts only," "shared service contract," "PMs plus discounted time and material," "first look," and "assumed risk."

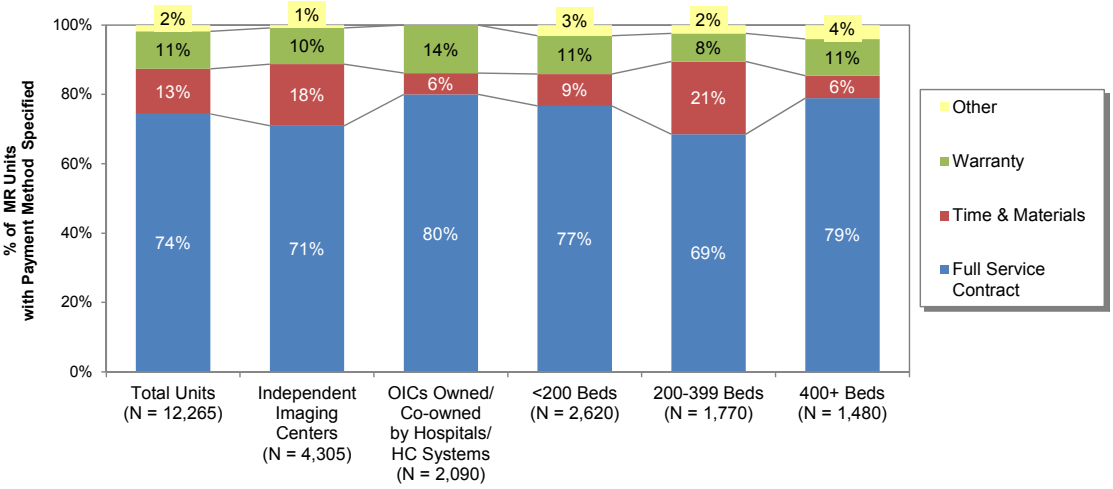
Payment Arrangements for MR Service Support, as of 2015 Survey



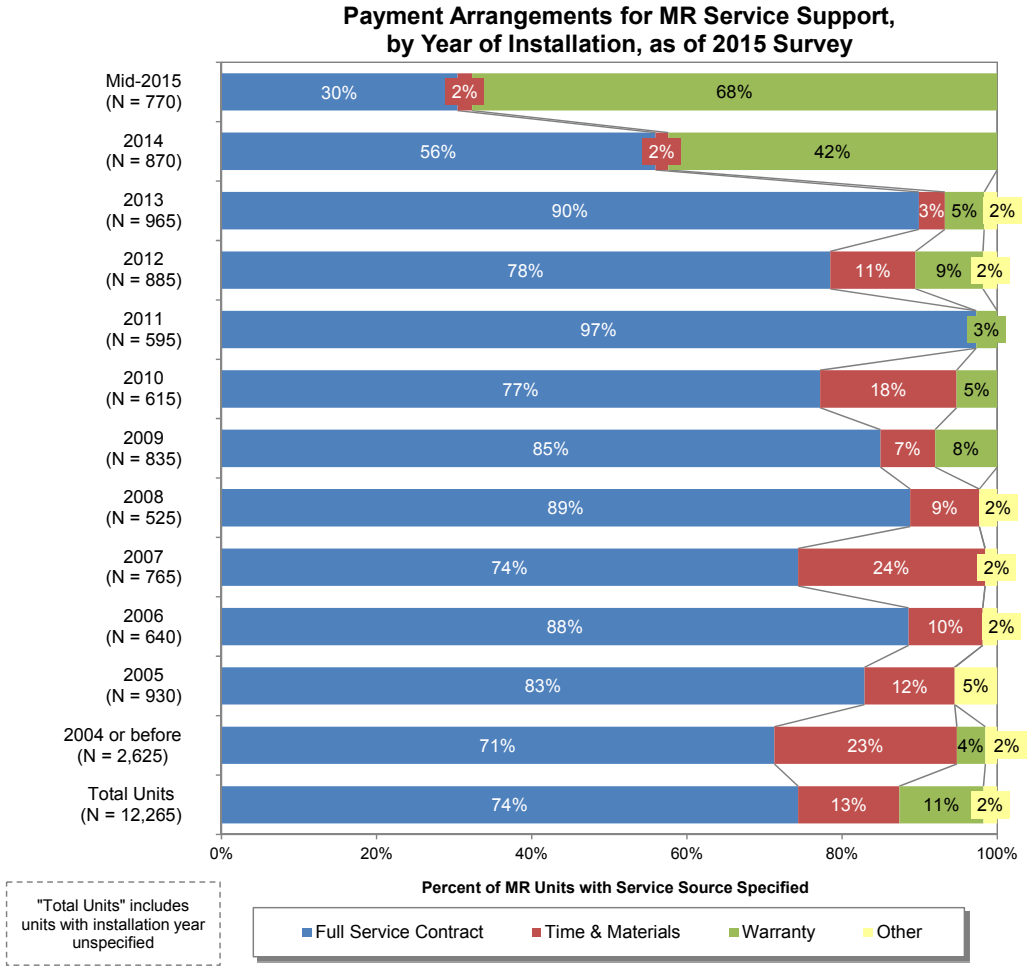
N = 12,265 MR Units with Method Specified

The <200 bed hospitals, 400+ bed hospitals, and OICs owned or co-owned by hospitals/HC systems are more likely than 200-399 bed hospitals and independent imaging centers to have their MRs covered under full service contracts (77-80% vs. 69-71%). Hospitals with 200-399 beds and independent imaging centers are more likely than the other site types to have their MR service support under a time and materials contract (18-21% vs. 6-9%).

Payment Arrangements for MR Service Support, by Site Type, as of 2015 Survey



Not surprisingly, the newer units are more likely to be covered under warranty. For MRs installed in 2013 and before, about 81% of the MR units (ranging from 71% to 97%) are covered under full service contracts, while about 14% (ranging from 3% to 24%) have their MR service support under a time and materials contract.

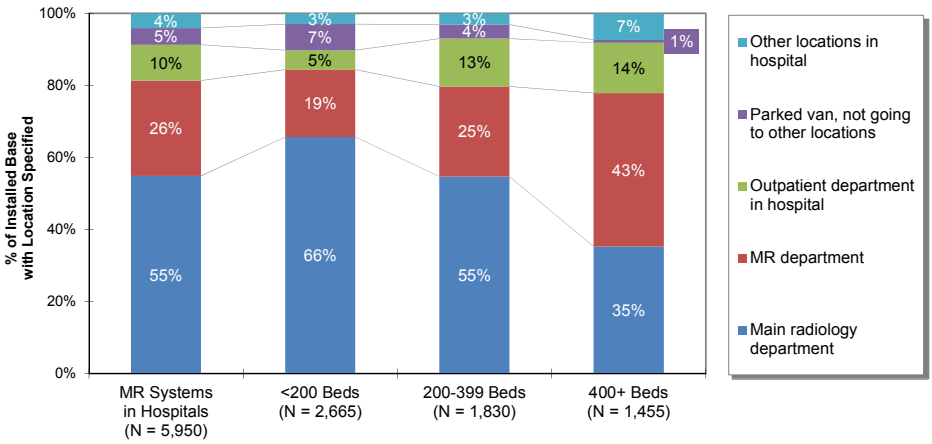


Location Type of MR Systems Located Within Hospitals

Hospital respondents were asked for the location types of their fixed MR systems located within their hospitals (not including locations outside of the hospital) that are owned/managed by the radiology/imaging department. Over half (55%) of such hospital MR systems are located in the main radiology department, 26% are located in the MR department, 10% are located in the outpatient departments in the hospital, 5% are in a parked van (not going to other locations), with 4% located in others areas of the hospital.

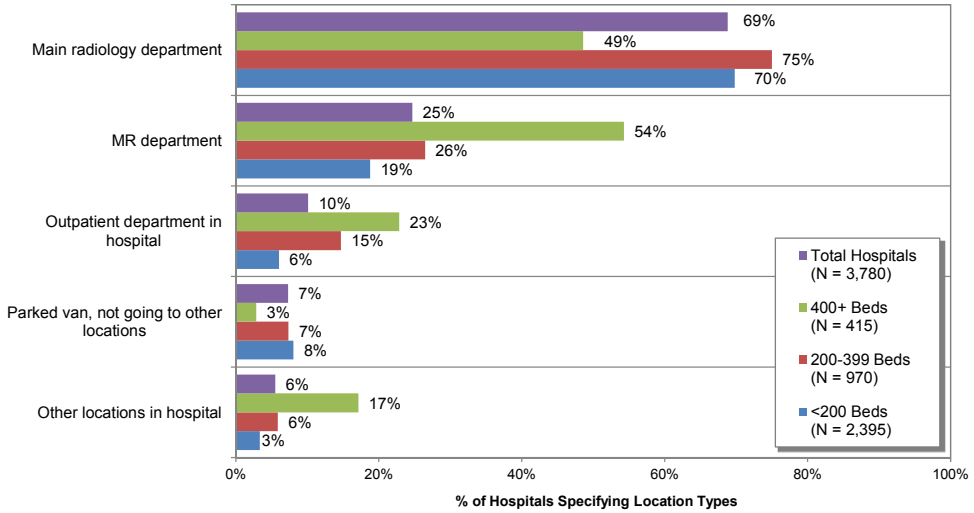
By hospital bed size, the larger 400+ bed hospitals are more likely to have MR units located outside of their main radiology department, but within the hospital, with 65% of the units compared to 45% for 200-399 bed hospitals and 34% in the <200 bed hospitals.

Location Type of Fixed MR Systems Owned/Managed by Radiology and Located Within Hospital Facility, by Hospital Bed Size, as of 2015 Survey



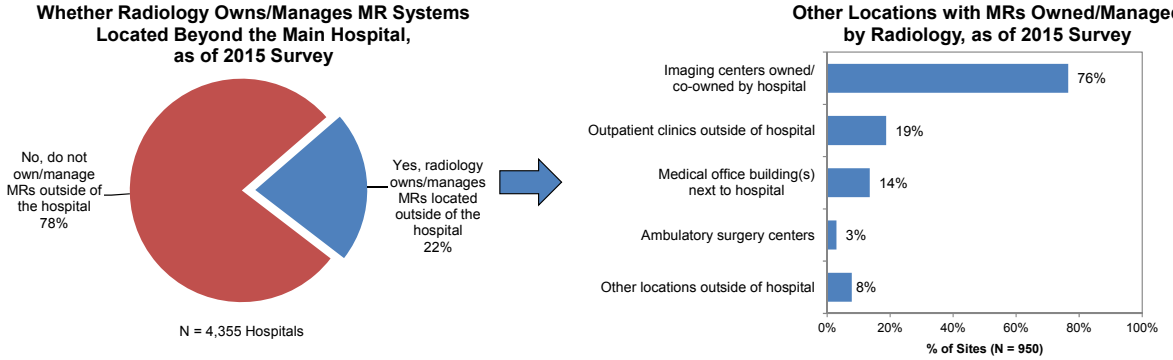
As a percent of the hospitals, 69% of the hospitals have MRs located in their main radiology department, 25% have units that are located in the MR department, 10% in the outpatient department, and 7% in a parked van. By hospital bed size, respondents in 400+ bed hospitals are more likely to identify the location for the MR equipment as an MR department compared to <400 bed hospitals (54% vs. 19-26%). The 400+ bed hospitals are also more likely to have MR units located in a hospital outpatient department (23%) than <400+ bed hospitals (6-15%).

Percent of Hospitals with MR Systems Owned/Managed by Radiology and Located Within Hospital Facility, by Location Type, by Hospital Bed Size, as of 2015 Survey

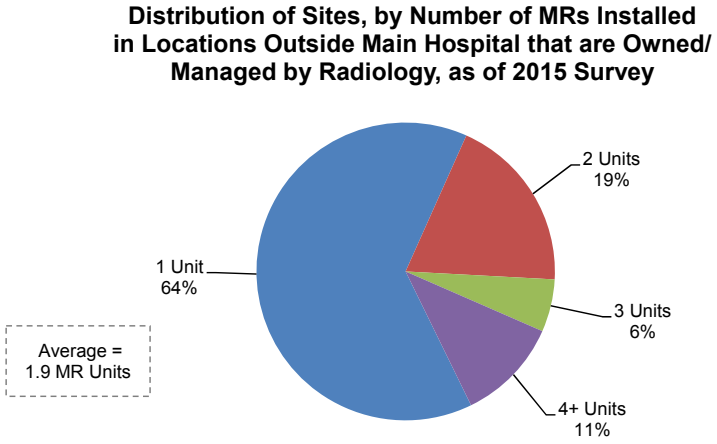


MR Systems Owned/Managed by Radiology and Located in Outpatient/Ambulatory Locations

In this 2015 survey, the hospital respondents were also asked if they own/manage any other MR systems that are located outside of the main hospital. Just under one quarter (22% or 950) of the radiology/imaging departments in hospitals own/manage MR units located outside of the main hospital. Of these hospitals, 76% own/manage MRs in imaging centers that are owned or co-owned by the hospital, 19% have MRs in outpatient clinics, 14% in medical office buildings next to the hospital, 3% in ambulatory surgery centers, and 8% in other locations outside of the hospital.



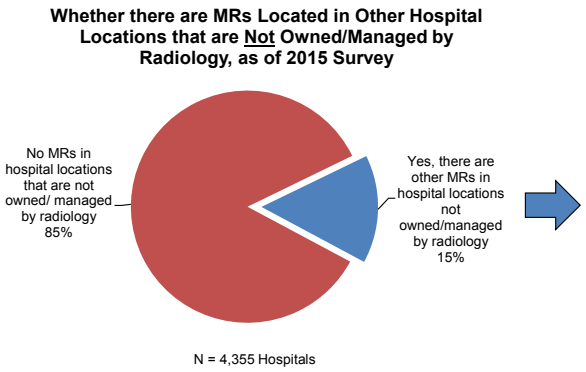
Of these 950 hospitals, 910 specified the number of MR units owned/managed by radiology that are located in these other locations. An estimated total of 1,695 MR units are in these other locations, with 64% of the hospitals having 1 MR installed in other locations, 19% having 2 MRs installed, 6% having 3 MRs installed, and 11% having 4+ MRs installed, for an average of 1.9 MRs per hospital.

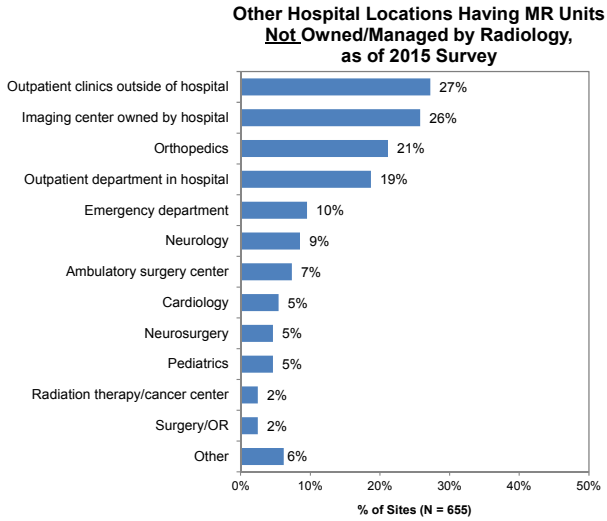


Since this study also surveyed respondents who represent 2,090 MR units in 1,095 imaging centers owned by hospital organizations, there may be some overlap between these hospital-owned locations, but it is likely that IMV's projection methodology based on those interviewed includes these other locations.

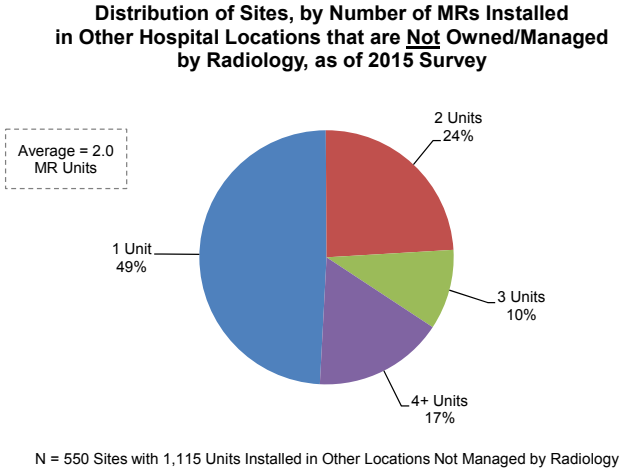
MR Systems Located in Other Hospital Departments, Not Owned/Managed by Radiology

The hospital respondents were also asked if there were any other hospital locations or departments where MR systems are installed that are not owned/managed by their radiology/imaging department. Overall, 15% (655 sites) of the hospital radiology departments indicated there are other such MR locations, primarily including outpatient clinics, imaging centers, orthopedics, and hospital outpatient departments.





Of these 655 hospitals, 550 specified the number of MR units located in these other locations. An estimated total of 1,155 MR systems are in other locations that are not owned or managed by radiology, with 49% of these other sites having 1 MR installed, 24% having 2 MRs installed, 10% having 3 MRs installed, and 17% having 4+ MRs installed, for an average of 2.0 MRs per site (that has MR units located in other hospital locations that are not owned/managed by radiology).

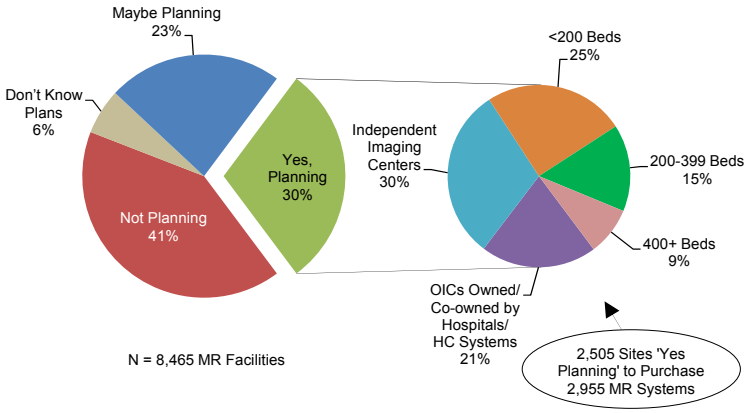


MR Purchase Plans and Market Scenarios

Reported Plans to Acquire Fixed MRs

In this *2015 MR Market Outlook* survey, respondents were asked if they were "Yes, planning" or "Maybe planning" to order any fixed MR systems from 2015 through 2018, which would be owned or managed by radiology/imaging. Based on their reported plans, 30% of the MR sites (an estimated 2,505 sites) plan to acquire fixed MR systems from 2015 through 2018 using "Yes, planning" as the indicator. An additional 23% of sites (an estimated 1,965 sites) are "Maybe planning" to purchase MR systems, resulting in a total of 4,470 sites "Yes" or "Maybe" planning MR purchases. Even though independent imaging centers comprise 35% of the MR imaging sites, they constitute only 30% of the sites "Yes, planning" to purchase MRs, whereas OICs owned or co-owned by hospitals/HC systems comprise 14% of the MR imaging sites and constitute 21% of the sites "Yes, planning" to purchase MRs.

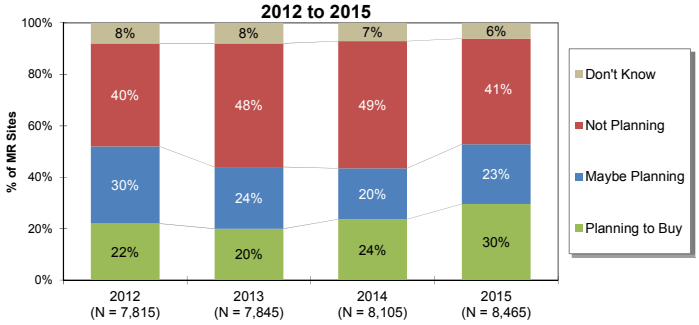
Purchase Plans for MR Systems from 2015 Through 2018, as of 2015 Survey



The 2,505 sites that are "Yes, planning" anticipate purchases of an estimated 2,955 MR systems, and the 1,965 sites that are "Maybe planning" anticipate purchases of 2,120 MR systems. It is evident that those who indicated "Maybe planning" represent a significant, although softer, market potential for MR systems. Taking both the "yes" and "maybe" plans into consideration, a total of 5,075 units are being considered for purchase by 4,470 sites from 2015 through 2018. Of the 5,075 units "Yes" or "Maybe" planned, the anticipated purchases are 730 units on order but not yet installed, 225 units in 2015, 1,235 units in 2016, 930 units in 2017, and 855 in 2018 plus 1,100 units with the year unspecified.

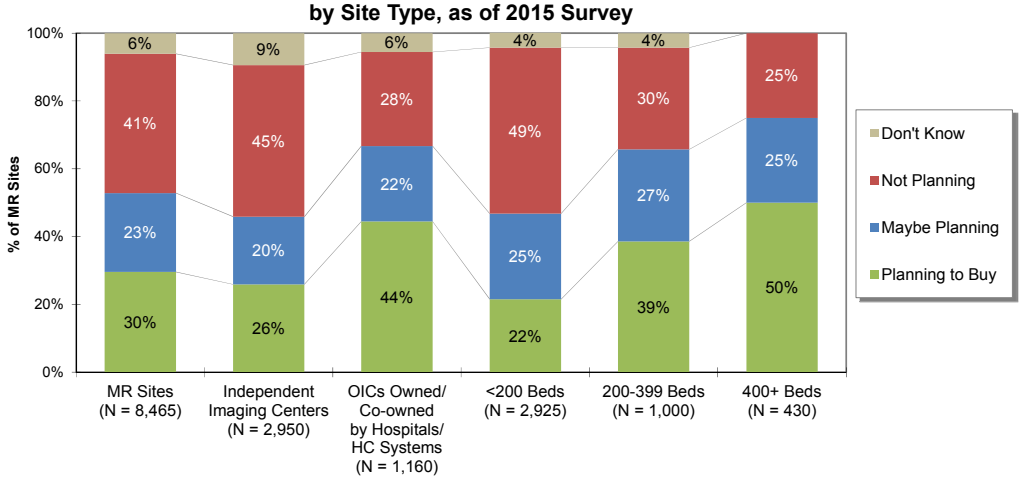
Since IMV's 2012 study, the percentage of those "Yes, planning" over the next three years has increased from 20-24% to 30% in this year's study, while those "Maybe planning" have decreased from 30% to 23%. The total percentage of sites indicating they are "Yes" and "Maybe" planning is 44% in both the 2013 and 2014 studies, increasing to 53% in 2015. The "Yes, planning" increased 6 percentage points from 2014 to 2015, potentially indicating that the marketplace is now more confident about purchasing MRs.

Percent of MR Sites Planning to Purchase MR Over the "Next Three Years," by IMV Study Year, 2012 to 2015



By site type, the larger 400+ bed hospitals and OICs owned or co-owned by hospitals/HC systems are more likely to be considering the purchase of MR systems, with 44-50% "Yes, planning" compared to 39% of the 200-399 bed hospitals, 22% of the <200 bed hospitals, and 26% of the independent imaging centers. Including those who are "Maybe planning," three quarters (75%) of the 400+ bed hospitals are planning to purchase MRs, compared to 66% of the 200-399 bed hospitals, 47% of the <200 bed hospitals, 66% of the OICs owned or co-owned by hospitals/HC systems, and 46% of the independent imaging centers.

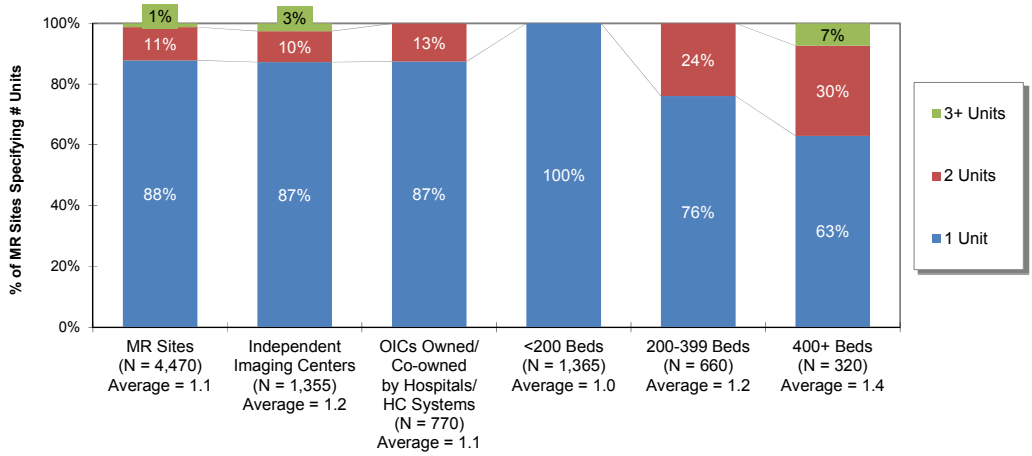
Percent of MR Sites Planning to Purchase MR from 2015 Through 2018, by Site Type, as of 2015 Survey



Taking both the "Yes, planning" and "Maybe planning" sites into account, an average of 1.1 fixed MR units is being planned for purchase (per site planning to acquire MR), with 88% of the sites planning one unit, 11% planning two units, and 1% planning three or more units.

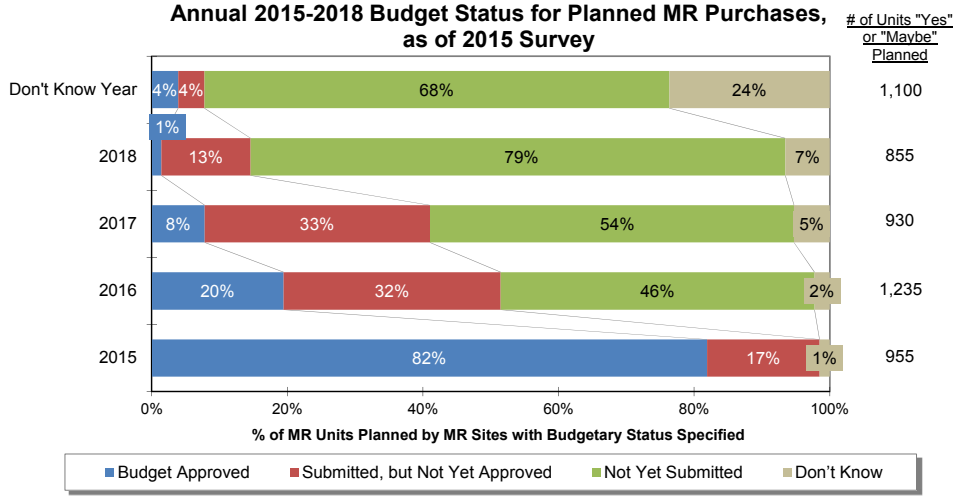
The larger 200+ bed hospitals are more likely to be planning to purchase 2 or more units, with an estimated 24-37% planning, compared to zero percent of the <200 bed hospitals and 13% of the non-hospital site types.

Distribution of MR Sites, by Number of MR Units Planned for Purchase, by Site Type, as of 2015 Survey

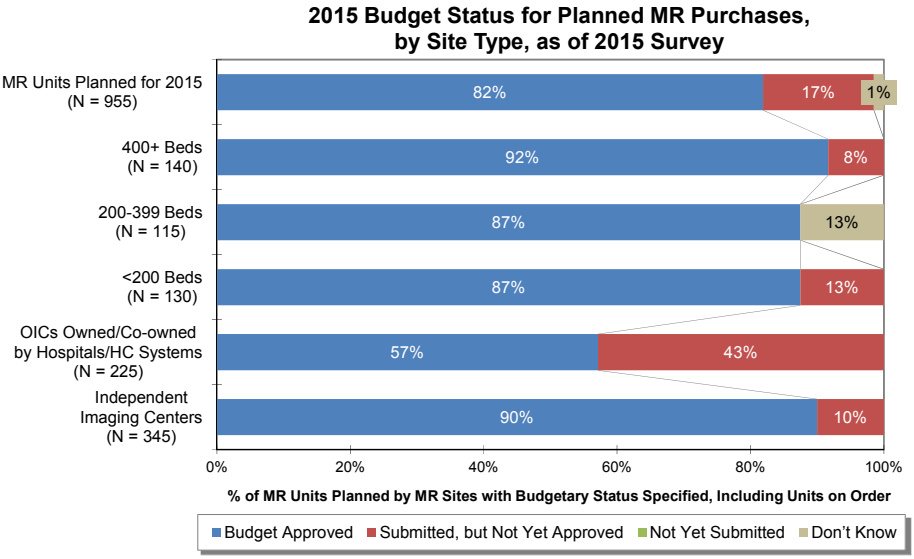


Budget Status of Planned MR Purchases

Respondents in MR sites that are "Yes, planning" and "Maybe planning" to purchase MR systems were asked what the budget status is for their planned purchases. For the units planned for purchase in 2015 (or already ordered but not yet installed), the budgets have been approved for an estimated 82% of the units, and budgets have been submitted for 17%. For 2016, only 20% have an approved budget thus far, and budgets have been submitted for 32% of the units. For 2017, 8% of the budgets have been approved and 33% have been submitted, but not yet approved. For 2018, 1% of the budgets have been approved and 13% have been submitted, but not yet approved. For those who did not know what year they were planning to purchase an MR, 4% have submitted budgets which have been approved, and another 4% have submitted budgets that have not been approved yet.

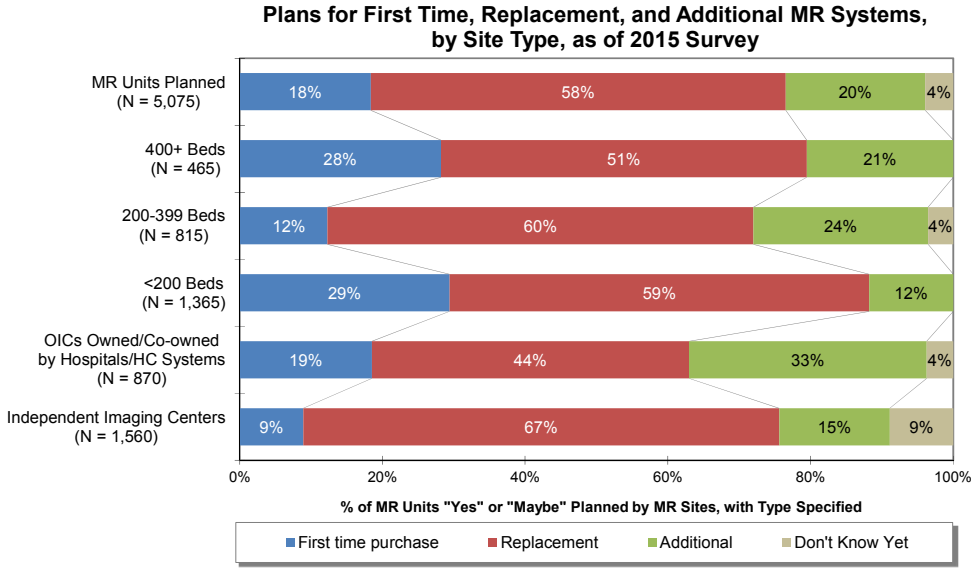


For planned MR purchases in 2015 and those already ordered but not yet installed (as of this 2015 survey), the OICs owned or co-owned by hospitals/HC systems are less likely to have an approved budget, with 57% having approved budgets compared to 87-92% of other site types.

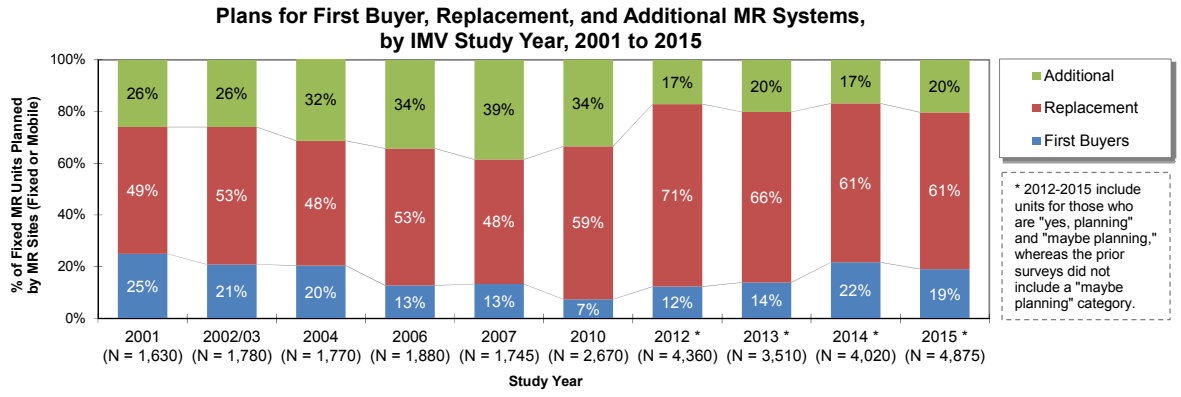


Plans for First Time, Replacement and Additional Purchases

Respondents in MR sites were asked if their plans for their next MR purchase were for "replacement," for "additional" units, or as the "first time purchase" of a fixed unit for the facility that it will be located in. The "first time purchase" category includes both those who are mobile service users who are planning their first fixed unit, as well as first time placements for new locations associated with the main facility. Using this definition, an estimated 18% of the planned units will be first time purchases, 58% will be replacement units, and 20% will be additional units, with 4% "don't know yet." If "don't know yet" is excluded from the calculation, 19% will be first time purchases, 61% will be replacements, and 20% will be additional units. The <400 bed hospitals and independent imaging centers are more likely to indicate they are planning replacement purchases for the facility it will be located in, with 59-67% of the units, compared to 44-51% of the 400+ bed hospitals and OICs owned or co-owned by hospital/HC systems.



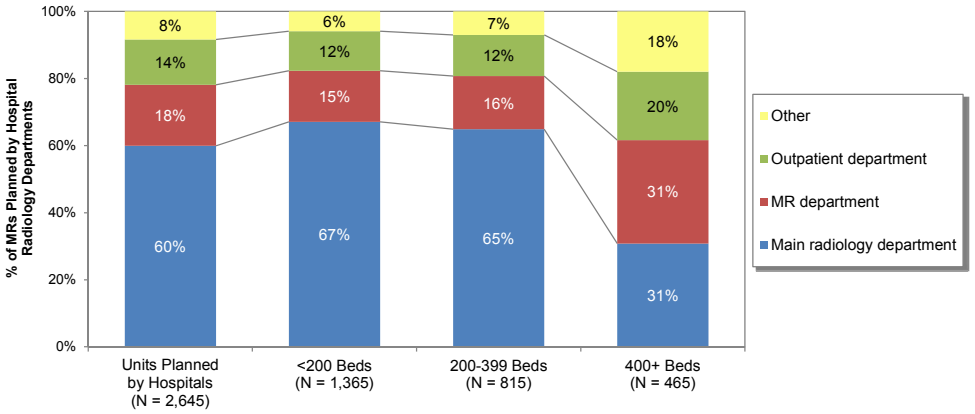
Compared to prior IMV studies since 2001, the proportion of "replacement" units has increased from 49% to 71% of the planned units as of IMV's 2012 study, with a decrease to 61% of the planned units estimated in this report. Meanwhile, the proportion of "first buyers" declined from 25% in 2001 to 7% as of IMV's 2010 survey, but has increased to an estimated 19% as of the 2015 survey (excluding the "don't know" respondents), down slightly from a high of 22% in the 2014 survey. (Note that the classification of "first buyers" in IMV's 2012-2015 reports is slightly different from previous reports, as it includes both mobile users and those who are planning to purchase units for new locations. In the surveys prior to 2012, the "first buyer" definition only included those who had been using mobile services.



Planned Locations of MR Systems to be Located in Hospitals and Owned/Managed by Radiology

The hospital respondents were asked to specify the planned locations for the MRs being purchased for their main hospital building, including any departments/locations within the building where radiology owns/manages the equipment (but not including imaging centers or outpatient locations outside of the main building). Overall, 60% of the hospital MR systems will be located in the main radiology department, 18% in the MR department, 14% in an outpatient department, and 8% in other locations. By bed size, 400+ bed hospitals are more likely to locate the MRs in an MR department (31%) compared to 15-16% of the <400 bed hospitals. The 400+ bed hospitals are also more likely to locate the MRs in an outpatient department (20%) compared to 12% of the <400 bed hospitals.

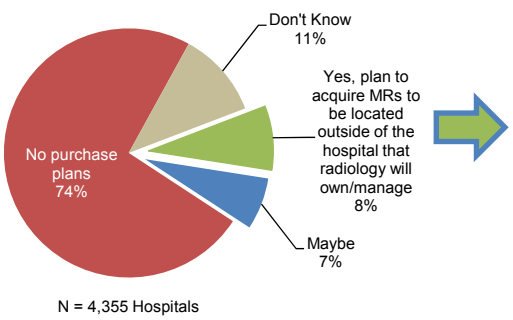
Planned Location of MRs to be Located in Hospitals and Owned/Managed by Radiology, by Hospital Bed Size, as of 2015 Survey



Other MR Systems Planned for Purchase, to be Owned/Managed by Hospital Radiology Department, and Located in Outpatient/Ambulatory Locations, from 2015 through 2018

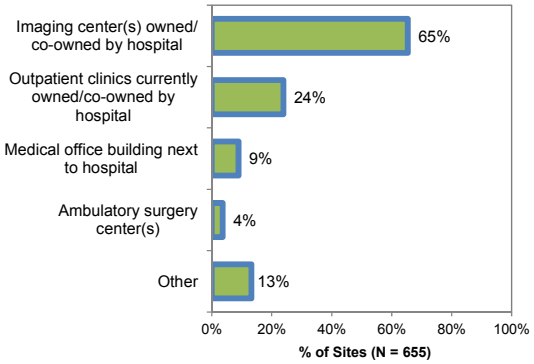
In this 2015 survey, the hospital respondents were also asked if their hospital plans to purchase any other MR systems that will be located outside of the main hospital, to be owned/managed by radiology. Taking both the "Yes, planning" and "Maybe planning" responses into account, an estimated 15% (655) of the hospital radiology departments are planning to purchase MR systems to be located outside of the main hospital. Of these hospitals, 65% will own/manage MR systems in imaging centers owned or co-owned by the hospital, 24% will have MRs in outpatient clinics, 9% will have MRs in medical office buildings next to the hospital, and 4% will own/manage MRs in ambulatory surgery centers. An estimated total of 730 MR systems are planned for purchase for these 655 locations. Since this study also surveyed respondents who are "Yes" or "Maybe" planning to purchase 870 MRs in 770 OICs owned or co-owned by hospitals/HC systems, there may be some overlap between the estimates for hospital-owned outpatient locations, but it is likely that IMV's projection methodology based on those interviewed includes these other locations.

Whether Hospital Plans to Purchase MR Systems Located Outside the Main Hospital that Radiology Will Own/Manage, as of 2015 Survey



N = 4,355 Hospitals

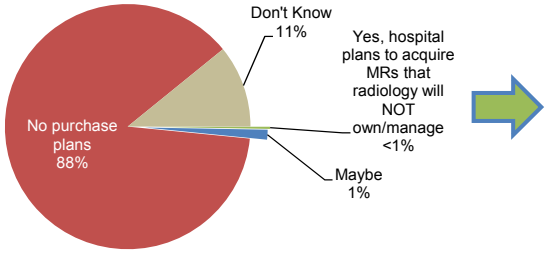
Other Locations for Planned MRs to be Owned/Managed by Radiology, as of 2015 Survey



Other MR Systems Planned for Purchase by Hospital Organizations that will NOT be Owned/Managed by Hospital Radiology Department, from 2015 through 2018

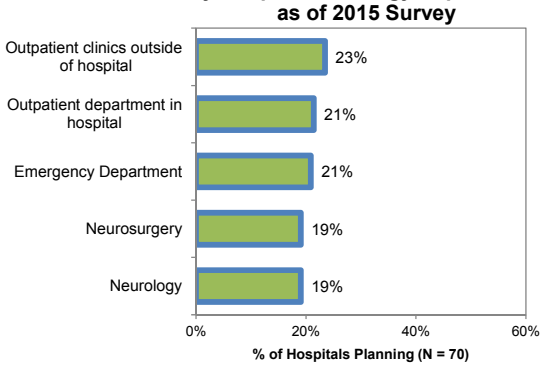
In this 2015 survey, the hospital respondents were then asked if their hospital plans to purchase any other MR systems that will not be owned/managed by radiology. Taking both the "Yes, planning" and "Maybe planning" responses into account, <2% (70) of the hospitals are planning to purchase 70 MR systems that will not be owned/managed by radiology for imaging centers, outpatient clinics, emergency departments, and ambulatory surgery centers. It is possible that these 70 MRs that will not be owned/managed by radiology constitute an incremental number of MR units planned for purchase from 2015 through 2018.

Whether Hospital Plans to Purchase MR Systems that Radiology will NOT Own/Manage, as of 2015 Survey



N = 4,355 Hospitals

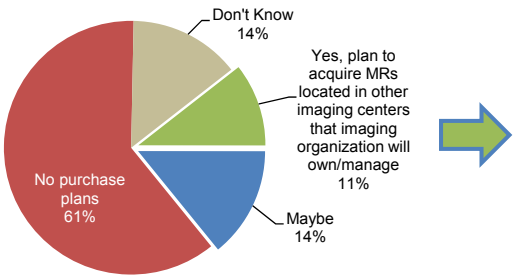
Other Locations for Planned MRs that will NOT be Owned/Managed by Hospital Radiology Department, as of 2015 Survey



Other MR Systems Planned for Purchase by Non-Hospital Organizations for Fixed MRs in Other Imaging Centers or Outpatient/Ambulatory Locations, from 2015 through 2018

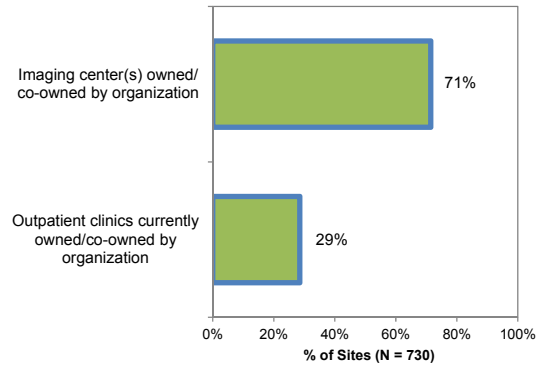
In this 2015 survey, respondents from imaging centers that are not owned or co-owned by a hospital organization were asked if their organization plans to purchase any other MR systems that will be located in imaging centers other than their primary facility, from 2015 through 2018. Taking both the "Yes, planning" and "Maybe planning" responses into account, 25% (730) of the non-hospital organizations are planning to purchase MR systems to be placed in other locations. Of these sites, 71% will purchase MRs for other imaging centers, and 29% will purchase MRs for outpatient clinics currently owned/co-owned by the organization. An estimated total of 970 MRs are planned for purchase for these locations. Since this study surveyed respondents representing an estimated 1,355 independent imaging centers who are "Yes" or "Maybe" planning to purchase 1,560 MRs, there may be some overlap between these two estimates, but it is likely that IMV's projection methodology based on those interviewed includes these other locations.

Non-Hospital Organization Plans to Purchase MR Systems for Other Imaging Centers or Outpatient/Ambulatory Locations, as of 2015 Survey



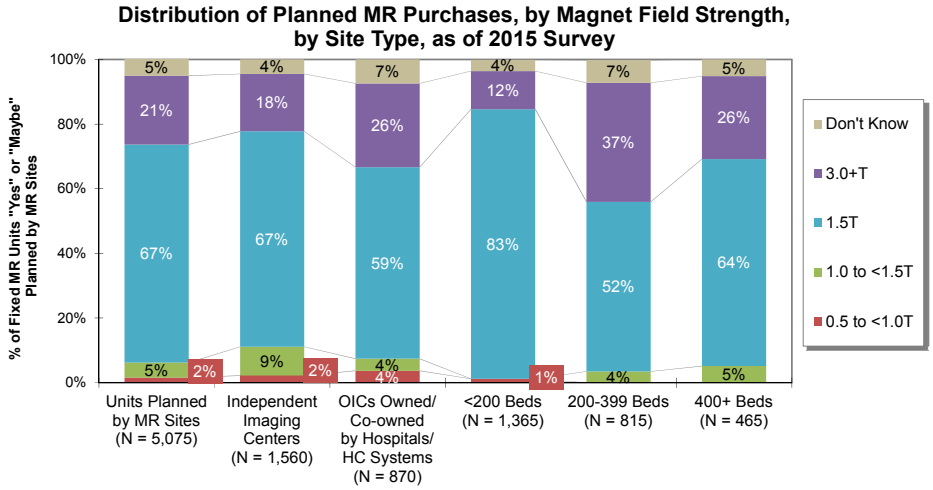
N = 2,950 Independent Imaging Centers

Other Locations for Planned MRs to be Owned/Managed by Non-Hospital Organizations, as of 2015 Survey

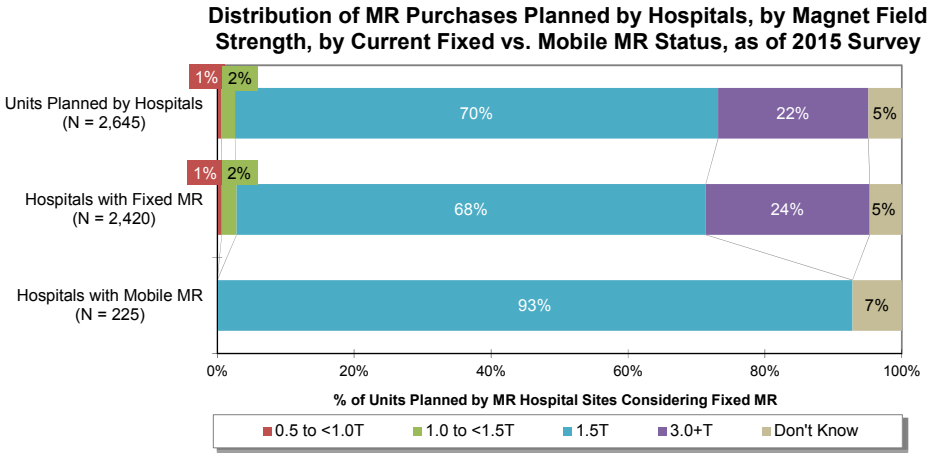


MR Field Strength Being Considered

By magnet field strength, an estimated 67% of the planned purchases are for 1.5 Tesla magnets, with 21% planned as 3.0+T systems, 5% as 1.0 to <1.5T systems, and 2% as 0.5 to <1.0T systems, with 5% unspecified. The larger 200+ bed hospitals and OICs owned or co-owned by hospitals/HC systems are more likely to be planning to purchase a 3.0+T MR system, with 26-37% of the units planned, compared to 12% of those planned by <200 bed hospitals and 18% by independent imaging centers. The smaller <200 bed hospitals are most likely to be considering 1.5T systems, with 83%, compared to 52-67% of the other site types.



Of the hospitals that are planning to purchase a fixed MR, those currently using a mobile MR service are more likely to be considering 1.5T magnets, which comprise 93% of their planned units, in contrast to 68% of the hospitals that currently have fixed MR systems.



Supplemental CON Application Form

Termination of a Service

Conn. Gen. Stat. § 19a-638(a)(5),(7),(8),(15)

Applicant: **Day Kimball Healthcare, Inc.**
D/B/A Day Kimball Hospital
320 Pomfret Street
Putnam, CT 09260

Project Name: **Relocation and Consolidation of Satellite MRI Services**

Affidavit

Applicant: **Day Kimball Healthcare, Inc.**

Project Title: **Relocation & Consolidation of Satellite MRI Services**

I, **Paul A Beaudoin**, **Vice Pres. of Finance & CFO**
(Name) (Position – CEO or CFO)

of **Day Kimball Healthcare, Inc.** being duly sworn, depose and state that the (Facility Name) said facility complies with the appropriate and applicable criteria as set forth in the Sections 19a-630, 19a-637, 19a-638, 19a-639, 19a-486 and/or 4-181 of the Connecticut General Statutes.

Signature 12/14/16
Date

Subscribed and sworn to before me on December 14, 2016

Amy L. Franklin

Notary Public/Commissioner of Superior Court

My commission expires: June 30, 2021

AMY L. FRANKLIN
Notary Public, State of Connecticut
My Commission Expires June 30, 2021

1. **Project Description: Service Termination**

   a. Please provide

      i. a description of the history of the services proposed for termination, including when they commenced ,

      The operations of the 39 Kennedy Drive, Putnam CT off site Fixed Unit MRI services were established under Day Kimball Healthcare, Inc. D/B/A Day Kimball Hospital (DKH) in December 2010 with the acquisition of the Refurbished 1998 GE 1.0 Tesla Signa Lx Magnet from a Radiology Group.

      ii. whether CON authorization was received and,

      It was the subject of a CON (docket number 10-31602-CON) approved December 22, 2010.

      iii. if CON authorization was required, the docket number for that approval.

      As noted immediately above.

   b. Explain in detail the Applicant's rationale for this termination of services, and the process undertaken by the Applicant in making the decision to terminate.

      Discussions concerning the financial performance of this service location along with many other DKH programs began during the DKH financial crisis in 2013.

      The program review became even more intense as the DKH financial crisis continued into 2014, volume remained low, high per unit costs and the multiple year equipment lease, facility lease, service contracts, service provider contracts were all coming up for renewal during the 4th quarter of calendar 2014.

      The types/range of services which could be provide at the 39 Kennedy Drive MRI location were limited by a combination of the 1) age of the equipment & its range of capabilities as compare to the newer models and 2) lack of physician presence at the facility.

      The Hospital main campus was located 1 mile away from the Kennedy Drive site, which had a more modern 1.5T Mobile MRI equipment with available capacity and physician presence which in combination allowed for a wider range of services to be available to the community.

DKH decided to relocate and consolidate the 39 Kennedy Drive operations to the Hospital's main campus as of 11/30/14. It expected to provide services to the same community with enhance capabilities available to the community 39 Kennedy Drive served and save approximately $300,941 per year.

c. Did the proposed termination require the vote of the Board of Directors of the Applicant? If so, provide copy of the minutes (excerpted for other unrelated material) for the meeting(s) the proposed termination was discussed and voted on.

It did not require a specific vote of the Board of Directors.

2. Termination's Impact on Patients and Provider Community

a. For each provider to which the Applicant proposes transferring or referring clients, provide the below information for the last completed fiscal year and current fiscal year.

Not applicable, patients are not being transferred or referred to other providers. Services are being relocated & consolidated less than 1 mile to the Hospitals main campus.

TABLE A
PROVIDERS ACCEPTING TRANSFERS/REFERRALS

Facility Name	Facility ID*	Facility Address	Total Capacity	Available Capacity	Utilization FY XX**	Utilization Current CFY***
		N/A				

* Please provide either the Medicare, Connecticut Department of Social Services (DSS), or National Provider Identifier (NPI) facility identifier and label column with the identifier used.

** Fill in year and identify the period covered by the Applicant's FY (e.g., July 1-June 30, calendar year, etc.). Label and provide the number of visits or discharges as appropriate.

*** For periods greater than 6 months, report annualized volume, identifying the number of actual months covered and the method of annualizing. For periods less than six months, report actual volume and identify the period covered.

a. Provide evidence (e.g., written agreements or memorandum of understanding) that other providers in the area are willing and able to absorb the displaced patients.

Not Applicable

b. Identify any special populations that utilize the service(s) and explain how these populations will maintain access to the service following termination at the specific location; also, specifically address how the termination of this service will affect access to care for Medicaid recipients and indigent persons.

There is no expected change in the populations DKH was serving between its 3 MRI locations as outlined in OHCA Table 1 and Table 2.

The relocation and consolidation of the MRI Service site is occurring within one mile at the Hospital main campus. All the same transportation services exist to both locations

In addition, the same transportation services, the Satellite location operated under the Day Kimball Hospital umbrella and as such followed all the same access protocols & charity care policies which continue on at the main hospital campus.

c. Describe how clients will be notified about the termination and transfer to other providers.

There is no transfer of patients to other providers necessary. Patients will continue to be served in the remaining (2) DKH MRI service sites.

All physician referral sources were notified.

Scheduling for 39 Kennedy Drive and the MRI service at the Hospital main campus have been handled by the same administrative clinical department staff.

Patients are specifically directed to the main campus located less than 1 mile from the former Kennedy Drive location.

Mobile MRI services have been available on the main hospital campus as many of our patients and physicians are aware for over 20 years.

d. <u>For DMHAS-funded programs only,</u> attach a report that provides the following information for the last three full FYs and the current FY to-date:
   i. Average daily census;
   ii. Number of clients on the last day of the month;
   iii. Number of clients admitted during the month; and
   iv. Number of clients discharged during the month.

Not Applicable

THE ORIGINAL DOCUMENT HAS A WHITE REFLECTIVE WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW. DO NOT CASH IF NOT PRESENT.

THE CITIZENS NATIONAL BANK
PUTNAM, CT. 06260

51-213
111

Check Number
0576077

Day Kimball Hospital

PO Box 6001 / Putnam, Connecticut 06260
(860) 928-6541 X2224

Date	AMOUNT
12/08/2016	*******500.00

*******500 DOLLARS 00 CENTS

PAY TO THE ORDER OF

STATE OF CT, DPH
CONTRACTS/GRANTS MS#13GCT
PO BOX 340308
HARTFORD CT 06134-0308

Paul G. Beaudoin
Authorized Signature

⑈0576077⑈ ⑆011102133⑆ 19 377 1⑈

Day Kimball Hospital
320 Pomfret Street/P.O. Box 6001
Putnam, Ct. 06260-6001

ACCOUNTS PAYABLE
Tel # (860) 928 - 6541 X2224
Fax # (860) 928 - 5341
Tax ID# 06-0646599
Tax Exempt # E-01604

Invoice Date	Description/Invoice #	Voucher Number	Gross Amount	Discount	Net Amount
12/07/16	MRI CON APPLIC FEE	284422	500.00	.0	500.00

Check Number	Vendor No.	Vendor Name	Check Date	Total Amount
0576077	9352	STATE OF CT, DPH	12/08/2016	*******500.00

Stuff Starts Here

Antiques & Collectibles

CASH PAID: For Antiques, guitars, Silver, Gold, Old Toys Musical Instr uments, Trains, Military items, watches, paintings, anything old, 1 item or entire estate. call 860-707-9350

Household Goods

LIVING ROOM SET: Natuzzi, 8 foot long "L" shaped tan leather sofa & matching rocker/recliner. $250 860-564-3879 call between 8am - 8pm

Heating Supplies

FIREWOOD: Seasoned, cut, split & delivered. $190 a cord. 860-334-9857

SEASONED FIREWOOD: Cut & Split $220. a cord. Quick Delivery. All Year Round. Call Ray 860-918-2700

Heating Supplies

Seasoned Hardwood
cut, split $220/cord for local delivery. Delivering from our Preston & Canterbury farms. Credit Cards accepted. Hart's Greenhouse 860-546-6541 ext. 208

Misc. For Sale

HATCHIMAL: Purple Draggle, New in Box, Sold out everywhere! $200 Cash in person. Text at:860-303-1444.

Wanted To Buy

$CASH PAID$: Vintage Electronics Guitars, Amps, Pro & Vac Tube Audio, All Radios; Ham Equip., CB's, 860-707-9350

Homes Starts Here

Rentals - Apartments

BALTIC
Christmas Specials
1, 2 & 3 Bedrooms
1st Floor & Very Spacious!
Hook ups avalable
Starting at **only $600**
No Pets
Call TODAY! for details
860-886-0558 or 401-741-1046

BLACKSTONE APARTMENTS
in Norwich
Secure Building!
$800. & up
Heat, Hot Water & Cable Included
24 Hour Maintenance
860-608-9531

NORWICH: 1BR, 1st fl, lots of sun, off st. park, W/D Hookup, Pet possible $625. Call Pat 860-949-8139.

NORWICH: 60 Broad St. Luxury Large 2 BR. Off street parking, granite countertops, hard-wood fls. new appls. $795. (860) 961-2825

For Sale Homes

A Publishers Notice
All Real Estate advertised in this newspaper is subject to the State and Federal Fair Housing Acts which makes it illegal to advertise any preference, limitation, or discrimination or any intention to make any such preference, limitation or discrimination based on race color, religion, sex, familial status, national origin, handicap, ancestry, marital status, age, lawful source of income and sexual orientation. This newspaper will not knowingly accept any advertising for real estate which is in violation of the law.

Cars Starts Here

Automotive

1966 CHEVROLET CORVETTE: C2 StingRay, 4 speed coupe, 327/300HP, silver pearl/ black interior, $18000, lena28726@gmail.com / 860-318-2319

Automotive

HONDA: Odyssey 2008, 170k Miles, 6 cylinder, 3rd Row Seat, Very Clean in/out. Runs wells. $ 3,900 obo. Call 860-230-8748 or 401-647-2437

Automotive Accessories

Vehicles Wanted

Legals Starts Here

Legals

Legal Notice

The Town of Voluntown Inland Wetlands and Watercourses Commission, in conformance with Sec. 22a-42(c)(2) of the CGS, approved the application of Mr. Robert Sirspenski to construct a driveway on the property located at 279 Brown Rd. with conditions,

Dated at Voluntown CT this 1st day of December 2016.

Joseph R. Theroux
Wetlands Agent Town of Voluntown

LEGAL NOTICE

Town of Preston

Planning and Zoning Commission
NOTICE OF DECISION

At its regular meeting held on Tuesday, November 29, 2016, the Preston Planning and Zoning Commission rendered the following decisions:

a) Zoning Permit #2016-05, Raymond and Anna Sobanski, 148 Ross Road, create an accessory apartment within their existing home pursuant to Section 13.8 of the Zoning Regulations. **APPROVED**

Arthur Moran Jr., Chairman

State of Connecticut
Superior Court, Juvenile Matters
Order of Notice

NOTICE TO: Malik Lawyea, father of a child born on September 13, 2011, formerly of Putnam
now of parts unknown

A petition has been filed seeking: Commitment of minor child(ren) of the above named or vesting of custody and care of said child(ren) of the above named in a lawful, private or public agency or a suitable and worthy person.

The petition, whereby the court's decision can affect your parental rights, if any, regarding minor child(ren) will be heard on: **01/11/2017 at 2:00 p.m. at 81 Columbia Avenue, Willimantic, CT 06226.**

Hearing on an Order of Temporary Custody will be heard on **12/13/16 at 1:30 p.m. at 81 Columbia Avenue, Willimantic, CT 06226.**

Therefore, ORDERED, that notice of the hearing of this petition be given by publishing this Order of Notice once, immediately upon receipt, in **The Bulletin, 10 Railroad Place, Norwich, CT 06360**, a newspaper having a circulation in the town/city of **Norwich, CT**

Dated 12/5/2016

Hon.Steven Spellman
Katrina Fletcher, Deputy Chief Clerk

Right to Counsel: Upon proof of inability to pay for a lawyer, the court will make sure that an attorney is provided to you by the Chief Public Defender. Request for an attorney should be made immediately in person, by mail, or by fax at the court office where your hearing is to be held.

LEGAL NOTICE

Public Notice

Filing for Day Kimball Healthcare to Discontinue MRI Services at 39 Kennedy Drive, Putnam CT 06260

Statutory Reference:	CT General Statutes §19a-638
Applicant:	Day Kimball Healthcare
Project Address:	39 Kennedy Drive Putnam CT 06260
Proposal:	The Applicant intends to file a Certificate of Need application with the State of Connecticut to transition all MRI services to the main hospital campus.
Capital Expenditure:	None

INVITATION TO BID

Proposals are invited by the owner for septic repair work on property located at 219 North Sterling Road, Sterling, CT. Proposals will be received by the Town of Sterling, First Selectman's Office, 1183 Plainfield Pike, Oneco, CT 06373 until 2:00 P.M., December 21, 2016 at which time they will be opened and read aloud.

Project Specifications are available at the Town of Sterling, First Selectman's Office, 1183 Plainfield Pike, Oneco, CT 06373, Monday & Tuesday 8:00AM-4:30 PM, Wednesday 8:00 AM - 6:00 PM, & Thursday 8:00 AM - 4:00 PM or at the State of Conn. Dept. of Admin. Services (DAS) website, www.das.ct.gov, State Contracting Portal, Town of Sterling Solicitation Number 136-104.

Mandatory pre-bid conference: December 14, 2016 @ 9:00 AM., 219 North Sterling Road, Sterling, CT. The scope of work includes: Single family residential septic repair.

For information, contact Peter Testa, 203-573-1188 x 213 or peter@lwagnerassociates.com.

AN AFFIRMATIVE ACTION/ EQUAL OPPORTUNITY EMPLOYER, MBE/ WBE/ SBE AND SECTION 3 DESIGNATED CONTRACTORS, ARE ENCOURAGED TO APPLY

RETURN DATE: DECEMBER 20, 2016 : SUPERIOR COURT

NAVIGANT CREDIT UNION : J.D. OF WINDHAM

VS. : AT PUTNAM

HEIRS AND ASSIGNS OF ARTHUR GOYETTE and STATE OF CONNECTICUT, DEPARTMENT OF REVENUE SERVICES : NOVEMBER 9, 2016

STATE OF CONNECTICUT

ORDER OF NOTICE

NOTICE OF HEIRS AND ASSIGNS OF ARTHUR GOYETTE:

Upon the complaint of the plaintiff in the above-caption action, praying, for reasons therein set forth, for foreclosure a mortgage, immediate possessions of the premises, reasonable attorneys fees and costs, is returnable to the Superior Court within and for the Judicial District of Windham at Putnam on December 20, 2016, and upon a motion is said action for an order of notice, it appearing to and being found by the subscribing authority that the said defendant, **HEIRS AND ASSIGNS OF ARTHUR GOYETTE**. has gone to parts unknown and that notice of the institution of this action most likely to come to the attention of the defendant, **HEIRS AND ASSIGNS OF ARTHUR GOYETTE**, is that hereinafter ordered, therefore it is:

ORDERED, that the notice of the institution of said action be given the defendant, **HEIRS AND ASSIGNS OF ARTHUR GOYETTE**, by some proper officer or indifferent person causing a true and attested copy of this Order of Notice to be published in The Bulletin, a newspaper circulated in the area where the defendant, **HEIRS AND ASSIGNS OF ARTHUR GOYETTE**, last know address was and where he is likely to be, once a week for two successive weeks, the second publication commencing on or before December 8, 2016 and that return of such service be made to the above-named Court.

THE COURT
A Clerk - 11/16/16

Joseph C. Heap, II
State Marshal
New London County

Legals Starts Here

Legals

LEGAL NOTICE
CITY OF NORWICH - ZONING BOARD OF APPEALS

NOTICE IS HEREBY GIVEN that on Tuesday December 13, 2016 at 7:00 p.m. in the lower-level conference room at 23 Union Street Norwich, a regular meeting and public hearing will be held by the Zoning Board of Appeals to hear the following applications:

A#16-02: 684 West Main Street. Appeal of Decision of Zoning Enforcement Officer for not applying ZR Section 4.8.8 in the denial of a proposed gas station use. Application of Jon B. Chase on behalf of Savin Gasoline Properties, LLC. Zone GC.

V#16-16: 13 Beebe Road. Request for variances to ZR Section 1.1 to locate a 20 ft. X 22 ft. canvas hoop garage structure 32 ft. from the front property line where 50 ft. is required, and 46 ft. from the rear property line where 50 feet is required; and ZR Section 4.14.1 to locate an accessory structure within the front yard setback. Application of Greg Case. Property of Greg R. Case & Catherine Romano-Case. Zone R-40.

Interested persons may be heard at these hearings, and written communications on the proposed activities will be received and considered. The plans are available and may be inspected in the Planning Dept., 23 Union St., Norwich, CT, Monday through Friday, between the hours of 8:30 a.m. and 4:30 p.m.

Zoning Board of Appeals Chairman Marc Benjamin

TOWN OF GRISWOLD
PLANNING & ZONING COMMISSION
GRISWOLD TOWN HALL
28 MAIN STREET, JEWETT CITY, CT 06351

Legal Notice

The Planning and Zoning Commission will hold a public hearing on Monday, Decemberr 12, 2016 at starting 6:15 p.m. at the Griswold Town Hall Meeting Room to consider.

SRC 01-17 ECONOMIC DEVELOPMENT COMMISSION, GRISWOLD, CT. Text Amendment to Section 7 C-Commercial Districts. New Sub-Section 7.3.28 Mixed Use Developments shall be permitted in all "C" Commercial Zones by Special Exception. The development shall be designed as a cohesive project designed to encourage and promote a well thought out and planned development. The mixed-use development shall consist of a minimum of at least three permitted land use types in order to be considered for review.

At this hearing, public and written comment may be received on the proposed application. Materials may be reviewed in the Griswold Planning Department of the Griswold Town Hall, Monday-Wednesday 8:30 a.m. to 4:00 p.m., Thursday 8:30 a.m. to 6:30 p.m. and Friday 8:30 a.m. to 1:30 p.m.

Martin McKinney
Chairman

CITY OF NORWICH
NOTICE OF PUBLIC HEARING

The City Council of the City of Norwich will meet in the Council Chambers, City Hall, 100 Broadway, Norwich, Connecticut on December 19, 2016, at 7:00 o'clock P.M. for the purpose of holding a public hearing on the following proposed ordinances:

1. AN ORDINANCE APPROPRIATING $2,900,000 FOR UPGRADES TO THE DEPARTMENT OF PUBLIC UTILITIES' WATER METERING SERVICES, AUTHORIZING THE ISSUANCE OF $2,900,000 REVENUE BONDS OF THE CITY SECURED SOLELY BY WATER REVENUE TO MEET SAID APPROPRIATION, AND AUTHORIZING THE CITY AND DEPARTMENT OF PUBLIC UTILITIES TO ENTER INTO GRANT AND LOAN AGREEMENTS AND A JOINT RESOLUTION WITH THE STATE OF CONNECTICUT WITH RESPECT THERETO.
(The Purpose of the Ordinance is to appropriate and authorize revenue bonds in the amount of $2,900,000 for the Advanced Metering Infrastructure project, including, but not limited to, materials, installation and deployment costs)

2. AN ORDINANCE INCREASING THE APPROPRIATION FROM $2,800,000 TO $3,500,000 FOR THE CONSTRUCTION OF A NEW MOHEGAN PARK WATER STORAGE TANK, INCREASING THE AUTHORIZATION FROM $2,800,000 TO $3,500,000 FOR THE ISSUANCE OF REVENUE BONDS OF THE CITY SECURED SOLELY BY WATER REVENUE TO MEET SAID APPROPRIATION, AUTHORIZING THE CITY AND DEPARTMENT OF PUBLIC UTILITIES TO ENTER INTO GRANT AND LOAN AGREEMENTS AND A JOINT RESOLUTION WITH THE STATE OF CONNECTICUT WITH RESPECT THERETO
(The Purpose of the Ordinance is to increase the appropriation and revenue bond authorization from $2,800,000 to $3,500,000 for the Mohegan Park Tank project and to add improvements relating to the Bentley Brook pressure reducing station and connections between the tank and the Bentley Brook station)

Copies of said ordinances are on file open to public inspection at the office of the City and Town Clerk.

Dated at Norwich, Connecticut this 6th day of December, 2016.

Betsy M. Barrett,
City Clerk

RETURN DATE: January 10, 2017 :SUPERIOR COURT

CITY OF NORWICH
vs. : JUDICIAL DISTRICT OF NEW LONDON

RICHARD J. MORENCY, JR., et al. : AT NEW LONDON

STATE OF CONNECTICUT

NOTICE TO: RICHARD J. MORENCY, JR., if living, and if not, The Heirs, Devisees and/or Beneficiaries of the Estate of Richard J. Morency, Jr. and BARBARA GRAVES, if living, and if not, The Heirs, Devisees and/or Beneficiaries of the Estate of Barbara Graves

The Plaintiffs, CITY OF NORWICH and CITY OF NORWICH DEPARTMENT OF PUBLIC UTILITIES, have named RICHARD J. MORENCY, JR., if living, and if not, The Heirs, Devisees and/or Beneficiaries of the Estate of Richard J. Morency, Jr. and BARBARA GRAVES, if living, and if not, The Heirs, Devisees and/or Beneficiaries of the Estate of Barbara Graves, as parties defendant in a complaint which it is bringing to the above named court seeking foreclosure of liens upon premises known as 239 Laurel Hill Road, Norwich, CT. The complaint is returnable to Court January 10, 2017 and will be pending therein after that date.

The subscribing authority finds that the residence(s) of Richard J. Morency, Jr. and Barbara Graves, if living, and, if not living, the identity and whereabouts of their heirs, devisees, and/or beneficiaries, are unknown to Plaintiffs, who represent that all reasonable efforts have been made to ascertain the same and have failed.

Now, therefore, it is hereby ordered that notice of the institution of this action be given to such defendants by some proper officer or indifferent person causing a true and attested copy of this Order be published in The Bulletin once a week for two consecutive weeks, commencing on or before December 15, 2016 and that return of such service be made to the Court.

THE COURT
By: Lindsay Hale, Assistant Clerk
Superior Court

A TRUE COPY ATTEST:
MARGARET LaBRANCHE
STATE MARSHAL
NEW LONDON COUNTY

Notices

Starts Here

Happy Grams

Happy Birthday **Joseph Guimond** of Griswold

Notices

Connecticut Scrap
will buy your scrap Steel, Copper, & Aluminum
33 Pequot Rd. Uncasville
860-848-3366

Services

Starts Here

Services Offered

ELECTRICAL: Service upgrades, Generators & Re-wiring Lic. 104212 860-889-7581.

Notice
The state of Connecticut requires home improvement contractors to include their license number in all forms of advertising. To apply for an application for registration go to:
www.dcp.state.ct.us/licensing
or call
860-713-6000
or 800-842-2649

Help Wanted

Independent Contractors IMMEDIATE OPENING!

GREAT INCOME OPPORTUNITY for a SELF MOTIVATED EARLY RISER / Independent Contractor to provide early morning delivery of newspapers to retail locations out of New London, CT. (Ashaway, RI - Route Available)

You must have reliable transportation (Van or SUV Preferred) and be available by 3AM Everyday.
Please call 860-857-5288

Roofing

Able Construction
SNOW PLOWING
Siding, Roofing, Additions, Roof Specials & more
Free Estimates
Hic#623261
Licensed & Insured
860-428-6863
ableconstruct1.com

Lawn Care

#1
A&A Services
★★★★★★★★★
Fall Cleanups, Hedges, Gutters, Powerwashing, Deck Staining, **SNOW PLOWING**, House Clean-outs & More!
★★★★★★★★★
Senior Discounts
Lowest Prices
Lic #0604368
Call Jim at
860-823-0452

All Seasons Lawn Care
Snow Plowing, Fall Clean-ups, Gutters, All aspects of landscaping, Dump Runs,Tree Removal, Odd Jobs Home Remodeling
860-886-3302
Lic# 0642369

Stuff

Starts Here

Services Offered

ELECTRICAL: Service upgrades, Generators & Re-wiring Lic. 104212 860-889-7581.

Notice
The state of Connecticut requires home improvement contractors to include their license number in all forms of advertising. To apply for an application for registration go to:
www.dcp.state.ct.us/licensing
or call
860-713-6000
or 800-842-2649

Antiques & Collectibles

CASH PAID: For Antiques, guitars, Silver, Gold, Old Toys Musical Instr uments, Trains, Military items, watches, paintings, anything old, 1 item or entire estate. call 860-707-9350

Yard / Tag Sale

HOLIDAY CRAFT BAZAAR: 81 E. Town St. Norwich (First Congregational Church of Norwich) Sat. 12/10 from 9-2. Crafters, Santa's Workshop, Jewelry, Books, Xmas Items, Baked goods, Luncheon

Help Wanted

Yard / Tag Sale

ESTATE SALE
N O R W I C H : 331 Old Canterbury Tpke. Fri, Sat & Sun 8:30 - 3:30. Complete contents of home. Country Items - Antiques - Christmas Items - Household Items. Everything must go! Pictures on C.L. or norwichestatesales.com

Heating Supplies

F I R E W O O D : Seasoned, cut, split & delivered. $190 a cord. 860-334-9857

S E A S O N E D FIREWOOD: Cut & Split $220. a cord. Quick Delivery. All Year Round. Call Ray 860-918-2700

Seasoned Hardwood
cut, split $220/cord for local delivery. Delivering from our Preston & Canterbury farms. Credit Cards accepted. Hart's Greenhouse 860-546-6541 ext. 208

Misc. For Sale

HATCHIMAL: Purple Draggle, New in Box, Sold out everywhere! $200 Cash in person. Text at:860-303-1444.

Wanted To Buy

$CASH PAID$: Vintage Electronics Guitars, Amps, Pro & Vac Tube Audio, All Radios; Ham Equip., CB's, 860-707-9350

Cars

Starts Here

Automotive

1966 CHEVROLET CORVETTE: C2 StingRay, 4 speed coupe, 327/300HP, silver pearl/ black interior, $18000, lena28726@gmail.com / 860-318-2319

HONDA: Odyssey 2008, 170k Miles, 6 cylinder, 3rd Row Seat, Very Clean in/out. Runs wells. $ 3,900 obo. Call 860-230-8748 or 401-647-2437

Automotive Accessories

Boyd's Used Auto Parts
Battery Special $20
Tires, Engines, Transmissions & much more!
Nobody Beats
Boyd's
860-887-3153

Vehicles Wanted

Nobody Beats
BOYD'S
BUYS JUNK CARS
Top Cash Paid for Junk Cars & Trucks
Free Towing
860-887-3153
BOYD'S
Used Auto Parts
133 Corning Road in Norwich

Legals

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Norwich Bulletin.com

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LEGAL NOTICE
Town of Voluntown Notice of Special Town Meeting

The Electors and Citizens qualified to vote in Town Meetings of the Town of Voluntown are hereby warned that a Special Town Meeting will be held at the Voluntown Town Hall Meeting Room, 115 Main Street in Voluntown, at 6:30 p.m. on Tuesday, December 20, 2016 to consider and act on the following items:

ORDINANCE FOR THE FILLING OF VACANCES IN THE PLANNING AND ZONING COMMISSION

Section One. Any vacancy in the panel of regular members or the panel of alternate members of the Planning and Zoning Commission ("Commission") shall be promptly filled by majority vote of the members of the Commission present, seated and voting at a public meeting of the Commission, provided that, before filling any such vacancy, the Commission shall provide public notice of the vacancy by posting notice of it on the Town of Voluntown website, and, if it chooses, by such other means as it deems prudent, said notice to include a request that persons interested in filling any such vacancy make that intent known to the Town Clerk, who shall report any such responses to the Commission.

Section Two. The Commission may not appoint any person to fill a vacancy who does not meet the eligibility requirements for regular or alternate membership on the Commission contained in the General Statutes and in the Ordinances of the Town of Voluntown. The appointment shall be for the unexpired portion of the term of the vacant position,

Section Three. This Ordinance shall be effective fifteen (15) days after publication in a newspaper having circulation in the Town of Voluntown and shall apply to any appointment to fill a vacancy in the regular and alternative membership of the Commission made after that date, regardless of the date on which the vacancy occurred.

Robert A. Sirpenski, First Selectman
Tracey L. Hanson, Selectman
Jack S. Wesa, Selectman

STATE OF CONNECTICUT

RETURN DATE: JANUARY 10, 2017 :**SUPERIOR COURT**

NATIONSTAR MORTGAGE LLC D/B/A CHAMPION MORTGAGE COMPANY :**JUDICIAL DISTRICT OF NEW LONDON**

V. :**AT NEW LONDON**

THE WIDOW, HEIRS, AND/OR CREDITORS OF THE ESTATE OF WILLIAM J. KINIRY, ET AL :**NOVEMBER 15, 2016**

NOTICE TO THE WIDOW, HEIRS AND/OR CREDITORS OF THE ESTATE OF WILLIAM J. KINIRY AND ALL UNKNOWN PERSONS, CLAIMING OR WHO MAY CLAIM, ANY RIGHTS, TITLE, INTEREST OR ESTATE IN OR LEN OR ENCUMBRANCE UPON THE PROPERTY DESCRIBED IN THIS COMPLAINT, ADVERSE TO THE PLANTIFF, WHETHER SUCH CLAIM OR POSSIBLE CLAIM BE VESTED OR CONTINGENT.

The Plaintiff has named as Defendant, The Widow, Heirs, and/or Creditors of the Estate of William J. Kiniry, and all unknown persons, claiming or who may claim, any rights, title, interest or estate in or lien or encumbrance upon the property described in this Complaint, adverse to the Plaintiff, whether such claim or possible claim can be vested or contingent, if not living, as a party defendant(s) in the complaint which it is bringing to the above-named Court seeing a foreclosure of its mortgage upon premises known as 120 Fourth Street, Norwich, CT.

The Plaintiff has represented to the said Court, by means of an affidavit annexed to the Complaint, that, despite all reasonable efforts to ascertain such information, it has been unable to determine the identity and/or whereabouts of The Widow, Heirs, and/or Creditors of the Estate of William J. Kiniry, and all unknown persons, claiming or who may claim, any rights, title, interest or estate in or lien or encumbrance upon the property described in this Complaint, adverse to the Plaintiff, whether such claim or possible claim can be vested or contingent, if not living.

Now, Therefore, it is hereby ORDERED that notice of the institution of this action be given to said The Widow, Heirs, and/or Creditors of the Estate of William J. Kiniry and all unknown persons, claiming or who may claim, any rights, title, interest or estate in or lien or encumbrance upon the property described in this Complaint, adverse to the Plaintiff, whether such claim or possible claim can be vested or contingent, by some proper officer causing a true and attested copy of this Order of Notice to be published in The Bulletin, once a week for 2 successive weeks, commencing on or before December 15, 2016, and that return of such service be made to this court.

BY THE COURT
Colleen Deary,
Court Operatons Asst./ Clerk

A True Copy Attest
Gregory E. Kehaya, Sr., Connecticut State Marshal
New London County

LEGALS Starts Here

Legals

LEGAL NOTICE
Town of Killingly
Inland Wetlands and Watercourses Commission

On December 5, 2016 the Killingly Inland Wetlands and Watercourses Commission took the following action(s):

A.Application #16 - 1433 of William Menghi for a free split with associated driveways, house and septic systems within 200' of wetlands and watercourses, a bridge installation, and wetlands reclamation areas; Located at 476 Bailey Hill Road; GIS Map 170; Lot 12; 30 acres; Rural Development Zone. - **Approved**

B.Application #16 - 1434 of Spirol International Corporation for remediation of cadmium from the Five Mile River; Located at 965 North Main Street; GIS Map 137; Lot 24; 15 acres; Industrial Zone. - **Approved**

Dated this 8th day of December, 2016

Sandy Eggers, Chair
Rodney Galton, Secretary

LEGAL NOTICE
Public Notice
Filing for Day Kimball Healthcare to Discontinue MRI Services at 39 Kennedy Drive, Putnam CT 06260

Statutory Reference:	CT General Statutes §19a-638
Applicant:	Day Kimball Healthcare
Project Address:	39 Kennedy Drive Putnam CT 06260
Proposal:	The Applicant intends to file a Certificate of Need application with the State of Connecticut to transition all MRI services to the main hospital campus.
Capital Expenditure:	None

LEGALS Starts Here

Legals

Fun and Games

HOROSCOPE

ARIES (March 21-April 19): You'll find it difficult to stick to just one thing. Set strict guidelines and follow your chosen path closely. Learn from past experiences so that you don't make the same mistakes twice. Make changes based on facts, not assumptions. 3 stars

TAURUS (April 20-May 20): Get in the game and challenge your intelligence. Put some effort into how you move forward when dealing with others. Figure out what you need to pursue something you want to do. Don't neglect your health or your personal responsibilities. 3 stars

GEMINI (May 21-June 20): Put health, personal plans and romance at the top of your list. Explore new interests and make new friends. Share your emotions and concerns with others and do your best to make personal improvements. Travel looks inviting. 4 stars

CANCER (June 21-July 22): Think before you react. You'll save a lot of time if you refuse to get entangled in emotional situations that cannot be resolved. Focus on self-improvement, learning and exploring ways to master your skills instead of trying to change others. 2 stars

LEO (July 23-Aug. 22): Personal changes look promising. A business or pleasure trip will encourage new partnerships and bring about physical changes that will raise your confidence. Romance is in the stars and will raise your self-esteem. 5 stars

VIRGO (Aug. 23-Sept. 22): Don't feel the need to overspend in order to impress someone or give in to the financial demands someone makes. You'll do best if you stay focused on personal needs and exploring what works best for you. Avoid unnecessary changes. 3 stars

LIBRA (Sept. 23-Oct. 22): You'll have lots of options but might find it difficult to decide. Take care of your responsibilities early in the day to avoid missing out on something you really want to pursue. Love and romance are encouraged. 3 stars

SCORPIO (Oct. 23-Nov. 21): Discussing travel plans or visiting someone who can share knowledge and insight into your cultural background will lead to a breakthrough regarding what path to follow. An unexpected change will turn out to be beneficial. Embrace the future. 3 stars

SAGITTARIUS (Nov. 22-Dec. 21): Good fortune will be yours if you follow through with a plan that will help lower your overhead or increase your income. Look for new opportunities and you will find a way to secure your financial and emotional future. 5 stars

CAPRICORN (Dec. 22-Jan. 19): Emotional discussions will lead to sudden and unexpected changes. Don't let regret take over because you couldn't contain a situation with someone you care about. Be willing to compromise and to admit when you make a mistake. 2 stars

AQUARIUS (Jan. 20-Feb. 18): Romance will bring about positive changes. Take better care of your health and check out alternative options that will encourage you to save more and spend less. Don't let someone or something from your past get in your way. 4 stars

PISCES (Feb. 19-March 20): You'll be torn between what you can offer and what's being asked of you. Make your positions clear and don't promise anything that might jeopardize your position, health or financial future. Time is on your side. 3 stars

JUMBLE

Unscramble these four Jumbles, one letter to each square, to form four ordinary words.

NUDMO

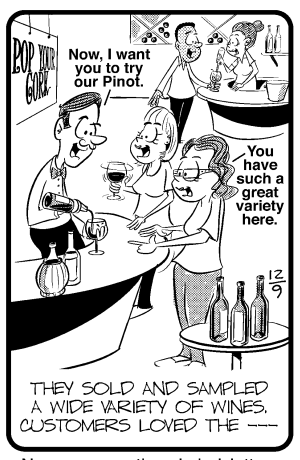
SIPEO

DOLUME

RIRTEW

Check out the new, free JUST JUMBLE app

THAT SCRAMBLED WORD GAME
by David L. Hoyt and Jeff Knurek



Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon.

Ans. here: "○○-○○○○-○○○○"

(Answers tomorrow)

Yesterday's Jumbles: CROAK YUCKY BROKEN UPDATE
Answer: He asked if he could join their poker game, and they said — YOU BET YOU CAN

12-9 CRYPTOQUOTE

P N F F H X U A A J Q Y M A N R Y C Q Y M X K H Q U A H Z U A , N X Z H A X Y R R Y L U F H B T U Z H X A R Q N X J U Q A ' J N Q Z U X A . — Z Y C J G N A E U Q Q Y G Z

Yesterday's Cryptoquote: KEEP A GREEN TREE IN YOUR HEART AND PERHAPS A SINGING BIRD WILL COME. — CHINESE PROVERB

LEGALS Starts Here

LEGALS Starts Here

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▶ Legals

State of Connecticut
Superior Court Juvenile Matters

Order of Notice

NOTICE TO:
The father of a female child born to Kayla Alimandi in New Haven, Connecticut on 9/16/2015 and now of parts unknown

A petition has been filed seeking:
Commitment of minor child(ren) of the above named or vesting custody and care of said child(ren) of the above named in a lawful, private or public agency or a suitable and worthy person.

The petition, whereby the court's decision can affect your parental rights, if any, regarding minor child(ren) will be heard on: **1/10/2017 at 9:30 a.m. at Superior Court for Juvenile Matters, 978 Hartford Turnpike, Waterford, CT**

Therefore, ORDERED, that notice of the hearing of this petition be given by publishing this Order of Notice once, immediately upon receipt, in **The Bulletin, 10 Railroad Place, Norwich, CT 06360** a newspaper having a circulation in the town/city of **Norwich, CT.**

Dated 12/2/16

Hon. John C. Driscoll
Lisa Rinato, Deputy Chief Clerk

Right to Counsel: Upon proof of inability to pay for a lawyer, the court will make sure that an attorney is provided to you by the Chief Public Defender. Request for an attorney should be made immediately in person, by mail, or by fax at the court office where your hearing is to be held.

▶ Legals ▶ Legals ▶ Legals

LEGAL NOTICE

Public Notice

Filing for Day Kimball Healthcare to Discontinue MRI Services at 39 Kennedy Drive, Putnam CT 06260

Statutory Reference:	CT General Statutes §19a-638
Applicant:	Day Kimball Healthcare
Project Address:	39 Kennedy Drive Putnam CT 06260
Proposal:	The Applicant intends to file a Certificate of Need application with the State of Connecticut to transition all MRI services to the main hospital campus.
Capital Expenditure:	None

Notice of Permit Application

Town: Killingly

Notice is hereby given that NTE Connecticut, LLC (the "applicant") of 24 Cathedral Place, St. Augustine, FL 32084 will submit to the Department of Energy and Environmental Protection an application under Section 22a-430 of the Connecticut General Statutes for a permit to initiate, create, originate or maintain a discharge of water, substance or material to waters of the state.

Specifically, the applicant proposes to discharge wastewaters from the proposed Killingly Energy Center, an approximately 550-megawatt electric generating facility, to the Killingly publicly owned treatment works. The proposed activity will be located on approximately 63 acres located at 189 Lake Road, Killingly, Connecticut. The proposed activity will potentially affect the Quinebaug River.

Interested persons may obtain copies of the application from Lynn Gresock, Tetra Tech, 2 Lan Drive, Suite 210, Westford, MA 01886 or (978) 203-5352. The application will also be available for inspection at the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, Water Permitting & Enforcement Division, 79 Elm Street, Hartford, CT 06106-5127 (860) 424-3018 from 8:30 to 4:30 Monday through Friday. Please call in advance to schedule review of the application.

Legals Starts Here

▶ Legals

NOTICE TO CREDITORS

ESTATE OF
James Joseph Foley
(16-00702)

The Hon. Charles K. Norris, Judge of the Court of Probate, District of Norwich Probate Court, by decree dated December 6, 2016, ordered that all claims must be presented to the fiduciary at the address below. Failure to promptly present any such claim may result in the loss of rights to recover on such claim.

Lisa A. Bolles, Clerk

The fiduciary is:
Daniel Foley,
808 Kettle Run Road,
Marlton, NJ 08053

Legals Starts Here

NOTICE TO CREDITORS

ESTATE OF
Melbourne Edwin Williamson, Jr., AKA Melbourne Williamson
(16-00642)

The Hon. Charles K. Norris, Judge of the Court of Probate, District of Norwich Probate Court, by decree dated December 5, 2016, ordered that all claims must be presented to the fiduciary at the address below. Failure to promptly present any such claim may result in the loss of rights to recover on such claim.

Barbara A. Palm, Clerk

The fiduciary is:
Raymond Carbonneau
c/o Theresa I. Madonna, Esq.,
110 Main Street,
Jewett City, CT 06351

Legals Starts Here

▶ Legals

NOTICE TO CREDITORS

ESTATE OF
Roland M. Lambert
(16-00710)

The Hon. Charles K. Norris, Judge of the Court of Probate, District of Norwich Probate Court, by decree dated December 7, 2016, ordered that all claims must be presented to the fiduciary at the address below. Failure to promptly present any such claim may result in the loss of rights to recover on such claim.

Barbara A. Palm, Clerk

The fiduciary is:
Gary Lambert,
90 Sawyers Lane,
Tewksbury, MA 01876

Legals Starts Here

▶ Legals

NOTICE TO CREDITORS

ESTATE OF
Richard C. Curriden
(16-00672)

The Hon. Charles K. Norris, Judge of the Court of Probate, District of Norwich Probate Court, by decree dated December 5, 2016, ordered that all claims must be presented to the fiduciary at the address below. Failure to promptly present any such claim may result in the loss of rights to recover on such claim.

Barbara A. Palm, Clerk

The fiduciary is:
Marlene Terry Ziegler
c/o Wade D. Jensen, Esq.,
Hoops & Jensen LLC,
19 A Thames Street,
Groton, CT 06340

Legals Starts Here

▶ Legals

NOTICE TO CREDITORS

ESTATE OF
JO-ELLEN LEONE
(16-00708)

The Hon. Charles K. Norris, Judge of the Court of Probate, District of Norwich Probate Court, by decree dated December 7, 2016, ordered that all claims must be presented to the fiduciary at the address below. Failure to promptly present any such claim may result in the loss of rights to recover on such claim.

Eileen M. Robbins, Chief Clerk

The fiduciary is:
Luke Leone, 41
Strawberry Street,
Lisbon, CT 06351

Financial Worksheet (A)

LINE	Total Entity: / Description	(1) FY12 Projected W/out CON	(2) FY12 Projected Incremental	(3) FY12 Projected With CON	(4) FY13 Projected W/out CON	(5) FY13 Projected Incremental	(6) FY13 Projected With CON	(7) FY14 Projected W/out CON	(8) FY14 Projected Incremental	(9) FY14 Projected With CON
A.	**OPERATING REVENUE**									
1	Total Gross Patient Revenue	$212,323,722		$212,323,722	$216,749,429		$216,749,429	$224,868,002		$224,868,002
2	Less: Allowances	98,574,532		98,574,532	107,878,972		107,878,972	114,704,856		114,704,856
3	Less: Charity Care	710,098		710,098	703,850		703,850	522,721		522,721
4	Less: Other Deductions	(366,243)		(366,243)	376,984		376,984	1,542,484		1,542,484
	Net Patient Service Revenue	**113,405,335**	**$0**	**113,405,335**	**107,789,623**	**-**	**107,789,623**	**108,097,941**	**-**	**108,097,941**
5	Medicare			$0			-			-
6	Medicaid			$0			-			-
7	CHAMPUS & TriCare			$0			-			-
8	Other			$0			-			-
	Total Government	**$0**	**$0**	**$0**	**-**	**-**	**-**	**-**	**-**	**-**
9	Commercial Insurers			$0			-			-
10	Uninsured			$0			-			-
11	Self Pay			$0			-			-
12	Workers Compensation			$0			-			-
13	Other	113,405,335		113,405,335	107,789,623		107,789,623	108,097,941		108,097,941
	Total Non-Government	**113,405,335**	**-**	**113,405,335**	**107,789,623**	**-**	**107,789,623**	**108,097,941**	**-**	**108,097,941**
	Net Patient Service Revenue[a] (Government+Non-Government)	**113,405,335**	**-**	**113,405,335**	**107,789,623**	**-**	**107,789,623**	**108,097,941**	**-**	**108,097,941**
14	Less: Provision for Bad Debts	3,538,134		**3,538,134**	3,140,293		**3,140,293**	3,250,605		**3,250,605**
	Net Patient Service Revenue less provision for bad debts	**109,867,201**	**-**	**109,867,201**	**104,649,330**	**-**	**104,649,330**	**104,847,336**	**-**	**104,847,336**
15	Other Operating Revenue	6,224,434		**6,224,434**	4,807,000		**4,807,000**	6,153,524		**6,153,524**
17	Net Assets Released from Restrictions	314,624		**314,624**	1,624,641		**1,624,641**	542,228		**542,228**
	TOTAL OPERATING REVENUE	**116,406,259**	**-**	**116,406,259**	**111,080,971**	**-**	**111,080,971**	**111,543,088**	**-**	**111,543,088**
B.	**OPERATING EXPENSES**									
1	Salaries and Wages			-	47,682,335		47,682,335	47,646,733		47,646,733
2	Fringe Benefits	19,856,567		19,856,567	17,030,038		17,030,038	17,072,825		17,072,825
3	Physicians Fees (Professional Fees)			-	12,483,720		12,483,720	10,631,022		10,631,022
4	Supplies and Drugs			-	27,750,076		27,750,076	27,133,430		27,133,430
5	Depreciation and Amortization	4,752,691		4,752,691	4,726,233		4,726,233	5,177,041		5,177,041
6	Provision for Bad Debts-Other[b]			-			-			-
7	Interest Expense	1,106,339		1,106,339	952,190		952,190	1,343,831		1,343,831
8	Malpractice Insurance Cost			-			-			-
9	Lease Expense			-			-			-
10	Other Operating Exp (State NPSR Tax)	85,987,698		85,987,698			-			-
	TOTAL OPERATING EXPENSES	**111,703,295**	**-**	**111,703,295**	**110,624,592**	**-**	**110,624,592**	**109,004,882**	**-**	**109,004,882**
	INCOME/(LOSS) FROM OPERATIONS	**4,702,964**	**-**	**4,702,964**	**456,379**	**-**	**456,379**	**2,538,206**	**-**	**2,538,206**
	NON-OPERATING REVENUE	**483,967**		**483,967**	**430,535**		**430,535**	**519,164**		**519,164**
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**$5,186,931**	**$0**	**$5,186,931**	**$886,914**	**$0**	**$886,914**	**$3,057,370**	**$0**	**$3,057,370**

Financial Worksheet (A)

LINE	Total Entity:	(1) FY12 Projected W/out CON	(2) FY12 Projected Incremental	(3) FY12 Projected With CON	(4) FY13 Projected W/out CON	(5) FY13 Projected Incremental	(6) FY13 Projected With CON	(7) FY14 Projected W/out CON	(8) FY14 Projected Incremental	(9) FY14 Projected With CON
	Description	W/out CON	Incremental	With CON	W/out CON	Incremental	With CON	W/out CON	Incremental	With CON
	Principal Payments	$731,065		**$731,065**	$17,284,874		**$17,284,874**	$1,315,394		**$1,315,394**
C.	**PROFITABILITY SUMMARY**									
1	Hospital Operating Margin	**4.0%**	**0.0%**	**4.0%**	**0.4%**	**0.0%**	**0.4%**	**2.3%**	**0.0%**	**2.3%**
2	Hospital Non Operating Margin	**0.4%**	**0.0%**	**0.4%**	**0.4%**	**0.0%**	**0.4%**	**0.5%**	**0.0%**	**0.5%**
3	Hospital Total Margin	**4.4%**	**0.0%**	**4.4%**	**0.8%**	**0.0%**	**0.8%**	**2.7%**	**0.0%**	**2.7%**
D.	**FTEs**	**No CON Impact**			**No CON Impact**			**No CON Impact**		
E.	**VOLUME STATISTICS[c]**									
1	Inpatient Discharges	**No CON Impact**			**No CON Impact**			**No CON Impact**		
2	Outpatient Visits	**No CON Impact**			**No CON Impact**			**No CON Impact**		
	TOTAL VOLUME	**No CON Impact**			**No CON Impact**			**No CON Impact**		

[a]Total amount should equal the total amount on cell line "Net Patient Revenue" Row 14.

[b]Provide the amount of any transaction associated with Bad Debts not related to the provision of direct services to patients. For additional information, refer to FASB, No.2011-07, July 2011.

[c]Provide projected inpatient and/or outpatient statistics for any new services and provide actual and projected inpatient and/or outpatient statistics for any existing services which will change due to the pro

Day Kimball Healthcare, Inc.
MRI Relocation Consolidation
OHCA Financial Worksheet A

Financial Worksheet (A)

		(10)	(11)	(12)		(13)	(14)	(15)		(16)	(17)	(18)
LINE	**Total Entity:**	**FY15 Projected W/out CON**	**FY15 Projected Incremental**	**FY15 Projected With CON**		**FY16 Projected W/out CON**	**FY16 Projected Incremental**	**FY16 Projected With CON**		**FY17 Projected W/out CON**	**FY17 Projected Incremental**	**FY17 Projected With CON**
	Description											
A.	**OPERATING REVENUE**											
1	Total Gross Patient Revenue	$110,443,309		$110,443,309		$111,096,402		$111,096,402		$113,078,002		$113,078,002
2	Less: Allowances			-				-				-
3	Less: Charity Care			-				-				-
4	Less: Other Deductions			-				-				-
	Net Patient Service Revenue	**110,443,309**	**-**	**110,443,309**		**111,096,402**	**-**	**111,096,402**		**113,078,002**	**-**	**113,078,002**
5	Medicare			-				-				-
6	Medicaid			-				-				-
7	CHAMPUS & TriCare			-				-				-
8	Other			-				-				-
	Total Government	**-**	**-**	**-**		**-**	**-**	**-**		**-**	**-**	**-**
9	Commercial Insurers			-				-				-
10	Uninsured			-				-				-
11	Self Pay			-				-				-
12	Workers Compensation			-				-				-
13	Other	110,443,309		110,443,309		111,096,402		111,096,402		113,078,002		113,078,002
	Total Non-Government	**110,443,309**	**-**	**110,443,309**		**111,096,402**	**-**	**111,096,402**		**113,078,002**	**-**	**113,078,002**
	Net Patient Service Revenue[a] (Government+Non-Government)	**110,443,309**	**-**	**110,443,309**		**111,096,402**	**-**	**111,096,402**		**113,078,002**	**-**	**113,078,002**
14	Less: Provision for Bad Debts	4,172,085		**4,172,085**		3,460,363		**3,460,363**		3,591,027		**3,591,027**
	Net Patient Service Revenue less provision for bad debts	**106,271,224**	**-**	**106,271,224**		**107,636,039**	**-**	**107,636,039**		**109,486,975**	**-**	**109,486,975**
15	Other Operating Revenue	3,119,128		**3,119,128**		5,943,981		**5,943,981**		6,722,301		**6,722,301**
17	Net Assets Released from Restrictions	279,620		**279,620**		495,189		**495,189**		548,000		**548,000**
	TOTAL OPERATING REVENUE	**109,669,972**	**-**	**109,669,972**		**114,075,209**	**-**	**114,075,209**		**116,757,276**	**-**	**116,757,276**
B.	**OPERATING EXPENSES**											
1	Salaries and Wages	46,570,692		46,570,692		43,804,810		43,804,810		44,941,569		44,941,569
2	Fringe Benefits	15,990,518		15,990,518		13,179,406		13,179,406		13,782,651		13,782,651
3	Physicians Fees (Professional Fees)	10,370,380	(94,340)	10,276,040		9,573,587	(93,820)	9,479,767		9,035,705	(95,540)	8,940,165
4	Supplies and Drugs	26,836,858	(78,233)	26,758,625		28,563,667	(127,168)	28,436,499		29,139,987	(205,401)	28,934,586
5	Depreciation and Amortization	5,804,468		5,804,468		5,627,130		5,627,130		5,200,000		5,200,000
6	Provision for Bad Debts-Other[b]			-				-				-
7	Interest Expense	1,451,212		1,451,212		1,768,386		1,768,386		1,961,341		1,961,341
8	Malpractice Insurance Cost			-				-				-
9	Lease Expense			-				-				-
10	Other Operating Exp (State NPSR Tax)	4,597,935		4,597,935		5,903,161		5,903,161		6,234,380		6,234,380
	TOTAL OPERATING EXPENSES	**111,622,063**	**(172,573)**	**111,449,490**		**108,420,147**	**(220,988)**	**108,199,159**		**110,295,633**	**(300,941)**	**109,994,692**
	INCOME/(LOSS) FROM OPERATIONS	**(1,952,091)**	**172,573**	**(1,779,518)**		**5,655,062**	**220,988**	**5,876,050**		**6,461,643**	**300,941**	**6,762,584**
	NON-OPERATING REVENUE	**1,280,830**		**1,280,830**		**646,682**		**646,682**				**-**
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**($671,261)**	**$172,573**	**($498,688)**		**$6,301,744**	**$220,988**	**$6,522,732**		**$6,461,643**	**$300,941**	**$6,762,584**

Financial Worksheet (A)												
		(10)	**(11)**	**(12)**		**(13)**	**(14)**	**(15)**		**(16)**	**(17)**	**(18)**
LINE	**Total Entity:**	**FY15**	**FY15**	**FY15**		**FY16**	**FY16**	**FY16**		**FY17**	**FY17**	**FY17**
		Projected	**Projected**	**Projected**		**Projected**	**Projected**	**Projected**		**Projected**	**Projected**	**Projected**
	Description	**W/out CON**	**Incremental**	**With CON**		**W/out CON**	**Incremental**	**With CON**		**W/out CON**	**Incremental**	**With CON**
	Principal Payments	$1,875,925		**$1,875,925**		$1,393,467		**$1,393,467**				**$0**
C.	**PROFITABILITY SUMMARY**											
1	Hospital Operating Margin	**-1.8%**	**0.0%**	**-1.6%**		**4.9%**	**0.0%**	**5.1%**		**5.5%**	**0.0%**	**5.8%**
2	Hospital Non Operating Margin	**1.2%**	**0.0%**	**1.2%**		**0.6%**	**0.0%**	**0.6%**		**0.0%**	**0.0%**	**0.0%**
3	Hospital Total Margin	**-0.6%**	**0.0%**	**-0.4%**		**5.5%**	**0.0%**	**5.7%**		**5.5%**	**0.0%**	**5.8%**
D.	**FTEs**	**No CON Impact**				**No CON Impact**				**No CON Impact**		
E.	**VOLUME STATISTICS[c]**											
1	Inpatient Discharges	**No CON Impact**				**No CON Impact**				**No CON Impact**		
2	Outpatient Visits	**No CON Impact**				**No CON Impact**				**No CON Impact**		
	TOTAL VOLUME	**No CON Impact**				**No CON Impact**				**No CON Impact**		
[a]Total amount should equal the total amount on c												
[b]Provide the amount of any transaction associate												
[c]Provide projected inpatient and/or outpatient stat	posal.											

Day Kimball Healthcare, Inc.
MRI Relocation Consolidation
OHCA Financial Worksheet A

Financial Worksheet (A)

			(19)	(20)	(21)		(22)	(23)	(24)
LINE	**Total Entity:**		**FY18**	**FY18**	**FY18**		**FY19**	**FY19**	**FY19**
			Projected	**Projected**	**Projected**		**Projected**	**Projected**	**Projected**
	Description		**W/out CON**	**Incremental**	**With CON**		**W/out CON**	**Incremental**	**With CON**
A.	**OPERATING REVENUE**								
1	Total Gross Patient Revenue		$113,078,002		$113,078,002		$113,078,002		$113,078,002
2	Less: Allowances				$0				$0
3	Less: Charity Care				$0				$0
4	Less: Other Deductions				$0				$0
	Net Patient Service Revenue		**113,078,002**	**-**	**$113,078,002**		**113,078,002**	**-**	**$113,078,002**
5	Medicare				$0				$0
6	Medicaid				$0				$0
7	CHAMPUS & TriCare				$0				$0
8	Other				$0				$0
	Total Government		**-**	**-**	**$0**		**-**	**-**	**$0**
9	Commercial Insurers				$0				$0
10	Uninsured				$0				$0
11	Self Pay				$0				$0
12	Workers Compensation				$0				$0
13	Other		113,078,002		$113,078,002		113,078,002		$113,078,002
	Total Non-Government		**113,078,002**	**-**	**$113,078,002**		**113,078,002**	**-**	**$113,078,002**
	Net Patient Service Revenue[a] (Government+Non-Government)		**113,078,002**	**-**	**$113,078,002**		**113,078,002**	**-**	**$113,078,002**
14	Less: Provision for Bad Debts		3,591,027		**$3,591,027**		3,591,027		**$3,591,027**
	Net Patient Service Revenue less provision for bad debts		**109,486,975**	**-**	**$109,486,975**		**109,486,975**	**-**	**$109,486,975**
15	Other Operating Revenue		6,722,301		**$6,722,301**		6,722,301		**$6,722,301**
17	Net Assets Released from Restrictions		548,000		**$548,000**		548,000		**$548,000**
	TOTAL OPERATING REVENUE		**116,757,276**	**-**	**$116,757,276**		**116,757,276**	**-**	**$116,757,276**
B.	**OPERATING EXPENSES**								
1	Salaries and Wages		44,941,569		$44,941,569		44,941,569		$44,941,569
2	Fringe Benefits		13,782,651		$13,782,651		13,782,651		$13,782,651
3	Physicians Fees (Professional Fees)		9,035,705	(95,540)	$8,940,165		9,035,705	(95,540)	$8,940,165
4	Supplies and Drugs		29,139,987	(205,401)	$28,934,586		29,139,987	(205,401)	$28,934,586
5	Depreciation and Amortization		5,200,000		$5,200,000		5,200,000		$5,200,000
6	Provision for Bad Debts-Other[b]				$0				$0
7	Interest Expense		1,961,341		$1,961,341		1,961,341		$1,961,341
8	Malpractice Insurance Cost				$0				$0
9	Lease Expense				$0				$0
10	Other Operating Exp (State NPSR Tax)		6,234,380		$6,234,380		6,234,380		$6,234,380
	TOTAL OPERATING EXPENSES		**110,295,633**	**(300,941)**	**$109,994,692**		**110,295,633**	**(300,941)**	**$109,994,692**
	INCOME/(LOSS) FROM OPERATIONS		**6,461,643**	**300,941**	**$6,762,584**		**6,461,643**	**300,941**	**$6,762,584**
	NON-OPERATING REVENUE				**$0**				**$0**
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES		**$6,461,643**	**$300,941**	**$6,762,584**		**$6,461,643**	**$300,941**	**$6,762,584**

Financial Worksheet (A)									
			(19)	**(20)**	**(21)**		**(22)**	**(23)**	**(24)**
LINE	**Total Entity:**		**FY18**	**FY18**	**FY18**		**FY19**	**FY19**	**FY19**
			Projected	**Projected**	**Projected**		**Projected**	**Projected**	**Projected**
	Description		**W/out CON**	**Incremental**	**With CON**		**W/out CON**	**Incremental**	**With CON**
	Principal Payments				**$0**				**$0**
C.	**PROFITABILITY SUMMARY**								
1	Hospital Operating Margin		**5.5%**	**0.0%**	**5.8%**		**5.5%**	**0.0%**	**5.8%**
2	Hospital Non Operating Margin		**0.0%**	**0.0%**	**0.0%**		**0.0%**	**0.0%**	**0.0%**
3	Hospital Total Margin		**5.5%**	**0.0%**	**5.8%**		**5.5%**	**0.0%**	**5.8%**
D.	**FTEs**		**No CON Impact**				**No CON Impact**		
E.	**VOLUME STATISTICS[c]**								
1	Inpatient Discharges		**No CON Impact**				**No CON Impact**		
2	Outpatient Visits		**No CON Impact**				**No CON Impact**		
	TOTAL VOLUME		**No CON Impact**				**No CON Impact**		
[a]Total amount should equal the total amount on c									
[b]Provide the amount of any transaction associate									
[c]Provide projected inpatient and/or outpatient stat									

Day Kimball Healthcare, Inc.
Summary of MRI Services by Site
Fiscal Year 2014

Financial W/S (A) - Supplemental

LINE	Total Entity:	FY14 MRI SERVICES PROGRAM			
		Kennedy Dr.		Main	Total
	Description	(Full Yr)	Plainfield	Campus	Program
A.	**OPERATING REVENUE**				
1	Total Gross Patient Revenue	$ 1,110,495	$ 734,626	$ 9,614,343	$ 11,459,464
2	Less: Allowances				-
3	Less: Charity Care				-
4	Less: Other Deductions				-
	Net Patient Service Revenue	**1,110,495**	**734,626**	**9,614,343**	**11,459,464**
14	Less: Provision for Bad Debts				-
	Net Patient Service Revenue less provision for bad debts	**1,110,495**	**734,626**	**9,614,343**	11,459,464
15	Other Operating Revenue				-
17	Net Assets Released from Restrictions				-
	TOTAL OPERATING REVENUE	**1,110,495**	**734,626**	**9,614,343**	11,459,464
B.	**OPERATING EXPENSES**				
3	Physicians Fees (Professional Fees)	53,833	103,905	1,177,559	1,335,297
4	Supplies and Drugs	2,474		89,164	91,638
5	Depreciation and Amortization				-
7	Interest Expense				-
9	Lease & Related Expense	205,401			205,401
10	Other Operating Exp (State NPRS Tax)				-
	TOTAL OPERATING EXPENSES	**261,708**	**103,905**	**1,266,723**	1,632,336
	INCOME/(LOSS) FROM OPERATIONS	**848,787**	**630,721**	**8,347,620**	9,827,128
	NON-OPERATING REVENUE				-
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**$ 848,787**	**$ 630,721**	**$ 8,347,620**	$ 9,827,128
C.	**ASSUMPTIONS**				
	MRI Scans	591	360	4,681	5,632
	Assumed No Change in Payor Mix				
	100% Kennedy Dr. activity will move to Main Hospital Campus				
	No Overhead Costs included in the analysis and would remain unchanged by CON				
	Reduction in Cost per Unit due to higher volume tier on mobile unit.				

Financial W/S (A) - Supplemental

Day Kimball Healthcare, Inc.
Summary of MRI Services by Site
Fiscal Year 2015

LINE	Total Entity:	FY15 MRI SERVICES PROGRAM								FY 15 Net CON Impact
		Kennedy Dr.				Main Campus			Total	
	Description	Base Line	CON Impact	(Part Yr)	Plainfield	Base Line	CON Impact	Adj Site Total	Program	
A.	**OPERATING REVENUE**									
1	Total Gross Patient Revenue	$ 1,110,495	$ (909,276)	$ 201,219	$ 494,321	$ 10,109,258	$ 909,276	$ 11,018,534	$ 11,714,074	$ -
2	Less: Allowances								-	-
3	Less: Charity Care								-	-
4	Less: Other Deductions								-	-
	Net Patient Service Revenue	**1,110,495**	**(909,276)**	**201,219**	**494,321**	**10,109,258**	**909,276**	**11,018,534**	11,714,074	-
14	Less: Provision for Bad Debts								-	-
	Net Patient Service Revenue less provision for bad debts	**1,110,495**	**(909,276)**	**201,219**	**494,321**	**10,109,258**	**909,276**	**11,018,534**	11,714,074	-
15	Other Operating Revenue								-	-
17	Net Assets Released from Restrictions								-	-
	TOTAL OPERATING REVENUE	**1,110,495**	**(909,276)**	**201,219**	**494,321**	**10,109,258**	**909,276**	**11,018,534**	11,714,074	-
B.	**OPERATING EXPENSES**									
3	Physicians Fees (Professional Fees)	53,833	(42,177)	11,656	69,172	1,150,856	(52,163)	1,098,693	1,179,521	(94,340)
4	Supplies and Drugs	2,474	(15)	2,459		57,175	15	57,190	59,649	-
5	Depreciation and Amortization	-	-			-	-		-	-
7	Interest Expense	-	-			-	-		-	-
9	Lease & Related Expense	205,401	(78,233)	127,168		-	-		127,168	(78,233)
10	Other Operating Exp (State NPRS Tax)		-			-	-		-	-
	TOTAL OPERATING EXPENSES	**261,708**	**(120,425)**	**141,283**	**69,172**	**1,208,031**	**(52,148)**	**1,155,883**	1,366,338	(172,573)
									-	-
	INCOME/(LOSS) FROM OPERATIONS	**848,787**	**(788,851)**	**59,936**	**425,149**	**8,901,227**	**961,424**	**9,862,651**	10,347,736	172,573
	NON-OPERATING REVENUE								-	-
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**$ 848,787**	**$ (788,851)**	**$ 59,936**	**$ 425,149**	**$ 8,901,227**	**$ 961,424**	**$ 9,862,651**	$ 10,347,736	$ 172,573
C.	**ASSUMPTIONS**									
	MRI Scans	591	**(476)**	115	283	4,241	**476**	4,717	5,115	**-**
	Assumed No Change in Payor Mix	None	None	None			None			None
	100% Kennedy Dr. activity will move to Main Hospital Campus									
	No Overhead Costs included in the analysis and would remain unchanged by CON									
	Reduction in Cost per Unit due to higher volume tier on mobile unit.							$ 20 per unit $94,340		

Day Kimball Healthcare, Inc.
Summary of MRI Services by Site
Fiscal Year 2016

Financial W/S (A) - Supplemental

LINE	Total Entity:	FY16 MRI SERVICES PROGRAM								FY 16 Net CON Impact
		Kennedy Dr.				Main Campus			Total	
	Description	Base Line	CON Impact	(Part Yr)	Plainfield	Base Line	CON Impact	Adj Site Total	Program	
A.	**OPERATING REVENUE**									
1	Total Gross Patient Revenue	$ 201,219	$ (201,219)	$ -	$ 599,796	$ 10,817,315	$ 201,219	$ 11,018,534	$ 11,618,330	$ -
2	Less: Allowances								-	-
3	Less: Charity Care								-	-
4	Less: Other Deductions								-	-
	Net Patient Service Revenue	**201,219**	**(201,219)**	**-**	**599,796**	**10,817,315**	**201,219**	**11,018,534**	11,618,330	-
14	Less: Provision for Bad Debts								-	-
	Net Patient Service Revenue less provision for bad debts	**201,219**	**(201,219)**	**-**	**599,796**	**10,817,315**	**201,219**	**11,018,534**	11,618,330	-
15	Other Operating Revenue								-	-
17	Net Assets Released from Restrictions								-	-
	TOTAL OPERATING REVENUE	**201,219**	**(201,219)**	**-**	**599,796**	**10,817,315**	**201,219**	**11,018,534**	11,618,330	-
B.	**OPERATING EXPENSES**									
3	Physicians Fees (Professional Fees)	11,656	(11,656)	-	65,456	1,180,857	(82,164)	1,098,693	1,164,149	(93,820)
4	Supplies and Drugs	2,459	(2,459)	-		54,731	2,459	57,190	57,190	-
5	Depreciation and Amortization	-	-	-		-	-		-	-
7	Interest Expense	-	-	-		-	-		-	-
9	Lease & Related Expense	127,168	(127,168)	-		-	-		-	(127,168)
10	Other Operating Exp (State NPRS Tax)		-			-	-		-	-
	TOTAL OPERATING EXPENSES	**141,283**	**(141,283)**	**-**	**65,456**	**1,235,588**	**(79,705)**	**1,155,883**	1,221,339	(220,988)
	INCOME/(LOSS) FROM OPERATIONS	**59,936**	**(59,936)**	**-**	**534,340**	**9,581,727**	**280,924**	**9,862,651**	10,396,991	220,988
	NON-OPERATING REVENUE								-	-
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**$ 59,936**	**$ (59,936)**	**$ -**	**$ 534,340**	**$ 9,581,727**	**$ 280,924**	**$ 9,862,651**	$ 10,396,991	$ 220,988
C.	**ASSUMPTIONS**									
	MRI Scans	115	**(115)**	-	276	4,576	**115**	4,691	4,967	**-**
	Assumed No Change in Payor Mix	None	None	None			None			None
	100% Kennedy Dr. activity will move to Main Hospital Campus									
	No Overhead Costs included in the analysis and would remain unchanged by CON									
	Reduction in Cost per Unit due to higher volume tier on mobile unit.							$ 20 per unit $93,820		

Financial W/S (A) - Supplemental

Day Kimball Healthcare, Inc.
Summary of MRI Services by Site
Fiscal Year 2017

LINE	Total Entity:	FY 17 MRI SERVICES PROGRAM						FY 17 Net CON Impact
		Kennedy Dr.		Main Campus			Total	
	Description	CON Impact	Plainfield	Base Line	CON Impact	FY 17 Proj.	Program	
A.	**OPERATING REVENUE**							
1	Total Gross Patient Revenue	$ (1,110,495)	$ 599,796	$ 12,645,066	$ 1,110,495	$ 13,755,561	$ 14,355,357	$ -
2	Less: Allowances	-					-	-
3	Less: Charity Care	-					-	-
4	Less: Other Deductions	-					-	-
	Net Patient Service Revenue	(1,110,495)	**599,796**	**12,645,066**	**1,110,495**	**13,755,561**	14,355,357	-
14	Less: Provision for Bad Debts	-					-	-
	Net Patient Service Revenue less provision for bad debts	(1,110,495)	**599,796**	**12,645,066**	**1,110,495**	**13,755,561**	14,355,357	-
15	Other Operating Revenue	-					-	-
17	Net Assets Released from Restrictions	-					-	-
	TOTAL OPERATING REVENUE	(1,110,495)	**599,796**	**12,645,066**	**1,110,495**	**13,755,561**	14,355,357	-
								-
B.	**OPERATING EXPENSES**							-
3	Physicians Fees (Professional Fees)	(53,833)	65,456	1,185,180	(41,707)	1,143,473	1,208,929	(95,540)
4	Supplies and Drugs	(2,474)		63,110	2,474	65,584	65,584	-
5	Depreciation and Amortization	-		-	-		-	-
7	Interest Expense	-		-	-		-	-
9	Lease & Related Expense	(205,401)		-	-		-	(205,401)
10	Other Operating Exp (State NPRS Tax)	-		-	-		-	-
	TOTAL OPERATING EXPENSES	(261,708)	**65,456**	**1,248,290**	**(39,233)**	**1,209,057**	1,274,513	(300,941)
								-
	INCOME/(LOSS) FROM OPERATIONS	(848,787)	**534,340**	**11,396,776**	**1,149,728**	**12,546,504**	**13,080,844**	300,941
								-
	NON-OPERATING REVENUE	-					-	-
								-
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	$ (848,787)	**$ 534,340**	**$ 11,396,776**	**$ 1,149,728**	**$ 12,546,504**	**$ 13,080,844**	$ 300,941
C.	**ASSUMPTIONS**							
	MRI Scans	**(591)**	279	4,186	591	4,777	$ 5,056	**-**
	Assumed No Change in Payor Mix							
	100% Kennedy Dr. activity will move to Main Hospital Campus							
	No Overhead Costs included in the analysis and would remain unchanged by CON							
	Reduction in Cost per Unit due to higher volume tier on mobile unit.					$ 20 per unit $95,540		

Financial W/S (A) - Supplemental

Day Kimball Healthcare, Inc.
Summary of MRI Services by Site
Fiscal Year 2018

LINE	Total Entity:	FY 18 MRI SERVICES PROGRAM						FY 18 Net CON Impact
		Kennedy Dr.		Main Campus			Total	
	Description	CON Impact	Plainfield	Base Line	CON Impact	FY 17 Proj.	Program	
A.	**OPERATING REVENUE**							
1	Total Gross Patient Revenue	$ (1,110,495)	$ 599,796	$ 12,645,066	$ 1,110,495	$ 13,755,561	$ 14,355,357	$ -
2	Less: Allowances	-			-		-	-
3	Less: Charity Care	-			-		-	-
4	Less: Other Deductions	-			-		-	-
	Net Patient Service Revenue	(1,110,495)	**599,796**	**12,645,066**	1,110,495.00	**13,755,561**	14,355,357	-
14	Less: Provision for Bad Debts	-			-		-	-
	Net Patient Service Revenue less provision for bad debts	(1,110,495)	**599,796**	**12,645,066**	1,110,495.00	**13,755,561**	14,355,357	-
15	Other Operating Revenue	-			-		-	-
17	Net Assets Released from Restrictions	-			-		-	-
	TOTAL OPERATING REVENUE	(1,110,495)	**599,796**	**12,645,066**	1,110,495.00	**13,755,561**	14,355,357	-
		-			-			-
B.	**OPERATING EXPENSES**	-			-			-
3	Physicians Fees (Professional Fees)	(53,833)	65,456	1,185,180	(41,707.00)	1,143,473	1,208,929	(95,540)
4	Supplies and Drugs	(2,474)		63,110	2,474.00	65,584	65,584	-
5	Depreciation and Amortization	-		-	-		-	-
7	Interest Expense	-		-	-		-	-
9	Lease & Related Expense	(205,401)		-	-		-	(205,401)
10	Other Operating Exp (State NPRS Tax)	-		-	-		-	-
	TOTAL OPERATING EXPENSES	(261,708)	**65,456**	**1,248,290**	(39,233.00)	**1,209,057**	1,274,513	(300,941)
		-			-			-
	INCOME/(LOSS) FROM OPERATIONS	(848,787)	**534,340**	**11,396,776**	1,149,728.00	**12,546,504**	**13,080,844**	300,941
		-			-			-
	NON-OPERATING REVENUE	-			-		-	-
		-			-			-
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	$ (848,787)	**$ 534,340**	**$ 11,396,776**	$ 1,149,728	**$ 12,546,504**	**$ 13,080,844**	$ 300,941
C.	**ASSUMPTIONS**							
	MRI Scans	**(591)**	279	4,186	591	4,777	$ 5,056	**-**
	Assumed No Change in Payor Mix							
	100% Kennedy Dr. activity will move to Main Hospital Campus							
	No Overhead Costs included in the analysis and would remain unchanged by CON							
	Reduction in Cost per Unit due to higher volume tier on mobile unit.					$ 20 per unit $95,540		

Financial W/S (A) - Supplemental

Day Kimball Healthcare, Inc.
Summary of MRI Services by Site
Fiscal Year 2019

LINE	Total Entity:	FY 19 MRI SERVICES PROGRAM						FY 19 Net CON Impact
		Kennedy Dr.		Main Campus			Total	
	Description	CON Impact	Plainfield	Base Line	CON Impact	FY 17 Proj.	Program	
A.	**OPERATING REVENUE**							
1	Total Gross Patient Revenue	$ (1,110,495)	$ 599,796	$ 12,645,066	$ 1,110,495	$ 13,755,561	$ 14,355,357	$ -
2	Less: Allowances	-			-		-	-
3	Less: Charity Care	-			-		-	-
4	Less: Other Deductions	-			-		-	-
	Net Patient Service Revenue	(1,110,495)	**599,796**	**12,645,066**	1,110,495.00	**13,755,561**	14,355,357	-
14	Less: Provision for Bad Debts	-			-		-	-
	Net Patient Service Revenue less provision for bad debts	(1,110,495)	**599,796**	**12,645,066**	1,110,495.00	**13,755,561**	14,355,357	-
15	Other Operating Revenue	-			-		-	-
17	Net Assets Released from Restrictions	-			-		-	-
	TOTAL OPERATING REVENUE	(1,110,495)	**599,796**	**12,645,066**	1,110,495.00	**13,755,561**	14,355,357	-
		-			-			-
B.	**OPERATING EXPENSES**	-			-			-
3	Physicians Fees (Professional Fees)	(53,833)	65,456	1,185,180	(41,707.00)	1,143,473	1,208,929	(95,540)
4	Supplies and Drugs	(2,474)		63,110	2,474.00	65,584	65,584	-
5	Depreciation and Amortization	-		-	-		-	-
7	Interest Expense	-		-	-		-	-
9	Lease & Related Expense	(205,401)		-	-		-	(205,401)
10	Other Operating Exp (State NPRS Tax)	-		-	-		-	-
	TOTAL OPERATING EXPENSES	(261,708)	**65,456**	**1,248,290**	(39,233.00)	**1,209,057**	1,274,513	(300,941)
		-			-			-
	INCOME/(LOSS) FROM OPERATIONS	(848,787)	**534,340**	**11,396,776**	1,149,728.00	**12,546,504**	**13,080,844**	300,941
		-			-			-
	NON-OPERATING REVENUE	-			-		-	-
		-			-			-
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	$ (848,787)	**$ 534,340**	**$ 11,396,776**	$ 1,149,728	**$ 12,546,504**	**$ 13,080,844**	$ 300,941
C.	**ASSUMPTIONS**							
	MRI Scans	**(591)**	279	4,186	591	4,777	$ 5,056	**-**
	Assumed No Change in Payor Mix							
	100% Kennedy Dr. activity will move to Main Hospital Campus							
	No Overhead Costs included in the analysis and would remain unchanged by CON							
	Reduction in Cost per Unit due to higher volume tier on mobile unit.					$ 20 per unit $95,540		

Greer, Leslie

From: Fernandes, David
Sent: Thursday, January 12, 2017 2:41 PM
To: Glazier, Douglas P.
Cc: Greer, Leslie; Riggott, Kaila; Veyberman, Alla
Subject: 16-32142-CON Completeness Letter
Attachments: 16-32142-CON Completeness letter Final.docx

Good afternoon Mr. Glazier,

Please see the attached completeness letter in the matter of the proposed termination of MRI services at 39 Kennedy Drive and the consolidation of the remaining services onto Day Kimball Hospital. In responding to the completeness letter, please follow the instructions included in the letter and provide the response document as an attachment only (no hard copies required). Please provide your written responses to OHCA by March 13, 2017.

Email to OHCA@ct.gov and cc: Kaila.Riggott@ct.gov.

If you have any questions regarding the completeness letters, please contact Kaila Riggott at (860) 418-7037.

Please confirm receipt of this email.

Thank You,

David Fernandes
Planning Analyst (CCT)
Office of Health Care Access
Connecticut Department of Public Health
410 Capitol Avenue, Hartford, Connecticut 06134
P: (860) 418-7032|F: (860) 418-7053|E: David.Fernandes@ct.gov

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

Office of Health Care Access

January 12, 2017 Via Email

Mr. Douglas P. Glazier
Financial & Systems Consultant
Day Kimball Healthcare, Inc.
D/B/A Day Kimball Hospital
320 Pomfret Street
Putnam, CT 06260
dpglazier@daykimball.org

RE: Certificate of Need Application: Docket Number: 16-32142-CON
Termination of MRI services at 39 Kennedy Drive, Putnam Connecticut and the consolidation of MRI services onto Day Kimball Hospital's main campus located at 320 Pomfret Street, Putnam Connecticut.

Dear Mr. Glazier:

On January 3, 2017, the Department of Public Health ("DPH"), Office of Health Care Access ("OHCA") received the Certificate of Need ("CON") application on behalf of Day Kimball Healthcare, Inc. D/B/A Day Kimball Hospital ("DKH") seeking authorization to terminate MRI services at 39 Kennedy Drive, Putnam Connecticut and to consolidate MRI services onto DKH's main campus located at 320 Pomfret Street, Putnam, Connecticut.

OHCA requests additional information pursuant to Connecticut General Statutes §19a-639a(c). *Please "reply all" to electronically confirm receipt of this email as soon as you receive it.* Provide responses to the questions below in both a Word document and PDF format as an attachment to a responding email. *Please email your responses to each of the following email addresses:* ***OHCA@ct.gov*** and ***kaila.riggott@ct.gov.***

Pursuant to Section 19a-639a(c) of the Connecticut General Statutes, you must submit your response to this request for additional information no later than sixty days after the date that this request was transmitted. Therefore, please provide your written responses to OHCA no later than **March 13, 2017**, otherwise your application will be automatically considered withdrawn. Repeat each question before providing your response and paginate and date your response (i.e., each page in its entirety). Information filed after the initial CON application submission (e.g., completeness response letter, prefiled testimony, late file submissions, and the like) must be numbered sequentially from the

Applicant's document preceding it. Begin your submission using **Page 101** and reference "**Docket Number: 16-32142-CON**."

1. Explain why MRI services at the Kennedy Drive location were terminated in advance of OHCA authorization.

2. Page 8 of the application states the relocation and consolidation of MRI services at 39 Kennedy Drive was to occur as of November 30, 2014 but a previously submitted CON application (15-32053) indicated the scanner was temporarily operational in October and November 2015. Please clarify the last day on which the scanner was in operation.

3. Please reconcile the current days of operation as page 7 of the application states the main campus MRI operates 6 days a week while Table 1 on page 19 states 5 days.

4. Why was there a lack of physician presence at the 39 Kennedy Drive facility, as indicated on page 8 of the application?

5. Expand on the increased range of services patients now have access to as compared to the 1.0T scanner, as indicated on pages 11 and 12 of the application.

6. Page 11 of the application states the main campus has adequate capacity to absorb patients from the 39 Kennedy Drive facility. How many MRI scans can DKH's main campus accommodate annually?

7. Page 11 of the application states the availability of transportation service options would remain the same. Please expand on what transportation services are available.

8. Did the Applicant face difficulty in maintaining and repairing the scanner located on 39 Kennedy Drive due to the end of production and sale of 1.0 Tesla MRI scanners in 2005, as indicated on page 11 of the application?

9. Please provide the assumptions and calculations used to determine that growth would remain stable for fiscal years 2017 through 2019, when past volume has declined 2.66%, 9.17% and 2.89%, respectively in fiscal years 2013 through 2016.

10. Please fill out the net patient service revenue and total government sections on Financial Worksheet A found on pages 89, 91 and 93.

11. Please explain the reduction in physician fees on Financial Worksheet A found on pages 89, 91 and 93.
    a. Were the physicians from the Kennedy Drive location retained?
    b. Explain the reduction in physician fees for the main campus found on the Supplemental Financial Worksheet on pages 96 through 100.

12. Please reconcile the operating expenses on the Financial Worksheet with the Supplemental Financial Worksheet, as the figures for incremental supplies and drugs on Financial Worksheet A, is found under lease and related expenses in the Supplemental Financial Worksheet A.

If you have any questions concerning this letter, please feel free to contact Kaila Riggott at (860) 418-7037.

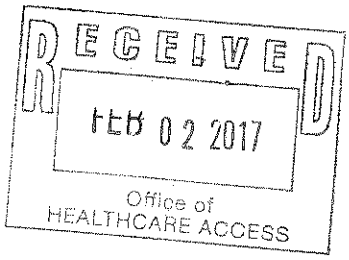
User, OHCA

From: Spooner, Luanne C. <LCSpooner@DayKimball.org>
Sent: Thursday, February 02, 2017 3:18 PM
To: User, OHCA; Riggott, Kaila
Cc: Beaudoin, Paul A.; Glazier, Douglas P.
Subject: Docket #16-32142-CON Day Kimball Healthcare (DKH) Response to Completeness Questions
Attachments: Docket #16-32142-CON Resp to Qs of 01.12.2017.pdf

Importance: High

OHCA Representatives:

Attached is DKH's response to the completeness questions Re: Docket #16-32142-CON.



Please confirm receipt.

Thank you.

Luanne

Luanne Spooner
Sr. Administrative Coordinator - Finance
320 Pomfret Street | Putnam CT 06260 | (860) 928-6541 ext 2035 | F (860) 963-6096 lcspooner@daykimball.org

1. Explain why MRI services at the Kennedy Drive location were terminated in advance of OHCA authorization.

RESPONSE:

There apparently was a lot of confusion as to whether or not a CON was required, and which forms, if any, were required to be filed with OHCA. The individuals directly involved in the change in operations are no longer at Day Kimball Hospital but others have indicated that these discussion took 8 or 9 months to resolve beginning in late summer/early fall of 2014.

This site was operated, and reported, as part of the Hospital under CMS Provider Based Service criteria to provide expansion capability for limited, basic range MRI services to allow DKH to handle the expected growth in MRI services overall. Unfortunately, the growth did not materialize on the Main Campus of the Hospital, or in the satellite facility at 39 Kennedy Drive.

CMS and CT Department of Social Services continually push providers to improve cost efficiency and effectiveness of a Hospital's operations. It's a delicate balancing act to improve cost management and maintain access to necessary services for the population that the hospital serves.

The low volume of services at Kennedy Drive and the close proximity of the two MRI operations seemed to provide the golden opportunity to improve both access to the expanded services and achieve a significant reduction in costs as well. This occurred in a period when the hospital system was experiencing significant financial distress for the second year in a row.

The Hospital did not view the change in service configuration as a "Termination of Services" but rather as a relocation or continuation and expansion of the range of MRI services available to the 39 Kennedy Drive Road patient population at the main Hospital Campus.

Even the Certificate of Need Application Guide indicates "Replacing Imaging Equipment" does not require a CON, and on page 11 it indicates "Moving Imaging equipment" does not require a CON. Although this section is silent about the "specific service" it would seem if equipment can move, the service also would be able to move without the need for a CON.

2. Page 8 of the application states that the relocation and consolidation of MRI services at 39 Kennedy Drive was to occur as of November 30, 2014, but a previously submitted CON application (15-32053) indicated the scanner was temporarily operational in October and November 2015. Please clarify the last day on which the scanner was in operation.

RESPONSE:
The confusion may be from the distinction between calendar year and fiscal year.

The MRI scanner did function on a limited basis during October and November of calendar 2014 that is within the Hospital's Fiscal Year 2015 (10/01/14 to 09/30/15) , as was referenced in the previous CON submission Supplemental Application Termination of Service page 3 line 1. b (7).

The last scan was actually performed November 26, 2014 at 1:18:00PM.

3. Please reconcile the current days of operation as page 7 of the application states the main campus MRI operates 6 days a week while Table 1 on page 19 states 5 days.

RESPONSE:
As noted in response to question number 2 above, the Mobile MRI serves the main campus of the hospital 6 days per week.

Table 1 on page 19 of the submission is incorrect. It should have reflected 6 days, consistent with page 7.

4. Why was there a lack of physician presence at the 39 Kennedy Drive facility, as indicated on page 8 of the application?

RESPONSE:
The potential volume of appropriate scans was inadequate to justify the independent Radiology Group placing a physician at the Kennedy Drive location when the availability of a Radiologist on site existed 1 mile away at the main campus of the hospital.

5. Expand on the increased range of services patients now have access to as compared to the 1.0T scanner, as indicated on pages 11 and 12 of the application.

RESPONSE:
Exhibit A, on pages 24 – 28 of the submission, provides a comparative chart of services available at Kennedy Drive vs. those available on the main campus of the Hospital 1 mile away.

6. Page 11 of the application states that the main campus has adequate capacity to absorb patients from the 39 Kennedy Drive facility. How many MRI scans can DKH's main campus accommodate annually?

RESPONSE:

DKH's main campus has the capacity to perform 5,928 scans per year.
(19 per day x 6 days x 52 wks.).

The number of actual scans now performed at the Hospital's main campus (a combination of main campus & former Kennedy Drive patients) in FY 2016 totaled 4,691 as reported in Table 5 on page 21 of the submission, or approximately 79% of capacity.

7. Page 11 of the application states the availability of transportation service options would remain the same. Please expand on what transportation services are available.

RESPONSE:

For outpatient services, the following companies served both 39 Kennedy Drive and the Hospital's main campus at 320 Pomfret Street:

- **Med-X a medical transport company**
- **KR Rides Webster Cab service**
- **Putnam Taxi, LLC**

In addition, North East CT Transit services the Hospital's main campus but did not serve the Kennedy Drive location.

8. Did the Applicant face difficulty in maintaining and repairing the scanner located on 39 Kennedy Drive due to the end of production and sale of 1.0 Tesla MRI scanners in 2005, as indicated on page 11 of the application?

RESPONSE:

With the low volume of scan activity, DKH was fortunate in that it did not experience significant repair requirements. The cost of servicing the equipment, and the availability of parts in the future, were topics of discussion whenever maintenance was performed, or at maintenance contract renewal time. While not the driving issue, that is always a concern with any equipment that has not been manufactured within the past 10 years.

9. Please provide the assumptions and calculations used to determine that growth would remain stable for fiscal years 2017 through 2019, when past volume has declined 2.66%, 9.17% and 2.89%, respectively in fiscal years 2013 through 2016.

RESPONSE:

DKH does not view this CON as an addition of new services or the closure of services previously available. Consequently, for simplicity and clarity of the impact of the CON without the confusion of many other unrelated factors changing, DKH assumed essentially no increase or decreases in volume, no change in overall payor mix (Table 7) and no cost inflation.

This essentially isolates any incremental changes between Fiscal Years to the impact of the CON only.

10. Please fill out the net patient service revenue and total government sections on Financial Worksheet A found on pages 89, 91 and 93.

RESPONSE:

Although this information is not relevant to this CON, as no patient services were added or are any patient services reduced or eliminate, Financial Worksheet A has been updated with the best data available. The FY 2016 OHCA 12 Month filings have not been finalized as of yet for the 2/28/17 submission, limiting the segregation of net patient service revenue to only the 5 payor categories maintained within the General Ledger.

The revised Worksheets are attached with a revision date of 01/25/17 noted in the upper right corner of the documents.

11. Please explain the reduction in physician fees on Financial Worksheet A found on pages 89, 91 and 93.
    a. Were the physicians from the Kennedy Drive location retained?

RESPONSE:

There were no physicians present at the 39 Kennedy Drive operations to retain. As noted on Financial Worksheet A, Operating Expenses Line B3, reported costs include Professional Fees and not just Physician Fees. The professional fees (primarily per scan) from the MRI service company are included in this line and are eliminated with the closure of the unit.

b. Explain the reduction in physician fees for the main campus found on the Supplemental Financial Worksheet on pages 96 through 100

RESPONSE:

As noted in 11.a. above, the Operating Expenses Line B3 reported costs include Professional Fees, not just Physician Fees. The professional fees (primarily per scan) from the MRI mobile service company are included in this line. The combination of the volume from Kennedy Drive with the main campus volume put DKH in a higher volume pricing tier which resulted in a reduction of $20 per scan costs for the entire volume performed at the main campus, outweighing the incremental cost for the new volume from Kennedy Drive.

12. Please reconcile the operating expenses on the Financial Worksheet with the Supplemental Financial Worksheet, as the figures for incremental supplies and drugs on Financial Worksheet A, is found under lease and related expenses in the Supplemental Financial Worksheet A.

RESPONSE:

The two schedules referenced will not agree.

Financial Worksheet A (filing pages 89 to 94) represents the entire Hospital operations. The full Lease & Related Expenses were not readily available for separate reporting.

Financial Worksheet (A) – Supplemental represents only the MRI Services Program for the combined 3 locations of operation. Building Lease & Related Expenses for the one departmental cost center were identifiable and reported separately on line 9.

Financial Worksheet (A)

LINE	Total Entity:	(1) FY12 Projected W/out CON	(2) FY12 Projected Incremental	(3) FY12 Projected With CON	(4) FY13 Projected W/out CON	(5) FY13 Projected Incremental	(6) FY13 Projected With CON	(7) FY14 Projected W/out CON	(8) FY14 Projected Incremental	(9) FY14 Projected With CON
	Description									
A.	OPERATING REVENUE									
1	Total Gross Patient Revenue	$212,323,722	= OHCA 150	$212,323,722	$216,749,429	= OHCA 150	$216,749,429	$224,868,002	= OHCA 150	$224,868,002
2	Less: Allowances	98,208,289		98,208,289	108,255,956		108,255,956	116,247,340		116,247,340
3	Less: Charity Care	710,098		710,098	703,850		703,850	522,721		522,721
4	Less: Other Deductions			-			-			-
	Net Patient Service Revenue	**113,405,335**	= OHCA 150	**113,405,335**	**107,789,623**	= OHCA 150	**107,789,623**	**108,097,941**	= OHCA 150	**108,097,941**
5	Medicare	$39,330,519		$39,330,519	40,088,820		40,088,820	39,718,418		39,718,418
6	Medicaid	$19,019,832		$19,019,832	16,352,315		16,352,315	16,913,391		16,913,391
7	CHAMPUS & TriCare	$567,688		$567,688	445,300		445,300	439,899		439,899
8	Other			$0			-			-
	Total Government	**$58,918,039**	**$0**	**$58,918,039**	**56,886,435**	**-**	**56,886,435**	**57,071,708**	**-**	**57,071,708**
9	Commercial Insurers	$49,505,612		$49,505,612	46,662,520		46,662,520	52,181,874		52,181,874
10	Uninsured	$201,068		$201,068	251,298		251,298	363,280		363,280
11	Self Pay			$0			-			-
12	Workers Compensation		-	$0		-	-		-	-
13	Other	4,780,616		4,780,616	3,989,370		3,989,370	(1,518,921)		(1,518,921)
	Total Non-Government	**54,487,296**	**-**	**54,487,296**	**50,903,188**	**-**	**50,903,188**	**51,026,233**	**-**	**51,026,233**
	Net Patient Service Revenue[a] (Government+Non-Government)	**113,405,335**	= OHCA 150 & = AFS	**113,405,335**	**107,789,623**	= OHCA 150 & = AFS	**107,789,623**	**108,097,941**	= OHCA 150 & = AFS	**108,097,941**
14	Less: Provision for Bad Debts	3,538,134		**3,538,134**	3,140,293		**3,140,293**	3,250,605		**3,250,605**
	Net Patient Service Revenue less provision for bad debts	**109,867,201**	**-**	**109,867,201**	**104,649,330**	**-**	**104,649,330**	**104,847,336**	**-**	**104,847,336**
15	Other Operating Revenue	6,224,434		**6,224,434**	4,807,000		**4,807,000**	6,153,524		**6,153,524**
17	Net Assets Released from Restrictions	314,624		**314,624**	1,624,641		**1,624,641**	542,228		**542,228**
	TOTAL OPERATING REVENUE	**116,406,259**	**-**	**116,406,259**	**111,080,971**	**-**	**111,080,971**	**111,543,088**	= OHCA 150	**111,543,088**
								= AFS		
B.	OPERATING EXPENSES									
1	Salaries and Wages			-	47,682,335		47,682,335	47,646,733		47,646,733
2	Fringe Benefits	19,856,567		19,856,567	17,030,038		17,030,038	17,072,825		17,072,825
3	Physicians Fees (Professional Fees)			-	12,483,720		12,483,720	10,631,022		10,631,022
4	Supplies and Drugs			-	27,750,076		27,750,076	27,133,430		27,133,430
5	Depreciation and Amortization	4,752,691		4,752,691	4,726,233		4,726,233	5,177,041		5,177,041
6	Provision for Bad Debts-Other[b]			-			-			-
7	Interest Expense	1,106,339		1,106,339	952,190		952,190	1,343,831		1,343,831
8	Malpractice Insurance Cost			-			-			-
9	Lease Expense			-			-			-
10	Other Operating Exp (State NPSR Tax)	85,987,698		85,987,698			-			-
	TOTAL OPERATING EXPENSES	**111,703,295**	**-**	**111,703,295**	**110,624,592**	**-**	**110,624,592**	**109,004,882**	**-**	**109,004,882**
	INCOME/(LOSS) FROM OPERATIONS	**4,702,964**	**-**	**4,702,964**	**456,379**	**-**	**456,379**	**2,538,206**	**-**	**2,538,206**
	NON-OPERATING REVENUE	**483,967**		**483,967**	**430,535**		**430,535**	**519,164**		**519,164**
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**$5,186,931**	**$0**	**$5,186,931**	**$886,914**	**$0**	**$886,914**	**$3,057,370**	**$0**	**$3,057,370**

Financial Worksheet (A)												
		(1)	(2)	(3)		(4)	(5)	(6)		(7)	(8)	(9)
LINE	Total Entity:	FY12 Projected W/out CON	FY12 Projected Incremental	FY12 Projected With CON		FY13 Projected W/out CON	FY13 Projected Incremental	FY13 Projected With CON		FY14 Projected W/out CON	FY14 Projected Incremental	FY14 Projected With CON
	Description											
	Principal Payments	$731,065		$731,065		$17,284,874		$17,284,874		$1,315,394		$1,315,394
C.	PROFITABILITY SUMMARY											
1	Hospital Operating Margin	4.0%	0.0%	4.0%		0.4%	0.0%	0.4%		2.3%	0.0%	2.3%
2	Hospital Non Operating Margin	0.4%	0.0%	0.4%		0.4%	0.0%	0.4%		0.5%	0.0%	0.5%
3	Hospital Total Margin	4.4%	0.0%	4.4%		0.8%	0.0%	0.8%		2.7%	0.0%	2.7%
D.	FTEs	No CON Impact				No CON Impact				No CON Impact		
E.	VOLUME STATISTICS[c]											
1	Inpatient Discharges	No CON Impact				No CON Impact				No CON Impact		
2	Outpatient Visits	No CON Impact				No CON Impact				No CON Impact		
	TOTAL VOLUME	No CON Impact				No CON Impact				No CON Impact		

[a]Total amount should equal the total amount on cell line "Net Patient Revenue" Row 14.

[b]Provide the amount of any transaction associated with Bad Debts not related to the provision of direct services to patients. For additional information, refer to FASB, No.2011-07, July 2011.

[c]Provide projected inpatient and/or outpatient statistics for any new services and provide actual and projected inpatient and/or outpatient statistics for any existing services which will change due to the pro

Financial Worksheet (A)										
		(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
LINE	Total Entity:	FY15 Projected	FY15 Projected	FY15 Projected	FY16 Projected	FY16 Projected	FY16 Projected	FY17 Projected	FY17 Projected	FY17 Projected
	Description	W/out CON	Incremental	With CON	W/out CON	Incremental	With CON	W/out CON	Incremental	With CON
A.	OPERATING REVENUE									
1	Total Gross Patient Revenue	$243,567,842	= OHCA 150	$243,567,842	$248,594,675		248,594,675	$244,421,276		$244,421,276
2	Less: Allowances	133,614,444		133,614,444	139,168,399		139,168,399	135,188,059		135,188,059
3	Less: Charity Care	477,319		477,319	344,715		344,715	541,600		541,600
4	Less: Other Deductions	(967,230)		(967,230)	(2,014,901)	Ct Suppl Pymt	(2,014,901)	(1,999,797)	Ct Suppl Pymt	(1,999,797)
	Net Patient Service Revenue	**110,443,309**	= OHCA 150	**110,443,309**	**111,096,462**	= AFS	**111,096,462**	**110,691,414**	-	**110,691,414**
5	Medicare	41,379,562		41,379,562	39,765,296		39,765,296	38,311,244		38,311,244
6	Medicaid	17,542,179		17,542,179	15,076,125		15,076,125	14,541,579		14,541,579
7	CHAMPUS & TriCare	446,015		446,015			-			-
8	Other			-			-			-
	Total Government	**59,367,756**	-	**59,367,756**	**54,841,421**	-	**54,841,421**	**52,852,823**	-	**52,852,823**
9	Commercial Insurers	49,848,466		49,848,466	53,892,720		53,892,720	47,490,114		47,490,114
10	Uninsured	259,857		259,857	347,420		347,420	2,114,299		2,114,299
11	Self Pay			-			-			-
12	Workers Compensation		-	-			-			-
13	Other	967,230	Ct Suppl Pymt	967,230	2,014,901	Ct Suppl Pymt	2,014,901	1,999,797	Ct Suppl Pymt	1,999,797
	Total Non-Government	**51,075,553**	-	**51,075,553**	**56,255,041**	-	**56,255,041**	**51,604,210**	-	**51,604,210**
	Net Patient Service Revenue[a] (Government+Non-Government)	**110,443,309**	= OHCA 150 & = AFS	**110,443,309**	**111,096,462**	-	**111,096,462**	**104,457,033**	-	**104,457,033**
14	Less: Provision for Bad Debts	4,172,085	= AFS	4,172,085	3,460,363	= AFS	3,460,363	3,690,748	-	**3,690,748**
	Net Patient Service Revenue less provision for bad debts	**106,271,224**	-	**106,271,224**	**107,636,099**	-	**107,636,099**	**107,000,666**	-	**107,000,666**
15	Other Operating Revenue	3,119,128	= AFS	3,119,128	5,943,981	= AFS	5,943,981	6,037,551		**6,037,551**
17	Net Assets Released from Restrictions	279,620	= AFS	279,620	495,129	= AFS	495,129	548,000		**548,000**
	TOTAL OPERATING REVENUE	**109,669,972**	= OHCA 150	**109,669,972**	**114,075,209**		**114,075,209**	**113,586,217**	-	**113,586,217**
		= AFS			= AFS		107,351,836			
B.	OPERATING EXPENSES									
1	Salaries and Wages	46,570,692		46,570,692	43,804,810		43,804,810	46,119,726		46,119,726
2	Fringe Benefits	15,990,518		15,990,518	13,179,406		13,179,406	15,055,855		15,055,855
3	Physicians Fees (Professional Fees)	10,370,380	(94,340)	10,276,040	9,573,587	(93,820)	9,479,767	8,925,664	(95,540)	8,830,124
4	Supplies and Drugs	26,836,858	(78,233)	26,758,625	28,563,667	(127,168)	28,436,499	29,217,009	(205,401)	29,011,608
5	Depreciation and Amortization	5,804,468		5,804,468	5,627,130		5,627,130	5,663,000		5,663,000
6	Provision for Bad Debts-Other[b]			-			-			-
7	Interest Expense	1,451,212		1,451,212	1,768,386		1,768,386	1,992,404		1,992,404
8	Malpractice Insurance Cost			-			-			-
9	Lease Expense			-			-			-
10	Other Operating Exp (State NPSR Tax)	4,597,935		4,597,935	5,903,161		5,903,161	6,234,381		6,234,381
	TOTAL OPERATING EXPENSES	**111,622,063**	**(172,573)**	**111,449,490**	**108,420,147**	**(220,988)**	**108,199,159**	**113,208,039**	**(300,941)**	**112,907,098**
	INCOME/(LOSS) FROM OPERATIONS	**(1,952,091)**	**172,573**	**(1,779,518)**	**5,655,062**	**220,988**	**5,876,050**	**378,178**	**300,941**	**679,119**
	NON-OPERATING REVENUE	**1,280,830**		**1,280,830**	**646,682**		**646,682**	**897,000**		**897,000**
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**($671,261)**	**$172,573**	**($498,688)**	**$6,301,744**	**$220,988**	**$6,522,732**	**$1,275,178**	**$300,941**	**$1,576,119**

Financial Worksheet (A)												
		(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)		
LINE	Total Entity:	FY15	FY15	FY15	FY16	FY16	FY16	FY17	FY17	FY17		
		Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected		
	Description	W/out CON	Incremental	With CON	W/out CON	Incremental	With CON	W/out CON	Incremental	With CON		
	Principal Payments	$1,875,925		$1,875,925	$1,393,467		$1,393,467			$0		
C.	PROFITABILITY SUMMARY											
1	Hospital Operating Margin	-1.8%	0.0%	-1.6%	4.9%	0.0%	5.1%	0.3%	0.0%	0.6%		
2	Hospital Non Operating Margin	1.2%	0.0%	1.2%	0.6%	0.0%	0.6%	0.8%	0.0%	0.8%		
3	Hospital Total Margin	-0.6%	0.0%	-0.4%	5.5%	0.0%	5.7%	1.1%	0.0%	1.4%		
D.	FTEs	No CON Impact			No CON Impact			No CON Impact				
E.	VOLUME STATISTICS[c]											
1	Inpatient Discharges	No CON Impact			No CON Impact			No CON Impact				
2	Outpatient Visits	No CON Impact			No CON Impact			No CON Impact				
	TOTAL VOLUME	No CON Impact			No CON Impact			No CON Impact				
[a]Total amount should equal the total amount on c												
[b]Provide the amount of any transaction associate												
[c]Provide projected inpatient and/or outpatient statbosal.												

Financial Worksheet (A)							
		(19)	(20)	(21)	(22)	(23)	(24)
LINE	Total Entity:	FY18	FY18	FY18	FY19	FY19	FY19
		Projected	Projected	Projected	Projected	Projected	Projected
	Description	W/out CON	Incremental	With CON	W/out CON	Incremental	With CON
A.	OPERATING REVENUE						
1	Total Gross Patient Revenue	$244,421,276		$244,421,276	$244,421,276		$244,421,276
2	Less: Allowances	135,188,059		135,188,059	135,188,059		135,188,059
3	Less: Charity Care	541,600		541,600	541,600		541,600
4	Less: Other Deductions	(1,999,797)	Ct Suppl Pymt	(1,999,797)	(1,999,797)	Ct Suppl Pymt	(1,999,797)
	Net Patient Service Revenue	**110,691,414**	-	**110,691,414**	**110,691,414**	-	**110,691,414**
5	Medicare	38,311,244		38,311,244	38,311,244		38,311,244
6	Medicaid	14,541,579		14,541,579	14,541,579		14,541,579
7	CHAMPUS & TriCare			-			-
8	Other			-			-
	Total Government	**52,852,823**	-	**52,852,823**	**52,852,823**	-	**52,852,823**
9	Commercial Insurers	47,490,114		47,490,114	47,490,114		47,490,114
10	Uninsured	2,114,299		2,114,299	2,114,299		2,114,299
11	Self Pay			-			-
12	Workers Compensation			-			-
13	Other	1,999,797	Ct Suppl Pymt	1,999,797	1,999,797	Ct Suppl Pymt	1,999,797
	Total Non-Government	**51,604,210**	-	**51,604,210**	**51,604,210**	-	**51,604,210**
	Net Patient Service Revenue[a] (Government+Non-Government)	**104,457,033**	-	**104,457,033**	**104,457,033**	-	**104,457,033**
14	Less: Provision for Bad Debts	3,690,748	-	**3,690,748**	3,690,748	-	**3,690,748**
	Net Patient Service Revenue less provision for bad debts	**107,000,666**	-	**107,000,666**	**107,000,666**	-	**107,000,666**
15	Other Operating Revenue	6,037,551		**6,037,551**	6,037,551		**6,037,551**
17	Net Assets Released from Restrictions	548,000		**548,000**	548,000		**548,000**
	TOTAL OPERATING REVENUE	**113,586,217**	-	**113,586,217**	**113,586,217**	-	**113,586,217**
B.	OPERATING EXPENSES						
1	Salaries and Wages	46,119,726		46,119,726	46,119,726		46,119,726
2	Fringe Benefits	15,055,855		15,055,855	15,055,855		15,055,855
3	Physicians Fees (Professional Fees)	8,925,664	(95,540)	8,830,124	8,925,664	(95,540)	8,830,124
4	Supplies and Drugs	29,217,009	(205,401)	29,011,608	29,217,009	(205,401)	29,011,608
5	Depreciation and Amortization	5,663,000		5,663,000	5,663,000		5,663,000
6	Provision for Bad Debts-Other[b]			-			-
7	Interest Expense	1,992,404		1,992,404	1,992,404		1,992,404
8	Malpractice Insurance Cost			-			-
9	Lease Expense			-			-
10	Other Operating Exp (State NPSR Tax)	6,234,381		6,234,381	6,234,381		6,234,381
	TOTAL OPERATING EXPENSES	**113,208,039**	**(300,941)**	**112,907,098**	**113,208,039**	**(300,941)**	**112,907,098**
	INCOME/(LOSS) FROM OPERATIONS	**378,178**	**300,941**	**679,119**	**378,178**	**300,941**	**679,119**
	NON-OPERATING REVENUE	**897,000**		**897,000**	**897,000**		**897,000**
	EXCESS/(DEFICIENCY) OF REVENUE OVER EXPENSES	**$1,275,178**	**$300,941**	**$1,576,119**	**$1,275,178**	**$300,941**	**$1,576,119**

Financial Worksheet (A)								
		(19)	(20)	(21)		(22)	(23)	(24)
LINE	Total Entity:	FY18	FY18	FY18		FY19	FY19	FY19
		Projected	Projected	Projected		Projected	Projected	Projected
	Description	W/out CON	Incremental	With CON		W/out CON	Incremental	With CON
	Principal Payments			$0				$0
C.	PROFITABILITY SUMMARY							
1	Hospital Operating Margin	0.3%	0.0%	0.6%		0.3%	0.0%	0.6%
2	Hospital Non Operating Margin	0.8%	0.0%	0.8%		0.8%	0.0%	0.8%
3	Hospital Total Margin	1.1%	0.0%	1.4%		1.1%	0.0%	1.4%
D.	FTEs	No CON Impact				No CON Impact		
E.	VOLUME STATISTICS[c]							
1	Inpatient Discharges	No CON Impact				No CON Impact		
2	Outpatient Visits	No CON Impact				No CON Impact		
	TOTAL VOLUME	No CON Impact				No CON Impact		
[a]Total amount should equal the total amount on c								
[b]Provide the amount of any transaction associate								
[c]Provide projected inpatient and/or outpatient stat								

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

Office of Health Care Access

March 2, 2017

Via Email Only

Mr. Douglas P. Glazier
Financial & Systems Consultant
Day Kimball Healthcare, Inc.
D/B/A Day Kimball Hospital
320 Pomfret Street
Putnam, CT 06260
dpglazier@daykimball.org

RE: Certificate of Need Application: Docket Number: 16-32142-CON
Termination of MRI services at 39 Kennedy Drive, Putnam Connecticut and the consolidation of MRI services onto Day Kimball Hospital's main campus located at 320 Pomfret Street, Putnam Connecticut.

Dear Mr. Glazier:

This letter is to inform you that, pursuant to Section 19a-639a (d) of the Connecticut General Statutes, the Office of Health Care Access has deemed the above-referenced application complete as of March 2, 2017.

If you have any questions concerning this letter, please feel free to contact me at (860) 418-7032.

Sincerely,

David Fernandes
Planning Analyst (CCT)

Connecticut Department of Public Health

Phone: (860) 418-7001 • Fax: (860) 418-7053
410 Capitol Avenue, P.O. Box 340308
Hartford, Connecticut 06134-0308
www.ct.gov/dph
Affirmative Action/Equal Opportunity Employer

Olejarz, Barbara

From: Greer, Leslie
Sent: Thursday, March 02, 2017 12:54 PM
To: Olejarz, Barbara
Subject: CON-32142 Deemed Complete
Attachments: 16-32142-CON Notification of Application Deemed Complete.pdf

For the file

From: Fernandes, David
Sent: Thursday, March 02, 2017 12:50 PM
To: Glazier, Douglas P.
Cc: Riggott, Kaila; Veyberman, Alla; Greer, Leslie
Subject: CON-32142 Deemed Complete

Good Morning Mr. Glazier:
Please see the attached letter deeming complete the above reference application. Please confirm receipt of this correspondence as soon as possible.

If you have any questions, do not hesitate to contact me.

Thanks,

David Fernandes
Planning Analyst (CCT)
Office of Health Care Access
Connecticut Department of Public Health
410 Capitol Avenue, Hartford, Connecticut 06134
P: (860) 418-7032|F: (860) 418-7053|E: David.Fernandes@ct.gov

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

Office of Health Care Access

Certificate of Need
Final Decision

Applicant: **Day Kimball Healthcare, Inc.**
D/B/A Day Kimball Hospital
320 Pomfret St.
Putnam, CT 06260

Docket Number: **16-32142-CON**

Project Title: **Termination of MRI services at 39 Kennedy Drive, Putnam Connecticut and relocation of MRI services at Day Kimball Hospital's main campus located at 320 Pomfret Street, Putnam**

Project Description: Day Kimball Healthcare, Inc., d/b/a Day Kimball Hospital ("Applicant" or "DKH") proposes to terminate its Magnetic Resonance Imaging ("MRI") services at 39 Kennedy Drive, Putnam CT and to relocate MRI services at DKH's main campus at 320 Pomfret Street, Putnam.

Procedural History: The Applicant published notice of its intent to file the Certificate of Need ("CON") Application in the *Norwich Bulletin* (Norwich) on December 8, 9 and 10, 2016. On January 3, 2017, the Office of Health Care Access ("OHCA") received the initial CON application from the Applicant for the above-referenced project. The CON application was deemed complete on March 2, 2017. OHCA received no responses from the public concerning the Applicant's proposal and no hearing requests were received from the public per Connecticut General Statutes ("Conn. Gen. Stat.") § 19a-639a(e). In rendering her decision, Deputy Commissioner Addo considered the entire record in this matter.

Findings of Fact and Conclusions of Law

1. The Applicant, a 122-bed acute-care hospital located at 320 Pomfret Street, Putnam, Connecticut, formerly operated a hospital-owned satellite MRI facility at 39 Kennedy Drive, Putnam. Ex. A, pp. 7; 2015 Financial Stability Report, Appendix S, p. 92.

2. Operation of the Kennedy Drive facility was established by DKH with approval from OHCA (10-31602-CON) in December 2010. The Applicant acquired a refurbished 1998 GE 1.0 Tesla ("T") Signa Lx Magnet scanner primarily to scan orthopedic patients. Ex. A, pp. 7, 25-28, 82.

3. Concerns regarding the financial crisis at DKH, the poor financial performance of the Kennedy Drive MRI facility, low MRI volume and higher per unit costs began in 2013 and continued into the following year. Ex. A, p. 8.

4. The range of services offered at Kennedy Drive was limited by a lack of physician presence. The low MRI volume made it difficult to justify the placement of a physician when DKH's main campus was one mile away. Ex. C, p. 102.

5. It was determined the services offered at Kennedy Drive were limited by the age of the equipment and range of the MRI's capabilities compared to newer models. Ex. A, p. 8.

6. At 18 years old, the 1.0T MRI was no longer considered the standard in imaging. Ex. A, p. 11; Ex. D, p. 37.

7. The production and sale of 1.0T MRI scanners by major manufacturers had ceased over ten years ago, causing concern regarding the availability of parts. Ex. A, p. 11; Ex. C, p. 103.

8. Discussions over whether to invest in newer equipment, establish a physician presence and avenues to attract greater volume of referrals were explored but abandoned due to the significant investments that would be necessary by the financially distressed institution. Ex. A, p. 11.

9. On November 26, 2014, the Applicant terminated MRI services at Kennedy Drive and relocated the remaining services at the existing MRI operations on DKH's main campus. Ex. A, pp. 7-8; Ex. C, p. 102.

10. DKH's main campus currently operates a 1.5T scanner with available capacity and physician presence. Ex. A, pp. 8, 11.

11. DKH has extended MRI hours of operation at its main campus to 16 hours per day, 6 days a week. Ex. A, pp. 7, 11; Ex. C, p. 102.

12. In addition to the availability of the same transportation service options as Kennedy Drive, the main campus is also served by North East CT Transit. Ex. A, pp. 11-12; Ex. C, p. 103.

13. The 1.5T allows for a wider range of services, faster patient throughput and better image quality over a 1.0T MRI. Ex. A, pp. 8, 11-12, 25-28; Ex. C, p. 101.

14. Physician referral sources were notified of the closure of the Kennedy Drive facility and have directed patients to DKH's main campus. Ex. A, p. 84.

15. The physicians that referred to the former Kennedy Drive facility have also referred to DKH's main campus for MRI as well as for other hospital-based diagnostic services. Ex. A, pp. 13, 18.

16. DKH's main campus utilizes the same scheduling system, is integrated into the same patient electronic medical record and results reporting process and is managed by the same personnel as Kennedy Drive. Ex. A, pp. 13, 18, 84.

17. No change is anticipated in the Applicant's service area, which is shown below.

TABLE 1
SERVICE AREA TOWNS OF THE APPLICANT

Ashford	Brooklyn
Canterbury	Chaplin
Eastford	Hampton
Killingly	Plainfield
Pomfret	Putnam
Sterling	Thompson
Woodstock	

Ex. A, pp. 17, 19.

18. The proposal would have minimal impact on other providers in the service area. The following providers offer MRI service in the Applicant's service area:

TABLE 2
EXISTING MRI SERVICE PROVIDERS

Service	Facility Name	Facility Address	Days/Hours of Operation
1.5T Mobile MRI	Day Kimball Hospital	320 Pomfret St. Putnam, CT	Sunday - Thursday 7:00 AM - 11:00 PM
1.5T Mobile MRI	Day Kimball Hospital	12 Lathrop Rd. Plainfield, CT	Saturday 9:00 AM - 1:00 PM Monday - Friday 9:00 AM - 5:00 PM
1.5T Mobile MRI	The William W. Backus Hospital	582 Norwich Rd. Plainfield, CT	Monday and Wednesday 7:00 AM - 9:00 PM Sunday 8:00 AM - 5:00 PM

Ex. A, pp. 18-19, 23; Table 8 of the Statewide Health Care Facilities and Services Inventory-2014.

19. Due to the health care market environment, the advent of high deductible health plans and stricter pre-certification criteria, DKH's total MRI volume has declined annually since FY 2013. Below is the historical utilization at all MRI sites:

TABLE 3
HISTORICAL UTILIZATION OF MRI SITES BY SCANS

Service	Actual Volume			
	FY 2013	FY 2014	FY 2015	FY 2016
1.5T Mobile MRI Main Campus	4,704	4,681	4,717	4,691
1.5T Mobile MRI Plainfield, CT	440	360	283	276
1.0T Fixed MRI Kennedy Drive	642	591	115	0
Total	5,786	5,632	5,115	4,967

*Applicant's fiscal year is from October 1 to September 30.
Ex. A, pp. 16, 21.

20. The Applicant anticipates no net growth for the next three years.

TABLE 4
PROJECTED UTILIZATION OF MRI SITES BY SCANS

Service	Projected Utilization by Service		
	FY 2017	FY 2018	FY 2019
1.5T Mobile MRI Main Campus	4,777	4,777	4,777
1.5T Mobile MRI Plainfield, CT	279	279	279
1.0T Fixed MRI Kennedy Drive	0	0	0
Total	5,056	5,056	5,056

*Applicant's fiscal year is from October 1 to September 30.
Ex. A, pp. 16, 21; Ex. C, p. 104.

21. With a maximum capacity of 5,928 scans per year, the Applicant anticipates DKH's main campus can accommodate all patients previously scanned at Kennedy Drive. Ex. A, p. 8; Ex. C, p. 103.

22. Payer mix is anticipated to remain stable for the next three fiscal years with no impact on access to care for Medicaid recipients and the indigent.

TABLE 5
HOSPITAL'S CURRENT AND PROJECTED PAYER MIX

Payer	Most Recently Completed FY 2016		Projected					
			FY2017		FY 2018		FY 2019	
	No.	%	No.	%	No.	%	No.	%
Medicare	1,654	33.30%	1,683	33.30%	1,683	33.30%	1,683	33.30%
Medicaid	1,082	21.79%	1,102	21.79%	1,102	21.79%	1,102	21.79%
CHAMPUS & TriCare	25	.51%	26	.51%	26	.51%	11	.51%
Total Government	**2,761**	**55.60%**	**2,811**	**55.60%**	**2,811**	**55.60%**	**2,811**	**55.60%**
Commercial Insurers	1,866	37.56%	1,899	37.56%	1,899	37.56%	1,899	37.56%
Uninsured	50	1.01%	51	1.01%	51	1.01%	51	1.01%
Workers Compensation	290	5.83%	295	5.83%	295	5.83%	295	5.83%
Total Non-Government	**2,206**	**44.40%**	**2,245**	**44.40%**	**2,245**	**44.40%**	**2,245**	**44.40%**
Total Payer Mix	**4,967**	**100%**	**5,056**	**100%**	**5,056**	**100%**	**5,056**	**100%**

*Applicant's fiscal year is from October 1 to September 30.
Ex. A, pp. 13, 16, 22.

23. DKH's charity care policies and procedures will remain unchanged. Ex. A, pp. 13, 84.

24. There are no capital costs associated with this proposal. Ex. A, pp. 10, 14.

25. The Applicant anticipates an incremental gain of $300,941, primarily from decreases in physician/professional fees and lease expenses.

TABLE 6
APPLICANT'S PROJECTED INCREMENTAL REVENUES AND EXPENSES

	FY 2016	FY 2017	FY 2018
Revenue from Operations	$0	$0	$0
Total Operating Expenses*	($220,988)	($300,941)	($300,941)
Gain/(Loss) from Operations	**$220,988**	**$300,941**	**$300,941**

*No inflationary cost increases are included in projections.
Ex. A, pp. 8, 12, 15-16, 20; Ex. C, pp. 104-105.

26. Reimbursement rates are not anticipated to change as a result of the proposal. Ex. A, pp. 14, 15.

27. DKH's main campus will continue to meet all national standards on culturally and linguistically appropriate services. Ex. A, pp. 12-13.

28. OHCA is currently in the process of establishing its policies and standards as regulations. Therefore, OHCA has not made any findings as to this proposal's relationship to any regulations not yet adopted by OHCA. (Conn. Gen. Stat. § 19a-639(a)(1)).

29. The proposal is consistent with the Statewide Health Care Facilities and Service Plan. (Conn. Gen. Stat. § 19a-639(a)(2)).

30. The Applicant has established that there is a clear public need for the proposal. (Conn. Gen. Stat. § 19a-639(a)(3)).

31. The Applicant has demonstrated that the proposal is financially feasible. (Conn. Gen. Stat. § 19a-639(a)(4)).

32. The Applicant has satisfactorily demonstrated that the proposal will maintain quality, accessibility and cost effectiveness of health care delivery in the region. (Conn. Gen. Stat.§ 19a-639(a)(5)).

33. The Applicant has shown that there would be no change in the provision of health care services to the relevant populations and payer mix, including access to services by Medicaid recipients and indigent persons. (Conn. Gen. Stat. § 19a-639(a)(6)).

34. The Applicant has satisfactorily identified the population to be affected by this proposal. (Conn. Gen. Stat. § 19a-639(a)(7)).

35. The Applicant's historical provision of services in the service area supports this proposal. (Conn. Gen. Stat. § 19a-639(a)(8)).

36. The Applicant has satisfactorily demonstrated that this proposal would not result in an unnecessary duplication of existing services in the area. (Conn. Gen. Stat. § 19a-639(a)(9)).

37. The Applicant has demonstrated that there will be no reduction in access to services by Medicaid recipients or indigent persons. (Conn. Gen. Stat. § 19a-639(a)(10)).

38. The Applicant has demonstrated that the proposal will not negatively impact the diversity of health care providers and patient choice in the region. (Conn. Gen. Stat. § 19a-639(a)(11)).

39. The Applicant has satisfactorily demonstrated that the proposal will not result in any consolidation that would affect health care costs or access to care. (Conn. Gen. Stat. § 19a-639(a)(12)).

Discussion

CON applications are decided on a case by case basis and do not lend themselves to general applicability due to the uniqueness of the facts in each case. In rendering its decision, OHCA considers the factors set forth in Conn. Gen. Stat. § 19a-639(a). The Applicant bears the burden of proof in this matter by a preponderance of the evidence. *Jones v. Connecticut Medical Examining Board, 309 Conn. 727 (2013).*

The Applicant, Day Kimball Hospital, is a122-bed acute-care hospital located in Putnam, Connecticut. From 2013 to 2014, concerns arose regarding the financial performance of the Hospital's satellite MRI facility, including declining scan volume, lack of a physician presence, higher per unit costs and limited services/capabilities due to the existing MRI's age. Investment in newer equipment and strategies to increase referral volume were explored but abandoned due to the significant investment that would be required by the financially distressed institution. On November 26, 2014, the Applicant terminated its MRI services at Kennedy Drive and relocated its remaining services to DKH's main campus. *FF 1-6, 8-9.*

Despite the termination, the Applicant has demonstrated that the quality and range of capabilities of the existing MRI scanner, coupled with increased physician presence and transportation options at DKH's main campus, will exceed what was previously available to patients. The additional transportation option will increase the accessibility of MRI services for all patients, including Medicaid recipients and the indigent. DKH's main campus has the available capacity and physician presence to accept additional volume. As a result of a reduction in expenses and economies of scale associated with consolidating MRI scanning at DKH's main campus, incremental gains are anticipated through FY 2018. *FF 4, 10, 12-13, 25.*

Imaging services at Kennedy Drive were financially and operationally unsustainable due to the Applicant's financially distressed status, declining MRI volume, lack of physicians and scanner age and capabilities. Eliminating MRI services at Kennedy Drive prevents the unnecessary duplication of health resources while providing financial stability and cost containment for the Applicant.

Order

Based upon the foregoing Findings of Fact and Discussion, the Certificate of Need application for Day Kimball Healthcare, Inc., D/B/A Day Kimball Hospital to terminate MRI services at 39 Kennedy Drive Putnam, Connecticut and to consolidate MRI services onto Day Kimball Hospital's main campus located at 320 Pomfret Street, Putnam, Connecticut is hereby **APPROVED**.

All of the foregoing constitutes the final order of the Office of Health Care Access in this matter.

By Order of the
Office of Health Care Access

5/25/17
Date

Yvonne T. Addo, MBA
Deputy Commissioner

Olejarz, Barbara

From: Microsoft Outlook
To: dpglazier@daykimball.org
Sent: Thursday, May 25, 2017 12:48 PM
Subject: Relayed: Final Decision

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

dpglazier@daykimball.org (dpglazier@daykimball.org)

Subject: Final Decision