

June 24, 2014

Ms. Martha Frisone, Interim Chief  
Certificate of Need Section, DHSR  
2704 Mail Service Center  
Raleigh, NC 27699-2704

Re: Comments Regarding Novant Health Mint Hill Medical Center  
CON Project ID# F-10292-14: Fixed MRI Scanner in Mecklenburg County

Dear Ms. Frisone:

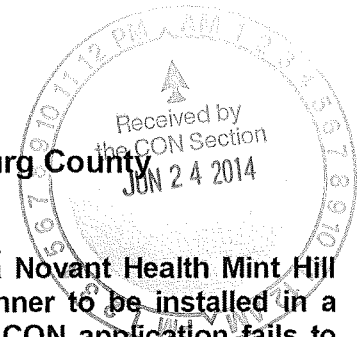
I am writing on behalf of OrthoCarolina PA to provide written comments regarding the CON application submitted by Novant Health Mint Hill Hospital to acquire a fixed MRI scanner. These comments are submitted in accordance with N.C. GEN. STAT. § 131E-185(a1)(1).

Thank you for your consideration of this information.

Sincerely,

David. J French  
Consultant to OrthoCarolina

**Comments Regarding Novant Health Mint Hill Medical Center  
CON Project ID# F-10292-14: Fixed MRI Scanner in Mecklenburg County  
Submitted by OrthoCarolina, PA**



Novant Health, Inc. and Presbyterian Hospital Mint Hill, LLC d/b/a Novant Health Mint Hill Medical Center (NHMHMC) proposed to acquire a fixed MRI scanner to be installed in a CON-approved but undeveloped 50-bed hospital. The NHMHMC CON application fails to meet CON review criteria and MRI regulatory criteria and standards due to multiple deficiencies:

- The patient origin data and the methodology for the projected utilization are flawed.
- The applicant failed to adequately demonstrate that acquiring the proposed fixed MRI scanner is the least costly and most effective alternative.
- Operational and financial projections are inaccurate.
- The financial statements are flawed and omit necessary expenses.
- The project will be duplicative of existing underutilized mobile MRI scanners owned by the applicant.
- Staffing projections are incorrect due to the omission of personnel for MRI scheduling, patient registration and transport.

Specific comments regarding why the NHMHMC application fails to conform to the CON review criteria are discussed below.

**CON Review Criteria:**

- (1) *The proposed project shall be consistent with applicable polices and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, operating rooms or home health offices that may be approved.*

The NHMHMC application is nonconforming to Criterion 1 and Policy GEN-3 because the applicant did not adequately demonstrate the need the population has for the proposed MRI scanner. As discussed in the Criterion 3 comments below, the utilization projections are not credible. Furthermore, as discussed in the Criterion 5 comments, the financial projections omit necessary expenses and are based on unreasonable operational projections. Based on these circumstances, the application does not demonstrate that the project will maximize healthcare value as required by GEN-3.

- (3) *The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.*

The NHMHMC application is nonconforming to Criterion 3 based on unreasonable assumptions, flawed methodology and unreliable utilization projections.

NHMHMC reports that the proposed fixed MRI scanner will serve the population of a primary service area that includes the following zip codes and populations:

	2014 Populations	% of Total Five Zip Codes
28227 – Mint Hill	52,370	26.68%
28213 – Charlotte	40,248	20.50%
28215 – Charlotte	56,844	28.95%
28075 – Harrisburg (Cabarrus County)	40,248	20.50%
28107 – Midland (Cabarrus County)	6,614	3.37%
<b>Total for Five Zip Codes</b>	<b>196,324</b>	<b>100.00%</b>

However, this service area definition overlaps the service area that was identified for the fixed MRI scanner, CON Project ID #F-8688-11, that is pending installation at Presbyterian Hospital Matthews. The zip codes listed in the table below are the primary service area for the fixed MRI scanner described in application #F-8688-11. The red arrows show that zip codes 28227 and 28215 are within the primary service area of both the pending fixed MRI scanner #F-8688-11 as well as the proposed MRI scanner #F-10292-14 that is currently under review.

Presbyterian Hospital Matthews MRI  
Project ID #F-8688-11  
Page 8

COUNTY	ZIP CODE	TOWN	2010	2015	CAGR 2010 - 2015
Mecklenburg	28105	Matthews	38,755	42,534	2.36%
Mecklenburg	28227	Charlotte	46,417	50,977	1.89%
Union	28079	Indian Trail	31,924	38,424	3.78%
Union	28110	Monroe	54,432	65,216	3.68%
Mecklenburg	28104	Matthews	29,033	35,130	3.89%
Mecklenburg	28270	Charlotte	33,785	38,138	2.45%
Union	28173	Waxhaw	39,916	48,390	3.93%
Mecklenburg	28212	Charlotte	39,904	44,228	2.08%
Mecklenburg	28277	Charlotte	66,821	77,132	2.91%
Mecklenburg	28226	Charlotte	42,021	46,337	1.97%
Union	28112	Monroe	29,189	34,133	3.18%
Mecklenburg	28215	Charlotte	51,136	57,893	2.51%
Mecklenburg	28211	Charlotte	29,243	31,672	1.61%

It is unreasonable for the applicant to propose overlapping primary service areas for zip codes 28227 and 28215 because these two geographic areas comprise 55.73 percent of the total population of the primary service area for the MRI scanner as proposed in #F-10292-14. Consequently, NHMHC failed to adequately identify the population to be served because the patient origin projections for the proposed project are not based on reasonable assumptions.

The NHMHC application is inconsistent with Table 9P of the 2014 State Medical Facilities Plan which documents that the applicant and its parent company, Novant Health, have 7 hospital-based fixed MRI scanners (including Novant Health Imaging Museum) and 2 fixed MRI scanners located at Novant Health Southpark Imaging. On page 29 of the application, NHMHC shows a total of only 8 MRI scanners which conflicts with the 2014 State Medical Facilities Plan.

Utilization projections for the applicant's existing fixed MRI scanners appear to omit one fixed MRI scanner (CON Project ID F-005748-07) that was located at Novant Health Imaging Southpark. Page 29 of the application includes a table showing South Park as having only one fixed MRI scanner; however, the 2014 State Medical Facilities Plan and the Table 9P (Draft 5/28/2014) that is posted on the website of the Medical Facilities Planning Branch show that Novant Health Imaging Southpark has two fixed MRI scanners at the Southpark location (Project ID #F-7068-04 and #F-5748-97).

Based on these discrepancies in the numbers of MRI scanners that are owned and operated by the applicant and related entities, the utilization projections are entirely unreliable. Furthermore the applicant admits that it has a previously-approved fixed MRI scanner (Project ID# 8688-11) that has not yet been implemented at the time this current application was submitted.

The NHMHC MRI utilization projections are overstated with unreasonably high ratios of weighted MRI scans per patient day (ranging from 0.355 to 0.370) as seen in the following table.

Novant Health Mint Hill	Projected Acute Care Days	Projected Weighted MRI Scans	Ratio of Weighted MRI Scans to Acute Care Days
Year 1	9244	3277	0.355
Year 2	11455	4235	0.370
Year 3	13753	4916	0.357

Sources: F-10292-14 / NHMHC MRI Application and F-7648-06/ Presbyterian Hospital Mint Hill, LLC/ Relocate 50 existing acute care beds and 5 existing operating rooms

Actual utilization data for the combined Novant Health hospitals and the combined Carolina Medical Center hospitals located in Mecklenburg County shows far lower ratios of weighted MRI scans per patient day.

	2012 Acute Care Days	2012-13 Weighted MRI Scans	Ratio of Weighted MRI Scans to Acute Care Days
Novant Hospitals in Mecklenburg County	200,835	30,520	0.152
CMC Hospitals in Mecklenburg County	344,089	42,044	0.122

Sources: Acute Care Days from Table 5A 2014 SMFP  
Weighted MRI Scans from Table 9P 2014 SMFP

As seen in the table above, the combined Novant hospitals in Mecklenburg County (including the Novant Health Imaging Museum that is licensed as a hospital-based MRI) had a ratio of 0.152 weighted MRI scans per patient day based on the data provided in the 2014 SMFP. Therefore the NHMHMC MRI projections of 0.355 to 0.370 weighted MRI scans per patient day are unreasonably high. These existing hospitals have more licensed acute care beds, greater depth of specialty care and likely higher acuity of patients as compared to the 50-bed NHMHMC. Therefore it is most probable that NHMHMC will have a lower ratio of MRI scans per patient day due to the small size and limited scope of services to be provided at the facility.

Patient volumes and patient origin projections for the proposed scanner are inaccurate based on unrealistic "projected market capture." On page 58, NHMHMC provided the estimated numbers of MRI patients within their 5 zip code service area and then estimated the proposed fixed MRI would capture 55% of the MRI patients in CY2018, 70% of all MRI patients in CY2019 and 80% of all patients in CY2020. These market share capture percentages are unreasonable because zip codes 28227 and 28215 are within the primary service area of both the pending fixed MRI scanner #F-8688-11 (Novant Health Matthews Medical Center) as well as the proposed MRI scanner #F-10292-14 at NHMHMC.

Mecklenburg County has 19 existing fixed MRI scanners and numerous mobile host site locations, making it is most unlikely that any one fixed MRI scanner could capture a 55% to 80% market share for any of the zip codes in the County. Furthermore, the application does not document that any of its existing fixed MRI scanners in Mecklenburg have ever achieved such high rates of increased market capture in their respective zip code service areas. For example, the Novant Health Matthews Medical Center (with 2 fixed MRI scanners), which is 11 miles from the proposed fixed MRI scanner, has seen a decline in MRI volumes and a market share dropping from 6,138 MRI unweighted procedures in 2008 to 5,346 unweighted procedures for the year ending September 30, 2013.

The 55%, 70% and 80% projected market capture assumptions are unreasonable because there currently are numerous fixed MRI scanners and mobile MRI host sites in Mecklenburg County that provide competition and patient choice for outpatient MRI procedures. These percentages are not reasonable as follows.

- Patients in the five zip code primary service area already have access to multiple fixed MRI scanners in Mecklenburg County including the underutilized MRI scanners at Novant Health Charlotte Orthopaedic, Novant Health Imaging Museum, and the two Novant Health mobile MRI scanners.
- The 50-bed NHMHC has a more limited scope of services than the existing hospitals in Mecklenburg County. Therefore high acuity inpatients and outpatients who require specialty care will likely utilize tertiary hospitals.
- Page 58 of the application attempts to justify these overinflated percentages by explaining that the population is expected to grow. But the size of the population has no mathematical relationship to the market share percentages.
- The proposed location of the facility near the I-485 Beltway is not a rational basis for the overinflated market share projections because the proposed primary service area is a compact 5 zip code region of Mecklenburg County. This new I-485 Beltway makes it more convenient for patients to travel out of the 5 zip code region to obtain access to existing fixed MRI scanners.
- MRI procedures performed at freestanding MRI locations have lower charges and reimbursement rates. Since the majority of MRI procedures are performed on a scheduled outpatient basis, patients often prefer to obtain MRI scans at freestanding facilities that are more convenient and less costly than scans at the hospitals.

The utilization projections for the NHMMC (Matthews) scanner that are discussed on page 61 are unreasonable due to the overlap of zip codes 28227 and 28215. Also, the unweighted MRI scans at NHHMC are projected to increase by over 50 percent from 5670 in CY2014 to 8520 in CY2020. This growth is not reasonable because NHHMC's unweighted MRI scans have decreased by 20 percent from 6,684 scans for the year ending September 30, 2008 to 5,346 scans for the period ending September 30, 2013.

The utilization projections for the NHCOH (Orthopedic Hospital) that are discussed on page 61 are unreasonable as compared to historical data. The applicant projects that unweighted MRI scans at NHCOH are projected to increase by 4.1 percent from 3,282 in CY2014 to 3,471 in CY2020. This growth is not reasonable because NHCOH's unweighted MRI scans have decreased by 32.6 percent from 3,398 scans for the year ending September 30, 2008 to 2,289 scans for the period ending September 30, 2013.

Historical utilization for Novant Health's existing two mobile MRI scanners is provided on page 30 of the application. Both mobile MRI scanners are underutilized and performed less than 3,328 weighted MRI procedures making the CON application nonconforming to the regulatory performance standard 10A NCAC 14C.2703 (b) (2). Based on this nonconformity the Novant application cannot be approved.

Future projections for the mobile MRI scanner "MQ 16" (Jacksonville Diagnostic Imaging) are unreasonable because the unit performed 2,286 weighted scans in FFY 2013 and would have to increase by approximately 50 percent to reach 3,410 weighted scans by 2020. The applicant's assumptions for market capture are unsubstantiated because no information is provided to explain if the market capture is due to the growth of existing host sites or the implementation of new host sites.

Future projections for the mobile MRI referred to as "PRESBY" are unreasonable because the unit performed only 1,796 weighted scans in FFY 2013 and the scan volume would have to increase by approximately 117 percent to reach 3,891 weighted scans by 2020. The applicant's assumption of market capture in Iredell County is unreliable because the Mooresville Diagnostic Imaging location has historically received mobile MRI service from other mobile scanners owned by Novant/ Medquest.

- (4) *Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.*

The NHMCMH application fails to demonstrate the need for the project and is nonconforming with Criteria 3 and 5; therefore the application is also nonconforming with Criterion 4. The utilization projections for the proposed fixed MRI scanner are inaccurate due to overstated market capture projections. Therefore the financial projections for revenue and expenses are not based on reasonable assumptions.

The previously-approved project application ID# F-7648-06 stated that NHMCMH would obtain mobile MRI service two to three days per week which is the least costly and most effective alternative because the applicants already have ownership of two mobile MRI scanners in Mecklenburg County that are currently underutilized.

- (5) *Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.*

The NHMCMH application is nonconforming with Criterion 5 because the utilization projections for the proposed fixed MRI scanner are inaccurate due to overstated market capture projections. As a result the inaccurate operational projections and the financial projections are faulty.

On page 159, the Form B is inaccurate and incomplete with no expenses listed for raw food, other direct expenses, housekeeping, laundry, and equipment maintenance. The omission of these expenses is unreasonable because page 12 of the application specifically states that NHMHMC will provide ancillary and support services including housekeeping, laundry linen service, clinical equipment maintenance and maintenance, dietary and nutrition.

Page 159 Form B is also inaccurate and incomplete with no expenses listed for utilities in years 2018 through 2020. The omission of these expenses is unreasonable because utilities are essential to the operation of a hospital and the Form B assumptions do not explain the omission.

Page 159 Form B is also inaccurate and incomplete with no expenses listed for insurance. The omission of these expenses is unreasonable because insurance coverage is usually essential to the operation of a hospital and the Form B assumptions do not explain the omission.

On page 161, the Form C is inaccurate because no expenses are shown for utilities and insurance for the proposed MRI scanner.

On page 161, the Form C is inaccurate because the expenses include no salary for staff to perform scheduling, patient registration and transportation functions. The line item Other Direct Expenses is left blank which is unreasonable because many of the ancillary and support services described on page 12 of the application are direct patient expenses and are not included in the financial assumptions.

Form E, page 164 of the application unreasonably assumes that MRI reimbursement will increase by 3 percent per year. It is most unlikely that imaging reimbursement will continue to increase in future years due to implementation of the ACA and healthcare reform. A more realistic assumption would be to assume no increases in reimbursement.

(6) *The applicant shall demonstrate that the proposed project will not result in the unnecessary duplication of existing or approved health service capabilities or facilities.*

The NHMCMH application is nonconforming with Criterion 6 because the proposed project represents unnecessary duplication of existing and approved MRI scanners that are owned and operated by Novant Health. Novant has underutilized fixed MRI scanners in Mecklenburg County and a previously-approved fixed MRI scanner (Project ID# F-8688-11) that it had not yet implemented at the time the application was submitted. As discussed in the Criterion 3 comments, the service area for Project ID# F-8688-11 includes zip codes 28227 and 28215 that overlap with 55.73 percent of the total population of the primary service area for the proposed MRI scanner in application #F-10292-14.

The proposed NHMCMH fixed MRI is duplicative of the two mobile MRI scanners owned by Novant that are underutilized and each performed less than 3,328 weighted MRI procedures.

Future projections for the mobile MRI scanner "MQ 16" (Jacksonville Diagnostic Imaging) are unreasonable because the unit performed 2,286 weighted scans in FFY 2013 and would have to increase by approximately 50 percent to reach 3,410 weighted scans by 2020. The applicant's assumptions for market capture are unsubstantiated because no information is provided to explain if the market capture is due to the growth of existing host sites or the implementation of new host sites.

Future projections for the mobile MRI referred to as "PRESBY" are unreasonable because the unit performed only 1,796 weighted scans in FFY 2013 and the scan volume would have to increase by approximately 117 percent to reach 3,891 weighted scans by 2020. The applicant's assumption of market capture in Iredell County is unreliable because the Mooresville Diagnostic Imaging location has historically received mobile MRI service from other mobile scanners owned by Novant/ Medquest.



- (7) *The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.*

The NHMCMH application fails to conform to CON Review Criterion 7 because the application lacks adequate staffing for MRI scheduling, registration and patient transportation. In the previous CON application the staffing for the hospital was based on the use of a part-time mobile MRI only a couple of days per week. Therefore the previous staffing level for the imaging department was not based on 66 hours of MRI services per week.

- (8) *The applicant shall demonstrate that the provider of the proposed service, will make available or otherwise make arrangements for the provision of necessary ancillary and support services. The applicant shall also demonstrate that the proposed service will be coordinated with the existing healthcare system.*

NHMCMH is a previously-approved hospital project that has not yet been implemented. Consequently there are no ancillary and support services currently in place.

The NHMCMH application fails to conform to CON Review Criterion 7 due to the discrepancies in the financial proforma expenses on page 159 and the description of ancillary and support services described on page 12 of the application. The application provides inconsistent representations as follows:

On page 159, the Form B is inaccurate and incomplete with no expenses listed for raw food, other direct expenses, housekeeping, laundry, and equipment maintenance. The omission of these expenses is unreasonable because page 12 of the application specifically states that NHMCMH will provide ancillary and support services including housekeeping, laundry linen service, clinical equipment maintenance and maintenance, dietary and nutrition.

Page 159 Form B is also inaccurate and incomplete with no expenses listed for utilities in years 2018 through 2020. The omission of these expenses is unreasonable because utilities are essential to the operation of a hospital and the Form B assumptions do not explain the omission.

Page 159 Form B is also inaccurate and incomplete with no expenses listed for insurance. The omission of these expenses is unreasonable because insurance coverage is usually essential to the operation of a hospital and the Form B assumptions do not explain the omission.

- (18a) *The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost-effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for a service on which competition will not have a favorable impact.*

The application is non-conforming with Criteria 3 and 5 and therefore is also non-conforming with Criterion 18a. The proposed project will not have a positive impact on cost effectiveness because the financial pro forma is based on overstated utilization and unreasonable expenses.

The application is non-conforming with Criteria 18 because Foundation Health Mobile Imaging LLC / Medquest, both related entities of Novant Health, failed to submit multiple 2014 MRI Registration and Inventory Forms by the specified deadline in accordance with requirements described in G.S. 131E-177.

Novant Health has more underutilized and unimplemented fixed and mobile MRI scanners than any other provider in Mecklenburg County. The proposed additional fixed MRI would not improve competition because Novant already controls more than 50 percent of the fixed MRI inventory. Adding another hospital-based MRI scanner to the Mecklenburg County inventory also fails to improve access to more cost effective services because freestanding MRI scanners offer patients lower cost and charges.

*(20) An applicant already involved in the provision of health services shall provide evidence that quality care has been provided in the past.*

The application is non-conforming with Criterion 20 because Foundation Health Mobile Imaging LLC / Medquest, both related entities of Novant Health, failed to submit multiple 2014 MRI Registration and Inventory Forms by the specified deadline of January 28, 2014 in accordance with requirements described in G.S. 131E-177. Months after the deadline, Foundation Health Mobile Imaging LLC / Medquest finally submitted several Registration and Inventory Medical Equipment Forms for mobile MRI scanners. However, these forms are unsigned and undated.

The unwillingness or inability of Novant Health and its related entities to provide timely, required, information regarding its MRI scanners should be interpreted as a quality deficiency related to CON Review Criterion 20. This is because if an MRI provider is unable to meet the deadline for submitting mandatory information to the Medical Facilities Planning Section, then that provider has not adequately demonstrated that it has provided quality care in the past. Timeliness is an important measure of healthcare quality according to numerous national organizations including the US Department of Health and Human Services, Agency for Healthcare Research and Quality.

While Foundation Health Mobile Imaging LLC may claim that they eventually submitted the required 2014 MRI information four months past the deadline, the CON Section is under no obligation to accept the outdated and unsigned MRI inventory forms as credible or accurate.

In addition to being nonconforming with CON review criteria, the application also fails to conform to MRI criteria and standards as follows:

*10A NCAC 14C.2703 (b) (2) demonstrate that each existing mobile MRI scanner which the applicant or a related entity owns a controlling interest in and operates in the proposed MRI service area except temporary MRI scanners, performed 3,328 weighted MRI procedures in the most recent 12 month period for which the applicant has data*

The application fails to conform to this regulatory standard because Novant Health owns at least two mobile MRI scanners that provide services in Mecklenburg County and each performed less than 3,328 weighted MRI procedures. As seen on page 30 of the application MQ 16 Unit performed only 2,286 weighted MRI procedures and PRESBY Unit performed only 1,796 weighted MRI procedures. The applicant's failure to conform to this criterion also results in nonconformity to CON Review Criterion 3.

Foundation Health Mobile Imaging LLC / Medquest, both related entities of Novant Health, may have additional mobile MRI scanners that provided service to host sites in Mecklenburg County. In May 2014, the Medical Facilities Planning Branch received several 2014 Registration and Inventory Forms for mobile MRI scanners including MQ2 Mobile Unit that reportedly served a mobile host site, PIC-Ballantyne, 14215 Ballantyne Corporate Place, Suite 140 Charlotte NC 28211. The MRI utilization data provided in this unsigned and undated MRI inventory form does not correspond to the representations in the NHMCMH application # F-10292-14. Therefore it is not possible to determine the accuracy of any of the data in the NHMCMH CON application and the unsigned, undated MRI inventory forms of related entities. A copy of the MQ2 inventory form is provided in Attachment 1.

*10A NCAC 14C.2703 (b) (3) demonstrate that the average annual utilization of the existing, approved and proposed fixed MRI scanners which the applicant or a related entity owns a controlling interest in and locates in the proposed MRI service area are reasonably expected to perform the following number of weighted MRI procedures, whichever is applicable, in the third year of operation following completion of the proposed project:*

- (A) 1,716 weighted MRI procedures in MRI service areas in which the SMFP shows no fixed MRI scanners are located,*
- (B) 3,775 weighted MRI procedures in MRI service areas in which the SMFP shows one fixed MRI scanner is located,*
- (C) 4,118 weighted MRI procedures in MRI service areas in which the SMFP shows two fixed MRI scanners are located,*
- (D) 4,462 weighted MRI procedures in MRI service areas in which the SMFP shows three fixed MRI scanners are located, or*
- (E) 4,805 weighted MRI procedures in MRI service areas in which the SMFP shows four or more fixed MRI scanners are located;*

The NHMCMH application fails to conform to this regulatory standard because the utilization projections for the existing, approved and proposed MRI scanners are overstated and unreasonable. The utilization projections for the proposed MRI are based on unreasonable assumptions regarding market capture percentages that are unachievable. The 50 bed NHMCMH has a more limited scope of services than any of the existing hospitals in Mecklenburg County. Therefore it is unreasonable to expect this new facility to capture 55% to 80% of the MRI scan volume for a five zip code region.

10A NCAC 14C.2703 (b) (6) document the assumptions and provide data supporting the methodology used for each projection required in this Rule.

The NHMCMH application fails to conform to this regulatory standard because the utilization projections for the existing, approved and proposed MRI scanners are not credible. Market share capture percentages are unsupported because of the service area overlap with a previously-approved fixed MRI scanner. Future years' projections for existing fixed MRI scanners are unreasonable as compared to the historical trends of declining utilization. Existing mobile MRI scanners owned and operated by Novant are chronically underutilized.

### Comparative Analysis

In the following paragraphs, the applications submitted by NHMHMC (CON Project ID # F-10292-14) and OrthoCarolina, PA (CON Project ID# F-10287-14) are compared based on factors that have previously been used by Certificate of Need analysts in competitive MRI reviews.

#### Location

The following table provides a comparison of the location of the two proposed fixed MRI scanners:

MRI Location Comparison	NHMHMC ID# F-10292-14	OrthoCarolina ID# F-10287-14
Geographic Location	East Charlotte	South Charlotte
Proximate to Previously Approved MRI Scanner of Related Entity	Yes	No
Duplicative of Existing and Approved MRI	Yes	No
Facility Exists	No	Yes
Currently Properly Zoned	No	Yes

NHMCMH proposes to locate its fixed MRI scanner in Mint Hill on the east side of Charlotte in a hospital facility that has not yet been constructed. Therefore this location has no historical utilization. The proposed location is approximately 12 miles from the existing Novant Health Matthews Medical Center which has one existing fixed MRI and a previously-approved MRI scanner that has not yet been implemented. As discussed in previous comments the service area for the proposed fixed MRI is overlapped by the previously-approved fixed MRI Project ID# F-8688-11. The proposed location for the project is not an effective alternative due to the duplication of existing and approved fixed MRI scanners owned and operated by Novant Health. In addition, the proposed location is speculative because even though the CON to allow NHMCMH to develop a hospital was issued in 2007, Novant has not yet rezoned the land to accommodate the hospital and the proposed MRI scanner.

OrthoCarolina proposes to locate its fixed MRI at its existing office location in Ballantyne in south Charlotte. This location currently utilizes a mobile MRI scanner that performed 3,768 unweighted scans for the year ending September 30, 2013. The OrthoCarolina Ballantyne host site location has been the highest volume mobile MRI site in Mecklenburg County for over two years. OrthoCarolina has no previously-approved fixed MRI scanners that are pending development in Mecklenburg County. OrthoCarolina Ballantyne is already zoned as BP(CD) Business Park which supports medical office use and MRI service.

**Demonstration of Need**

OrthoCarolina adequately demonstrates that the projected utilization for their proposed fixed MRI scanner is based on reasonable, credible and supported assumptions. Therefore OrthoCarolina demonstrated the need the population it projects to serve has for the proposed fixed MRI scanner. In contrast, NHMCMH did not adequately demonstrate that projected utilization of its existing and proposed fixed MRI scanners is based on reasonable, credible and supported assumptions. Moreover, Novant Health owns and operates two underutilized mobile MRI scanners which serve sites in Mecklenburg County. Therefore NHMCMH did not adequately demonstrate the need the population it projects to serve has for the proposed fixed MRI scanner. Therefore the proposal by OrthoCarolina is the more effective alternative with regard to demonstration of need.

**Access by Medically Underserved Groups**

The following table provides the percentage of MRI procedures to be provided to Medicaid and Medicare recipients in Project Year 2

	NHMHMC	OrthoCarolina
Medicaid % Year 2	9.99%	2.73%
Medicare % Year 2	41.92%	20.08%

The OrthoCarolina percentages are lower than those of NHMCMH. However, NHMCMH did not adequately demonstrate the need the population it projects to serve has for the proposed fixed MRI scanner. Therefore the Medicaid and Medicare percentages projected by NHMCMH are unreliable.

**Average Gross Charge per Procedure**

The two proposals have significantly different start dates with the OrthoCarolina MRI scanner beginning January 1, 2016 and the NHMHMC beginning January 1, 2018. Neither OrthoCarolina nor NHMCMH include professional fees in their respective charges.

Average Gross Charges per Unweighted Procedure	NHMHMC	OrthoCarolina
2016		1548
2017		1548
2018	2937	1548
2019	3025	
2020	3116	

OrthoCarolina projects the lowest gross revenue per unweighted MRI procedure in 2018 which is Year 3 for OrthoCarolina and Year 1 for NHMHMC. The average gross revenue per unweighted procedure for NHMCMH is questionable because the projected utilization is not based on reasonable assumptions. In contrast, OrthoCarolina's average gross revenue per procedure is not questionable because the projected utilization is based on reasonable, credible and supported assumptions. Therefore with regard to average gross charge per unweighted procedure, the proposal submitted by OrthoCarolina is the most effective alternative.

**Average Net Revenue per Procedure**

The two proposals have significantly different start dates with the OrthoCarolina MRI scanner beginning January 1, 2016 and the NHMHMC beginning January 1, 2018.

Average Net Revenue per Unweighted Procedure	NHMHMC	OrthoCarolina
2016		\$621
2017		\$621
2018	\$873	\$621
2019	\$899	
2020	\$926	

For 2018, OrthoCarolina projects net revenue per unweighted MRI procedure that is more than 28 percent lower than the net revenue per procedure calculated by NHMHMC.

The average net revenue per unweighted procedure for NHMCMH is questionable because the projected utilization is not based on reasonable assumptions. In contrast, OrthoCarolina's average net revenue per procedure is not questionable because the projected utilization is based on reasonable, credible and supported assumptions. Therefore with regard to average net charge per unweighted procedure, the proposal submitted by OrthoCarolina is the most effective alternative.

### Average Operating Expense per Procedure

The two proposals have significantly different start dates with the OrthoCarolina MRI scanner beginning January 1, 2016 and the NHMHMC beginning January 1, 2018. Neither OrthoCarolina nor NHMCMH include professional fees in their respective expenses and charges.

Average Operating Cost per Unweighted Procedure	NHMHMC	OrthoCarolina
2016		\$250
2017		\$281
2018	\$362	\$273
2019	\$306	
2020	\$283	

For 2018, OrthoCarolina projects an average operating cost per unweighted MRI procedure of \$273 which is 24.6 percent lower than the average cost per procedure of NHMHMC.

The average operating cost per unweighted procedure for NHMCMH is questionable because the projected utilization is not based on reasonable assumptions. In contrast, OrthoCarolina's average operating cost per unweighted procedure is not questionable because the projected utilization is based on reasonable, credible and supported assumptions. Therefore with regard to average operating cost per unweighted procedure, the proposal submitted by OrthoCarolina is the most effective alternative.

### Summary

The OrthoCarolina application conforms to all CON criteria and MRI regulatory criteria and standards. OrthoCarolina's operational and financial projections are based on reasonable assumptions. The NHMCMH proposal fails to conform to CON Review Criteria 1, 3, 4, 5, 6, 7, 8, 18a, 20 and multiple MRI regulatory criteria. NHMCMH's operational and financial projections are not credible.

OrthoCarolina's proposal is the superior application regarding location, demonstration of need, access, revenue per unweighted procedure and cost per unweighted procedure. NHMCMH's operational and financial projections are flawed.

The OrthoCarolina application deserves CON approval because it is the most effective alternative to meet the needs of Mecklenburg County population.