



**Comments on Competing Application for One
Fixed MRI Scanner in Wake County**

July 31, 2023

Comments on Competing Applications for a Fixed MRI Scanner in Wake County

submitted by

WR Imaging, LLC and Wake Radiology Diagnostic Imaging, Inc.

In accordance with N.C. GEN. STAT. § 131E-185(a1)(1), WR Imaging, LLC and Wake Radiology Diagnostic Imaging, Inc. (collectively, “Wake Radiology” or “WR”) submit the following comments related to competing applications to develop one additional fixed MRI scanner in Wake County. WR’s comments on these competing applications include *“discussion and argument regarding whether, in light of the material contained in the application and other relevant factual material, the application complies with the relevant review criteria, plans and standards.”*¹ See N.C. GEN. STAT. § 131E-185(a1)(1)(c). To facilitate the Agency’s review of these comments, WR has organized its discussion by issue, noting some of the general CON statutory review criteria and specific regulatory criteria and standards creating the non-conformity on the following applications:

- **Duke University Health System, Inc. (“Duke”), Project ID # J-012395-23**
- **Raleigh Radiology, LLC (“RRLLC”), Project ID # J-012393-23**

Although the review includes multiple applicants that propose to meet the need for additional fixed MRI services in Wake County, only one can be approved. The comments below include substantial issues that Wake Radiology believes render the competing applications non-conforming with applicable statutory and regulatory review criteria.

¹ Wake Radiology is providing comments consistent with this statute; as such, none of the comments should be interpreted as an amendment to its application as filed June 15, 2023.

GENERAL COMMENTS

Comparative Analysis

All three applications appear to expand access to non-hospital-based outpatient MRI services. However, comparative factors should be considered in light of the issues with several of the applications, as well as the overall need for additional MRI capacity in Wake County. For the comparative factors involving financial metrics, Wake Radiology notes that the two competing applications have errors or omissions that render their projected financial statements invalid, including projected utilization, revenue, and payor mix; therefore, a meaningful comparison is not possible. Further, the competing applications should be found to be less effective on a comparative basis for those factors derived from statutory review criteria with which they are non-conforming.

Scope of Services

Although all three applicants will offer fixed MRI services in a freestanding outpatient imaging facility, Wake Radiology is the only applicant that will perform scans using a 3.0 Tesla (3T) strength scanner. The existing, vendor-owned MRI at Wake Radiology Cary is a 1.5T scanner. A 3T scanner is twice the strength of a 1.5T and produces exceptional images in less time. 3T scans catch details that are simply obscured by noise in 1.5T scans and are especially helpful when a more sensitive diagnostic tool is needed. Smaller abnormalities in the brain and spine are less likely to be missed, which can lead to a more accurate diagnosis of epilepsy, tumors, and strokes. Orthopedic physicians can use the enhanced sensitivity to assess joint fractures, joint stability, and sometimes even bleeding associated with fractures. Further, 3T scans are one of the best diagnostic tools for both infections and other types of tissue changes like prostate cancer, allowing for earlier diagnosis. Through the increased image clarity, radiologists can see details that otherwise would not be detected on a 1.5T scan, thereby improving diagnostic accuracy, which ultimately reduces the occurrence of duplicate scans or other unnecessary treatments. Both Duke and Raleigh Radiology propose to offer fixed MRI services using a 1.5T scanner in their respective applications. Therefore, Wake Radiology is the most effective applicant for this factor.

Access by Service Area Residents

Regarding the “Access by Service Area Residents” comparative factor, Wake Radiology’s project will serve a higher number of Wake County patients than the competing applicants. The total number of Wake County patients served in Project Year 3 is summarized in the following table:

Wake County Residents Served – Project Year 3

<i>Applicant</i>	<i>Wake Radiology</i>	<i>Duke Health</i>	<i>Raleigh Radiology</i>
Wake County Residents Served	4,298	2,533	3,559
% of Total Patients	86.2%	62.6%	76.6%

Source: Applications, Table C.3b.

Wake Radiology also projects to serve the highest percentage of service area residents compared to total patients. The Agency has previously determined that this comparative factor is a valid criterion for

evaluating applications for fixed MRI services.² Wake Radiology is the most effective applicant for this factor, given that it projects to serve more patients from Wake County than Duke or Raleigh Radiology in Project Year 3.

While Wake Radiology recognizes that the Agency may choose other factors to analyze, it believes that many of those may be deemed inconclusive based on differences between applications. Moreover, as noted above, both Duke and Raleigh Radiology should be found non-conforming based on various statutory and regulatory criteria and should not be approved.

² See 2021 Wake County Fixed MRI Agency Findings, p. 77.

COMMENTS ON DUKE IMAGING GARNER

1. **Duke applies inconsistent growth rates in its utilization projection methodology.** Duke applies a 2.0 percent annual growth rate (CAGR) to project future outpatient MRI utilization from its described catchment area. The 2.0 percent CAGR is applied to all Duke outpatient MRI facilities for Fiscal Years 2024-2027, except Holly Springs, as discussed below.

DUHS Outpatient MRI Procedures from Proposed Duke Imaging Garner MRI Catchment Area

DUHS Facility	FY2024	FY2025	FY2026	FY2027
DRAH MRI Fixed	1,394	1,422	1,450	1,479
DRAH MRI Mobile	797	813	829	846
DRH MRI Fixed	109	111	113	115
DRH MRI Mobile	34	35	35	36
Duke Imaging Cary Parkway	188	191	195	199
DUH Fixed	554	565	576	587
Duke Imaging Arrington	132	135	137	140
Southpoint MRI	19	19	20	20
Total MRI Procedures	3,226	3,290	3,356	3,423

Source: Project ID # J-012395-23, p. 104.

However, when forecasting the future outpatient MRI utilization for the fixed MRI unit at the Duke Imaging Holly Springs facility, Duke uses a 4.5 percent CAGR for the FY 2024-2028 period. Duke contends that it is reasonable to use a growth rate that is more than double that of its other facilities, despite serving patients in the same catchment area, because it is “a fraction of recent historical growth at the respective facility” and the rate is “lower compared to DUHS’s FY2019-2023 CAGR for outpatient MRI procedures (6.3%).”³ With the 4.5 percent CAGR assumption, future MRI utilization at the Holly Springs location is as follows:

**Duke Imaging Holly Springs
Projected MRI Utilization**

	FY2024	FY2025	FY2026	FY2027	FY2028
MRI Procedures	2,877	3,007	3,142	3,283	3,431

Source: Project ID # J-012395-23, p. 113.

The Duke Imaging Holly Springs fixed MRI began operating in June 2020, and has thus experienced relatively higher utilization growth as a startup facility. However, as of FY 2024, the Holly Springs location is no longer a startup facility, but rather represents an established competitor offering MRI services in Wake County. As such, Duke’s projection that it will continue to grow at a faster rate than Duke’s other facilities in Wake County is unsupported and unreasonable, as it is more reasonable to assume that utilization growth will slow to a rate consistent with its other imaging

³ Project ID # J-012395-23, p. 113.

facilities. If the Holly Springs facility were to use the 2.0 percent CAGR that Duke for all other locations, the growth in MRI procedures would have the following revised utilization in Fiscal Years 2024-2028:

**Duke Imaging Holly Spring Projected MRI Scans Utilization
Revised 2.0% CAGR**

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Total Unadjusted MRI Procedures	2,808	2,864	2,922	2,980	3,040
Shift to DUHS Knightdale Mobile MRI Site	n/a	4	10	13	13
Unadjusted MRI Procedures after Shift to Knightdale Mobile Site	2,808	2,860	2,912	2,967	3,027

Source: Duke Utilization Methodology and Assumptions.

If the revised Duke Imaging Holly Springs unadjusted MRI procedures are assumed to have the same proportion of procedures with contrast (38.9 percent) and without contrast (61.1 percent) as contained in the application, and the number of procedures with contrast is weighted according to the 2023 SMFP methodology,⁴ the total volume of adjusted MRI procedures is calculated as shown in the following table:

Duke Imaging Holly Springs Adjusted MRI Scans

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Total Unadjusted MRI Procedures	2,808	2,860	2,912	2,967	3,027
OP with contrast (38.9%)	1,092	1,113	1,133	1,154	1,177
OP without contrast (61.1%)	1,716	1,748	1,779	1,813	1,849
Total Adjusted MRI Procedures	3,172	3,231	3,289	3,351	3,419

Source: Duke Utilization Methodology and Assumptions.

Using the same growth factor that Duke found to be appropriate for its other outpatient facilities results in less utilization than Duke projected in its application. As a result, Duke’s overall projected MRI utilization is overstated, as are its financial projections based on that utilization.

As such, the Duke application is non-conforming with N.C. Gen. Stat. § 131E-183(a)(3), (5) and (6), as well as the performance standards for MRI scanners.

⁴ 2023 SMFP, Chapter 17, Magnetic Resonance Imaging Scanners Methodology, p. 333. The adjustment calculation is based on the average time for an MRI procedure, according to the setting (inpatient or outpatient) and complexity. A base procedure with a weight of 1.0 is an outpatient MRI without contrast. A complex outpatient procedure has a weight of 1.212, calculated from the average time per procedure (40 minutes) divided by the average time for a base procedure (33 minutes.)

2. **Duke fails to apply reasonable and supported assumptions and methodology confirming financial feasibility.** In the assumptions for its financial projections, Duke fails to include the contractual adjustment assumptions summarized on page 119 of its application to calculate total net revenue for the entire IDTF facility (Form F.2b). Instead, as shown on Form F.2b for the facility, it projects total gross revenue and then fails to show any deductions by payor. While the net revenue amount is lower than the gross revenue amount, the application fails to demonstrate how these numbers were calculated, and the net revenue is inexplicably higher than Duke’s assumptions would suggest. Specifically, if Duke had included the contractual adjustments to gross revenue as it stated, the Total Net Revenue for the entire facility would have been lower. A comparison of the total facility net revenue as stated in the application and the calculations for the contractual deductions in Project Year 3 (July 1, 2027 through June 30, 2028) are shown in the following table:

Duke Imaging Garner - Entire Facility Contractual Adjustment Calculation (PY3)

<i>Payor</i>	<i>FY 2028 Charges</i>	<i>Contractual Allowance</i>	<i>Contractual Adjustment</i>
Self-Pay	\$125,833	90.0%	\$113,250
Insurance	\$2,930,770	31.0%	\$908,539
Medicare	\$1,936,717	79.2%	\$1,533,880
Medicaid	\$560,385	68.2%	\$382,183
Other	\$163,278	80.7%	\$131,765
Total	\$5,716,983		\$3,069,616
Bad Debt	0.6% of Gross Revenue		\$34,301
Charity Care	2.4%		\$137,207
Total Adjustments (Contractuals, Bad Debt, Charity Care)			\$3,241,124
Total Net Revenue			\$2,475,859
Form F.2b Net Revenue			\$2,648,437
Overstatement			\$172,578

Source: Project ID # J-012395-23, p. 119.

By failing to account for these reductions in revenue, Duke overstates net revenue by \$172,578 in PY3. This error is repeated in the net revenue calculations for the entire facility in the interim period and Project Years 1-2. This results in overstated Net Revenue and Net Income on Form F.2b in all three project years. Because Duke failed to calculate these figures correctly, its projected financial performance for Duke Imaging Garner is unsupported.

Therefore, the Duke application is non-conforming with N.C. Gen. Stat. § 131E-183(a) (5), and the application should be denied.

3. **Duke fails to demonstrate that its projected payor mix is based on reasonable assumptions.** In Section L.3.b, when detailing the assumptions used to project its payor sources through year three of its proposed project, Duke states that it increases the percentage of Medicare patients

receiving MRI services “to account for the aging population.”⁵ In its application, Duke then increases its Medicare payor mix, shifting 2.09 percent of patients that were previously enrolled in managed care insurance plans to incrementally increase Medicare coverage in future years.

However, Duke does not include any consideration of patient age in its MRI utilization projections. In *Step 4* of its methodology, Duke uses the FY 2021 statewide MRI use rate to calculate total MRI procedures in its catchment area.⁶ Utilization volumes for fixed MRI scanners at Duke imaging locations, including the proposed Duke Imaging Garner facility, are based on overall population growth and immigration that is not dependent on age cohort assumptions. The Garner facility also anticipates an additional shift of MRI patients seeking more convenient and lower-cost care settings.⁷ Nowhere in its MRI utilization projections for the Garner facility is there any mention of patient aging assumptions or the relative representation of the 65 and older population that would presumably be enrolled in Medicare. Duke therefore is speculating that the payor mix for the proposed fixed MRI unit at the Garner facility will experience an increase in Medicare patients, despite not accounting for this assumption anywhere in its methodology. Given these inconsistencies, the Duke projected payor mix is unreasonable, and its projected Medicare percentages are unreliable.

Therefore, the Duke application is non-conforming to N.C. Gen. Stat. § 131E-183(a)(3), (5), and (13c).

4. **Duke makes numerous unsupported assumptions in its utilization methodology.** Throughout its Form C Methodology and Assumptions are multiple assumptions that are not supported by any data or analysis, including the following:
 - In *Step 3* of its methodology, Duke projects that patients will shift from its existing MRI imaging facilities to the Garner facility, including Duke imaging facilities in Durham County. This assumes that patients that currently choose to receive elective MRI procedures at a Durham County facility will instead receive their care in Garner. While some of these patients may live closer to Garner than to the facilities in Durham, there are numerous other MRI scanners owned by Duke (and other providers) that are closer to Garner than the scanners in Durham County; patients are clearly choosing those scanners in Durham for reasons other than proximity. As such, it is not reasonable to assume that proximity of the proposed scanner will cause a change in their patterns. The Agency has previously regarded similar assumptions to be unreasonable. For example, in the 2019 Mecklenburg County acute care bed and operating room review, the Agency found that Atrium Health failed to demonstrate that MRI patients (and other modalities) who had historically accessed those services at other Atrium Health facilities in the area would instead access the services at the proposed facility “simply because they live in the area of patient origin.” See Agency Findings⁸ at page 72. While it may be plausible that some patients would shift from the next closest facility with MRI to the Garner facility upon its development, it simply does not follow that patients who live in the proposed

⁵ Project ID # J-012395-23, p. 84.

⁶ Ibid, pp. 105-106. Duke applies the statewide use rate of 92.45 per 1,000 population, based on FY 2021 data as published in the *2023 SMFP*.

⁷ Ibid, p. 106.

⁸ <https://info.ncdhhs.gov/dhsr/coneed/decisions/2020/march/findings/2019-MecklenburgAcuteCareBedandORReviewFindings.pdf>

service area, who have historically received MRI scans 45 minutes to an hour away at Duke's facilities in Durham, driving much farther than they would to Duke Raleigh Hospital or Duke's other MRI facilities in Wake County, will instead choose care at the proposed facility. Duke fails to provide any evidence that patients seeking care at its Durham hospitals, in particular, are not also receiving other types of outpatient services, such as emergency care, other imaging, oncology treatment or surgery, and would not be able to shift these types of care to the Garner facility. As such, Duke's shift assumptions, which total approximately one-half of its projected utilization, are overstated.

In addition, Duke applies uniform percentages for the shift of MRI volume at its existing imaging facilities to the proposed Garner facility: 30 percent in Project Year 1, increasing to 40 percent in PY2 and 50 percent in PY3.⁹ Duke fails to explain why this assumption is reasonable, given the differences in proximity, referring physician and other factors that are likely to result in different shift percentages, including the lack of shift entirely from some facilities.

- In *Step 4*, Duke estimates the total volume of MRI procedures in its defined MRI catchment area by applying the FY 2021 statewide use rate for MRI to the population by zip code in its catchment area.¹⁰ Duke could have projected volume more accurately by using utilization and population data specific to its identified catchment area, at least by county, rather than statewide figures. Duke fails to demonstrate that the factors that drive MRI use rates are the same in the service area as they are statewide, including patient ages, health conditions, socioeconomics and other demographic factors. The application of MRI use patterns for the entire state rather than the specific geography that will be served by its proposed project is not supported.
- Also in *Step 4*, Duke estimates it will capture additional market share of the estimated total MRI scans in its service area.¹¹ Duke assumes it will achieve a 2.0 percent share in Project Year 1, 3.5 percent in PY2, and 5.0 percent in PY3. This market share capture rate is unsupported. The application fails to provide any analysis of Duke's historical increases in market share following the development of other Duke imaging locations offering MRI services, or that of any other providers. In addition, Duke will be competing with existing freestanding MRI facilities in Wake County that already offer the comparative benefits it cites as reasons for the market share gains, e.g., lower costs, improved patient access, etc. While Duke's market share projections may appear relatively low, when applied to the total volume for the service area, they have a significant impact on volume. Specifically, Duke's 5.0 percent market share assumption equates to 1,704 additional MRI procedures, representing 42 percent of total utilization at the proposed Garner facility in PY3.¹² Duke does not provide information that adequately justifies this incremental volume—nearly one-half of its overall utilization.
- In *Step 6*, Duke states that utilization at the proposed Garner facility will include 15 percent immigration.¹³ While it may be reasonable to expect some immigration from outside the service area, immigration percentages vary based on the size of the service area and the service(s)

⁹ Ibid, p. 105.

¹⁰ Ibid, p. 105. Duke calculates the FY 2021 North Carolina MRI use rate of 92.45 using the statewide total of MRI scans from Table 17E-1 on page 353 of the 2023 SMFP.

¹¹ Ibid, p. 106.

¹² $1,704 = 5.0\% \times 34,078$ MRI procedures in the Duke Catchment Area, p. 106 of the application.

¹³ Ibid, p. 108.

being offered. Duke's patient origin already includes multiple ZIP codes from Johnston County, which represents immigration from outside Wake County. Duke offers no quantification of how the 15 percent figure was calculated, nor is there supporting analysis based on any other imaging facilities. Duke states (page 107) that in FY 2022, immigration from outside Wake County at its Holly Springs Imaging facility equaled approximately 30 percent of total patient volume; however, as noted previously, Duke already includes 22.3 percent immigration from Johnston County in its projected patient origin (page 31). Duke then projects an additional 15 percent, for a total of 37.3 percent immigration, which would be higher than either its Holly Springs freestanding facility or Duke Raleigh Hospital, the latter of which certainly has a much broader scope of services from which to attract patients from outside the county. Duke provides no credible analysis or data to support its assumption that it will experience such a high level of immigration. As such, its projected utilization is overstated.

The assumptions regarding patient origin and utilization projections are unsupported. Therefore, the Duke application is non-conforming with N.C. Gen. Stat. § 131E-183(a) (1), (3), (6), and (18a), and the application should be denied.

5. **Duke fails to list all related facilities in Form O.** In its list of related entities that provide the same service components in Form O of its application, Duke fails to include Duke Lifepoint facilities that offer MRI services. This includes at least five acute care facilities in the greater Raleigh/Triangle market: Person Memorial Hospital in Person County, Maria Parham Health's hospital campuses in Henderson (Vance County) and Franklin County, Wilson Medical Center in Wilson County, and Central Carolina Hospital in Lee County, as well as other facilities across the state. By failing to include information about fixed MRI services at Duke Lifepoint facilities, Duke is non-conforming with the requirement in Criterion 20 that an applicant "shall provide evidence that quality care has been provided in the past."¹⁴

Therefore, the Duke application is non-conforming to N.C. Gen. Stat. § 131E-183(a)(20).

6. **Duke uses an unreasonable assumption in its conversion of unadjusted MRI procedures to adjusted MRI procedures.** In its methodology for projecting utilization in its project years, Duke calculates the total number of unadjusted procedures, and then applies historical percentages of Outpatient Mobile MRI procedures broken out by those with and without contrast to calculate its future volume of adjusted MRI scans with and without contrast.¹⁵ Duke does not explain why it uses only its historical percentage of outpatient mobile MRI procedures, but not MRI procedures performed in hospital outpatient or diagnostic center care settings. As the proposed project is for a fixed MRI and not a mobile unit, it would logically be appropriate to use historical assumptions based on fixed MRI facilities, not mobile scanners. For this reason, Duke's methodology is unreasonable, and the application is non-conforming with Criteria 3, 5, 6 and 18a.

Accordingly, the Duke application is non-conforming with N.C. Gen. Stat. § 131E-183(a) (3), (5), (6), and (18a), and the application should be denied.

¹⁴ G.S. 131E-183(a)(20)

¹⁵ Project ID # J-012395-23, p. 108.

In summary, based on the issues detailed above, the Duke application is non-conforming with the review criteria established under N.C. GEN. STAT. § 131E-183, specifically (1), (3), (4), (5), (6), (13c), (18a), and (20), as well as the performance standards at 10A NCAC 14C .2703.

COMMENTS ON RALEIGH RADIOLOGY

1. **Raleigh Radiology provides incorrect information for its patient origin.** In Section C.3c of the application, the Applicant is required to provide the patient origin for the entire facility, including the proposed service component. Raleigh Radiology states that its patient origin projections for the entire Raleigh Radiology Knightdale facility include the following imaging modalities: Bone Density, CT, Mammography, X-ray, and Ultrasound.¹⁶ The proposed MRI service component is excluded. The Applicant thus fails to complete the application correctly and provides incorrect utilization volumes for the entire facility. Because Raleigh Radiology failed to provide the required information, its projected utilization for its Knightdale imaging location is unsupported.

As such, the Raleigh Radiology application is non-conforming with N.C. Gen. Stat. § 131E-183(a)(3), (5), (6), and (18a), and the Raleigh Radiology application should be denied.

2. **Raleigh Radiology’s utilization methodology contains multiple errors that overstate the need for the proposed service.** In the Section Q Need & Utilization Methodology, *Steps 1-6*, RRLLC attempts to demonstrate the need for the service area. However, within these steps there are multiple mathematical errors. The forecast adjusted scans are wildly overstated. In *Step 3*, there are math errors in the application of the use rate. Using the projected 2028 population totals for the proposed Knightdale facility’s service areas from Table 1 on page 136 and the 5-year average MRI use rate per 1,000 population of 88.54 that the Applicant uses¹⁷ should result in a calculation of 73,745 unadjusted MRI procedures in CY 2028.¹⁸ Instead, RRLLC incorrectly calculates the 2028 MRI utilization for the Secondary and Tertiary service areas, resulting in overstated MRI demand. The variances for each service area are displayed in the following table:

Raleigh Radiology Unadjusted MRI Utilization Projections by Service Area – Step 3

<i>Service Area</i>	<i>CY 2028 Population</i>	<i>MRI Use Rate</i>	<i>CY 2028 Unadjusted</i>	<i>Step 3 Calculation</i>	<i>Variance</i>
Primary	292,733	88.54	25,919	25,919	-
Secondary	385,921	88.54	34,169	67,562	33,393
Tertiary	154,241	88.54	13,656	24,788	11,132
Total	832,895	88.54	73,745	118,269	44,524

Source: Raleigh Radiology application, Section Q.

As shown above, RRLLC overstates unadjusted MRI need by 44,524 procedures, a variance of more than 60 percent.

In *Step 5*, the weighting factor of 1.194 is applied to the overstated unadjusted MRI procedures from *Step 3* for each service area, magnifying the calculation errors and resulting in adjusted need that is significantly overstated. In *Step 6*, RRLLC utilizes these inflated figures to demonstrate the

¹⁶ Project ID # J-012393-23, p. 47.

¹⁷ Ibid, Step 2, Table 2, p. 138.

¹⁸ For the formula (Population * Rate / 1,000) --> 832,895 * 88.54 / 1,000 = 73,744.5.

need for additional fixed MRI capacity in Wake County. This need calculation is incorrect and dramatically overstated. The impact of this variance is shown in the following table. Raleigh Radiology incorrectly calculates the need deficit for fixed MRI scanners by more than 10 units in each of the forecast years, as summarized below.

Raleigh Radiology Estimate of Fixed MRI Capacity Need for Service Area – Step 6

<i>Service Area</i>	<i>CY 2023</i>	<i>CY 2024</i>	<i>CY 2025</i>	<i>CY 2026</i>	<i>CY 2027</i>	<i>CY 2028</i>
Step 6 Adjusted Scans	132,578	134,253	135,957	137,688	139,449	141,238
Adjusted Scans	82,631	83,681	84,747	85,831	86,932	88,051
Variance	49,947	50,572	51,210	51,857	52,517	53,187
Wake County Planning Threshold	4,992	4,992	4,992	4,992	4,992	4,992
Overstated Fixed MRI Unit Need	10.0	10.1	10.3	10.4	10.5	10.7

Source: Raleigh Radiology application, Section Q, p. 142.

In *Steps 7-10* of the utilization methodology, RRLC attempts to estimate the number of unadjusted MRI scans at the Knightdale imaging facility by patient origin. The unadjusted MRI scans in *Step 10* do not match the total number of unweighted MRI procedures on Form C.2b. The figures shown in Section Q are marginally higher than those in the form, as summarized in the following table.

Raleigh Radiology Projected MRI Utilization – Project Years 1-3

<i>Utilization</i>	<i>Interim Year</i>	<i>PY 1</i>	<i>PY 2</i>	<i>PY 3</i>
Form C.2b # of Procedures	1,415	5,695	5,730	5,766
Step 10 Unadjusted Scans	1,429	5,751	5,786	5,822
Variance	14	56	56	56

Source: Raleigh Radiology application, Section Q, Form C.2b, p. 130; Need Methodology Step 10.

Similarly, the adjusted scans in *Step 12* do not match the figures shown on Form C.2b.

Raleigh Radiology Projected MRI Utilization – Project Years 1-3

<i>Utilization</i>	<i>Interim Year</i>	<i>PY 1</i>	<i>PY 2</i>	<i>PY 3</i>
Form C.2b # of Weighted Procedures	1,504	6,054	6,091	6,130
Step 12 Adjusted Scans	1,519	6,113	6,151	6,189
Variance	15	59	60	59

Source: Raleigh Radiology application, Section Q, Form C.2b, p. 130; Need Methodology Step 12.

These mathematical inconsistencies in Raleigh Radiology’s application result in unsupported utilization projections that fail to demonstrate that they are reasonable. The overstated demand for fixed MRI services in the defined Service Area and unmatched numbers in the Section Q Forms and Methodology make it impossible to reconstruct or verify the application’s assumptions and raise uncertainty about the validity of other figures in the application that are derived from these utilization assumptions.

Based on these issues, the application should be found non-conforming with N.C. Gen. Stat. § 131E-183(a)(1), (3), (4), (5), (6), and (18a), as well as the performance standards at 10A NCAC 14C .2703, and the RRLC application should be denied.

3. **Raleigh Radiology understates its Charity Care deduction for the entire Knightdale facility.** In Form F.2a, RRLC states that the services included in the revenue and net income projections for the entire facility include “CT, X-ray, Mammography, MRI, Ultrasound, and DEXA.”¹⁹ However, the estimated figures have clearly been calculated incorrectly, because when the Charity Care deductions for the proposed MRI service are subtracted from those for the entire facility, there is a negative amount of charity care for the remaining imaging services. The differences for each project year are displayed in the following table:

Raleigh Radiology Charity Care Adjustments – Project Years 1-3

<i>Service Component</i>	<i>Interim Year</i>	<i>PY 1</i>	<i>PY 2</i>	<i>PY 3</i>
Entire Knightdale Facility	\$6,493	\$26,269	\$26,572	\$26,881
Knightdale MRI Only	\$36,320	\$146,177	\$147,088	\$148,011
Knightdale Facility without MRI	-\$29,827	-\$119,908	-\$120,516	-\$121,130

Source: Raleigh Radiology application, Section Q, Form F.2b, pp. 162,165.

Raleigh Radiology thus fails to provide reasonable financial projections.

Accordingly, the RRLC application should be found non-conforming with N.C. Gen. Stat. § 131E-183(a) (5), and the application should be denied.

4. **Raleigh Radiology omits an explanation for the identified alternatives to its proposed project.** In Section E.1 RRLC states there are no alternative methods to its proposed project. However, in the response to E.3 RRLC lists five alternatives that were evaluated and rejected.²⁰ Raleigh Radiology’s responses are not consistent. If there are no other alternatives to its proposed project, the application form requires an explanation of why there are none, along with supporting documentation. Raleigh Radiology failed to provide this information. If there are indeed other alternatives to its proposal, then Raleigh Radiology incorrectly stated there are none in its response in E.1. These responses are inconsistent and non-conforming with Criterion 4.

RRLC’s application provides inconsistent information in its response and should be found non-conforming with N.C. Gen. Stat. § 131E-183(a) (4), and the application should be denied.

In summary, based on the issues detailed above, the Raleigh Radiology application is non-conforming with the review criteria established under N.C. GEN. STAT. § 131E-183, specifically (1), (3), (4), (5), (6), and (18a), as well as the performance standards at 10A NCAC 14C .2703.

¹⁹ Project ID # J-012393-23, p. 160.

²⁰ Ibid, p. 81.