



**COMPETITIVE COMMENTS ON  
2024 CUMBERLAND COUNTY FIXED MRI NEED DETERMINATION  
SUBMITTED BY CAPE FEAR VALLEY MEDICAL CENTER**

**APRIL 1, 2024**

These comments are submitted by Cumberland County Hospital System, Inc. d/b/a Cape Fear Valley Medical Center (CFVMC) in accordance with N.C. Gen. Stat. § 131E-185(a1)(1) to address the representations in the competing application submitted by Carolina Imaging, LLC of Fayetteville (Carolina Imaging), including a comparative analysis and a discussion of the most significant issues regarding the applicant's conformity with the statutory and regulatory review criteria ("the Criteria") in N.C. Gen. Stat. §131E-183(a) and (b). Other non-conformities in the Carolina Imaging application may exist and CFVMC reserves the right to develop additional opinions, as appropriate upon further review and analysis.

**COMPARATIVE ANALYSIS FOR FIXED MRI SCANNERS**

Pursuant to G.S. 131E-183(a)(1) and the 2024 SMFP, no more than one fixed MRI scanner can be approved in Cumberland County in this review. Because each applicant proposes to acquire one fixed MRI scanner for a total of two MRI scanners, only one of the applications can be approved. Therefore, CFVMC has prepared a comparative analysis of the proposals to determine which proposal is the most effective. The following factors are typically utilized by the Agency in competitive reviews regardless of type of services or equipment proposed:

- Conformity with Statutory and Regulatory Review Criteria
- Scope of Services
- Historical Utilization
- Geographic Accessibility (Location within the Service Area)
- Access by Service Area Residents
- Access by Underserved Groups: Charity Care
- Access by Underserved Groups: Medicaid
- Access by Underserved Groups: Medicare
- Competition (Access to a New or Alternate Provider)
- Projected Average Net Revenue per Patient/Procedure
- Projected Average Total Operating Cost per Patient/Procedure

Other comparative factors may be utilized based on the facts of the competitive review. The following summarizes the competing applications relative to the potential comparative factors.

**Conformity to CON Review Criteria**

Two CON applications have been submitted seeking to develop a fixed MRI scanner in Cumberland County. The applicants collectively propose to develop two fixed MRI scanners. Based on the 2024 SMFP's

need determination, only one (1) fixed MRI scanner can be approved. Only applicants demonstrating conformity with all applicable Criteria can be approved, and only the application submitted by CFVMC demonstrates conformity to all Criteria:

**Conformity of Applicants**

Applicant	Project I.D.	Conforming/ Non-Conforming
Cape Fear Valley Medical Center	M-012493-24	Yes
Carolina Imaging	M-012485-24	No

The CFVMC application is based on reasonable and supported volume projections and adequate projections of cost and revenues. As discussed separately in this document, the competing application contains errors and flaws which result in one or more non-conformities with statutory and regulatory review Criteria. Therefore, the **CFVMC** application is the most effective alternative regarding conformity with applicable review Criteria.

**Scope of Services**

Generally, the application proposing to provide the greatest scope of services is the more effective alternative regarding this comparative factor.

The following table summarizes the scope of patient services proposed by each applicant.

Applicant	Hospital Based or Freestanding	Scope of MRI Services
Cape Fear Valley Medical Center	Hospital Based	Inpatient, Emergency, Outpatient
Carolina Imaging	Freestanding	Outpatient Only

CFVMC provides fixed MRI services to inpatients, emergency patients, and outpatients. Carolina Imaging provides fixed MRI services to outpatients only. Therefore, **CFVMC** is the most effective alternative regarding this factor.

This analysis is consistent with the Agency’s comparative analysis for scope of services in the 2021 Mecklenburg County MRI Review where Carolinas Medical Center was found to be the more effective alternative than the competing freestanding proposal.<sup>1</sup> The Agency also found New Hanover Regional Medical Center more effective regarding scope of services than the freestanding proposals in the 2021 New Hanover MRI Review.<sup>2</sup>

<sup>1</sup><https://info.ncdhhs.gov/dhsr/coneed/decisions/2022/jan/findings/2021%20Mecklenburg%20County%20MRI%20Findings.pdf>

<sup>2</sup><https://info.ncdhhs.gov/dhsr/coneed/decisions/2022/feb/findings/2021%20New%20Hanover%20MRI%20Review%20Findings.pdf>

**Historical Utilization**

The following table illustrates historical utilization of each fixed MRI scanner owned by an applicant or related entity as provided in the 2024 SMFP representing FY2022 reported utilization.

	<b>Cape Fear Valley Medical Center</b>	<b>Carolina Imaging</b>
FY22 Fixed MRI Scans	9,539	8,064
FY22 Adjusted MRI Scans	14,227	8,419
No. of Fixed MRI Scanners	3	2
<u>Adjusted Scans per Fixed Unit</u>	<u><b>4,742</b></u>	<u><b>4,210</b></u>

Source: 2024 SMFP, Table 15E-1

The average adjusted MRI procedures for CFVMC’s three existing fixed MRI scanners is 4,742. The average adjusted MRI procedures for the two existing fixed MRI scanners owned by Carolina Imaging is 4,210. Therefore, **CFVMC** is the most effective alternative regarding historical utilization.

Carolina Imaging operates two (2) fixed MRI scanners. Table 15E-1 of the 2024 SMFP indicates that one of Carolina Imaging’s fixed MRI scanners operates at only 56% capacity. See also the following table.

<b>Fixed Unit CON #</b>	<b>FY22 Adjusted MRI Procedures</b>	<b>% Capacity*</b>
M-5899-98	4,925	78.9%
M-7924-07	3,493	<u><b>56.0%</b></u>

\*Capacity of a single MRI scanner is defined as that of an MRI scanner being available and staffed for use at least 66 hours per week for 52 weeks per year, which equals 6,240 procedures annually, at 33 minutes per procedure (66 x 52 x (60/33) = 6,240).

Source: 2024 SMFP, Table 15E-1

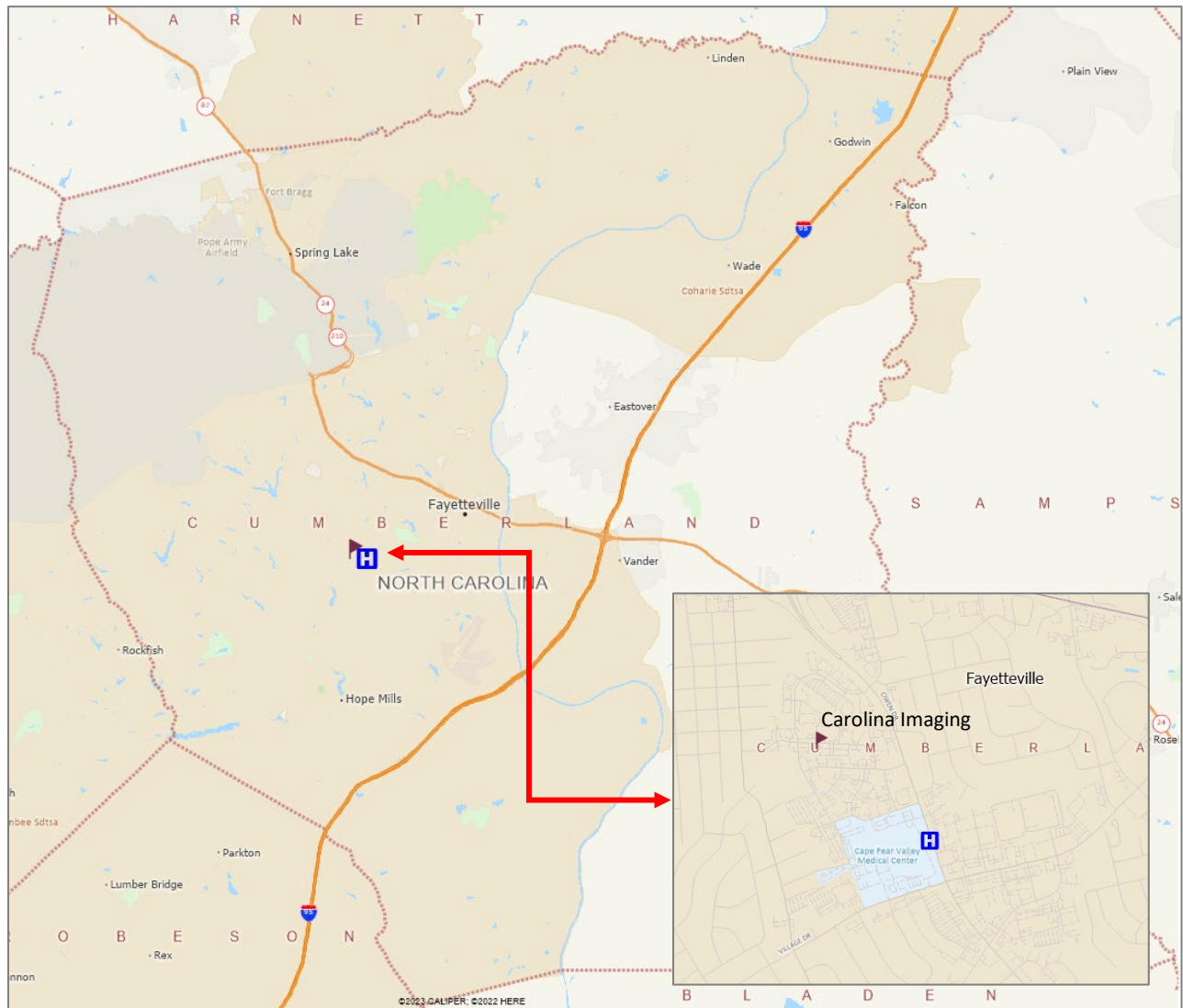
As shown in the previous table, Carolina Imaging has available capacity on CON # M-7924-07; therefore, it cannot be the most effective alternative regarding historical utilization.

For information purposes, Carolina Imaging also hosts a mobile MRI scanner that performed 1,209 adjusted MRI procedures during FY2022. These procedures were not included in this analysis because they were not performed on a fixed MRI scanner.

**Geographic Accessibility (Location within the Service Area)**

The 2024 SMFP identifies the need for one fixed MRI scanner in Cumberland County. The following table identifies the location of the existing and approved fixed MRI scanners in Cumberland County.

As the following map illustrates, CFVMC and Carolina Imaging are located less than three tenths of a mile from each other.



Applicants that are located in relative proximity to one another are typically equally effective regarding geographic access. However, as discussed separately in this document, Carolina Imaging does not conform to all statutory review criteria and administrative rules and cannot be approved. Therefore, **CFVMC** is the most effective alternative regarding this factor.

**Access By Service Area Residents**

On page 336, the 2024 SMFP defines a fixed MRI scanner as “an MRI scanner that is not a mobile MRI scanner.” The 2024 SMFP defines the service area for a fixed MRI scanner as “the same as an Acute Care Bed Service area as defined in Chapter 5 and shown in Figure 5.1.” Based on that definition, the fixed MRI service area is a single county, except where there is no licensed acute care hospital located within the county. Cumberland County has more than one licensed acute care hospital. Therefore, for the purpose of this review, Cumberland County is the service area because it has multiple licensed acute care hospitals. Facilities may also serve residents of counties not included in their service area.

**Cumberland County Residents  
 MRI Cases Projected to be Served Project Year 3**

	<b>Cape Fear Valley Medical Center</b>	<b>Carolina Imaging</b>
<b>Access by Service Area Residents (% of SA County Patients)</b>	<b>62%</b>	55%

As shown in the table above, CFVMC projects to serve the highest percentage of service area residents during the third full fiscal year following project completion. Therefore, **CFVMC** is the most effective alternative regarding this factor.

**Competition (Patient Access to a New or Alternative Provider)**

CFVMC and Carolina Imaging each provide fixed MRI services in the service area of Cumberland County; therefore, neither of the applicants would qualify as a new or alternative provider in the service area. However, the application submitted by Carolina Imaging does not conform with all applicable statutory and regulatory review criteria. An application that does not conform to all applicable statutory and regulatory review criteria cannot be approved. Therefore, regarding this comparative factor, the application submitted by **CFVMC** is the most effective alternative.

**Access By Underserved Groups**

**Projected Medicare**

The following table compares projected access by Medicare patients in the third full fiscal year following project completion for all the applicants in this review using gross Medicare dollars as a percentage of gross revenue.

Applicant	Form F.2b	Form C.1b	Avg Medicare Rev. per MRI	Form F.2b	% of Gross Revenue
	Total Medicare Revenue	MRIs		Gross Revenue	
Cape Fear Valley Medical Center	\$26,401,458	11,028	\$2,394	\$46,318,347	57.0%
Carolina Imaging	\$10,859,463	12,835	\$846	\$27,245,625	39.9%

Source: Section Q Form F.2b of the respective applications

The following table compares Medicare MRI procedures as a percentage of total MRI procedures.

	Cape Fear Valley Medical Center	Carolina Imaging
<b>PY3 Unadjusted MRI Procedures</b>	11,028	12,835
<b>Medicare MRI Procedures as a % of Total MRI Procedures</b>	<b>5,194</b>	4,633
<b>Medicare MRI Procedures (Unadjusted)</b>	<b>47.1%</b>	36.1%

Source: Section L.3 and Section Q Form C.2b of the respective applications

CFVMC projects 1) the highest Medicare revenue as a percentage of gross revenue; 2) the highest absolute number of Medicare MRI procedures, and 3) the highest percentage of Medicare procedures as a percent of total MRI procedures. Therefore, the **CFVMC** application is the most effective alternative regarding access for Medicare patients.

Projected Medicaid

The following table compares projected access by Medicaid patients in the third full fiscal year following project completion for all the applicants using gross Medicaid dollars as a percentage of gross revenue.

Applicant	Form F.2b	Form C.1b	Avg Medicaid Rev. per MRI	Form F.2b	% of Gross Revenue
	Total Medicaid Revenue	MRIs		Gross Revenue	
Cape Fear Valley Medical Center	\$7,874,119	11,028	\$714	\$46,318,347	17.0%
Carolina Imaging	\$2,784,065	12,835	\$217	\$27,245,625	10.2%

Source: Section Q Form F.2b of the respective applications

The following table compares Medicaid MRI procedures as a percentage of total MRI procedures.

	Cape Fear Valley Medical Center	Carolina Imaging
<b>PY3 Unadjusted MRI Procedures</b>	11,028	12,835
<b>Medicaid MRI Procedures as a % of Total MRI Procedures</b>	<b>1,764</b>	1,313
<b>Medicaid MRI Procedures</b>	<b>16.0%</b>	10.2%

Source: Section L.3 and Section Q Form C.2b of the respective applications

CFVMC projects 1) the highest Medicaid revenue as a percentage of gross revenue; 2) the highest absolute number of Medicaid MRI procedures, and 3) the highest percentage of Medicaid procedures as a percentage of total MRI procedures. Therefore, the **CFVMC** application is the most effective alternative regarding access for Medicaid patients.

**Projected Average Net Revenue per MRI Procedure**

The following table shows the projected average net revenue per MRI procedure in the third year of operation for each of the applicants, based on the information provided in the applicants’ pro forma financial statements (Section Q). Generally, the application proposing the lowest average net revenue is the more effective alternative regarding this comparative factor since a lower average may indicate a lower cost to the patient or third-party payor.

**Projected Average Net Revenue per MRI Procedure – 3rd Full FY**

Applicant	Form C.1b	Form F.2b	Average Net Revenue per MRI
	MRIs	Net Revenue	
Cape Fear Valley Medical Center	11,028	\$7,642,527	\$693
Carolina Imaging	12,835	\$6,781,436	\$528

Source: Section Q Form F.2b of the respective applications

The application submitted by Carolina Imaging does not conform with all applicable statutory and regulatory review criteria. An application that does not conform to all applicable statutory and regulatory review criteria cannot be approved. In particular, as noted in Issue-Specific Comments below, the Carolina Imaging application projects unsupported increases in charity care which result in artificially understated net revenue. As such, Carolina Imaging’s projected net revenue per case is unsupported and cannot be used in a Comparative Analysis. Therefore, regarding this comparative factor, the application submitted by **CFVMC** is the most effective alternative.

**Projected Average Operating Expense per MRI Procedure**

The following table shows the projected average operating expense per MRI procedure in the third full fiscal year following project completion for each project. Generally, the application projecting the lowest average operating expense per patient is the more effective alternative regarding this comparative factor to the extent it reflects a more cost-effective service, which could also result in lower costs to the patient or third-party payor.

**Projected Average Operating Expense per MRI Procedure – 3rd Full FY**

Applicant	Form C.1b	Form F.2b	Average Operating Expense per MRI
	MRIs	Operating Expense	
Cape Fear Valley Medical Center	11,028	\$3,632,559	<b>\$329</b>
Carolina Imaging	12,835	\$4,252,341	\$331

Source: Section Q Form F.3b of the respective applications



CFVMC projects the lowest operating expense per MRI. The application submitted by Carolina Imaging does not conform with all applicable statutory and regulatory review criteria. An application that does not conform to all applicable statutory and regulatory review criteria cannot be approved. In particular, as noted in the application-specific comments below, Carolina Imaging’s projected MRI operating costs are unsupported and cannot be used in a Comparative Analysis as Carolina Imaging does not include reasonable support for their assumptions, projects that its MRI services represent a far greater share of its total facility’s revenues than its expenses, and does not increase radiologist salaries over eight years. Therefore, regarding this comparative factor, the application submitted by **CFVMC** is the most effective alternative.

**Summary**

Setting aside the issue of conformity, the following table lists the comparative factors and indicates whether each application was most effective, more effective, or less effective for each factor.

Comparative Factor	CFVMC	Carolina Imaging
Scope of Services	<b>More Effective</b>	Less Effective
Historical Utilization	<b>More Effective</b>	Less Effective
Geographic Location in the Service Area	Equally Effective	Equally Effective
Access by Service Area Residents	<b>More Effective</b>	Less Effective
Competition (Access to a New MRI Provider)	Equally Effective	Equally Effective
Projected Charity Care	<b>More Effective</b>	Less Effective
Projected Medicare	<b>More Effective</b>	Less Effective
Projected Medicaid	<b>More Effective</b>	Less Effective
Projected Avg Net Revenue per MRI Scan	<b>More Effective</b>	Less Effective
Projected Avg Operating Expense per MRI Scan	<b>More Effective</b>	Less Effective

As shown in the previous table, CFVMC was determined to be a more effective alternative for the following factors:

- Scope of Services,
- Historical Utilization
- Access by Service Area Residents,
- Projected Charity Care,
- Projected Medicare,
- Projected Medicaid,
- Projected Average Net Revenue per MRI Scan
- Projected Average Operating Expense per MRI Scan

Based on a comparative analysis presented above, the application submitted by **CFVMC** is the most effective alternative proposed in this review for one additional fixed MRI scanner for Cumberland County and should be approved.

The following pages provide a detailed analysis of the Carolina Imaging application and its non-conformity with multiple statutory review criteria.

**COMMENTS SPECIFIC TO CAROLINA IMAGING, LLC  
PROJECT I.D. M-012485-24**

The Carolina Imaging application fails to conform with the statutory review criteria based on the following:

**1. The Carolina Imaging application fails to demonstrate the need for an additional scanner at Carolina Imaging-Fayetteville given its existing 1.2T fixed MRI unit.**

Throughout its application, Carolina Imaging states that its proposed 1.5T MRI scanner is needed because it provides a safer and more effective alternative than its existing 3.0T MRI scanner. However, Carolina Imaging fails to demonstrate that its existing 1.2T MRI scanner cannot provide those same benefits.

On page 27 of its application, Carolina Imaging states “[s]afety and quality are two primary reasons that Carolina Imaging is seeking to acquire a new 1.5T fixed MRI scanner” and then discusses that [d]ue to its higher magnet strength, a 3T MRI unit should not be used for patients [with metal shrapnel, metal plates, or metal joint replacements] *as it has the potential to pull the metal in a patient’s body to the surface*. Carolina Imaging concludes that *“there is a gap that needs to be addressed, and the proposed 1.5T MRI unit is the best way to address it”* (page 27). However, Carolina Imaging never addresses its ability to use its existing 1.2T fixed MRI scanner to provide care for patients with metal artifacts in their bodies.

Similarly, Carolina Imaging states that its proposed 1.5T MRI unit is needed because “[u]sing a 3T MRI units for some patients increases SAR . . . [which] translates into internal heat for the patient” (page 27). Again, Carolina Imaging fails to address its ability to use its existing 1.2T fixed MRI scanner to provide care for patients who those patients at risk for increased SAR (Specific Absorption Rate).<sup>3</sup>

Throughout its application (see pages 27, 32, 39, 43, 55, 84, and page 3 of Section Q-Projected Utilization and Assumptions), Carolina Imaging cites the need for its proposed 1.5T fixed MRI scanner based on the need to care for patients with metal artifacts and/or at risk for increased SAR. In none of these instances does Carolina Imaging provide a demonstration that its existing 1.2T MRI unit cannot serve these patients.

Based on the discussion above, the Carolina Imaging application fails to demonstrate that the project is needed in accordance with Criterion 3. As such, **the Carolina Imaging application is non-conforming with Criteria 1 and 3.**

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<sup>3</sup> SAR is a measure of the rate at which energy is absorbed by the body when exposed to a radiofrequency (RF) electromagnetic field. It is measured in units of watts per kilogram of body weight and translates into internal heat for the patient.

**2. The Carolina Imaging application fails to adequately demonstrate the reasonableness of its projected utilization.**

Carolina Imaging fails to provide support for the reasonableness of the 3.64 percent growth rate used to project future MRI volume. As such, Carolina Imaging fails to demonstrate its projected utilization is based on reasonable or supported assumptions.

On page 3 of its Section Q-Projected Utilization, Carolina Imaging states “[i]n order to be conservative, Carolina Imaging utilized a growth rate of 3.64% to project unweighted MRI volume for the proposed project. The 3.64% growth rate is one half of Carolina Imaging’s historical CAGR. Considering the factors discussed in Carolina Imaging’s application, Section C, Carolina Imaging can reasonably project growth of 3.64% for the proposed project based on historical and current demand for MRI services, the substantial number of referring physicians utilizing Carolina Imaging’s services, the facility’s working partnership with the U.S. Military, and population growth and aging in the service area.” Carolina Imaging assumes that its MRI utilization will grow 3.64 percent from FY 2023 through FY 2028, or its project year three. In addition, Carolina Imaging provides a table demonstrating its historical utilization as follows:

		<b>Carolina Imaging - Historical Fixed MRI Utilization</b>			
		10/1/2019	10/1/2020	10/1/2021	10/1/2022
		9/30/2020	9/30/2021	9/30/2022	9/30/2023
<b>Outpatient</b>	Base	6836	7072	7289	8525
<b>Outpatient</b>	Complex	1857	1898	1929	2209
<b>Unweighted</b>	Total	8693	8970	9218	10734
<b>Percent Change</b>			3.20%	2.80%	16.4%
<b>CAGR</b>					7.28%

Source: Carolina Imaging internal data.

According to this data, Carolina Imaging’s Fiscal Year 2020 to 2023 Compound Annual Growth Rate (CAGR) for unweighted MRI scans is 7.28 percent (and the assumed growth rate of 3.64 percent is one half of that CAGR). However, that 7.28 percent CAGR is a result of Carolina Imaging’s one year 16.4 percent growth in MRI utilization from FY 2022 to 2023. In prior years, Carolina Imaging’s growth has been less than its projected growth rate of 3.64 percent: from FY 2020 to 2021, Carolina Imaging’s MRI utilization grew 3.2 percent and from FY 2021 to 2022, its MRI utilization grew 2.8 percent.

Carolina Imaging provides no discussion in its application of why its MRI utilization grew 16.4 percent over the one year period from FY 2022 to 2023 or why it would be reasonable to expect that year’s higher than historical growth to continue. Carolina Imaging does not provide any information in its application to show that the factors that cites for its growth (i.e., referring physicians, U.S. Military partnership, population growth and aging in the service area) changed in FY 2023 and contributed to its 16.4 percent growth in MRI utilization. As a result, Carolina Imaging’s projected growth rate of 3.64 percent through FY 2028, which is higher than two of its three prior year growth rates, is not based on reasonable or supported assumptions.

Based on the discussion above, the Carolina Imaging application fails to demonstrate that the project is needed in accordance with Criterion 3 and the performance standards in the MRI rules (10A NCAC 14C .2703). As such, the **Carolina Imaging application is non-conforming with Criteria 1, 3, 4, 5, 6, 8, and 18(a), as well as the performance standards at 10A NCAC 14C .2703.**

**3. The Carolina Imaging application fails to provide reasonable or adequate assumptions for its projected payor mix and charity care amounts.**

Carolina Imaging fails to provide support for the reasonableness of the 900 percent projected growth rate for Charity Care patients at both its facility and for its MRI services. As such, Carolina Imaging fails to demonstrate the proposed project’s contribution to meeting the health needs of medically underserved patients.

On pages 98, 99, and 101 of its application, Carolina Imaging provides its historical and projected payor mix for its facility and MRI services. As shown in the table below, Carolina Imaging assumes a shift of patients from Self Pay to Charity Care and no other changes from its historical to projected payor mix. The result is that Charity Care patients are projected to increase 900 percent and Self-Pay Insured patients are projected to decrease 55 to 60 percent.

	Historical (FY 2023)	Projected (FY 2028)	Percent Change
Self-Pay Uninsured Carolina Imaging Facility	1.6%	0.64%	-60.0%
Charity Care Carolina Imaging Facility	0.1%	1.00%	900.0%
Self-Pay Uninsured Carolina Imaging MRI Services	1.7%	0.77%	-54.7%
Charity Care Carolina Imaging MRI Services	0.1%	1.00%	900.0%

Source: Carolina Imaging Application pages 98 to 101.

Further, Carolina Imaging failed to provide any response to L.3.b which asks the applicant to “Describe the assumptions used to project each payor source.” As such, there is no basis provided by Carolina Imaging for its projected increase in the percentage of Charity Care patients and decrease in Self-Pay Uninsured patients.

Of note, these unsupported assumptions provide the basis for Carolina Imaging’s projected charity care patients in response to L.4.a as shown below.

4. **Charity and Reduced Cost Care**

- a. Will the facility or campus identified in Section A, Question 4, provide care to medically indigent or low-income patients at no cost to the patient (i.e., charity care)?

YES

If you answered yes, provide estimates of the total number of charity care patients to be served by the entire facility in the each of the first three full FYs of operation. Describe how the number was estimated.

	1 <sup>st</sup> Full FY	2 <sup>nd</sup> Full FY	3 <sup>rd</sup> Full FY
Estimated # of Charity Care Patients	120	124	128

The number of charity care patients were estimated based on the provision of 1.0% charity care service for the MRI. Carolina Imaging partners with Care Clinic to provide charity services.

See Carolina Imaging Application page 101.

As there is no basis for Carolina Imaging’s projected 1.0 percentage of Charity Care patients, its projected number of Charity Care patients in L.4.a is unsupported and unreasonable.

These unsupported assumptions are also evident in Carolina Imaging’s historical and projected financial statements. As shown below, according to its Forms F.2a and F.2b, Charity Care as a percentage of Gross Revenue will increase without any basis from 0.1 percent to 1.0 percent at its facility and for its MRI services.

**Carolina Imaging ALL SERVICES**

	Last Full FY	Interim Full FY	Interim Full FY	1st Full FY	2nd Full FY	3rd Full FY
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Total Gross Revenue	\$38,011,958	\$39,453,868	\$40,630,349	\$41,842,884	\$43,095,845	\$44,389,362
Charity Care	\$24,912	\$25,831	\$26,586	\$418,429	\$430,958	\$443,894
<b>Charity Care as % of Total Gross</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.0%</b>

Source: Carolina Imaging Application Forms F.2a and F.2b.

**Carolina Imaging MRI Services**

	Last Full FY	Interim Full FY	Interim Full FY	1st Full FY	2nd Full FY	3rd Full FY
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Total Gross Revenue	\$22,484,301	\$23,615,705	\$24,475,423	\$25,364,859	\$26,288,260	\$27,245,625
Charity Care	\$13,868	\$14,565	\$15,096	\$253,649	\$262,883	\$272,456
<b>Charity Care as % of Total Gross</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.0%</b>

Source: Carolina Imaging Application Forms F.2a and F.2b.

Further, Carolina Imaging failed to provide any discussion in its Financial Assumptions (the last page of its Application) to support these changes. Its assumptions for Deductions from Gross Patient Revenue are excerpted below:

<b>Deductions from Gross Patient Revenue</b>	Deductions from revenue for each payor group is based on the difference between our reimbursement rates by modality. Reimbursement rates are based on current contracts with each payor. Bad Debt is based on our historical experience at the proposed sites
Charity Care	
Bad Debt	
Contractual Adjustments	

These unsupported increases in charity care result in artificially understated net revenue amounts for Carolina Imaging. As such, Carolina Imaging’s projected net revenue per case is unsupported and cannot be used in a Comparative Analysis.

Based on the discussion above, the Carolina Imaging application fails to demonstrate the contribution of the proposed service in meeting the health-related need of medically underserved groups in accordance with Criterion 13. As such, the **Carolina Imaging application is non-conforming with Criterion 13.**

**4. The Carolina Imaging application fails to provide adequate assumptions to demonstrate the reasonableness of financial projections.**

Carolina Imaging fails to provide support for the reasonableness of its financial projections which project that its MRI services represent a far greater share of its total facility’s revenues than its expenses and do not increase radiologist salaries over eight years. As such, Carolina Imaging fails to demonstrate the reasonableness of its projections of costs and charges.

On Forms F.2a and F.2b, Carolina Imaging provides projected gross revenues, net revenues, and operating costs for both its total facility and MRI services, as summarized in the table below.

**Carolina Imaging MRI Revenues and Expenses as Percentage of All Services**

	Last Full FY	Interim Full FY	Interim Full FY	1st Full FY	2nd Full FY	3rd Full FY
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
All Services Gross Revenue	\$38,011,958	\$39,453,868	\$40,630,349	\$41,842,884	\$43,095,845	\$44,389,362
MRI Services Gross Revenue	\$22,484,301	\$23,615,705	\$24,475,423	\$25,364,859	\$26,288,260	\$27,245,625
<b>MRI as % of Total</b>	<b>59%</b>	<b>60%</b>	<b>60%</b>	<b>61%</b>	<b>61%</b>	<b>61%</b>
All Services Net Revenue	\$9,461,176	\$9,820,068	\$10,112,894	\$10,414,694	\$10,726,556	\$11,048,512
MRI Services Net Revenue	\$5,596,343	\$5,877,949	\$6,091,933	\$6,313,313	\$6,543,148	\$6,781,436
<b>MRI as % of Total</b>	<b>59%</b>	<b>60%</b>	<b>60%</b>	<b>61%</b>	<b>61%</b>	<b>61%</b>

COMPETITIVE COMMENTS ON 2024 CUMBERLAND COUNTY  
FIXED MRI SCANNER COMPETITIVE REVIEW  
SUBMITTED BY CAPE FEAR VALLEY MEDICAL CENTER

All Services Operating Costs	\$9,187,859	\$9,387,305	\$9,569,166	\$10,409,808	\$10,403,149	\$10,581,065
MRI Services Operating Costs	\$3,365,388	\$3,444,009	\$3,513,367	\$4,219,793	\$4,115,768	\$4,252,341
<b>MRI as % of Total</b>	<b>37%</b>	<b>37%</b>	<b>37%</b>	<b>41%</b>	<b>40%</b>	<b>40%</b>

Source: Carolina Imaging Application Forms F.2a and F.2b.

As shown above, Carolina Imaging MRI services have historical and projected revenues which range from 59 to 61 percent of gross and net revenues for the facility. By contrast, MRI operating costs range from 37 to 41 percent of total facility expenses. The financial assumptions provided by Carolina Imaging in its application do not provide any discussion of how operating costs were determined or allocated to MRI services from the total facility’s expenses. As such, it impossible to determine the reasonableness of its financial projections.

In addition, Carolina Imaging’s Form H shows that salaries for Radiologists will remain constant at \$450,000 from historical (FY 2023) to the 3<sup>rd</sup> Full FY (FY 2028), as excerpted below.

Form H Staffing	Current Staff			Projected Staff								
	As of 09/30/2023			1st Full FY			2nd Full FY			3rd Full FY		
	# of FTEs	Average Annual Salary per 1 FTE**	Total Salary *	# of FTEs	Average Annual Salary per 1 FTE**	Total Salary *	# of FTEs	Average Annual Salary per 1 FTE**	Total Salary *	I	Average Annual Salary per 1 FTE**	Total Salary *
B	C	D=B*C	E	F	G=E*F	H	I	J=H*I	K	L	M=K*L	
Radiologist	3	450,000	\$1,350,000	3	450,000	\$1,350,000	3	450,000	\$1,350,000	3	450,000	\$1,350,000
Chief Tech	1	112,556	\$112,556	1	122,993	\$122,993	1	126,682	\$126,682	1	130,483	\$130,483

By contrast, Carolina Imaging projects that salaries for other positions (e.g., Chief Tech) will increase three percent annually.

Based on these issues, Carolina Imaging’s projected MRI operating costs are unsupported and cannot be used in a Comparative Analysis. Further, the Carolina Imaging application fails to demonstrate the reasonableness of its projections of costs and charges in accordance with Criterion 5. As such, the **Carolina Imaging application is non-conforming with Criterion 5.**

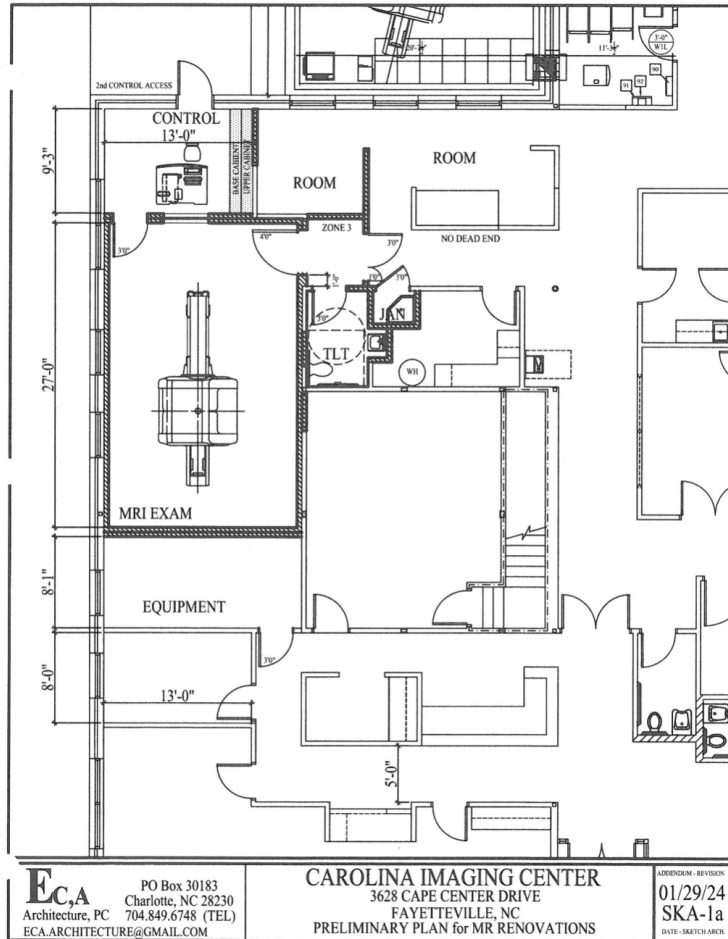
**5. The Carolina Imaging application fails to provide all the information necessary to conduct the review.**

Carolina Imaging fails to provide “before” renovation drawings that can be used to demonstrate that the design represents the most reasonable alternative, and that the proposed project will not result in the reduction or elimination of a service.

In its response to Section K.2 which specifies, “Include drawings that show the “before” and “after” renovation,” Carolina Imaging states “See Exhibit K for a facility floorplan” (page 94).



Carolina Imaging's Exhibit K, excerpted below, only includes an "after" renovation drawing. There is no information in the application or in this Exhibit to specify the purpose of the existing space where the proposed MRI unit will be located.



As such, there is insufficient information in the application to determine that the design represents the most reasonable alternative or that the proposed project will not result in the reduction or elimination of a service. As such, the **Carolina Imaging application is non-conforming with Criterion 12 and may be non-conforming with Criterion 3a.**

**6. The Carolina Imaging Application fails to demonstrate that the proposed health services accommodate health professional training programs.**

The Carolina Imaging application fails to provide documentation or reasonable support that the proposed MRI unit will be available to health professional training programs. In its response to Section M.2 on page 105, Carolina Imaging states that "*[i]n a planned partnership with Edgecombe Community College, the MRI technology program students will have the opportunity to train at Carolina Imaging.*" Carolina Imaging fails to provide any documentation or existing agreements to demonstrate this planned partnership.

Based on this issue, Carolina Imaging has failed to demonstrate that the proposed service will accommodate the clinical needs of health professional training programs in the area. As such, the **Carolina Imaging application is non-conforming with Criterion 14.**