

Technology and Equipment Committee Agency Report
Petition for a Special Need Adjustment for the Conversion of an Approved or Existing Fixed MRI Scanner to a Mobile MRI Scanner
2024 State Medical Facilities Plan

Petitioner:

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Request:

Appalachian Regional Healthcare System (ARHS or “Appalachian Regional”) requests an adjusted need determination “for the conversion of an approved or existing fixed MRI scanner in Watauga County to a mobile MRI scanner” in the *2024 State Medical Facilities Plan (SMFP or “Plan”)*.

Background Information:

Chapter Two of the *SMFP* provides, in relevant part, that “[a]nyone who finds that the *North Carolina State Medical Facilities Plan* policies or methodologies, or the results of their application, are inappropriate may petition for changes or revisions. Such petitions are of two general types: those requesting changes in basic policies and methodologies, and those requesting adjustments to the need projections.” Petitions requesting adjustments to need projections are reviewed in the summer. Any person may submit a certificate of need (CON) application for a need determination in the *Plan*. The CON review could be competitive and there is no guarantee that the petitioner would be the approved applicant.

The Petitioner is concerned with access to mobile MRI services in Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, and Yancey counties, which it refers to as the “High Country” region in the petition. The *SMFP* enumerates three types of MRI scanners in Tables 15E-1 and 15E-2, dependent upon ownership of the scanner: hospital fixed, free-standing fixed, and mobile. Hospitals and non-hospital providers may apply for a CON for either fixed or mobile machines. As shown in Table 1, there are no mobile MRIs operating in the High Country. Four hospitals operate fixed MRIs. The sole free-standing fixed MRI in the High Country is not yet developed, but it has been CON-approved for the Watauga County service area. The intended site for it is proximally located to the Watauga County’s existing hospital fixed MRI at Watauga Medical Center (WMC). The Petitioner’s request is to convert the freestanding fixed MRI to a mobile MRI

so that, in the Petitioner’s view, its capacity can be more “effectively and efficiently” used across the High Country region.

Table 1. Access to MRI Services in the “High Country” Region

	Number of Fixed MRIs in Hospitals	Number of Freestanding Fixed MRIs	Mobile MRI Sites
Alleghany	0	0	0
Ashe	1	0	0
Avery	0	0	0
Mitchell	1	0	0
Watauga	1	1*	0
Wilkes	1	0	0
Yancey	0	0	0

Source: *Proposed 2024 SMFP*

* This scanner is CON-approved, but it is not yet in operation.

In the Spring of 2023, AHRS requested the addition of a new policy to the *2024 SMFP*. The proposed policy language stated that with certain stipulations, facilities with an existing or approved fixed magnetic resonance imaging (MRI) scanner would be able to apply for a CON to convert the existing or approved fixed MRI scanner to a mobile MRI scanner. In its response to the petition, the Agency noted that the summer petition process is an opportunity to request an adjusted need determination for a mobile MRI scanner in a specific region. The State Health Coordinating Council denied the petition on the basis that the statewide diversity in MRI scanner performance across scanner type and geography would render such a policy an unsuitable approach to increase access.

Analysis/Implications:

The Petitioner asserts that there will not be sufficient need for a mobile MRI scanner once the already-approved fixed MRI scanner in Watauga County is developed. According to the *2023 SMFP*, the planning threshold in a service area where there are at least two fixed MRIs the threshold for a need determination is 4,992 procedures per fixed MRI machine, and the threshold is 4,368 procedures where there is only one fixed MRI in the service area. As shown in Table 15E-2 in the *Proposed 2024 SMFP*, Watauga County’s average annual change rate is 0.1271. Based on this rate, and assuming the CON-approved MRI would begin operating next year, two fixed MRIs will be able to handle the volume in Watauga through 2029 (Table 2). This finding supports the Petitioner’s assertion that the development of both a second fixed MRI and mobile scanner would be a duplication of services.

Table 2: Watauga County MRI Scans and Need Determination

Data Year*	2019	2021	2022	Average Annual Growth Rate	2023	2024	2025	2026	2027	2028	2029	2030
Scans	4,348	5,286	5,490	12.71%	6,188	6,974	7,861	8,860	9,986	11,255	12,686	14,298
Scans/machine	4,348	5,286	5,490		3,094	3,342	3,609	3,898	4,209	4,546	4,910	5,303
Threshold	4,368	4,368	4,368		4,992	4,992	4,992	4,992	4,992	4,992	4,992	4,992

Source: *Proposed 2024 SMFP*

*The 2020 data year was excluded due to impacts of the COVID-19 pandemic.

Patient origin data on the fixed MRI in Watauga County indicates that it primarily serves patients from Ashe, Avery and Watauga Counties. Additionally, the Petitioner reports that travel in the High Country can be challenging. According to Patient Origin Reports, on average, over 30% of Ashe County residents and about 60% of Avery County residents who sought MRI services between 2018 -2022 have traveled to WMC. Also, as shown in Table 3, on average, 45% of WMC total MRI patients are from the Watauga, but an additional 36% migrate from Avery and Ashe Counties.

Table 3: Total Fixed MRI Procedures at Watauga Medical Center by Patient Origin

Service Area	Data Year				
	2018	2019	2020	2021	2022
Watauga	47.2%	47.8%	44.5%	41.7%	40.8%
Avery	16.9%	17.7%	19.2%	21.4%	22.1%
Ashe	16.4%	15.7%	17.9%	17.3%	17.4%

Source: 2019-2023 Patient Origin Reports

Therefore, one impetus for the petition is an increasingly aging population in Watauga, Avery and Ashe Counties. Appalachian Regional contends that because of the advanced age of the population as compared to the state and the challenging terrain, a mobile scanner would provide better access to older patients. As shown in Table 4, the proportion of the population over the age of 65 is projected to grow in all three counties, though an overall decline in population is expected for Avery County. Also, the percentage of the population aged 65 and older in these three counties will have grown by 6.5% by 2030.

Table 4. Projected Change in Population, 65+ Years

County	2020 Population	Percentage	2030 Population	Percentage	2020-2030 Change
Avery	17,562	22%	17,255	26%	-307
Ashe	27,707	26%	28,096	28%	389
Watauga	57,564	17%	64,150	18%	6,586
Total	102, 833		109,501		

Source: [North Carolina Population 65 years and over, percent by County \(indexmundi.com\)](https://indexmundi.com)

Patient origin reports also indicate that typically, around 3% or fewer MRI patients receiving services at WMC are from counties aside from Avery and Ashe. This is likely because other MRIs in neighboring counties are providing services to those patients. For example, in 2022, over 43% of Alleghany County MRI patients received services in Surry County; over 32% of Mitchell County MRI patients and over 50% of Yancey County MRI patients received services in Buncombe County. Also, while there is a fixed MRI in Wilkes County, its residents were next most likely to have MRI procedures done in Forsyth County. This suggests that if Watauga’s fixed MRI were converted to a mobile, it would most efficiently serve Ashe, Avery and Watauga Counties.

Agency Recommendation:

The Agency supports the standard methodology for fixed and mobile MRI equipment. Given available information and comments submitted by the August 9, 2023 deadline, and in consideration of factors discussed above, the Agency recommends approval of the Petition for a special need determination for the conversion of an approved or existing fixed MRI scanner to a mobile MRI scanner. However, the Agency stipulates that the mobile machine can only serve sites in Ashe, Watauga, and Avery counties.