
MRI Methodology Workgroup
March 2, 2022
Recommendations to the N. C. State Health Coordinating Council

The Magnetic Resonance Imaging (MRI) Scanner Methodology Workgroup was appointed by Dr. Sandra Greene and co-chaired by Dr. Lyndon Jordan. The workgroup consisted of nine appointed members representing the MRI community (see Attachment for list of members).

The workgroup was charged to:

1. Review the current MRI methodology and assess its appropriateness for determining need in all areas of the state. Activities should include:
 - a. Lessons learned from petitions for MRIs submitted to DHSR in the past 10 years.
 - b. Gather input from constituencies to understand how the current methodology is working and to identify potential problems.
 - c. Review each variable in the need methodology formula and consider whether changes are warranted.
 - d. Examine additional available data to consider whether to include other factors in a revision.
 - e. Consider both mobile and fixed scanners in the review and analysis.
 - f. Consider how or whether advancements in MRI technology may influence the methodology
2. If the workgroup finds that changes in the methodology are needed, prepare recommendations to the Technology and Equipment Committee of the SHCC for their deliberations in Spring, 2022, for possible inclusion in the 2023 SMFP.

The workgroup met on November 15, 2021, December 15, 2021, January 19, 2022, and February 15, 2022.

Recommendations

Recommendation 1: Change the nomenclature in the current methodology to describe the four types of scans used in the methodology. Scans without contrast or IV sedation will be referred to as “base” outpatient or “base” inpatient scans. Scans with contrast or IV sedation will be referred to as “complex” outpatient or “complex” inpatient scans. The only substantive change is that sedation is now defined specifically as “intravenous” sedation.

Recommendation 2: Change the procedure times to:

- 33 minutes for a base outpatient procedure
- 40 minutes for a complex outpatient procedure

- 60 minutes for a base inpatient procedure
- 70 minutes for a complex inpatient procedure.

Recommendation 3: Adjust the annual operational capacity of MRI scanners to reflect the new procedure times in Recommendation 2. The new operational capacity is an average of 1.8 base outpatient scans per hour, for a total of 6,240 scans per year. The annual operating assumptions do not change; MRI scanners are assumed to operate 52 weeks a year for 66 hours per week.

Recommendation 4: Project need three years beyond the current reporting year. For example, the current reporting year for the 2023 SMFP is 2021; thus, the methodology projects need for 2024.

Recommendation 5: Use three reporting years of data as the basis upon which to project need. Using three years of data helps balance the effects of years with unusually high or low utilization.

Recommendation 6: Include population growth for the three reporting years. Service areas with population decline during the three-year “look-back” period shall be considered to have 0% growth.

Recommendation 7: Use the following utilization thresholds to calculate need determinations:

- 80% utilization (80% of 6,240) or 4,992 adjusted scans for service areas with at least two fixed scanners.
- 70% utilization or 4,368 adjusted scans in service areas with one fixed scanner.
- 30% utilization or 1,872 adjusted scans in service areas with no fixed scanners.

**Attachment
 Workgroup Members**

Mr. Issack Boru	Chief MRI Technologist, Duke University Hospital
Ms. Kelli Collins	CEO, Greensboro Imaging (SHCC Member)
Ms. Allison Farmer	CEO, EmergeOrtho
Ms. Susan Hawkins	Senior Director of Operations, Cardinal Points Imaging
Ms. Tina Hinshaw	Regional VP, Southeast Operations, Alliance Healthcare Services
Dr. Satish Mathan	President, Managing Partner, Raleigh Radiology
Mr. Christopher Murphy	VP, Development, MedQuest
Mr. Todd Smiley	Director of Imaging Services, UNC Health
Dr. Christopher Whitlow	Interim Chair, Dept. of Radiology, Atrium/Wake Forest Baptist