Acute Care Committee Agency Report Adjusted Need Petition for the Wake Operating Room Service Area in the 2022 State Medical Facilities Plan

Petitioner:

Rex Hospital, Inc. 4420 Lake Boone Trail Raleigh, North Carolina 27607

Contact:

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Request:

Rex Hospital, Inc. (UNC Rex) requests a special need determination for six ORs specifically designated for existing licensed acute care hospitals in the Wake County service area in the 2022 State Medical Facilities Plan (SMFP or "Plan").

Background Information:

Chapter Two of the *SMFP* provides 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." The annual planning process and timeline allow for submission of petitions requesting adjustments to need projections during the comment period for the proposed SMFP in the summer. This includes petitions for adjustments based on a belief that "unique or special attributes of a particular geographic area or institution give rise to resource requirements that differ from those provided by application of the standard planning procedures and policies...." It should be noted that 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 current OR need determination methodology was enacted within the 2018 SMFP. The previous methodology calculated need determinations using service area-level data. The current methodology utilizes facility-level data to project need. It calculates service area need determinations by first subtracting each facility's adjusted planning inventory from its projected number of ORs required to determine the facility's surplus or deficit. Next, the deficits and

surpluses of each facility within the system are totaled to obtain the projected number of ORs for the health system. Each health system's total is rounded according to the number of ORs in the health system. Finally, all health system deficits are added together, and placeholders for need determinations from previous Plans are deducted to arrive at the service area need. None of the methodology's calculations were adjusted to account for potential impacts on OR utilization during 2020 caused by the COVID-19 pandemic.

The Wake County service area has four hospitals: Duke Raleigh, operated by Duke University Health System; Rex Hospital, operated by UNC Health; WakeMed Hospital and WakeMed Cary Hospital, both operated by WakeMed Health & Hospitals. These hospitals operate 82 of 114 total licensed ORs in the service area. The *2021 SMFP* showed a need determination for 3 ORs in Wake County. According to the OR need determination methodology in the *Proposed 2022 SMFP*, there is not a projected need for ORs in Wake County.

Analysis/Implications:

According to the Petitioner, the practice of shifting outpatient surgical cases to ambulatory surgical center (AMSU) settings in Wake County has resulted in higher concentrations of complex outpatient cases at hospitals, and consequently, highly utilized ORs. The Petitioner states that while OR utilization in hospitals has been responsible for creating need determinations in Wake County, the CON review process usually favors AMSUs over hospitals, partly because of their lower cost. Since the new methodology was first used in the *2018 SMFP*, there have been need determinations for a total of 11 ORs in Wake County. Each OR was initially awarded to AMSUs, although two ORs were later awarded to UNC Rex in a settlement agreement. UNC Rex licensed these two ORs in March 2021.

Agency staff examined the total case times reported by hospitals and AMSUs in the service area for the 2016 through 2019 data reporting years. As shown in Table 1, based on the median of average reported case times, even as AMSUs experienced slight increases, ambulatory case times have increased at a greater rate in hospitals. The Agency has no data on the acuity or complexity of cases, although it is logical that higher acuity/complexity cases would be performed at hospitals.

Table 1. Wake County ORs, Median of Average Reported Case Times, Data Years 2016 – 2019*

Facility Type	Surgical Type	2016	2017	2018	2019	% change	CAGR
AMSUs	Ambulatory	73.0	71.6	73.8	74.0	1.4	0.4
Hospitals	Inpatient	172.8	185.7	188.9	188.0	8.5	2.8
	Ambulatory	116.0	115.3	128.2	129.2	11.3	3.6

*Includes four AMSUs that operated for the entire period of 2016-2019.

The OR need methodology projects need under the assumption that the average OR will be staffed at least 75% of its available time. On this basis, the methodology calculates a number of "Standard Operating Room Hours Per OR" for each facility according to the facility's type. In light of the potential impacts of the COVID pandemic on OR utilization, Agency staff examined 2019 total adjusted surgical hours based on surgical case times reported on Wake County's 2020 Hospital

LRAs. Table 2 shows that Wake County hospitals overall are approaching the 75% utilization threshold. In particular, Duke Raleigh, Rex and WakeMed's operating room hours either exceeded or approached the thresholds for their facility types.

Hospital	Number of Licensed ORs	Total Operating Room Hours	Operating Room Hours Per OR	Standard Operating Room Hours Per OR (75% Utilization)	% Total OR Hours of Standard Hours per OR
Duke Raleigh	15	29,103	1,940	1,755	111%
Rex	28	52,686	1,882	1,950	96%
WakeMed	28	49,129	1,755	1,950	90%
WakeMed Cary	11	9,372	852	1,500	57%
TOTALS	82	140,290	6,428	7,155	90%

 Table 2. Wake County Hospitals' OR Utilization, Data Year 2019

Source: 2021 SMFP

Despite WakeMed Cary's relatively low utilization rate in FY 2019, its pre-COVID utilization trends indicate strong growth in OR utilization (Table 3). OR utilization growth in Wake's hospitals overall mirrors the population growth rate of the Wake County service area (CAGR = 1.9%).

Hospital	FY 2016	FY 2017	FY 2018	FY 2019	CAGR
Duke Raleigh	2,343	2,321	1,818	1,940	-6.0%
Rex	1,552	1,670	1,894	1,882	6.6%
WakeMed	1,696	1,572	1,711	1,755	1.1%
WakeMed Cary	636	754	841	852	10.2%
TOTALS	6,227	6,317	6,264	6,428	1.1%

Table 3. Wake County Hospitals' Total OR Hours per OR, Data Years 2016 – 2019

Source: 2021 SMFP

The Petitioner asserts that a need adjustment for six ORs in Wake County is appropriate because of the outcomes of the need methodology calculation in the 2021 SMFP. As a point of clarification to assertions made in the Petition, the 2021 SMFP did not reflect a need for six additional ORs. Rather, it indicated a *deficit* of six ORs, based on utilization. The deficit was driven by a 1.86 OR deficit the Duke University Health System, a 4.17 OR deficit in UNC Health and a 0.27 OR deficit at an AMSU. The calculated deficit was offset by a prior need determination of three ORs in the 2020 SMFP, leading to a need determination for three ORs in the 2021 SMFP. Also, in the 2021 SMFP, OR surpluses were calculated for WakeMed facilities (1.50 ORs) and for almost all the AMSU facilities unaffiliated with a health system. However, as noted above, the methodology only accounts for deficits when determining a service area's need.

Agency staff reviewed the OR deficits and surpluses of Wake County's hospitals since the implementation of the current OR need determination methodology. On average, these hospitals have experienced a deficit of 2.30 ORs (Table 4).

	2018 SMFP	2019 SMFP	2020 SMFP	2021 SMFP	Average OR Deficit (+) /Surplus (-)
Duke Raleigh Hospital	6.77	6.56	1.86	2.86	4.51
Rex Hospital	3.95	5.93	5.50	2.11	4.37
WakeMed	3.47	1.53	4.66	5.14	3.70
WakeMed Cary Hospital	-3.93	-2.99	-3.30	-3.27	-3.37
	2.30				

Table 4. Wake Hospital OR Surpluses and Deficits, 2018 -2021 SMFPs*

*Corresponds to Data Years 2017 - 2019

Agency Recommendation:

UNC Health requests a need determination for six ORs in the Wake County service area designated specifically for existing licensed hospitals. The impetus for this Petition is a trend of CONs for ORs being awarded to AMSU facilities despite high utilization in hospitals. A review of Wake County hospital and AMSU OR data suggests that hospital ORs may be experiencing growth in utilization due to a higher concentration of more complex ambulatory surgical cases. The Agency does not support specifically designating OR need determinations for a particular type of facility. Thus, given available information and comments submitted by the August 11, 2021 deadline, and in consideration of factors discussed above, the Agency recommends denial of the Petition to include a need determination for six ORs to be designated for existing licensed hospitals in the Wake County service area. Rather, the Agency recommends adding a need determination for two ORs in the Wake County service area in the 2022 SMFP.