

## PETITION

### Petition for Adjusted Need Determination for the 2022 State Medical Facilities Plan for One Additional Operating Room in Wake County at a Level III Trauma Center

#### Petitioner

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#### Statement of the Requested Adjustment

WakeMed respectfully petitions the State Health Coordinating Council (SHCC) to adjust the 2022 State Medical Facilities Plan (SMFP) to include a need determination for one (1) operating room in Wake County for the purpose of providing emergent trauma surgery at a Level III Trauma Center.

#### Reasons for the Proposed Change

The Proposed 2022 State Medical Facilities Plan identifies a need determination for zero (0) operating rooms in Wake County. The current standard methodology fails to recognize the true operating room need of a Level III Trauma Center in one significant way, which has disadvantaged WakeMed Cary Hospital for the past several review cycles for operating rooms in the Wake County service area.

#### Level III Trauma Centers Cannot Exclude an Operating Room for Purposes of Need Calculations

A Level III Trauma Center is substantially prejudiced by the Assumptions of the Methodology. Unlike Level I and Level II Trauma Centers, Level III Trauma Centers cannot exclude one operating room from its planning inventory when applying the Operating Room Standard Need Methodology. Specifically, Assumption 2 states:

*2. The planning inventory and need determination calculation exclude one operating room for each Level I and Level II trauma center, and one operating room for each designated burn intensive care unit.*

This methodology favors Level I and Level II Trauma Centers, despite no significant differences in how they operate. A Level III Trauma Center has the same commitment to the community,

EMS, and medical providers, and as such also reserve an operating room to accommodate unscheduled, emergent trauma cases that are transported to the facility.

The American College of Surgeons Committee on Trauma, which develops quality standards and best practice guidelines for trauma centers, outlines the requirements of Level I, Level II, and Level III designations. The chief difference between a Level II and a Level III Trauma Center is that a Level II Trauma Center must have an operating room “staffed and ready time” within fifteen minutes, while a Level III Trauma Center is required to have an operating room “staffed and ready time” within thirty minutes. Operationally, the difference between these two levels is negligible, as an operating room is still required to be left unscheduled. This inherent bias strongly favors Level I and Level II Trauma Centers, without recognizing the increasing acuity being shifted to Level III Trauma Centers from Level I and Level II Trauma Centers.

According to the North Carolina Department of Health and Human Services’ Office of Emergency Medical Services (OEMS), there are nine Level I and Level II Trauma Centers in North Carolina. Of those, three centers are within a thirty-minute radius of the only Level III Trauma Center in Wake County. As mentioned above, a Level III Trauma Center must “staff and ready” an operating room within thirty minutes, effectively putting those three Level I Trauma Centers within the transfer radius. Furthermore, due to increased acuity seen at Level I and II Trauma Centers, there has been a concerted effort to decompress those trauma centers to accommodate higher acuity patients. As a result, lower acuity patients are typically triaged to Level III Trauma Centers, increasing the volume and acuity in the operating rooms of those facilities.

Adding to the projected strain on the operating rooms at Wake County’s only Level III Trauma Center will be the projected population growth rates. Wake County is expected to grow by 103,127 from 2021-2026, a 9.2 percent increase, to over 1.2 million residents. Please see the following table.

**Wake County Projected Population  
2021-2026**

| <b>Year</b>            | <b>Total<br/>Population</b> |
|------------------------|-----------------------------|
| 2021                   | 1,117,556                   |
| 2022                   | 1,137,863                   |
| 2023                   | 1,158,291                   |
| 2024                   | 1,178,919                   |
| 2025                   | 1,199,735                   |
| 2026                   | 1,220,683                   |
| Percent Change 2021-26 | 9.2%                        |
| CAGR% 2021-26          | 1.78%                       |
| Numeric Change 2021-26 | 103,127                     |

Source: N.C OSBM

This projected growth will place an even greater emphasis on lower level trauma cases being directed to Level III Trauma Centers for the most appropriate level of care.

### WakeMed Cary Hospital

In August 2019, WakeMed Cary Hospital was officially designated as a Level III Trauma Center by the North Carolina OEMS. According to the Emergency Medical Services and Trauma Rules found in 10A NCAC 13P.0100, *et seq.*, a Level III Trauma Center is defined as “a hospital that provides assessment, resuscitation, emergency operations, and stabilization, and arranges for hospital transfer as needed to a Level I or II trauma center”. WakeMed Cary joined WakeMed Raleigh in the Capital Regional Advisory Committee (CapRAC), serving Wake, Johnston, Harnett, Franklin and Lee Counties. The growing population of Wake County, particularly western and southern Wake County, prompted WakeMed to develop additional trauma resources at WakeMed Cary. The Level III program at WakeMed Cary supports and complements the Level I program at WakeMed Raleigh Campus, as well as other designated Trauma programs at other hospitals in central North Carolina and across the state.

Since its designation, Trauma case volumes at WakeMed Cary have grown steadily. In FY 2020, WakeMed Cary reported 999 patients in its Trauma Registry, growing from 866 cases in FY 2019, an increase of 15.4 percent. When the first eight months of FY 2021 (October 2020-May 2021) are annualized, WakeMed Cary is on track to treat 1,117 trauma patients, a 11.8 percent increase in total cases from the previous year. These volumes are evidence of the local first-responder community’s confidence in the program. Local first responders, including Wake County EMS, Johnston County EMS, and Harnett County EMS, now transport appropriate trauma cases to WakeMed Cary, thereby shortening the transport time to a trauma facility for many residents of these counties, and allowing EMS providers to spend less time in transit.

Although WakeMed Cary’s trauma program has a relatively short history, certain trends have become apparent. In FYs 2019-2020, approximately 32 percent of total trauma cases that arrived at WakeMed Cary had a surgical procedure. In prior years, many of these patients and their resultant surgical cases would have been treated at other facilities. Please see the following chart.

The development of a formal Trauma program at WakeMed Cary has increased the need for additional OR capacity. From a pragmatic standpoint, the Level III Trauma designation necessitates that one operating room be available at all times, and free of elective and emergent cases. It is not feasible to schedule elective cases in every OR at WakeMed Cary, nor to fill all the licensed ORs with a combination of elective and emergent cases at any one time, because at least one OR must be available at all times for a trauma case. Were WakeMed Cary to do this, it would not be able to meet the Level III standards, set forth by the American College of Surgeons, of having an OR ready and staffed within 30 minutes for a trauma case.

Due in part to the biases in the methodology described above, WakeMed Cary Hospital’s CON applications for additional OR capacity have been denied in the Wake County operating room

review cycles in 2019 and 2020, which granted a total of five operating rooms. WakeMed Cary is Wake County's only Level III Trauma Center which is located in close proximity to three Level I Trauma Centers which are within the precise timeframe that would identify a case as appropriate for a Level III Trauma Center. Other Level III Trauma Centers in the state are either stand-alone in more rural areas or concentrated in the Metrolina RAC which has one Level I Trauma Center.

WakeMed Cary has felt the surge in both volume and acuity from both sides, as a result of explosive population growth in southwestern Wake County, as well as the decompression of patients coming from Level I Trauma Centers. While the methodology will impose the same biases and constraints on other Level III Trauma Centers in high growth areas, Wake County is in a uniquely perilous situation as its only Level III Trauma Center will continue to feel the strain from high population growth, decompression from Level I Trauma Centers, and a methodology that undervalues the operational conditions of its accreditation.

### **Alternatives to This Petition**

1. Status Quo: Maintaining the status quo is not a feasible option. As patients have postponed routine care due to COVID-19, many patients are returning to healthcare facilities with more acute needs. This has increased demand in the operating rooms, which is compounded by the necessity of keeping one operating room unscheduled to accommodate trauma cases in the required amount of time. Due to projected population growth rates and an increased effort to decompress less acute care from Level I and II Trauma Centers to lower level settings, the expected increase of patients seeking care at Level III Trauma Centers will be exponential and permanent.
2. Development of nearby Ambulatory Surgical Centers (ASCs): The development of an ASC will not alleviate the intense need for the operative services found in a hospital-based, Level III Trauma Center, because ASCs are for scheduled elective cases and are not set up operationally or physically to accommodate emergent cases

Due to the unique combination of circumstances outlined above that continue to challenge Wake County's only Level III Trauma Center, and the high expected growth, the only feasible option is to allocate one additional operating room in the 2022 State Medical Facilities Plan to meet the need of patients with emergent surgical needs.

### **Evidence of No Unnecessary Duplication**

According to the North Carolina Department of Health and Human Services there are eight Level III Trauma Centers in North Carolina. Of those, two are located at military hospitals operated by the Federal government and not open to the public. Of the six Level III centers at general acute care hospitals., only two are located in central North Carolina, which serve all of central and eastern North Carolina. The next closest Level III Trauma Center to Wake County is Cape Fear Valley Medical Center, which is approximately 71 miles away.

Due to the emergent nature of trauma cases routed to Level III Trauma Centers, and the necessity of an operating room to be utilized within thirty minutes, it would be impossible for there to be duplication of resources with the next closest comparable facility located 1.5 hours away. Please see Exhibit 1.

## **Consistency with Basic Principles of the SMFP**

### Safety and Quality

The requested adjustment will increase safety and quality for operative services by allowing the Level III Trauma Center in Wake County to add operating room capacity to treat the growing number of emergent trauma cases presenting to the hospital. In allowing for an additional operating room, urgent and elective cases can be performed in a timelier manner, rather than being put on hold to accommodate emergent cases. This will allow emergency medical services to transport more trauma cases to WakeMed Cary Hospital with confidence, knowing that an operating room will always be available.

### Access

The requested adjustment will increase access so to better accommodate EMS transports to WakeMed Cary, as well as cases that come in through the Emergency Department. This will allow for better clinical outcomes and provide EMS with the ability to more accurately triage patients to a Level III Trauma Center when that level of care is more appropriate.

### Value

The requested adjustment will increase value to the patient by decreasing unnecessary costs. If Wake County's only Level III Trauma Center is required to go on diversion for lack of operating room capacity, patients may be transported greater distances to Level I trauma centers. This could be an unnecessarily high-level care setting which would incur higher costs for the patient. By providing Wake County an additional Level III Trauma Center operating room, this will provide the appropriate level of care, in the most appropriate setting for that patient and maximize value.

## **Summary**

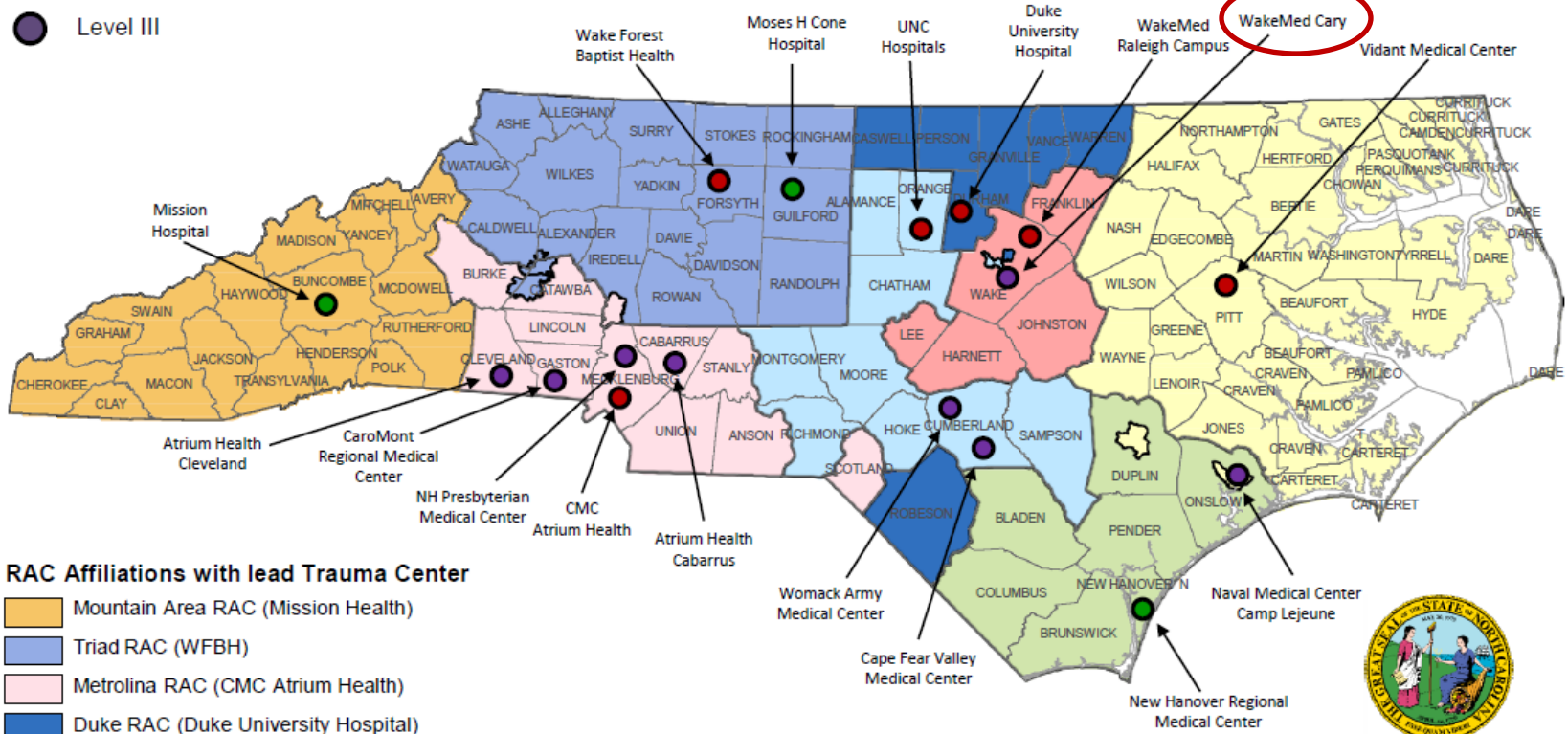
WakeMed believes that this petition will bring parity between all levels of Trauma Centers with regard to application of the Operating Room Need Methodology. Continued population growth and growing trauma center volumes in Wake County warrants that all Trauma Centers have the ability to exclude one operating room from their planning inventor. WakeMed appreciates the SHCC's careful consideration of this request and urges that it be approved.

Exhibit 1:

# North Carolina Trauma Centers and Trauma RAC affiliations by Hospital

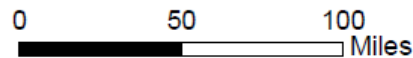
## NC Trauma Centers

- Level I
- Level II
- Level III



## RAC Affiliations with lead Trauma Center

- Mountain Area RAC (Mission Health)
- Triad RAC (WFBH)
- Metrolina RAC (CMC Atrium Health)
- Duke RAC (Duke University Hospital)
- Mid Carolina RAC (UNC Hospitals)
- Capital RAC (WakeMed)
- Eastern RAC (Vidant Medical Center)
- Southeastern RAC (NHRMC)



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