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October 1, 2025

Ms. Michaela Mitchell, Chief
Mr. Greg Yakaboski, Project Analyst
Healthcare Planning and Certificate of Need Section
Division of Health Service Regulation
Via Electronic Mail to:
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RE: Comments on September 1, 2025 Wake County Acute Care Bed CON Review

Project ID#	Applicant	Facility	Request
J-012671-25	WakeMed	WakeMed	164 beds
J-012672-25	WakeMed	WakeMed North Hospital	25 beds (COS)
J-012673-25	WakeMed	WakeMed Garner Hospital	78 beds (COS)
J-012677-25	Rex Hospital, Inc.	UNC Health Rex	106 beds
J-012680-25	Rex Hospital, Inc.	UNC Health Rex Wake Forest Hospital	50 beds
J-012686-25	Novant Health Knightdale Medical Center, LLC & Novant Health Inc.	Novant Health Knightdale Medical Center	26 beds
J-012690-25	Duke University Health System, Inc.	Duke Raleigh Hospital	101 beds
J-012689-25	Duke University Health System, Inc.	Duke Cary Hospital	120 beds (COS and COR)

Dear Ms. Mitchell and Mr. Yakaboski:

Thank you for considering WakeMed's comments regarding the 8 CON applications filed in the September 1, 2025 review cycle, in response to the 267 acute care beds allocated to Wake County in the 2025 SMFP. This is a challenging review not only for the number of applications, but also because the projects fundamentally differ so greatly from one another. Specifically, acute care bed requests range from creation of a new micro-hospital to additional beds at the county's Level I Trauma Center. The differences render many of the Comparative Review Factors typically used by the Agency inconclusive in this review.

Wake County has a desperate need for more acute care beds. Three applications submitted in this review cycle, WakeMed Raleigh, WakeMed North and UNC Rex Main, provide information that shows patients qualified for admission who are being treated in makeshift areas within existing facilities. This issue deserves priority consideration. WakeMed Raleigh is central to Wake County and accessible to major transportation arteries. Being located in a transportation hub makes service to the outskirts of Wake County viable and in some cases, more efficient.

The need for 267 beds identified in the 2025 SMFP is primarily the result of forecast utilization at WakeMed system hospitals. All three of WakeMed's existing hospitals are fully utilized and in desperate need of additional licensed bed capacity, even after recently awarded beds still under appeal are taken into consideration. In contrast, UNC Rex Holly Springs is underutilized despite being in its fifth year of operation. Similarly, Duke Raleigh operates at only 88% occupancy and Duke Cary has approved, undeveloped beds that are not yet under construction.

Wake County needs broader access to obstetric services. WakeMed Garner, Novant Health, Duke Cary and UNC Rex Wake Forest propose new obstetric capacity. However, only WakeMed Garner proposes obstetric capacity in an area not already served by another Wake County provider.

Financial proformas are not comparable across such inherently different projects, not only because of the profound differences in scope, but also due to the lack of commonality in details between applicants.

The following Comparative Review Factors do not allow for consistent analysis across applicants:

- Net Revenue and Net Operating Expense per unit because bed proformas revenue and expense presentations range from beds alone to the entire acute inpatient stay;
- Medicaid and Medicare percentages of patients served: Though a traditional measure of service to underserved groups, the factor does not compare like types of patients in each of these applications.
- Competition (New/Alternate provider):
    - The Agency should balance development of newly proposed acute care facilities with the need for timely capacity in existing and approved facilities. Existing facility need for beds in 2027 generated the need determination in this review. Ultimately, approving another new facility at this time is a disservice to Wake County residents.
    - Wake County is already the most competitive acute care hospital service area in North Carolina. Wake is the only county with three competing health care systems who operate hospitals in the same county.

Unfortunately, eliminating these comparative factors leaves the Agency with few metrics on its standard list. However, WakeMed believes the following factors are still valid.

- Scope of Services
- Access by Service Area Residents
- Historical Utilization

Scope of Services ensures access to the broadest array of specialty services. This is particularly important for a Level I Trauma Center that is operating above its licensed capacity. **Access by Service Area Residents** recognizes that Wake County residents should benefit from the competitive project. **Historical Utilization** acknowledges patient choices as well as where the current delivery system is stressed.

WakeMed also believes that this review merits one other metric for consideration in the Comparative Analysis: **Service Availability**.

Service Availability is the proposed date of service provided in Section P. *Service Availability* is important because Wake County has a desperate shortage of inpatient resources at **existing facilities** as the 2025 SMFP clearly states in Tables 5A. The need for beds continues in **2026**. Several applications confirm immediacy of need, mentioning Diversion Hours, times when local EMS providers must play the game of "Find a Bed," because beds in existing hospitals with needed specialties are full.

WakeMed is the safety net provider for Wake County and operates the only two State-designated trauma centers in the county, at WakeMed Raleigh and WakeMed Cary. Its facilities have significant shortages of acute care beds, and those shortages drove the majority of the need determination for acute care beds in the 2025 SMFP. Moreover, WakeMed can bring two of its proposed projects online quickly, and at comparatively low cost. Further, it can bring all projects online with minimal impact on the county workforce and greatest access to the highest level of specialty services in the county.

Finally, WakeMed has received additional letters of support for its WakeMed applications, which are being submitted under a separate cover letter. Several in particular have competitive bearing on this review. We ask the Agency to carefully read letters in the respective application as well as these recent letters submitted separately from these comments, especially those that reflect the voices of affected residents.

Thank you for your consideration.

Rick Shrum
Vice President & Chief Strategy Officer

WakeMed Comments on Wake County Acute Care Bed CONs Attachments

ATTACHMENT A

Competitive Review of Novant Health Knightdale Medical Center, Novant Health, Inc. / Project ID #J-12686-25

Overview

Novant Health ("Novant") proposes to develop a new hospital with 26 acute care beds at a site in Knightdale, in response to the determinations for 267 acute care beds for Wake County in the 2025 State Medical Facilities Plan ("SMFP"). Novant fails to adequately demonstrate the need for the proposed project. The application is nonconforming with multiple Review Criteria and Performance Standards for Acute Care Beds and should be denied.

CON Review Criteria

1. The proposed project shall be consistent with applicable policies and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, ambulatory surgery operating rooms, or home health offices that may be approved.

Overview

The proposed project is in response to a need determination for 267 acute care beds for Wake County in the 2025 SMFP.

As described in Criterion 3 below, Novant does not demonstrate that its proposal's projected volumes incorporate these concepts in meeting the need identified in the State Medical Facilities Plan as well as addressing the needs of all residents in the proposed service area. The Novant application should therefore be found non-conforming to Criterion 1.

Access

Novant's proposal will not materially improve access to acute care services in Wake County. According to Google Maps, its Knightdale site is located only 8.3 road miles from WakeMed Raleigh Campus and 3.7 miles from WakeMed Wendell Healthplex along Interstate 87/U.S. Highway 64. Both facilities are located in Novant's proposed primary service area and together they provide inpatient, outpatient, and emergency services to residents of the primary and secondary service areas.

Value

Novant Knightdale's total capital cost is $254,703,310; this equates to $9,796,281 per licensed bed. The proposed project's construction cost is $164,872,644, or $6,341,256 per licensed bed. These per-bed costs are the highest among all applicants in the review. Although capital cost has not been a comparative factor in Agency decisions in recent years, there is a stark contrast between applicants proposing new acute care hospitals, and applicants who propose to expand existing or approved facilities for additional beds.

Given the alternatives proposed by various applicants in this review cycle, approval of applicants proposing brand-new acute care hospital campuses seems superfluous.

As health care costs continue to spiral, the Agency may want to consider value as a comparative factor. The two applicants proposing new acute care hospitals have the highest capital costs, on a per-bed basis, in the review. Other applicants proposing to add beds to existing or approved campuses have significantly lower per-bed capital costs.

3. The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

Proposed Service Area

Novant proposes to develop its new hospital in Knightdale in eastern Wake County, citing the lack of acute care services in its defined PSA as the principal reason for choosing this location. On page 43, Novant states that "the primary and secondary service area zip codes are generally consistent with drive times of up to 10 minutes for the primary service area and 10 to 20 minutes for the secondary service area". The map provided on page 43 shows the proposed site in relation to the PSA and SSA, as well as locations of existing acute care hospitals, freestanding emergency departments, and Novant's physician practices in Wake County. As stated above, WakeMed Raleigh Campus and WakeMed Wendell Healthplex are located in the PSA. There are no Novant primary care practices based in the PSA and only 2 practices in the SSA, located 15.7 miles and 18.4 miles, respectively, from the Novant Knightdale site. Based on the map provided on page 44, none of the Novant practices are located within a 20-minute drive of the facility. Most of the practices are located closer to existing Wake County acute care hospitals.

On page 50, the application states "Approving NH Knightdale will allow service-area residents to access acute care services closer to their homes at a community hospital that is less congested than WakeMed Raleigh or Duke Raleigh Hospital." Novant Knightdale's PSA includes ZIP Code 27610, where WakeMed Raleigh Campus is located. Many residents of PSA ZIP Codes 27545 and 27604 may also live closer to WakeMed Raleigh. Novant provided no evidence that even PSA residents who may reside closer to its proposed facility would choose to utilize it. Novant's own analysis on page 50 shows that five existing and approved acute care hospitals are located within a 20-minute drive of the Novant Knightdale site.

Simply proposing to develop a hospital in closer proximity to service area residents is a thin justification for a proposed capital outlay of $254 million for 26 beds, which will do little to assuage the high utilization of existing facilities in the county.

On page 59, Novant asserts that "a closer analysis reveals that eastern Wake County remains underserved for timely access to acute care and emergency services" but provides no evidence to support this claim. Both WakeMed Raleigh Campus, with inpatient, outpatient, and emergency services, and WakeMed Wendell Healthplex, with outpatient and freestanding emergency services, are located in the proposed PSA.

On page 36, the Novant application states: "Some hospitals are designed to be larger and offer tertiary services, and some hospitals are designed as community hospitals. A metropolitan area should have both to meet the needs of all patients." It should be noted that Wake County is already well-served by tertiary hospitals, regional referral hospitals, and community hospitals that have either recently opened, or which are approved and under development.

Novant Proposed a Smaller Facility in 2025

As Novant chronicles in its application on response to Section C.4, the population of Wake County is increasing and utilization of existing acute care hospitals continues to grow, both of which have contributed to significantly more acute care beds allocated to the county in the 2025 SMFP. However, Novant curiously chose to downsize its proposed Knightdale hospital from 36 licensed beds in 2024 to 26 beds in 2025. Further, Novant proposes 6 of its total 26 beds as LDRP beds, leaving only 20 med-surg and ICU beds, which comprise the bulk of its projected patients. Novant does not address why it proposed a smaller facility in 2025. The proposed facility would have non-obstetric capacity of only 7,300 patient days per year. Applying the Performance Standard of 66.7 percent occupancy, this equates to only 4,869 patient days, or an average daily census of 13.3. Novant did not demonstrate why existing Wake County hospitals cannot fulfill this need with their existing capacity.

If approved, Novant Knightdale would be the smallest acute care hospital in Wake County, with no local tertiary facility to which it would admit high-acuity patients requiring advanced levels of care. While Novant describes the method for defining the Core Acute Care MS-DRGs that would be most likely to utilize the facility, there was no explanation regarding how patients requiring a higher level of care would be referred to other facilities, or to which facilities these referrals might go.

Market Share Projections Are Unrealistic

For medical-surgical patients, Novant projects that its Knightdale Hospital will obtain 10 percent market share of the PSA and 8 percent share of the SSA by Project Year 3. For obstetric patients, Novant projects 12 percent market share of the PSA and 10 percent of the SSA by Project Year 3.

Strategic Collaboration with Duke Health to Justify Market Share Shifts

Novant notes that the Agency found its 2024 CON application nonconforming due in part to its unrealistic market shares. On page 145, Novant states that "the current NH Knightdale proposal addresses these concerns directly through the addition of a strategic collaboration with DUHS" but does not specifically address how this collaboration justifies its 2025 projected market shares. Novant later states that "DUHS has provided documented support confirming that NH Knightdale will complement, not compete with, existing acute-care hospitals in Wake County." Again, this statement, while lofty, does not provide any tangible proof that Novant can attain its projected market shares. The substance of its collaboration with Duke Health is not specified.

Novant provided market shares for comparable community hospitals' PSAs and SSAs as justification for its projections in Wake County. There are multiple issues with Novant's methodology, which will be discussed below.

Use of Comparable Hospitals to Justify Market Share Shift

On pages 144-145, Novant justifies its projected Knightdale market shares by providing its experience with NH Ballantyne Medical Center, a comparably sized community hospital that recently opened in Mecklenburg County. However, assuming the market share data described in the application are correct, these examples do not translate to Novant Knightdale.

In Table Q.14, Novant provides NH Ballantyne's PSA and SSA market shares of 17.4 percent and 6.4 percent, respectively, in its first year of operation. Novant does not define NH Ballantyne's PSA and SSA boundaries, so it is impossible to independently verify if these percentages are accurate or if its service area is comparable in size to NH Knightdale.

Unlike the proposed NH Knightdale, NH Ballantyne is located in a county where Novant has both a tertiary facility and a longstanding primary care and specialty physician presence, both of which are vital to establishing a strong referral base. Novant Knightdale will have neither of these built-in advantages at NH Knightdale's opening. Simply developing and opening a hospital does not guarantee that it will capture market share, particularly in a county as competitive as Wake.

The application lacks a detailed analysis of local market dynamics, competitor responses, or other factors that would support achieving the stated market penetration in Wake County by Project Year 3.

Use of Limited Acute Care Patient Data

On page 37, Novant provides information on "Core Acute Care" (CAC) MS-DRGs that were used to define NH Knightdale's service mix and to project utilization. While Novant provides a list of the limited acute care MS-DRGs in Exhibit C.1-1 there is no discussion provided regarding the criteria for selection of these CAC MS-DRGs.

On pages 51-52, Novant notes that CAC MS-DRG discharges in the service area increased by a CAGR of 8.3 percent from 2022-2024. However, much of this growth is dependent on the inclusion of ZIP Codes 27610 and 27604, both of which are in east Raleigh, and which are the most populous in the service area.

Payor Mix Projections

Novant's inpatient payor mix projections are based on the same questionable market share assumptions and service area definitions discussed above. Additionally, the application describes the methodology for calculating the payor mix but provides no supporting data or intermediate calculations. Its outpatient payor mixes are based on "2024 HIDI data" which is not provided.

Calculation of Average Length of Stay

On page 145, Novant notes that the Agency found its 2024 CON application nonconforming because its projected average length of stay of 4.39 days was unreasonably high; see Attachment B. For 2025, Novant provides its assumptions for projecting average lengths of stay for labor and delivery and medical-surgical patients, using the HIDI inpatient database to estimate ALOS for CAC MS-DRGs within its service area. ALOS's for med-surg and labor & delivery services are provided below.

Table 1: Estimated ALOS for Medical/Surgical and Labor & Delivery MS-DRGs in Novant Knightdale Service Area

ALOS (Days)	Labor & Delivery	Medical/ Surgical
PSA	2.5	4.9
SSA	2.4	4.5

Excerpted from Table Q.15, page 146

Novant applies these ALOS's to their projections of labor & delivery and medical-surgical patients, and on page 147, aggregates these ALOS's in Table Q.19, in effect calculating an "average" ALOS for the facility of 4.0 days in Project Year 3. While this is certainly lower than their ALOS from the 2024 application, the estimated ALOS for med-surg patients of 4.9 days, which comprises the majority of discharges, is higher. Novant attempts to demonstrate that its overall facility ALOS is lower than its 2025 application but uses labor & delivery cases and days to disguise the fact that its medical-surgical ALOS is higher than their original application.

WakeMed North is an established non-tertiary hospital. It is unreasonable for an undeveloped non-tertiary hospital like Novant to maintain an ALOS that is greater than that of a larger facility like WakeMed North. WakeMed North Hospital's ALOS in FY 2024, inclusive of obstetric services, was 3.3 days. If Novant Knightdale's projected discharges are multiplied by WakeMed North's historic ALOS, NH Knightdale does not meet the Year 3 Performance Standard of 66.7% set forth in 10A NCAC 14C .3803(5).

Table 2: NH Knightdale Percent Utilization Using WakeMed North ALOS

Metric	PY1	PY2	PY3
a. Total Discharges	1,002	1,382	1,782
b. ALOS	3.3	3.3	3.3
c. Patient Days	3,310	4,561	5,881
d. ADC	9.1	12.5	16.1
e. Capacity	9,490	9,490	9,490
f. % occupancy	**34.9%**	**48.1%**	**62.0%**

Notes:
a: Novant Knightdale application, Table Q.19, p160
b: FY24 ALOS for WakeMed North Hospital
*c: a * b*
d: d / 365
*e: 26 * 365*
f: c / e

Projected Patient Origin Unreasonable

On pages 45-46, the Novant Knightdale application provides projected patient origin for the facility and key services. **Novant projects that 100 percent of the Knightdale facility's patients will originate from Wake County. It is entirely unreasonable to assume that the facility will draw all inpatients, outpatients, and emergency patients from a single county.** A review of 2025 Hospital License Renewal applications (2024 data) shows that no acute care hospital in North Carolina received all patients from one county. Novant Knightdale's service area includes ZIP Codes 27587, 27591 and 27597, all of which cross into adjacent counties. Further, it is not realistic to assume that there would be no in-migration from other areas. Novant provided no assumptions or methodology that address projected patient origin.

Obstetric Projections Not Reasonable

The Novant Knightdale application proposes 6 labor/delivery/recovery/postpartum (LDRP) beds, where Novant intends to provide low-risk obstetric services. Labor and delivery projections provided in Section Q are not reasonable. Novant bases its obstetric projections on "documented support from UWH of the Carolinas," citing a single letter of support from Barrett Gunter. Dr. Gunter, an obstetrician based in Durham County, provided non-committal support on behalf of the 15 Wake County OB/GYN practices with Unified Women's Health of the Carolinas (UWH). All these practices currently have privileges at either WakeMed or UNC Rex facilities. Three UWH-managed practices, Kamm McKenzie OB/GYN, Triangle Physicians for Women, and Cary OB/GYN, currently perform their deliveries at WakeMed facilities. All other UMW-managed practices in Wake County that perform obstetric care work at either UNC Rex Hospital or UNC Rex Holly Springs Hospital.

With no local obstetric practices identified to perform deliveries, Novant Knightdale cannot justify the market shares or discharge volumes for Labor & Delivery patients provided on page 141. If these patient days are excluded, Novant Knightdale does not meet the Performance Standard of 66.7% in Project Year 3 set forth in 10A NCAC 14C .3803(5). Please see the following table.

Table 3: Novant Knightdale Utilization Including and Excluding Labor & Delivery Patient Days

Metric	PY1	PY2	PY3
a. Med-Surg + ICU Days	3,041	4,295	5615
b. Labor & Delivery Days	898	1,181	1,478
c. Total Patient Days	3,939	5,476	7,093
d. % Occupancy	41.5%	57.7%	74.7%
e. % Occupancy if LDRP Days Excluded	32.0%	45.3%	59.2%

Notes:

a. Novant application, Table Q.17, p146
b. Novant application, Table Q.16, p146
c. a + b
d. Novant application, Table Q.19, p147
*e. (c – b) / (26*365)*

4. Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

In Section E, Novant provided the alternatives it considered to the proposed project. Novant rejected the status quo, citing that doing so would deprive service area residents of expanded access to essential hospital services. However, Novant did not adequately demonstrate why this need cannot be met by existing Wake County acute care hospital providers.

Novant described the alternative of developing a different number of beds at Knightdale but did not address why it reduced the number of beds from its 2024 application (Project No. J-12534-24). Novant's 2025 application proposes 28 percent fewer total licensed beds, and 44 percent fewer medical-surgical/ICU beds. The reduced number of proposed beds implies that Novant believes that the need within its proposed service area has declined.

6. The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

On page 57, the Novant application states that "NH Knightdale will significantly improve geographic access to inpatient surgical care for residents of eastern Wake County. In reality, Novant's proposal will be duplicative of existing hospital and emergency providers in Wake County. Novant's primary service area already contains an acute care hospital, as well as a freestanding emergency department. Eastern Wake County and the remainder of the PSA are well-served by existing providers. WakeMed Raleigh Campus, Wake County's largest acute care hospital, is located within the Novant Knightdale PSA.

The Novant site identified in its application is only 8.3 road miles from WakeMed Raleigh Campus and 3.7 miles from WakeMed Wendell Healthplex – each facility is approximately a 10-minute drive from the proposed site and offer inpatient, outpatient, and emergency services. In reviewing the Novant service area, which includes ZIPs 27587 (Wake Forest) and 27571 (Rolesville) and 27604 (northeast Raleigh), there are likely residents who live closer to WakeMed Raleigh, WakeMed North Hospital and Duke Raleigh Hospital than Novant Knightdale.

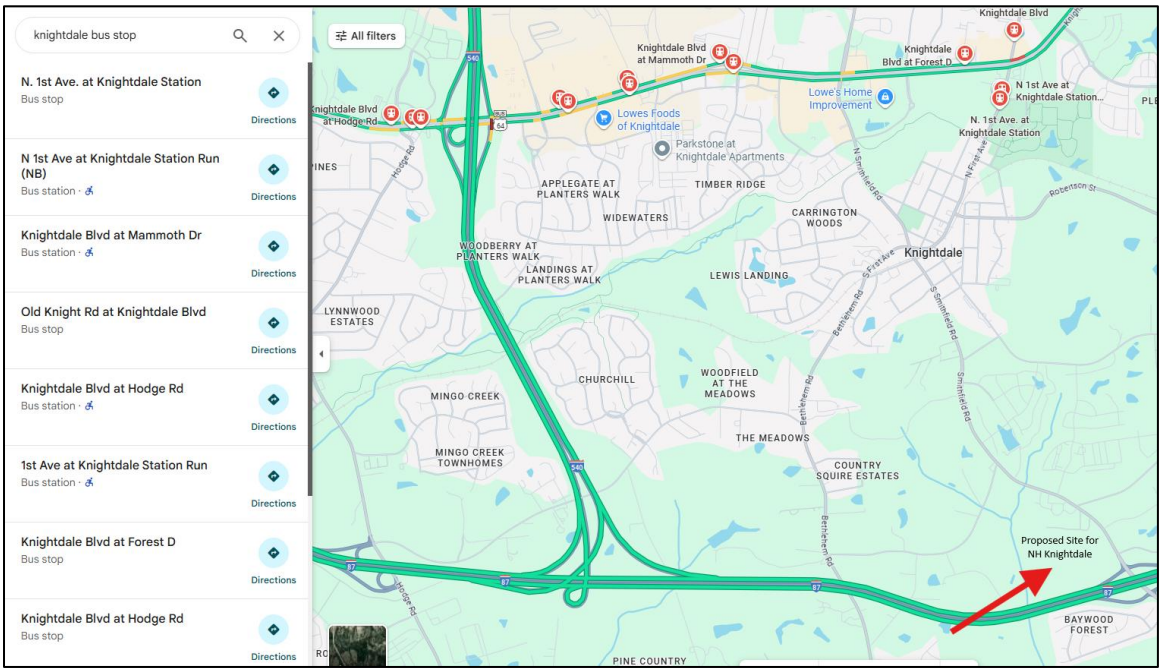
7. The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

Novant did not provide a specific plan for recruiting staff for the proposed hospital. Instead, Section H provides generic references to Novant's recruiting success in other areas where it already has a significant hospital and physician presence. The lack of recruiting plan for Novant Knightdale is a significant omission, given that Novant will be employing staff in a county where it has no existing acute care hospital and will be competing for scarce clinical staff with three established health care systems already present in Wake County and the greater Research Triangle area.

As shown in Attachment D, many of the Novant Knightdale's projected salaries are lower than those proposed by WakeMed North Hospital, a similar community hospital, in Project No. J-12672-25, for analogous clinical and support positions. Given the highly competitive nature of the Wake County health care market, facilities that propose lower salaries may have more difficulty attracting and retaining staff.

Furthermore, access to the facility by necessary staff is limited simply because of the proposed location. As seen in Figure 1 below, Novant Knightdale will not be near any public transportation routes, thus requiring potential staff who depend on public transportation to live within walking distance or have alternative transportation options. "[C]ompetitive salaries and benefits" used to "attract and retain qualified personnel," (p100) mean nothing if staff cannot get to work.

Figure 1: Wake County Public Transportation Stops in Relation to NH Knightdale Proposed Site



For these reasons, the Novant Knightdale application is nonconforming with Review Criterion 7.

8. The applicant shall demonstrate that the provider of the proposed services will make available, or otherwise make arrangements for, the provision of the necessary ancillary and support services. The applicant shall also demonstrate that the proposed service will be coordinated with the existing health care system.

Because Novant Knightdale will be a community hospital with 26 licensed beds, Novant proposes to provide inpatient and outpatient care to "core acute care" patients. It identified a subset of MS-DRGs, citing its experience operating similarly sized facilities in the Triad, Charlotte, and Wilmington markets. Notwithstanding the methodology used to create the list of diagnoses, there is nothing inherently erroneous with this approach, provided the facility can refer critically ill and other higher acuity patients to a regional referral or tertiary medical center.

Unlike other areas in North Carolina where Novant already operates tertiary medical centers, namely Novant Health Presbyterian Medical Center in Charlotte, Novant Health Forsyth Medical Center in Winston-Salem and Novant Health New Hanover Medical Center in Wilmington. **Novant has no acute care hospital presence in Wake County or the greater Research Triangle area**. This raises the obvious question: where would Novant Knightdale patients requiring specialized medical care not available at that facility be referred for care? Novant will essentially be starting from scratch in Wake County to develop a medical staff.

Beginning on page 105, Novant describes its commitment to "creating a healthier future and further developing healthcare access and primary care in Wake County." This statement is misleading at best. While the Applicant references "four affiliated physician practices in Wake County," its own map on page 106 shows that none of these practices are located in the primary service area. While two of the practices are in 27587-Wake Forest, travel from far northern Wake County to eastern Wake County can be challenging and time-consuming. A third primary care group, whose physicians provided letters of support, has three offices in Wake County, but none located in the proposed service area. Furthermore, patients located in and around those physician practices would drive past at least three existing hospitals with broader depths of services than those proposed at Novant Knightdale.

Novant proposes obstetric services at NH Knightdale. As detailed on page 57, the Applicant claims that its collaboration with Unified Women's Health of the Carolinas ("UWH") will "provide a strong and immediate referral base for NH Knightdale's obstetrics program." As described in Criterion 3, Novant provided one letter of support from UWH, which manages approximately 15 OB/GYN practices in Wake County. The practices that perform deliveries have privileges at either WakeMed or UNC Rex facilities. The support letter from UWH did not express an interest or commitment in delivering babies at Novant Knightdale

On page 112, Novant states: "NH maintains existing transfer agreements among NH facilities and would establish similar agreements for NH Knightdale." Novant did not describe any discussions or provide correspondence with existing hospitals in Wake County or the surrounding area to provide specialized services such as invasive cardiology, neonatology, or neurology. The closest Novant tertiary facility to Novant Knightdale is Novant Health Forsyth Medical Center in Winston-Salem, which is 116 road miles and 1 hour 46 minutes' away. The Novant application did not explain how its services will be coordinated with the existing health system.

In several places in its application, Novant describes its newly formed strategic collaboration with Duke Health System, which on page 56 is touted as "a transformational shift in the regional health landscape" as well as "an operational commitment to integrating complementary strengths, aligning resources, and jointly addressing unmet health needs." Beyond this description, it is not stated specifically how the Duke/Novant collaboration will benefit residents of eastern Wake County. Novant does not state that it will refer high-acuity patients who are not appropriate for admission to Duke facilities.

12. Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans.

On page 111, Novant explains that the proposed site is "currently zoned Highway Business (HB)," and that "development of this Parcel for use as a hospital would require a Conditional District rezoning which is subject to review by the Land Use Review Board and final approval by the Knightdale Town Council."

Requiring a zoning change for a proposed site is not unusual. However, proper documentation of the rezoning process is necessary. Novant falls short in this requirement. First, both Section K.4c, page 111, and the letter from Correspondence in Exhibit K.4 from Nick Eller, Vice President of Real Estate and Development for Novant Health, Inc. speak heavily to Novant's experience in the Greater Charlotte area for rezoning its projects. **However, that experience may not translate to the Knightdale area**. In fact, the letter from Donna Goodman, Assistant Director of Development Services for the Town of Knightdale is simply an overview of the rezoning process and specifically states **"[t]his letter does not serve as a binding zoning determination letter."**

This is an important detail that Novant has overlooked. In a recent example, WakeMed's development of its new behavioral health hospital, WakeMed Mental Health & Well-Being Hospital – Garner, was delayed because the Knightdale Town Council declined to rezone its originally proposed site to allow development of a medical facility. WakeMed ultimately relocated this hospital to Garner.

For these reasons, the Novant Knightdale application does not conform with Review Criterion 12.

14. The applicant shall demonstrate that the proposed health services accommodate the clinical needs of health professional training programs in the area, as applicable.

In Section M, page 121, Novant states that it is "committed to collaborative relationships with local and regional health professional training programs." Later in page 121, Novant mentions that it "has established a strategic collaboration with Duke Health, bring access to Duke's nationally recognized subspecialty expertise and clinical best practice." However, there is no description of how the Novant/Duke collaboration translates to accommodating the clinical needs of area health professional training programs. There was no description provided of specific efforts to work with training programs in Wake and surrounding counties. Novant provided no correspondence from local schools and universities expressing their interest in working with Novant, or correspondence to these programs seeking to initiate such relationships.

Therefore, the Novant application does not conform with Review Criterion 14.

18 a. The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for the service for which competition will not have a favorable impact.

Competition

Wake County is already the most competitive health care market in the state, being served by three large health systems, WakeMed Health & Hospitals, UNC Health, and Duke Health, all of whom currently operate or are approved to operate two or more acute care hospitals in the county. In addition, all three systems have a well-established primary care and specialty physician presence. No other North Carolina county has more than two health systems operating acute care hospitals.

The development of a fourth health system in Wake County would likely have a detrimental impact on competition, as four systems would be competing for patients, physician referrals, and finite clinical staff. This would also create unnecessary duplication of acute care hospital and emergency services. See the discussion in Criterion 6.

Access

The Novant Knightdale application asserts increased access to health care services for residents of eastern Wake County but does not demonstrate that residents of this area are not currently being served. Novant's proposed service area consists of ZIP Codes in Wake County where an acute care hospital and freestanding emergency department are already in operation.
The primary service area was inexplicably reduced from Novant's 2025 application. As described in Criterion 3, Novant Knightdale projects 100 percent of its patients will originate from Wake County, in spite of the fact that no North Carolina acute care hospitals serves patients originating from only one county, and that several of the ZIP Codes in the service area cross into neighboring counties.

With only 26 beds, 20 of which will be designated for med-surg/ICU patients, it is unlikely that Novant Knightdale will have much of an impact on improving access to acute care services.

For these reasons, the Novant Knightdale application does not conform with Review Criterion 18a.

ATTACHMENT B

REQUIRED STATE AGENCY FINDINGS

FINDINGS
C = Conforming
CA = Conforming as Conditioned
NC = Nonconforming
NA = Not Applicable

Decision Date:	January 28, 2025
Findings Date:	February 4, 2025
Project Analyst:	Gregory F. Yakaboski
Co-Signer:	Lisa Pittman

COMPETITIVE REVIEW

Project ID #:	J-12533-24
Facility:	WakeMed North Hospital
FID #:	990974
County:	Wake
Applicant:	WakeMed
Project:	Develop no more than two additional operating rooms pursuant to the 2024 SMFP need determination and no more than two additional procedure rooms

Project ID #:	J-12534-24
Facility:	Novant Health Knightdale Medical Center
FID #:	240655
County:	Wake
Applicants:	Novant Health Knightdale Medical Center, LLC Novant Health, Inc.
Project:	Develop a new acute care hospital with no more than 36 acute care beds and one operating room pursuant the 2024 SMFP need determinations

Project ID #:	J-12535-24
Facility:	WakeMed
FID #:	943528
County:	Wake
Applicant:	WakeMed
Project:	Develop no more than two additional operating rooms pursuant to the 2024 SMFP need determination

Project ID #:	J-12536-24
Facility:	WakeMed North Hospital
FID #:	990974
County:	Wake

Applicant:	WakeMed
Project:	Change of scope to Project ID# J-12419-23 (Develop 35 acute care beds) to develop no more than 25 additional acute care beds pursuant to the 2024 SMFP need determination

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Project ID #:	J-12537-24
Facility:	WakeMed Cary Hospital
FID #:	990332
County:	Wake
Applicant:	WakeMed
Project:	Change of scope to Project ID# J-12418-23 (Develop 9 acute care beds) to develop no more than 24 additional acute care beds pursuant to the 2024 SMFP need determination

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Project ID #:	J-12538-24
Facility:	WakeMed
FID #:	943528
County:	Wake
Applicant:	WakeMed
Project:	Develop no more than 21 additional acute care beds pursuant to the 2024 SMFP need determination

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Project ID #:	J-12542-24
Facility:	UNC REX Hospital
FID #:	953429
County:	Wake
Applicant:	Rex Hospital, Inc.
Project:	Develop no more than 20 additional acute care beds and no more than two additional operating rooms pursuant to the 2024 SMFP need determinations

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Project ID #:	J-12543-24
Facility:	UNC Health Rex Wake Forest Hospital
FID #:	240658
County:	Wake
Applicant:	Rex Hospital, Inc.
Project:	Develop a new acute care hospital with no more than 50 acute care beds and two operating rooms pursuant to the 2024 SMFP need determinations

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Project ID #:	J-12546-24
Facility:	Duke Raleigh Hospital
FID #:	923421
County:	Wake
Applicant:	Duke University Health System, Inc.
Project:	Develop no more than 41 additional acute care beds pursuant to the 2024 SMFP need determination

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Project ID #:	J-12547-24
Facility:	Duke Raleigh Hospital
FID #:	923421
County:	Wake
Applicant:	Duke University Health System, Inc.
Project:	Develop no more than three additional operating rooms pursuant to the 2024 SMFP need determination

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Project ID #:	J-12548-24
Facility:	Duke Cary Hospital
FID #:	210092
County:	Wake
Applicant:	Duke University Health System, Inc.
Project:	Change of scope to Project ID #J-12029-21 (Develop a new acute care hospital) to develop no more than 17 additional acute care beds pursuant to the 2024 SMFP need determination for a total of 57 beds upon project completion

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Project ID #:	J-12549-24
Facility:	Duke Garner Hospital
FID #:	240666
County:	Wake
Applicant(s):	Duke University Health System, Inc.
Project:	Develop a new acute care hospital with no more than 12 acute care beds and one operating room pursuant to the 2024 SMFP need determinations

Each application was reviewed independently against the applicable statutory review criteria found in G.S. 131E-183(a) and the regulatory review criteria found in 10A NCAC 14C. After completing an independent analysis of each application, the Healthcare Planning and Certificate of Need Section (CON Section) also conducted a comparative analysis of all the applications. The Decision, which can be found at the end of the Required State Agency Findings (Findings), is based on the

(3) The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, … persons [with disabilities], the elderly, and other underserved groups are likely to have access to the services proposed.

C
The Rest of the Applications

NC
Novant Knightdale

Project ID #J-12533-24/ WakeMed North / Develop 2 ORs

The applicant proposes to develop 2 ORs at WakeMed North pursuant to the need determination in the 2024 SMFP.

Patient Origin

On page 47, the 2024 SMFP defines the service area for OR as *"single or multicounty grouping shown in Figure 6.1*." Figure 6.1, on page 53, shows Wake County is a single county operating room service area. WakeMed North is in Wake County. Thus, the service area for this facility consists of Wake County. Facilities may also serve residents of counties not included in their service area.

The following tables illustrate historical and projected patient origin for operating rooms at WakeMed North Hospital.

Based on that review, the Agency concludes that the application is conforming to this criterion for the following reasons:

- The applicant adequately identifies the population to be served.
- The applicant adequately explains why the population to be served needs the services proposed in this application.
- Projected utilization is reasonable and adequately supported.
- The applicant describes the extent to which all residents, including underserved groups, are likely to have access to the proposed services and adequately supports its assumptions.

Project ID #J-12534-24/ Novant Health Knightdale Medical Center/Develop a new hospital with 36 AC beds and 1 OR

The applicant proposes to develop a new acute care hospital in Knightdale with 36 new acute care beds and 1 OR pursuant to the need determination in the 2024 SMFP.

Patient Origin

The 2024 SMFP defines the service area for acute care hospital beds on page 31 as *"…the single or multicounty grouping shown in Figure 5.1.*" Figure 5.1, on page 36, shows Wake County as its own acute care bed service area. Novant Knightdale hospital is in Wake County. Thus, the service area for this facility is Wake County. Facilities may also serve residents of counties not included in their service area.

On page 47, the 2024 SMFP defines the service area for OR as *"single or multicounty grouping shown in Figure 6.1.*" Figure 6.1, on page 53, shows Wake County is a single county operating room service area. The proposed Novant Knightdale hospital is in Wake County. Thus, the service area for this facility consists of Wake County. Facilities may also serve residents of counties not included in their service area.

The following table illustrates projected patient origin for Novant Knightdale Hospital.

Operating Room (pages 173-179)
- Surgical Volume
- Underlying Assumptions for Inpatient Surgical Volume Treated at Novant Knightdale (175-176)
- Step 1: Project Surgical Inpatients (pages 175-176)
- Step 2: Project Surgical Outpatients (pages 176-178)
- Step 3: Calculate Total Surgical Hours (page 178)
- Step 4: Calculate Non-Surgical Volume (pages 178-179)
- Conclusion (page 179)

Other Hospital Services (pages 180-192)
- Emergency Department (181-187)
  - Project Years
  - Data Sources
  - LRA Data
  - Novant Health Internal Data (page 164)
- ED Volume
- Step #1: Project Emergency Department (ED) Volume (pages 184-187)

- Observation Patients and Hours
- Step 2: Project Observation Patients and Days of Care
- Step 2A: Apply WakeMed Cary Ratio to Projected Novant Knightdale Discharges (pages187-188)
- Step 2B: Project Observation Hours (page 188).
- Total Outpatients
- Step 3 Project Total Outpatients (page 189)
- Projection of other C4b Ancillary Hospital Volumes
- Step 4: Calculate Inpatient and Outpatient Ratios for C.4b Services
- Step 5: Apply Ratios to Projected Inpatient Days and Outpatient Encounters (pages 191-192).

- Outpatients Patients (187-189)
- Ancillary Hospital Volumes (pages 189-192).

However, projected utilization is not reasonable and adequately supported based on the following three, stand-alone, reasons:

Issue #1: Projected market share of discharges is not reasonable.

Issue #2: Projected Average Length of Stay (ALOS) is not reasonable

Issue #3: Projected IP Discharges derived from the Emergency Department is not

ATTACHMENT C

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ATTACHMENT D

Salary Comparison
Novant Knightdale vs. WakeMed North Hospital (Project No. J-12672-25)

Project Year 1 (FY30)

Position Title	NH Knightdale		WM North			
	FTEs	Annual Salary per FTE	FTEs	Annual Salary per FTE	Novant/ WakeMed North	Cost to Reach WakeMed North Rate
Registered Nurse	44.25	$115,404	233.98	$145,434	79.4%	$1,328,828
Nurse Aide	10.51	$55,327	48.67	$55,494	99.7%	$1,755
Radiology Tech	19.90	$80,733	8.25	$107,723	74.9%	$537,101
Surgical Tech	9.00	$66,337	11.70	$106,766	62.1%	$363,861
Pharmacy Tech	8.00	$59,572	3.42	$63,898	93.2%	$34,608
Materials Mgmt.	3.00	$46,273	5.07	$55,890	82.8%	$28,851
Clerical/Registration	24.00	$52,786	7.93	$59,779	88.3%	$167,832
Maint./Engineering	4.00	$73,493	4.56	$83,200	88.3%	$38,828
Resp. Therapist	9.00	$64,306	14.45	$110,947	58.0%	$419,769
Total						**$2,921,433**

Project Year 2 (FY31)

Position Title	NH Knightdale		WakeMed North			
	FTEs	Annual Salary per FTE	FTEs	Annual Salary per FTE	Novant/ WakeMed North	Cost to Reach WakeMed North Rate
Registered Nurse	59.10	$118,866	235.99	$149,802	79.3%	$1,828,318
Nurse Aide	14.19	$56,987	49.21	$57,158	99.7%	$2,426
Radiology Tech	22.00	$83,021	8.25	$110,947	74.8%	$614,372
Surgical Tech	9.00	$68,327	11.70	$109,970	62.1%	$374,787
Pharmacy Tech	8.00	$61,359	3.42	$65,811	93.2%	$35,616
Materials Mgmt.	3.00	$47,661	5.17	$57,554	82.8%	$29,679
Clerical/Registration	24.00	$54,370	7.93	$61,568	88.3%	$172,752
Maint./Engineering	4.00	$75,698	4.68	$85,696	88.3%	$39,992
Resp. Therapist	9.00	$66,235	14.63	$114,275	58.0%	$432,360
Total						**$3,530,302**

Project Year 3 (FY32)

Position Title	NH Knightdale		WakeMed North			
	FTEs	Annual Salary per FTE	FTEs	Annual Salary per FTE	Novant/ WakeMed North	Cost to Reach WakeMed North Rate
Registered Nurse	75.36	$122,768	235.02	$154,294	79.6%	$2,375,799
Nurse Aide	17.87	$57,857	48.89	$58,864	98.3%	$17,995
Radiology Tech	22.00	$85,746	8.25	$114,275	75.0%	$627,638
Surgical Tech	9.00	$70,570	11.70	$113,277	62.3%	$384,363
Pharmacy Tech	8.00	$63,373	3.42	$67,787	93.5%	$35,312
Materials Mgmt.	3.00	$49,225	5.28	$59,280	83.0%	$30,165
Clerical/Registration	24.00	$56,154	7.93	$63,419	88.5%	$174,360
Maint./Engineering	4.00	$78,183	4.80	$88,275	88.6%	$40,368
Resp. Therapist	9.00	$68,409	14.83	$117,707	58.1%	$443,682
Total						**$4,129,682**

ATTACHMENT E

Competitive Review of Rex Hospital, Inc.
UNC Health Rex Wake Forest Hospital / Project ID #J-012680-25

Overview

Rex Hospital, Inc. ("UNC Rex") proposes to develop a new hospital with 50 acute care beds at a site in Wake Forest called UNC Health Rex Wake Forest Hospital ("Rex Wake Forest"), in response to the need determination for 267 acute care beds in the *2025 State Medical Facilities Plan* ("SMFP"). UNC Rex fails to adequately demonstrate the need for the proposed project. The application should be denied as it is nonconforming with multiple criteria.

CON Review Criterion

1. The proposed project shall be consistent with applicable policies and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, ambulatory surgery operating rooms, or home health offices that may be approved.

The proposed project is in response to a need determination for 267 acute care beds in Wake County. It is therefore subject to Policy GEN-3: Basic Principles, which states:

> *"A certificate of need applicant applying to develop or offer a new institutional health service for which there is a need determination in the North Carolina State Medical Facilities Plan shall demonstrate how the project will promote safety and quality in the delivery of health care services while promoting equitable access and maximizing healthcare value for resources expended. A certificate of need applicant shall document its plans for providing access to services for patients with limited financial resources and demonstrate the availability of capacity to provide these services. A certificate of need applicant shall also document how its projected volumes incorporate these concepts in meeting the need identified in the State Medical Facilities Plan as well as addressing the needs of all residents in the proposed service area."*

As described in Criterion 3 below, UNC Rex does not demonstrate that its proposal's, "projected volumes incorporate these concepts in meeting the need identified in the State Medical Facilities Plan as well as addressing the needs of all residents in the proposed service area." The

UNC Rex application should therefore be found non-conforming to Review Criterion 1.

3. The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

UNC Rex proposes to develop a new hospital campus in Wake Forest, citing the lack of acute care services in northern Wake County and southern Franklin County. However, the Applicant's catchment area is overstated, projections are unrealistic, inconsistent with historical trends, and unsupported by current utilization patterns.

Source of Patients

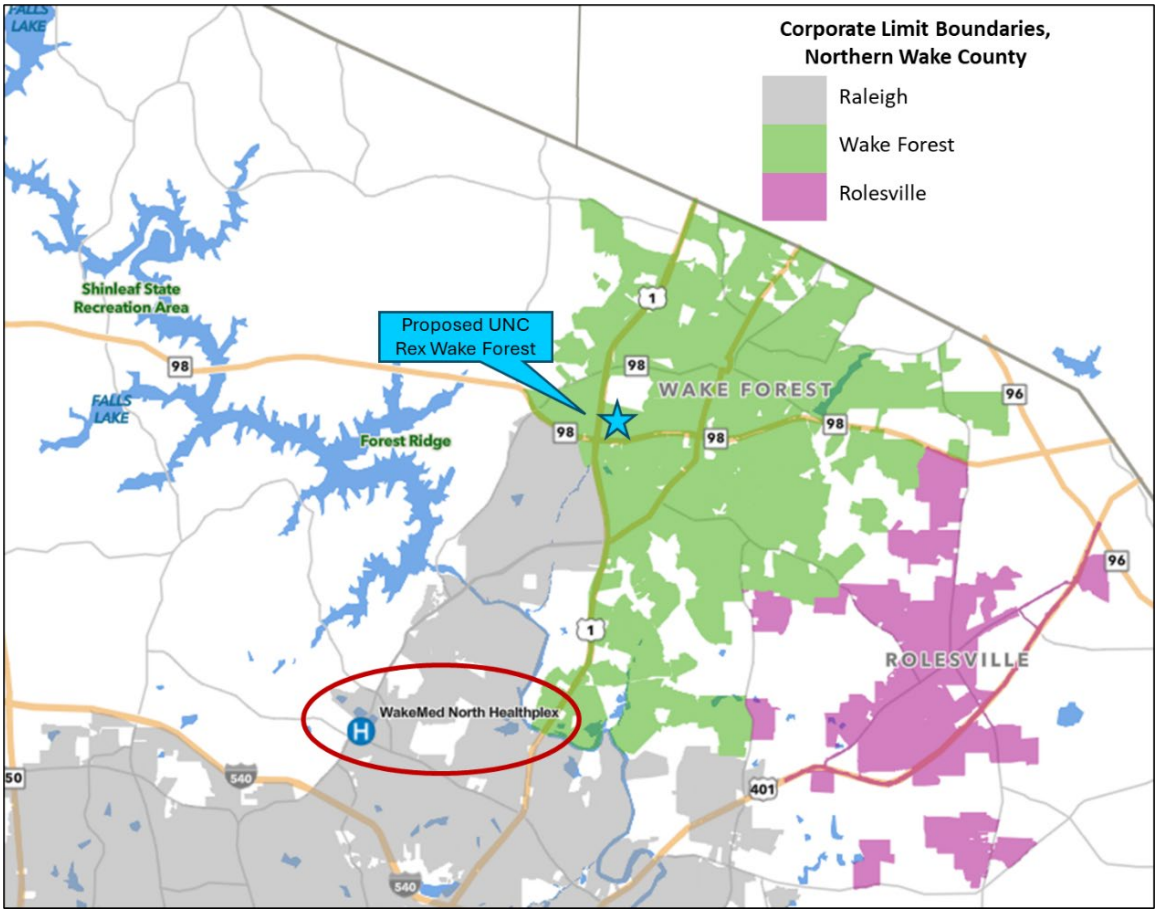
Acute Care Services in Raleigh vs. Northern Wake County

On page 60, UNC Rex states that

> "… no acute care hospital exists in Wake Forest, a large locality in Wake County primarily comprised of ZIP code 27587… there is a large and growing portion of Wake County *outside* of Raleigh that currently does not have any acute care services located within in: mainly the town of Wake Forest and the surrounding areas."

As shown in the figure below, WakeMed North is located within the Raleigh city limits; but those boundaries reach as far north as N.C. Highway 98, approximately one mile from UNC Rex Wake Forest site. By contrast, portions of Wake Forest are considerably closer to WakeMed North than the proposed Rex Wake Forest. The idea that "town limits" justify location is misleading at best.

Figure 1: Map of Northern Wake County Showing Proximity of UNC Wake Forest to WakeMed North and Corporate Limits



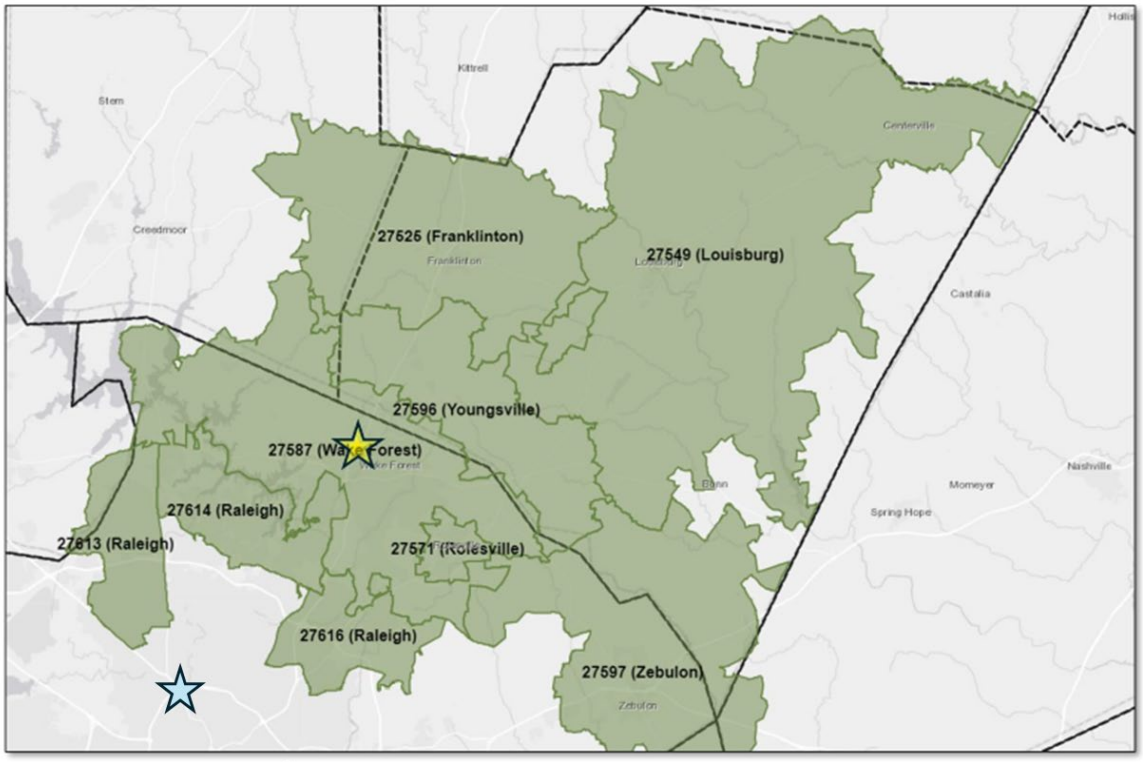
Source: Wake County Planning Department, iMaps; UNC Rex Wake Forest site marker added

UNC Rex Wake Forest Service Area Definition Overlaps WakeMed North Hospital and UNC Rex Main

WakeMed North Hospital

The UNC Rex Wake Forest catchment area is defined as a subset of ZIP Codes including and contiguous to Wake Forest ZIP 27587. Included in the definition is ZIP Code 27614, which is the location of WakeMed North Hospital, located only 7.2 miles from the proposed UNC Rex Wake Forest site. See Figure 2 below.

Figure 2: Proximity of UNC Rex Main Campus to Proposed Rex Wake Forest



Source: UNC Rex Main application page 66, UNC Rex Main star added

The service area population aged 65+ is projected to grow by 14,476 residents from 2025-2030, or approximately 4.8 percent. The highest growth is projected to occur in ZIP Code 27587, with an increase of 3,606 residents aged 65+.

UNC Rex Wake Forest's catchment area overlaps significantly with that of WakeMed North Hospital. As shown in the CON application for 25 additional acute care beds that WakeMed North filed in this review cycle (Project ID# J-012672-25), the largest concentrations of WakeMed North's patients currently originate in ZIP Codes 27587, 27614, and 27616.
In FY 2024, 60.7 percent of WakeMed North's acute care bed discharges originated from the UNC Rex Wake Forest proposed service area, and over 37 percent of discharges originated from ZIPs 27587, 27616, and 27614. Please see the table below.

Table 1: FY 2024 WakeMed North Acute Care Bed Patient Origin by ZIP Code, from Proposed UNC Rex Wake Forest Service Area

ZIP Code-City	Acute Care Discharges	Percent of Total
27587-Wake Forest	1,331	19.9%
27616-Raleigh	616	9.2%
27614-Raleigh	530	7.9%
27596-Youngsville	486	7.3%
27525-Franklinton	350	5.2%
27549-Louisburg	279	4.2%
27613-Raleigh	172	2.6%
27597-Zebulon	180	2.7%
27571-Rolesville	108	1.6%
Total	**4,052**	**60.7%**

Source: Project ID# J-012672-25, p. 35

The REX Wake Forest application does not identify patients to be served by ZIP code. It instead uses an inflated average length of stay to estimate patients. See discussion below in section "Unreasonable Length of Stay and Acuity Assumptions."

UNC Rex Main

According to Google Maps and HUD Population ZIP Code Weighted Centroids[1], 27613 is only 16 minutes from UNC Rex Main, but 30 minutes Rex Wake Forest. The application provides no justification for including this ZIP Code.

Equity and Access Considerations

The proposed Wake Forest hospital does not clearly advance access for the populations identified in Criterion 3.

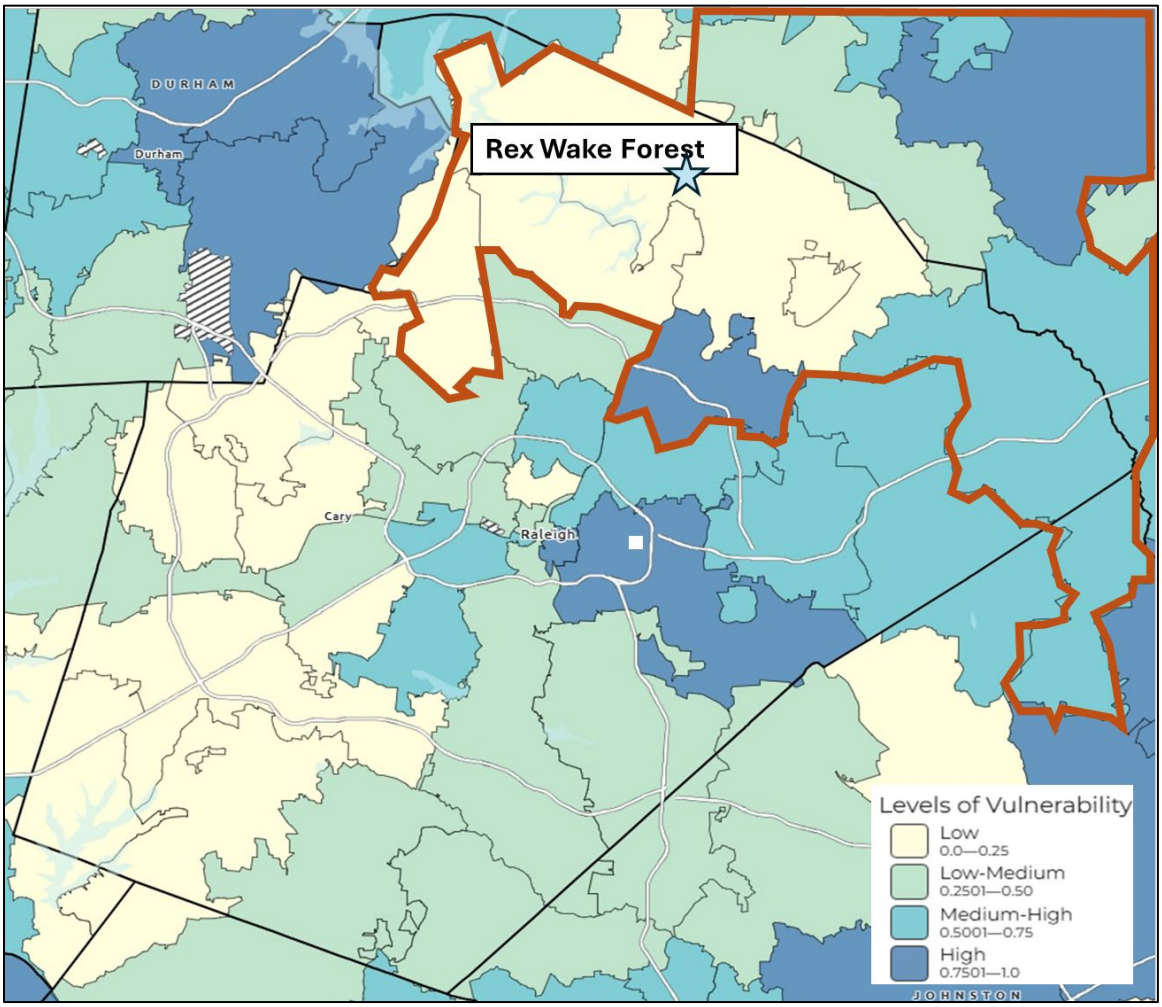
The Centers for Disease Control and Prevention / Agency for Toxic Substances and Disease Registry ("CDC/ATSDR") developed a Social Vulnerability Index Interactive Map which tracks factors that affect socioeconomic status, household characteristics, racial and ethnic minority status, and housing / transportation types. Together these factors feed a methodology calculates a "social vulnerability score" by state, county, ZIP code, and census tract.[2]

[1] https://hudgis-hud.opendata.arcgis.com/datasets/zip-code-population-weighted-centroids-1/about

[2] Centers for Disease Control and Preventions/Agency for Toxic Substances and Diseases Registry/Geospatial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index Interactive Map 2022. Accessed July 2025.

Figure 3 below shows the Rex Wake Forest location in relation to its catchment area and the social vulnerability of each ZIP Code. The map suggests that the chosen site is located closer to more vulnerable residents. However, this is not true. As the map in Criterion 7 illustrates, there are no public transportation stops and there is virtually one way to get there – via Hwy-1.

Figure 3: Rex Wake Forest in Relation to its Catchment Area, CDC Social Vulnerability Scale



Source: CDC/ATSDR Social Vulnerability Index

Patients living in eastern Wake – like 27591 and parts of Franklin County will remain closer to existing hospitals, including UNC Rex Main in Raleigh, WakeMed Raleigh, and WakeMed North. The proposed location therefore provides limited benefit to low-income residents, racial and ethnic minorities, and other groups that face the greatest barriers to accessing acute care services.

Contradictory Catchment Areas

After pages justifying a large geographic catchment area, the application reverses and discusses the fact that Emergency Department accessibility for persons over age 65 means location within 17.3 minutes travel time. Page 70 shows a much smaller catchment area. The application indicates on page 191 that 69 percent of inpatients will originate from the Emergency Department. This alone suggests that all ZIP Code based forecasts are overstated.

Methodology Issues

Unsupported Patient Origin

The inpatient services table in Question C.3b has assumptions that do not match the methodology. The patient origin shows a 28 percent in-migration from outside the primary service area. The methodology on page 49 says "… **the remaining 15 percent of patients** are expected to primarily originate from the remainder of Wake County (i.e.: the Wake County ZIP codes not listed in Section C.4 below), as well as Granville and Nash counties, proportionate to their respective populations."

Specifically, the methodology on page 172 says,

> *"…Given this, UNC Health Rex has **assumed that 15 percent of the total acute care days at UNC Health Rex Wake Forest Hospital will be "inmigrating"** acute care days from areas outside of the nine ZIP codes listed in Table 1-5, and as such are not accounted for in the total projected acute care days for the UNC Health Rex license as shown in both Table 1-2 and Table 1-4 above. This means that the projected acute care days in Table 1- 11 shows only the other 85 percent of acute care days at UNC Health Rex Wake Forest Hospital, without inmigration volume included. Because this inmigration is from outside only a few ZIP codes, and because the majority of the inmigration will be from other areas of Wake County and other contiguous counties, inmigration from outside Wake County (other than the selected Franklin ZIP codes) will be minimal, making this a conservative assumption."*

The patient origin table on page 50 shows that only 71.7 percent of patients come from the proposed service area, leaving 28.3 percent as in-migration. Clearly the methodology in Section Q does not support the stated patients to be served in Question C.3b.

Unrealistic Shift Assumptions

As noted above, ZIP Code 27613 is almost two times closer to UNC Rex Main than to the proposed Rex Wake Forest. The application indicates that proximity is the reason for patient choice of hospital. Hence, 27613 should not be included in the proposed catchment area. See Figure $$ above.

According to HIDI data, 27613 accounted for 25 percent of the patient days from the proposed catchment area at UNC Rex Main in FY 2024. See Table 2 below.

Table 2: UNC Rex Main FY 2024 Patient Days Originating from Rex Wake Forest Catchment Area

Geography	FY24 Patient Days	Percent of Total
27587-Wake Forest	4,057	20.8%
27616-Raleigh	2,727	14.0%
27614-Raleigh	1,700	8.7%
27596-Youngsville	1,367	7.0%
27525-Franklinton	818	4.2%
27549-Louisburg	1,436	7.4%
27613-Raleigh	**5,023**	**25.8%**
27597-Zebulon	1,831	9.4%
27571-Rolesville	512	2.6%
Total	19,471	100.0%

Because the methodology is built on shifting 80 percent of UNC Rex Main patient days in certain DRGs from this ZIP Code, **its inclusion results in a 25 percent over-statement of patient days**.

The sum in Table 2 above includes neonatal DRGs (788 through 795). Hence, the entire foundation of the HIDI-based projections may be overstated.

Unreasonable Length of Stay and Acuity Assumptions

As part of its methodology assumptions, UNC Rex claims,

> *"As a Wake County hospital under the UNC Health Rex Hospital license and a facility with 50 licensed acute care beds – the same number of acute care beds proposed to be developed at UNC Health Rex Wake Forest Hospital –* ***UNC Health Rex believes that UNC Health Rex Holly Springs Hospital is a reasonable and logical proxy to the proposed acute care facility****;" [emphasis added] pp162.*

Contradictory to this assumption, the Applicant projects an average length of stay ("ALOS") of 4.3 days at the Wake Forest facility, and only 3.1 days for Rex Holly Springs' ALOS. The Rex Holly Springs' ALOS is conveniently excluded from the Rex Wake Forest application; it can, however, be found in the UNC Rex Main application for this same batch (Project ID: J-017726-25) on page 147. See the excerpt in Figure 4.

Figure 4: Projected ALOS for Rex Holly Springs, FY25 through FY34

First, to project discharges at UNC Health Rex Holly Springs Hospital, UNC Health Rex utilized the historical ALOS for that facility only, which was 3.1 days for annualized FY 2025. Using this value, the projected discharges for UNC Health Rex Holly Springs Hospital through FY 2034 are shown in Table 19 below.

Table 19: Projected Discharges – UNC Health Rex Holly Springs Hospital

	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32 (PY1)	FY33 (PY2)	FY34 (PY3)
Total Acute Care Days	10,256	12,127	12,704	13,308	13,941	14,639	15,373	16,143	16,952	17,801
Average Length of Stay	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Total Discharges	3,284	3,883	4,068	4,262	4,464	4,688	4,923	5,169	5,428	5,700

Source: UNC Rex Main Application, J-012677-25, p147

The assumption that patients at Rex Wake Forest will **stay in the hospital 1.4 times longer** than patients at Rex Holly Springs results in inflated projected patient days. In fact, the Agency recently found Novant non-conforming because it assumed a similar ALOS of 4.39 in its 2024 Novant Knightdale application for a similar small community hospital, see Attachment B.

The application is not clear, but patient days and patient revenue appear to depend on the assumption that the Agency would reverse its denial Project ID #J-012543-25 an application for 50 non-neonatal acute care beds plus two operating rooms, thus permitting UNC Rex to develop two operating rooms in this proposed UNC Rex Wake Forest application. This indicates that, if that denial is not reversed, financial and operating projections for this proposed application will not materialize. Refer to pages 41 and 55.

Finally, despite its own claim that Rex Holly Springs is "a reasonable and logical proxy," the Applicant fails to explain why the methodology departs from this benchmark with regard to ALOS. Wake Forest hospital proposes obstetric services (see page 43). Holly Springs does not. ALOS for obstetric patients is typically lower than other adult patients.

With regard to population in need, most of the justification for a new hospital close to the border of Wake and Franklin Counties relies on the population growth rates of two ZIP Codes. The number of residents in only one of those ZIP Codes is mentioned later in the application where the applicant erroneously compares the Wake Forest ZIP Code to rural counties like Carteret, Caldwell and others that serve large geographies that have other isolation factors and in many cases, tertiary services like a cancer center. see page 63

Underutilization of Existing Facilities

Importantly, Rex Holly Springs Hospital remains underutilized, with only 56.2 percent occupancy projected for FY2025.

Rex repeatedly projected high patient days for its Holly Springs hospital in past CON applications, and the hospital consistently fell short of those projections. Highlighted green cells in the following table show the significant difference – almost 10 percent – between expected and actual occupancy in f PY3 l.

Table 3: Rex Holly Springs Projected Acute Care Bed Utilization Compared to Actual Acute Care Bed Utilization, First Three Full Fiscal Years

Metric	Projection			Actual		
	FY23	FY24	FY25	FY23	FY24	FY25
a. Patient Days	7,069	11,577	12,127	6,870	7,831	10,256
b. Average Daily Census	19	32	33	19	21	28
c. Total Acute Care Beds	50	50	50	50	50	50
d. Occupancy Rate	38.7%	63.4%	**66.4%**	37.6%	42.9%	**56.2%**

Notes and Sources:

a. Project ID #J-012371-23, p6 and Project ID #J-012680-25, p163
b. a / 365
c. Total number of acute care beds at Rex Holly Springs
d. b / c

The Applicant provides no reasonable explanation why Rex Wake Forest would reach a higher occupancy than Rex Holly Springs in its first three project years. In fact, COVID notwithstanding, according to the data provided on page 165, Rex Holly Springs is not expected to meet 72 percent occupancy until its Project Year 5, FY 2027; yet Rex Wake Forest projects will reach 72 percent occupancy in three years. Both are new hospitals in new locations, See Table 4 below.

Table 4: Rex Holly Springs Acute Care Bed Occupancy Projections Compared to Rex Wake Forest, Project Years 1 through 6

Metric	Full PY 1	Full PY 2	Full PY 3	Full PY 4	Full PY 5
Rex Holly Springs					
a. Patient Days	6,870	7,831	10,256	12,127	12,704
b. Average Daily Census	19	21	28	33	35
c. Total Acute Care Beds	50	50	50	50	50
d. Occupancy Rate	37.6%	42.9%	56.2%	66.4%	**69.6%**
Rex Wake Forest					
e. Patient Days	6,286	9,641	13,145		
f. Average Daily Census	17	26	36		
g. Total Acute Care Beds	50	50	50		
h. Occupancy Rate	34.4%	52.8%	**72.0%**		

Notes and Sources:

a. Application page 165, Table 1-3
b. a / 365
c. Total acute care beds
d. b / c
e. Application page 173 Table 1-13
f. e / 365
g. Proposed acute care beds
h. f / g

On page 61, the application states: "Franklin County – a county that currently does not have any acute care providers, as will be detailed further below." This is incorrect. Franklin County Hospital, which is on the Maria Parham license has 70 beds License Franklin H0267-B Maria Parham-Franklin is clearly listed in Table 5A p 41 of the 2025 SMFP. The application later acknowledges the presence of Maria Parham Franklin but discounts any current or future possibility that those beds might be reopened.

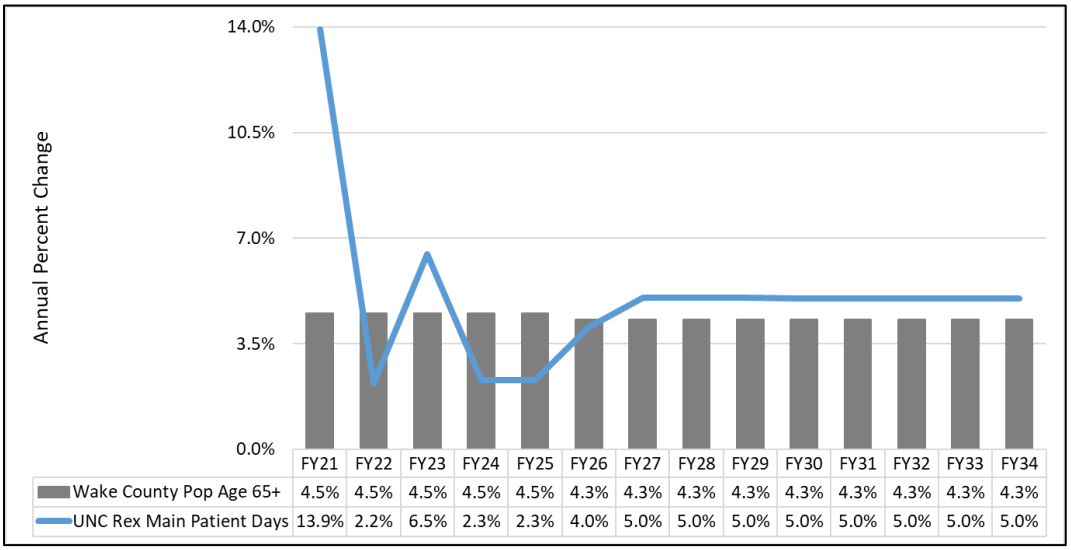
The application does not consider why acute care beds at Franklin County Hospital are not occupied. it does not consider the possibility that Its owners who work there every day may have concluded that this area has insufficient patient need to justify opening the beds at this time.

Misaligned with Demographics

UNC Rex justifies its projections by citing county-level population growth, particularly among residents aged 65 and older. However, the data do not support this conclusion. While Wake County's 65+ population increased at approximately 5 percent annually between 2020 and 2025, NCOSBM forecasts the rate will slow between 2025 and 2030. The application contains no information about subsequent years. Moreover, Rex Hospital's patient days have not come close to these annual increases, except during temporary COVID-related surges. Moreover, state projections show that annual growth in this age group will slow to 4.3 percent by 2034. Many of the ZIP Codes in the Wake Forest catchment area are expected to grow at rates lower than the county average, further undermining the applicant's assumptions.

Figure 5 below illustrates the significant difference between annual percent change in UNC Rex Main patient days and NCOSBM forecasts of Wake County's age 65+ population. Further detail can be found in Attachment F.

Figure 5: Annual Percent Change of UNC Rex Historical and Projected Patient Days Compared to Wake County Age 65+ Population Growth, FFY2021 – FFY2034



	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Wake County Pop Age 65+	4.5%	4.5%	4.5%	4.5%	4.5%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%
UNC Rex Main Patient Days	13.9%	2.2%	6.5%	2.3%	2.3%	4.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Source: Patient Days: UNC Rex application pp 163 & 166; NC OSBM Population by Age Groups, 2020-2060

Surgical Case Projections

Similar to its acute care assumptions, the applicant projects that a significant portion of surgical cases currently performed at Rex Hospital will shift to Wake Forest. These assumptions mirror the flawed patient day projections and are equally unreasonable, given proximity considerations and established patient preferences.

Moreover, the application indicates that the procedure rooms will not have the same capabilities as the proposed operating room. In fact, the procedure rooms will be limited to less complex cases, see page 178. Surgical case projections in Form C.3b indicate that the proposed facility would require more than one operating room.

Conclusion

Taken together, the proposed project fails to demonstrate reasonable need for the population it claims to serve. The applicant overstates projected patient shifts, inflates growth assumptions, misapplies demographic trends, and relies on unrealistic length of stay and utilization estimates. **As a result, the proposed Rex Wake Forest hospital is not conforming to Criterion 3.**

4. Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

In Section E, UNC Rex provided the alternatives it considered to the proposed project. Given that the *2025 SMFP* allocated 267 acute care beds to Wake County, UNC Rex could have opted to propose fewer beds for Wake Forest, thereby reducing capital costs, or developing more beds at the UNC Rex campus in Raleigh. As detailed in Criterion 12 below, Rex Wake Forest's capital costs are extraordinary compared to other Applicants in this batch. It is clear that the proposal does not demonstrate that the least costly or most effective alternative was proposed.

The application fails to discuss the very real possibility that the Agency does not reverse the denial of the operating rooms. The application provides no information to show whether the proposed hospital could effectively operate without two operating rooms.

Therefore, the UNC Rex Wake Forest application is nonconforming with Review Criterion 4.

5. Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs, as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

The application is not clear, but patient days and patient revenue appear to depend on the assumption that the Agency would reverse its denial Project ID #J-012543-25 an application for 50 non-neonatal acute care beds plus two operating rooms, thus permitting UNC Rex to develop two operating rooms in this proposed UNC Rex Wake Forest application. This indicates that, if that denial is not reversed, financial and operating projections for this proposed application will not materialize. Refer to application page 41 footnote 16.

Given the multiple inconsistencies associated with utilization projections for UNC Rex Wake Forest, the financial projections are unreliable and unsupported, and do not demonstrate the financial feasibility of the project. Please see the discussion for Review Criterion 3.

The UNC Rex Wake Forest application does not conform with Review Criterion 5.

6. The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

On page 123, the UNC Rex Wake Forest application states: "…UNC Health Rex believes there is currently a lack of accessible acute care services in northern Wake and Franklin counties…." However, UNC Rex's only explanation of this claim is a sentence on page 121 that says, "…the most northern acute care facility in Wake County is still within the Raleigh city limits...."

The application omits the fact that the proposed UNC Rex Wake Forest facility site is 7.2 road miles, or a 14-minute drive, from WakeMed North Hospital, which offers a full array of inpatient, outpatient, obstetric and emergency services. WakeMed North is currently licensed for 77 acute care beds, including 6 Level III neonatal beds, and has Agency approval to develop 35 additional acute care beds (Project No. J-12419-23).

UNC Rex also explains on page 65 that because "…Franklin County's sole acute care hospital no longer offers acute care services… it is reasonable to assume that a large number of Franklin County patients will seek acute care services at the proposed hospital in Wake Forest… particularly since two-thirds of Franklin County acute care patients have historically sought care in Wake County." The Applicant is correct, according to the patient origin data found in "Acute Care Hospital Admissions: Patient's County of Residence at Admission" from DHSR[3], Wake County hospitals served 3,954 Franklin County patients, approximately 66 percent.

[3] https://info.ncdhhs.gov/dhsr/mfp/pdf/por/2024/06-PatientOrigin_Ambulatory-2024.pdf

What the Rex Wake Forest application does not say is that **WakeMed hospitals served 44 percent of the Franklin County patients; and over 36 percent of those served at a WakeMed location, were served at WakeMed North specifically**. UNC Rex Main served the second highest number of Franklin County patients, but that still equated to only 13.7 percent, less than half that of WakeMed hospitals. See Table 5 below.

Table 5: FY 2024 Franklin County Acute Care Discharges by Site of Service, Compared

Site of Service	FY24 Franklin Discharges	Percent of Total
WakeMed Raleigh Campus	1,610	26.9%
WakeMed North	959	16.0%
WakeMed Cary	74	1.2%
WakeMed Total	**2,643**	**44.1%**
UNC Rex	821	13.7%
Duke Raleigh	490	8.2%
Wake County Total	**3,954**	**66.0%**
Other Sites / Counties	2,038	34.0%
Total Franklin Co. Discharges	***5,992***	***100.0%***

Sources: Acute Care Hospital Admissions: Patient Origin by Facility, FY 2023[4]
WakeMed internal data, FY 2023

Nowhere in its application does UNC Rex specifically state how many patients it projects to come from Franklin County. Franklin County forecasts are blended with Wake County in the patient origin analysis; it does not specify the total number of discharges from Franklin County ZIP Codes specifically. As illustrated in Table 5 UNC Rex served only 821 patients from Franklin County according to their own data, including tertiary and quaternary patients inappropriate for Rex Wake Forest. This misleads the reader in two ways:

- UNC Rex plans to significantly increase the number of discharges from Franklin County it has historically served. If this is true, UNC Rex has failed to provide adequate information as to how they plan to shift patient patterns.
- UNC Rex does not plan to increase the historical number of Franklin County patients served. If this is true, then its arguments that "a large number" of Franklin County will utilize the proposed Rex Wake Forest is unwarranted and unsupported.

UNC Rex proposes no services at Rex Wake Forest that are not currently available at WakeMed North. The proposed Rex Wake Forest hospital does not exist. As a new hospital, it will require duplication of ancillary and support services that are in place at WakeMed North. Approval of Rex Wake Forest will unnecessarily duplicate hospital services already provided in northern Wake County. Please see the discussion regarding Review Criterion 3, which provides WakeMed North Hospital's FY 2024 discharges from the proposed UNC Rex Wake Forest service area ZIP Codes.

[4] https://info.ncdhhs.gov/dhsr/mfp/pdf/por/2024/05-Facility_Ambulatory-2024.pdf

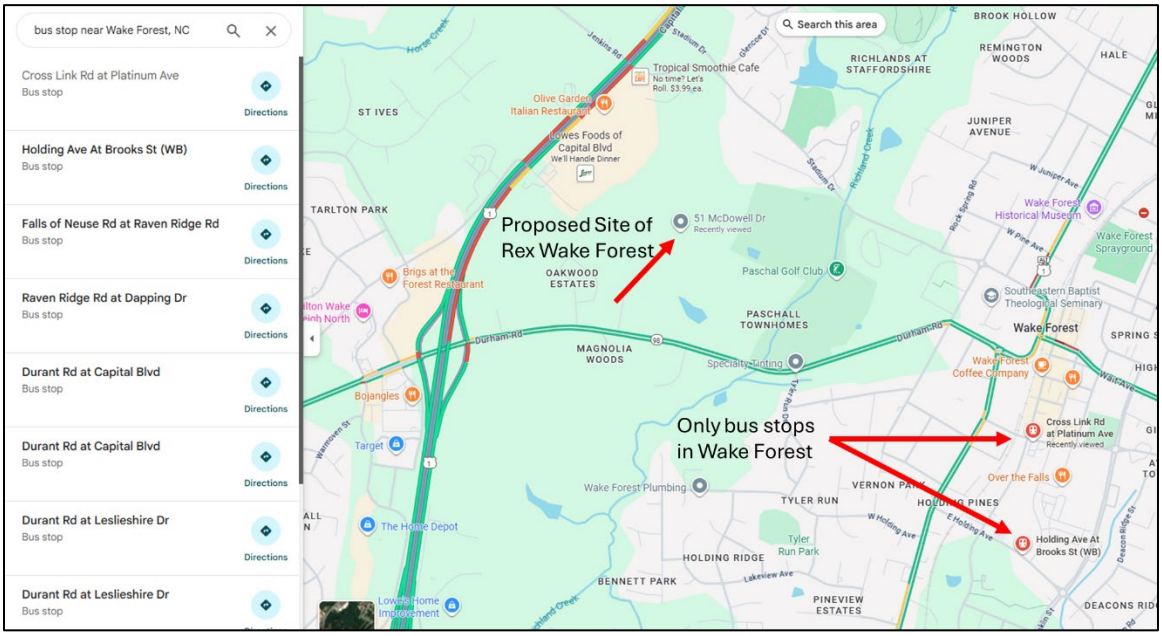
For the reasons listed above, the UNC Rex Wake Forest application does not conform with Review Criterion 6.

7. The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

The UNC Rex project proposes to hire **486 FTEs** by Project Year 3. Section H of the application provides no information about how UNC Rex will achieve such a large recruitment task in the face of a large and growing healthcare workforce shortage.

Furthermore, access to necessary staff is limited simply because of the proposed location. As seen in Figure 6 below, Rex Wake Forest will not be near any public transportation stops, thus requiring potential staff to live within walking distance, or have alternative transportation. Initiatives referenced on page 126 to retain nursing staff are only effective if those nurses can get to work.

Figure 6: Wake County Public Transportation Stops in Relation to Rex Wake Forest's Proposed Location



Source: Google maps, September 22, 2025

The UNC Rex application is nonconforming with Review Criterion 7.

12. Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans.

UNC Rex Wake Forest's total capital cost, $485,597,634 equates to $9,711, 953 – the second highest in this review batch after Novant Knightdale. The proposed project's construction contract is $320,166,244 or $6,403,325. Section K.1 indicates intent to build 308,467 Square feet. Hence the forecast construction cost is $1,037.93 per square foot. By contrast, RS Means/Gordian, a national construction cost tracking company, reports 2025 hospital construction at $398.39 per square foot in the Atlanta region in 2025[5]. This indicates that the proposed facility involves an enormous investment in outpatient services and the application provides no need analysis to support those outpatient services.

Although capital cost has not been used as a competitive factor in recent reviews, there is a stark contrast in this review among applicants proposing new facilities. Like other applicants in the review who propose to develop new acute care hospital campuses, the UNC Rex Wake Forest project will require creation of expensive infrastructure, including site work, central plant, parking, and ancillary and support space, which are necessary for this new hospital, but they add significantly to the project cost.

The application fails to explain the cost, design, and means of construction proposed represent the most reasonable alternative, or that the construction project will not unduly increase the costs of providing health services.

For reference, in this review batch, WakeMed Garner proposes an expansion to its approved hospital. The proposed expansion will increase total acute care beds from 31 to 109 – more than double that of Rex Wake Forest's 50 beds. However, UNC Rex's proposed construction contract cost is over $26,000,000 more than what WakeMed Garner proposes. See Table 6 for a complete cost comparison.

[5] https://www.bdcnetwork.com/home/news/55299784/healthcare-construction-costs-for-2025

Table 6: Capital Cost Breakdown, Rex Wake Forest Compared to WakeMed Garner

Metric	Rex Wake Forest	WakeMed Garner
a. Total Capital Costs	$485,597,634	$486,500,000
b. Total Acute Care Beds	50	109
c. Total Square Feet	308,467	420,000
d. Construction Contract	$320,166,244	$293,724,827
e. Cost per Bed	$9,711,953	$4,463,303
f. Cost per Square Foot	$1,574	$1,158
g. Cost per Bed (Const Contract)	$6,403,325	$2,694,723
h. Cost per SF (Const Contract)	$1,038	$699

Notes:

a. Form F.1a; Form F.1b
b. Per each application
c. Rex Wake Forest, Section K.1, p131; WakeMed Garner internal notes
d. Form F.1a; Form F.1b
e. a / b
f. a / c
g. d / b
h. d / c

The exorbitant capital cost of UNC Rex Wake Forest Hospital suggests that UNC Rex made little effort to contain the project's capital costs with regard to design and construction approach. Section K.3 contains no such information. In fact, the response to K.3.b. acknowledges that "the proposed project is capital intensive," (p. 132).

Because the project elements are not justified and the project requires duplication of ancillary and support infrastructure and construction cost savings are not explained, **the Rex Wake Forest application is nonconforming with Review Criterion 12.**

18a. The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for the service for which competition will not have a favorable impact.

Project Does Not Enhance Competition

UNC Rex is not a new competitor in Wake County. The application does not provide any information demonstrating that UNC Rex Wake Forest Hospital will offer competitive services or add cost effective features. The UNC Rex Wake Forest project will not enhance competition for acute care hospital services in Wake County and is duplicative of services currently operational and approved at WakeMed North Hospital. Please see the discussion for Review Criterion 6.

Cost Effectiveness

Please see the response to Review Criterion 12. The UNC Rex Wake Forest project proposes, by far, the highest capital cost for acute care beds in the review, and very high cost per square foot. These high costs may reflect inclusion of services that are not justified as needed by the population to be served. For example, Franklin County has an unused operating room in the proposed catchment area. See 2025 SMFP Table 6A.

Access Not Improved

The UNC Rex Wake Forest project would create another point of access for acute care hospital services in Wake County, at great cost. The Agency must weigh the value in an additional point of entry, whose proposed service area overlaps significantly with an existing provider, against the cost of developing such a facility.

Because the project claims it will increase competition but provides no evidence to show how it will enhance competition, **the project should be found non-conforming to Criterion 18a.**

ATTACHMENT F

Wake Co Pop 65+ Growth vs REX Main Px Day Growth, FY19-FY34

Metric	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
a. Wake County 65+ Population	139,025	139,025	139,025	139,025	139,025	139,025	173,332	173,332	173,332	173,332	173,332	214,006	223,221	232,833	242,859	253,317
b. REX main Patient days	110,549	108,609	123,724	126,431	134,615	137,707	140,850	146,550	153,923	161,667	169,800	178,307	187,240	196,621	206,471	216,816

Sources

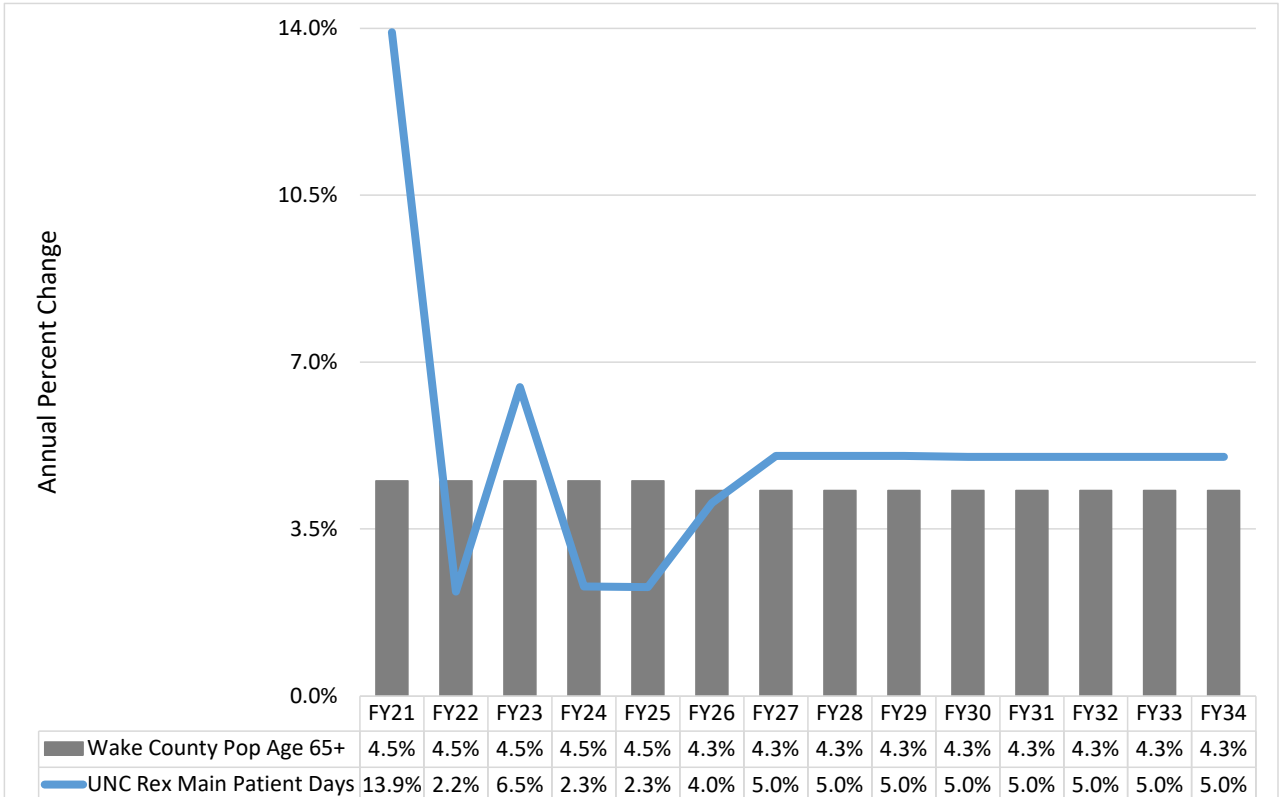
a. National Demographer Claritas, Pop Facts Premier Wake County Population by Age Group 2020, 2025, 2030, all other years interpolated.

b. Rex Wake Forest application pps 163 & 166

Percent Change Table

Metric	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Wake County Pop Age 65+		0.0%	0.0%	0.0%	0.0%	0.0%	24.7%	0.0%	0.0%	0.0%	0.0%	23.5%	4.3%	4.3%	4.3%	4.3%
UNC Rex Main Patient Days		-1.8%	13.9%	2.2%	6.5%	2.3%	2.3%	4.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Calculation: (current year - previous year) / previous year



ATTACHMENT G

Competitive Review of Rex Hospital, Inc.
UNC Health Rex Main Campus / Project ID #J-12677-25

Overview

UNC Health Rex is requesting approval of $98,400,093 as a change of scope to two approved CON applications, J-12258-22 and J-12548-24. The project also involves improvements to a project approved by Exemption in 2023. This 2025 application requests approval to develop 106 additional acute care beds in a new bed tower on the UNC Rex main campus in Raleigh. Beds would be available in **November 2030** or **FFY 2031.** The application assumes approval of another 44 beds that were denied by the Agency in a previous 2023 CON application. Total licensed acute care beds at UNC Rex Main following completion would be 583 (page 42), Form C shows 606 total non-neonatal beds at project completion.

For reasons listed below, this application should be found non-conforming to Criteria 1, 3, 4, 5, 6, 7, 8, 12, and 18a.

CON Review Criteria

1. The proposed project shall be consistent with applicable policies and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, ambulatory surgery operating rooms, or home health offices that may be approved.

Starting on page 29, the application addresses required Policy Gen-5. Policy GEN-5 requires a description of cultural competency programs for "communities it will serve."

The application ignores this instruction and addresses only Wake County (Question B.20a, p 29). However, on page 46, the application identifies patients as originating from Wake, Johnston, Sampson, Wayne, Harnett, Franklin, Nash, the rest of NC and other states.

- Parts Questions B.20a and b of the response to Policy GEN-5 do not address these other communities.
- Question B.20c does not address cultural competency.
- The response to part B.20e is not specific and does not address periodic measurement of cultural competency.

For these reasons, the application should be found non-conforming to Criterion 1.

3. The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

UNC Rex proposes to add 106 acute care beds to an approved tower on its main campus in Raleigh. However, the Applicant's forecast factors are overinflated creating unrealistic projections for patient days, and they fail to explain the need the defined service area has for the proposed services.

Inflated Forecast Factor

In Section C, the application proposes to serve residents of Wake and six other counties by finishing out two floors of a new tower building for which it received CON Exemption in 2024. The project involves 106 new acute care beds, a different location for 18 acute care beds approved in its 2022 CON, and 20 beds recommended for approval in 2024 but held up by a current appeal. This takes non-neonatal acute care beds on Rex Main Campus from 462 to 606 (462 + 106 + 18 + 20 = 606).

The need and utilization methodology are based on historical acute care bed days on the Rex Hospital License trended forward eight years from FY 2026 through FY 3034. Data for the forecast are from "internal data," not the License Renewal applications.

The forecast mechanism for the trend is the Compound Annual Growth Rate ('CAGR") of licensed days between FY 2019 and FY 2025 Annualized. A CAGR calculation reflects the difference between the starting point and the ending point. Historical data are on page 60 and are copied here.

UNC Health Rex Historical Acute Care Days by Campus

	FY19	*FY20*	*FY21*	*FY22*	*FY23*	*FY24*	*FY25**	*FY19-FY25 CAGR***
UNC Health Rex Hospital	110,549	108,609	123,605	126,431	134,615	137,707	140,850	4.1%
UNC Health Rex Holly Springs Hospital				2,984^	6,870	7,831	10,256	
UNC Health Rex License Total	**110,549**	**108,609**	**123,724**	**129,415**	**141,485**	**145,538**	**151,106**	**5.3%**

Source: UNC Health Rex internal data.
* FY 2025 data is seasonalized based on 10 months of historical data (July 2024 – April 2025)

Source: UNC Rex Main application page 60

The methodology acknowledges that the actual CAGR for Rex Main patient days during that period is substantially less than the UNC Rex Hospital License CAGR (4.1% in Table 1 compared to 4.9% in Table 4). The application narrative does not acknowledge that the UNC Rex License CAGR is higher because Holly Springs has no days at the starting point (FY 2019) and a full year of Holly Springs patient days at the end point (FY 2025). **The subtlety is important.**

The application states on page 134 that using a 5.0 percent growth rate for patient days is reasonable because, "is the same growth rate utilized by the 2025 SMFP that underlies the acute care bed need in **Wake County**… [and] is equivalent to the historical growth rate of the Wake County population age 65 and older…," (emphasis added).

This is misleading and inaccurate for this methodology. First, according to its own data in Exhibit C.4-1, Wake County age 65+ **was growing** at a rate of 5.0 percent annually between 2020 and 2025. That growth is expected to drop to 4.5 percent annually between 2025 and 2030. Maintaining 5.0 percent CAGR through FY 2031 is not supported by the facts the application presents.

Second, UNC Rex states throughout its application that its service area also includes Johnston, Sampson, Wayne, Harnett, Franklin, and Nash Counties. Most of these counties are growing at half that rate or lower. See summary Table 1 below.

Table 1: Population CAGR by County 2020-2025 Compared to 2025-2030

County	CAGR 2020-2025		CAGR 2025-2030		Net Change	
	Total	65+	Total	65+	Total	65+
Wake	1.8%	5.0%	1.9%	4.5%	0.1%	-0.5%
Johnston	3.3%	5.3%	2.5%	4.7%	-0.8%	-0.6%
Franklin	3.7%	6.0%	2.6%	4.8%	-1.1%	-1.2%
Harnett	2.0%	3.7%	1.4%	2.9%	-0.6%	-0.8%
Nash	0.8%	2.6%	0.4%	1.6%	-0.4%	-1.0%
Sampson	0.6%	1.7%	0.4%	1.3%	-0.2%	-0.4%
Other	1.1%	3.3%	1.1%	2.7%	0.0%	-0.6%

Source: UNC Rex Main Exhibit C.4-1

If the application had used data supplied in Exhibit C.4-1 to develop a population and age based CAGR for the period 2025 to 2030, the forecast licensed beds would not meet the performance standard in 10A NCAC 14C .3803(5). The performance standard is 78.0 percent as illustrated in the following table the forecast licensed beds would represent **only 76.5 percent occupancy**. Notably, the true forecast fails on Criterion 3 and the Performance Standard. For reference, the application on page 134 forces the days to meet the Performance Standard by using the 5.0 percent CAGR.

Table 2: Projected Acute Care Days – UNC Health Rex License without New Hospital

	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY25-FY34 CAGR
UNC Health Rex License Total	151,106	158,677	166,627	174,975	183,741	192,946	202,613	212,764	223,423	234,617	5.0%

The more reasonable CAGR is 2.85 percent based on a weighted CAGR. The weight is based on percent patient origin, population growth rate, and population age. In this table the "Other^" population CAGR is equal to the state of North Caolina average.

Table 2: Population Age and Patient Origin Based CAGR

County	Pt origin	Pop CAGR		Rex Pts.	Weighted Avg.		Total
		Total	65+	%65+	65+	<65	
a	b	c	d	e	f	g	h
Wake	70.70%	1.9%	4.5%	44.7%	1.4%	0.7%	2.2%
Johnston	7.40%	2.5%	4.7%	44.7%	0.2%	0.1%	0.3%
Franklin	3.50%	2.6%	4.8%	44.7%	0.1%	0.1%	0.1%
Harnett	2.50%	1.4%	2.9%	44.7%	0.0%	0.0%	0.1%
Nash	2.00%	0.4%	1.6%	44.7%	0.0%	0.0%	0.0%
Sampson	1.80%	0.4%	1.3%	44.7%	0.0%	0.0%	0.0%
Other^	12.20%	1.1%	2.7%	44.7%	0.1%	0.1%	0.2%
Total							2.85%

Notes:

a. *Patient origin counties, Form C.3b*
b. *Patient origin, Form C.3b*
c. *Age 65+ population CAGER from Exhibit C.4-1, FY25-FY30*
d. *Total population CAGR from Exhibit C.4-1, FY25-FY30*
e. *Rex Main Campus total patients over age 65, Section L, p113*
f. *Weighted Average 65+ = b * d * e*
g. *Weighted Average <65 = b * c * (1 – e)*
h. *f + g*

Applying the weighted CAGR described in Table 2, results in FY 2034 UNC Rex License patient days of 196,639, which is insufficient to meet the license performance standard. See Table 3 below.

Table 3: Corrected UNC Rex License Patient Day Forecast Through FY 2034

Metric	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
a. REX License Ttl Pt Days	151,106	155,419	159,856	164,419	169,113	173,940	178,905	184,955	190,711	196,639
b. ADC	414	426	438	450	463	477	490	507	522	539
c. Beds	466	466	466	510	510	510	654	704	704	704
d. Occupancy	***88.8%***	***91.4%***	***94.0%***	***88.3%***	***90.8%***	***93.4%***	***74.9%***	***72.0%***	***74.2%***	***76.5%***

Source:

*a. FY 2025 patient days from UNC Rex application Table 2; subsequent years calculated at previous year * (1 + 0.0285)*
b. a / 365
c. UNC Rex application Forms C.1a and b for the license
d. b / c

As noted above, these forecasts are generous. As demonstrated in Exhibit C.4-1, population growth rates in these counties are declining.

Need of Population to be Served for the Service Not Discussed

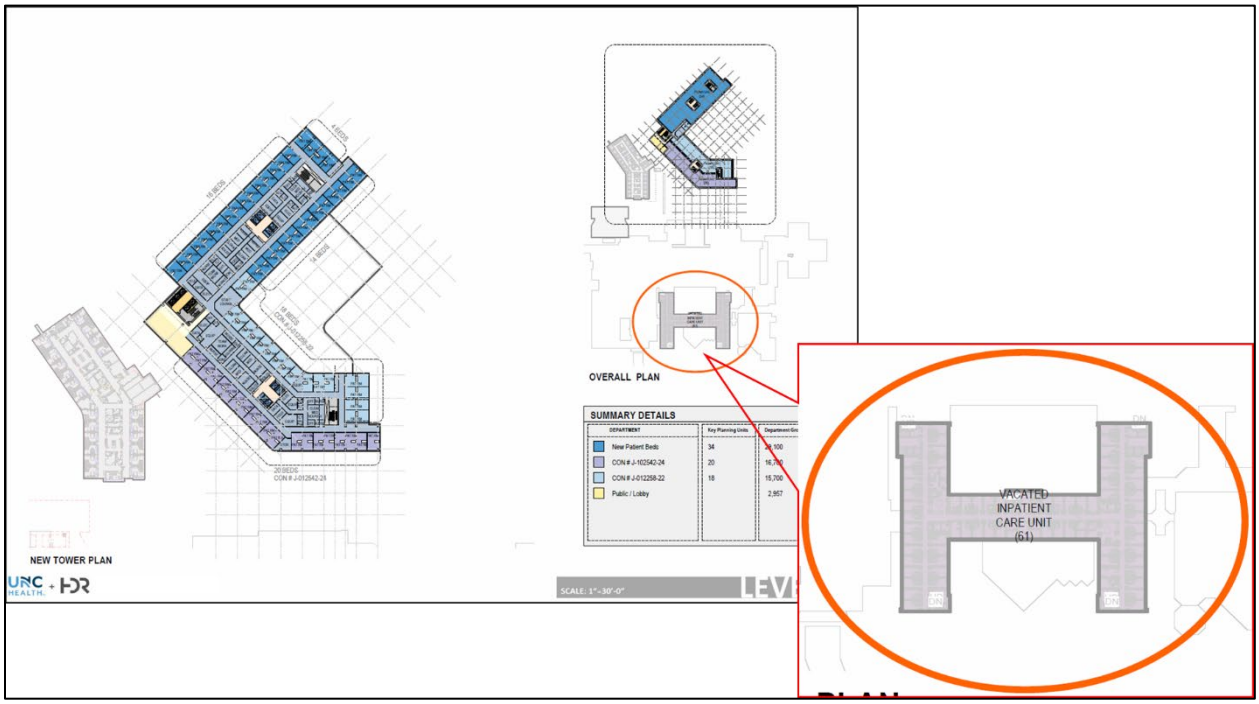
Criterion 3 requires demonstration of the need of the population to be served for the proposed service. The application provides no information to quantify or qualitatively describe the need that residents of the seven+ counties identified in the Patient Origin in Section C.3 have for so many beds at Rex Main hospital. The need discussion in **Section C.4 addresses only Wake County** and largely compares Wake County residential growth to that of other North Carolina geographies that the project does not propose to serve. **This section does not address need of the population to be served**. The Need and Utilization Methodology in Section Q is similarly silent on this topic as it relates to Rex Main. The methodology in Section Q is not clear about underlying assumptions.

Overstated and Unjustified Forecast of Patient Days

Thus, the application has not justified the inflated CAGR forecast and overestimates need for beds at UNC Rex Main Campus.

The overstated days and excess request for beds is compounded by the absence of an explanation for the abandoned 61 beds shown in the drawings in Exhibit C.1.b:

Figure 1: Excerpt of UNC Rex Main Line Drawings, Exhibit C.1-2



For these reasons, the application should be found non-conforming to Criterion 3.

4. Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

The application indicates that there are other alternatives to the proposed project (page 88). Two alternatives included in the application are not discussed in Section E.

First, drawings in Exhibit C.1-2 show a vacated 61 bed inpatient care unit on level 5. The application indicates on page 42 in the footnotes to the table that utilization forecasts assume approval of 44 UNC Rex Main acute care beds that were recommended for denial in the 2024 Wake County bed review. However, it is not clear where these 44 beds would be located relative to the 124 included in construction drawings associated with this application. There is no discussion of these beds in Section C or Section K. Thus, the application does not demonstrate that proposed project is the least costly, or most effective alternative considered by the applicant.

Second, the proforma for beds alone, in Form F.2b shows that the cost of operating patient beds costs more than the revenue they generate, even when highly occupied. This raises the question: why build new beds and leave 61 vacant?

For these reasons, the application should be found non-conforming to Criterion 4.

5. Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs, as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

Project requires substantial increase in collected revenue per day to produce the forecast proforma. The application provides no information to support why such large increases in per-day collected revenue are justified. See Table 4 in Criterion 18a below.

The patient day forecasts are significantly overstated as described in Criterion 3 above. Therefore, the financial projections are unreliable.

For these reasons, the application should be found non-conforming to Criterion 5.

6. The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

Drawings in Exhibit C.1 show 61 vacated acute care beds. The application fails to discuss why these beds cannot be used or why new construction is required.

For this reason, the application should be found non-conforming to Criterion 6.

7. The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

The project will require 506 additional employees. This is not routine recruitment. Section H of the application provides no explanation of how UNC Rex Main will recruit half again more employees than it has today. (1,581 versus 1,075 current employees.)

For these reasons, the application should be found non-conforming to Criterion 7.

8. The applicant shall demonstrate that the provider of the proposed services will make available, or otherwise make arrangements for, the provision of the necessary ancillary and support services. The applicant shall also demonstrate that the proposed service will be coordinated with the existing health care system.

The applicant is requesting 106 additional non-neonatal acute care beds. These beds become available at the same time as the previously approved 38 beds, leading to an increase of 144 beds. In this scenario, Rex Main will jump from 462 acute care beds to 606. *This assumes that the previously denied UNC Rex Main 44 acute care beds will come online in FY 2028.* This assumption alone is unsupported. The Administrative Law Judge **has already ruled** that the Agency was correct in denying UNC Rex Main these 44 beds.

Moreover, despite this large increase in capacity, this application fails to mention the addition of any ancillary services to accommodate the added acute care service. Specifically, **there are no lab, pharmacy, or imaging expansions mentioned in the Exemption letter** included in Exhibit C.1.1. Nor is there an explanation of the adequacy of, for example, imaging and CT to support the change from 2025 -- 31 percent more beds and 40,000 more patient days forecast in Table 13 of the application.

For these reasons, the application should be found non-conforming to Criterion 8.

12. Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans.

In Section K, the applicant writes "UNC Health Rex Hospital achieves substantial cost savings through consolidated services and economies of scale, which translate directly into lower patient charges. Additionally, UNC Health Rex's conservative financial management has generated sufficient reserves from prior years to fund this project without requiring cost increases or higher patient charges."

See the comments on criterion 18a below; the cost per patient day is increasing through the project years. There is a 19 percent increase in operating expenses per patient day from FY 2024 to FY 2029, the partial FY when these beds come online. Then in the partial year, operating costs per patient day increase by 23 percent in one year. The operating expenses per patient day continue to grow with inflation through the projected project years.

Facts contradict the narrative in Section K and there is no explanation for the contradiction.

For this reason, the application should be found non-conforming to Criterion 12.

18a. The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for the service for which competition will not have a favorable impact.

In Section K, the application claims that the increased days will reduce patient charges. Data from the proforma Forms F.2 and forecast days in Form C.1 indicate this is not a true statement. Costs per patient day also increase substantially as well. See Tables 4 and 5 below.

Table 4: Changes in Net Revenue Per Patient Day

Metric	Current	Partial	Project Yr 1	Project Yr 2	Project Yr 3
a. Patient Days	137,707	187,240	191,278	198,276	205,643
b. Net Revenue	$108,838,647	$181,302,170	$190,397,954	$202,890,547	$216,320,161
c. Net Revenue Per Day	790.36	968.29	995.40	1,023.27	1,051.92
d. Percent Change		**23%**	3%	3%	3%

Source: Forms F2.b Rex Main application for Net revenue and days from form C.1.
Notes:

a. Form C.1
b. Form F.2b
c. a / b
d. (current year / previous year) - 1

Table 5: Changes in Net Cost Per Patient Day

Metric	Current	Partial	Project Yr 1	Project Yr 2	Project Yr 3
a. Total Operating Costs	$164,189,113	$264,569,221	$296,151,312	$313,329,977	$331,706,195
b. Patient Days	137,707	187,240	191,278	198,276	205,643
c. Cost Per Day	$1,192.31	$1,413.00	$ 1,548.28	$1,580.27	$1,613.02
d. Percent Change		**19%**	**10%**	2%	2%

Source: Forms F3.b Rex Main application for Net revenue and days from form C.1.
Notes:

a. Form C.1
b. Form F.3b
c. a / b
d. (current year / previous year) - 1

Because the project will not meet the cost effectiveness test that the application claims, the project should be found non-conforming to Criterion 18a.

ATTACHMENT H

Competitive Review of Duke University Hospital, Inc.
Duke Raleigh Hospital / Project ID #J-012690-25

Overview

Duke Raleigh Hospital ("Duke Raleigh") proposes to develop 101 new acute care beds on its main campus, in response to the need determination for 267 beds for Wake County in the 2025 SMFP. Duke Raleigh fails to adequately demonstrate the need for the proposed project. The application is nonconforming with several Review Criteria and should be denied.

CON Review Criteria

3. The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

Duke Raleigh's projections are both unreasonable and unsupported for several reasons, rendering their application non-conforming with Review Criterion 3.

Projected Growth Rate for Inpatient Discharges is Unreasonable and Unsustainable

On page 128, Duke Raleigh states that it chose to use a 4.5 percent CAGR, based on its FYs 2019-2025 data, to project inpatient discharges through Duke Cary's Project Year 3 (FY 2034). This growth rate is unreasonably high. The CAGR calculation considers only the starting and ending points. Duke Raleigh's CAGR utilizes FY 2025 as the end point, which is an anomaly year, because it is both a partial year and the first full year after Duke Raleigh added 18 acute care beds. The new beds added inpatient capacity which would obviously inflate the growth rate. This annual growth rate is unsustainable, as Duke Raleigh is not approved to add 18 new beds per year indefinitely.

A more realistic growth rate, which would not unreasonably inflate the projections, would be to apply a CAGR of 2.18 percent, which is Duke Raleigh's annual growth rate for discharges in FYs 2019-2024, as shown in the table on page 127, and includes its most recent *full* fiscal year. This rate is very similar to the weighted population CAGR of 2.17 percent used in the WakeMed Raleigh Campus application in this review (Project No. J-12671-25).

If the more conservative annual growth rate of 2.18 percent per year is applied to discharges beginning in FY 2026 through FY 2034, Duke Raleigh does not meet the Year 3 (FY 2032) Performance Standard of 71.4 percent set forth in 10A NCAC .3803(5). Please see the following table.

Table 1: Duke Raleigh Projected Utilization Before and After Shifts to Duke Cary
Assumes 2.18 percent CAGR and 5.2 ALOS

									DCH PY1	DCH PY2	DCH PY3
							DRAH PY1	DRAH PY2	DRAH PY3		
Metric	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**FY32**	**FY33**	**FY34**
a. Projected Discharges Pre-Shift	10,697	12,506	12,778	13,056	13,340	13,630	13,927	14,230	14,540	14,857	15,180
b. Discharges Shifted to DCH							1,056	1,301	1,573	1,670	1,774
c. Discharges Remaining at DRAH	10,697	12,506	12,778	13,056	13,340	13,630	12,871	12,929	12,967	13,187	13,406
d. ALOS	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
e. Projected Patient Days	54,555	65,031	66,446	67,891	69,368	70,876	66,929	67,231	67,428	68,572	69,711
f. ADC	149.5	178.2	182.0	186.0	190.0	194.2	183.4	184.2	184.7	187.9	191.0
g. Licensed Beds	204	204	233	233	265	265	265	265	265	265	265
h. % Occupancy After Shifts to DCH	73.3%	87.3%	78.1%	79.8%	71.7%	73.3%	69.2%	69.5%	**69.7%**	70.9%	72.1%

Notes:

a. FY24-25 -- actual; FY26-34 – previous year's discharges increased by 2.18 percent per year (FY19-24 CAGR)
b. DCH projection methodology, DRAH application p. 138
c. a – b
d. FY24-25 -- actual; FY26-34 projected, DRAH application pp. 128-129
*e. c * d*
f. e / 365
g. DRAH application p. 130
h. f / g

Projected Utilization After Relocation of Beds to Duke Cary is Unreasonable

On pages 68-69, the Duke Raleigh application describes its proposed relocation of beds from Duke Raleigh to Duke Cary, approved in Project No. J-12029-21. Duke Raleigh states: "Even if DRAH experienced no further growth in utilization from FY 2024 to FY 2030 when DCH is targeted to open, it would far exceed the target occupancy threshold once the 40 beds and projected discharge volume are shifted *to* DCH as shown below. Its current patient utilization would require 117.6 percent occupancy of its remaining 164 beds." This statement is misleading, as it assumes Duke Raleigh would continue to treat inpatients unabated well after its facility exceeds 100 percent occupancy and following the shift of beds to Duke Cary.

The table below, provided on page 69 of the Duke Raleigh application, shows the supposed impact of relocation of beds on occupancy rates at Duke Raleigh in the Interim Years (FYs 2026-2029) through Project Years 1-3 (FYs 2030-2032) and Duke Cary's Project Years 4-5 (FYs 2033-2034).

										Duke Cary Project Years 1-3	
							Duke Raleigh Project Year 1-3				
	Actual	Annualized	Interim Year	Interim Year	Interim Year	Interim Year	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Project Year 5
	FY 2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034
Discharges	10,697	12,506	13,069	13,657	14,271	14,913	15,583	16,284	17,017	17,782	18,582
ALOS	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Inpatient Days of Care	54,914	65,521	68,468	71,547	74,765	78,128	81,641	85,313	89,150	93,160	97,350
Licensed Beds	204	204	209	209	209	205	169	169	169	169	169
% Occupancy	73.7%	88.0%	89.8%	93.8%	98.0%	104.4%	132.4%	138.3%	144.5%	151.0%	157.8%

Source: application p69

The table assumes inpatient discharges at Duke Raleigh will continue to grow at an annual rate of 4.5 percent per year, that ALOS will remain constant at 5.2 days, and that patient volumes would increase as if Duke Raleigh were still licensed for 209 beds, even though its licensed bed complement will decrease to 169 beds in FY 2030, coinciding with the opening of Duke Cary Hospital. The result is an impossible occupancy rate of 157.8 percent in FY 2034, which translates to an Average Daily Census of 266 (97,350 days ÷ 365 = 266.7), *nearly 100 beds above Duke Raleigh's licensed capacity* following the relocation of beds. The obvious flaw in this assumption is that Duke Raleigh's discharges and patient days would continue to grow without interruption, even after the shift of beds to Duke Cary beginning in FY 2030. The table above shows no decline in utilization associated this shift of capacity – discharges and patient days continue to increase as if Duke Raleigh were licensed for 209 beds from FY 2030-2034.

When hospitals reach 100 percent occupancy, their ability to continue to admit patients becomes severely limited, particularly if ALOS is not reduced. In reality, Duke Raleigh's utilization would reach a level where growth in discharges would be nearly flat, because capacity constraints would prevent additional admissions. Duke Raleigh's effort to demonstrate the supposedly dire occupancy levels following the relocation of beds to Duke Cary is baseless, particularly since its projection utilization does not decline accordingly following the shift.

Declined Transfer Requests Have Been Decreasing

On page 56, Duke Raleigh also discusses its Transfer Requests and Declinations over the past several years. While Duke Raleigh has accepted an increasing number of transfers since FY 2022, the number of declined requests has decreased steadily since 2021. Please see the following table, excerpted from the Duke Raleigh application.

DRAH Patient Transfers Requested and Declined

FY	Patient Transfer Accepted & Arrived	Declinations of Patient Transfers to DRAH Due to Capacity
2020	896	132
2021	672	202
2022	564	195
2023	722	164
2024	756	97
2025	985	93

Source: DUHS internal data

Source: application p56

Declined patient transfer requests decreased from a high of 34.6 percent in FY 2022 to only 9.4 percent in FY 2025. This data suggests that Duke Raleigh is better able to accommodate its transfer requests, a function of sufficient inpatient bed capacity.

For the reasons stated above, the Duke Raleigh application does not conform with Review Criterion 3.

3a. In the case of a reduction or elimination of a service, including the relocation of a facility or a service, the applicant shall demonstrate that the needs of the population presently served will be met adequately by the proposed relocation or by alternative arrangements, and the effect of the reduction, elimination or relocation of the service on the ability of low income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly to obtain needed health care.

Duke fails to demonstrate how Observation patients will be adequately served once its existing 29 observation beds are converted to licensed acute care beds as a result of this project. On page 82, Duke states that "[t]here are no regulated assets relocated to another facility in connection with this project (DUHS was previously approved to relocate 40 beds from DRAH to DCH, but no additional beds will be relocated.)" While Observation beds are unregulated by the Agency, they are a "service" provided in acute care hospitals. Duke did not project utilization of Observation Beds in their methodology or are their utilization provided in Form C.4b, as required by the Application.

Also on page 82, Duke states "when permanently licensed as inpatient beds, they will remain available to accommodate observation patients". However, this assumes that inpatients do not occupy these beds. The table below, excerpted from page 68 of the Duke Raleigh application, implies that, at its FY 2025 utilization, Duke Raleigh would be operating at a 117.6 percent occupancy if 40 beds were relocated to Duke Cary. This relocation would not only be unreasonable and irresponsible for patient safety, but it would leave no ability to utilize inpatient beds for observation patients that do not meet the clinical or payor criteria for inpatient admission. Duke provides no plan, projections, or support for how it would accommodate observation patients if its acute care beds were operating at 117.6 percent occupancy as it implies.

DRAH Projected Utilization with No Growth
Shift of Patient Days and Beds to DCH

	Patient Days	ADC	Beds	% Occupancy
DRAH FY 2025	65,521	179.5	204	88.0%
Shift to DCH*	4,858	13.3	(40)	
Remaining at DRAH	**60,663**	**192.8**	**164**	**117.6%**

** Year 1 - 1,056 discharges will shift x 4.6 ALOS = 4,858 patient days*
See Section Q assumptions for Form C.1b for DCH

Source: application p68

The above table clearly shows that Duke Raleigh would operate at only 88 percent occupancy if they chose to not relocate beds at this time. An occupancy level of only 88 percent is the lowest occupancy rate of any *established* hospital in the current review. The table below summarizes the occupancy level from Form C of each existing hospital's current application.

Table 2: Wake County Hospital Occupancy Rates Compared, FY24 and FY25

Facility	FY24 Occupancy	FY25 Occupancy
WakeMed North	85.6%	112.8%
WakeMed Raleigh	91.5%	94.8%
UNC Rex Hospital	90.3%	92.3%
Duke Raleigh	73.7%	88%

Source: Form C.1a for each existing hospital in this review batch.

The relocation of acute care beds from Duke Raleigh to Duke Cary is a self-inflicted, foreseeable crisis that was originally reflected in the original 2021 application (Project No. J-12029-21) for Duke Green Level Hospital. The reduction of observation beds in this application is similarly unreasonable and unsupported. Duke Raleigh, with the lowest occupancy rate among Wake County hospitals, has not adequately proven that it requires additional acute care beds at this time and is therefore non-conforming.

The Duke Raleigh application is non-conforming with Criterion 3a, as it fails to appropriately respond to Section D and Form C.4b, or address how observation patients will be cared for following the reduction in Observation bed capacity.

ATTACHMENT I

Competitive Review of Duke University Hospital, Inc.
Duke Cary Hospital / Project ID #J-12689-25

Overview

This project filed by Duke University Health System ("DUHS") requests almost $1 billion ($986,203.840) for a change in Scope of Project ID# J-12029-21 (38 med surg beds. 2 obstetric beds and 2 operating rooms and 10 observation bed). The new Duke Cary Hospital (DCH) hospital is to be licensed under the Duke Raleigh (DRAH) hospital license and this application proposes to add:

- 8 neonatal Level II beds
- 12 obstetric beds
- 108 medical surgical beds
- 28 observation beds
- 1 CT, 6 ultrasound units. 3 mammography uits and 1 interventional radiology room

The proposal would quadruple the size of the original project.

Careful review of the application shows it non-conforming to Criteria 3, 4, 5, 6, 7, 12, and 18a.

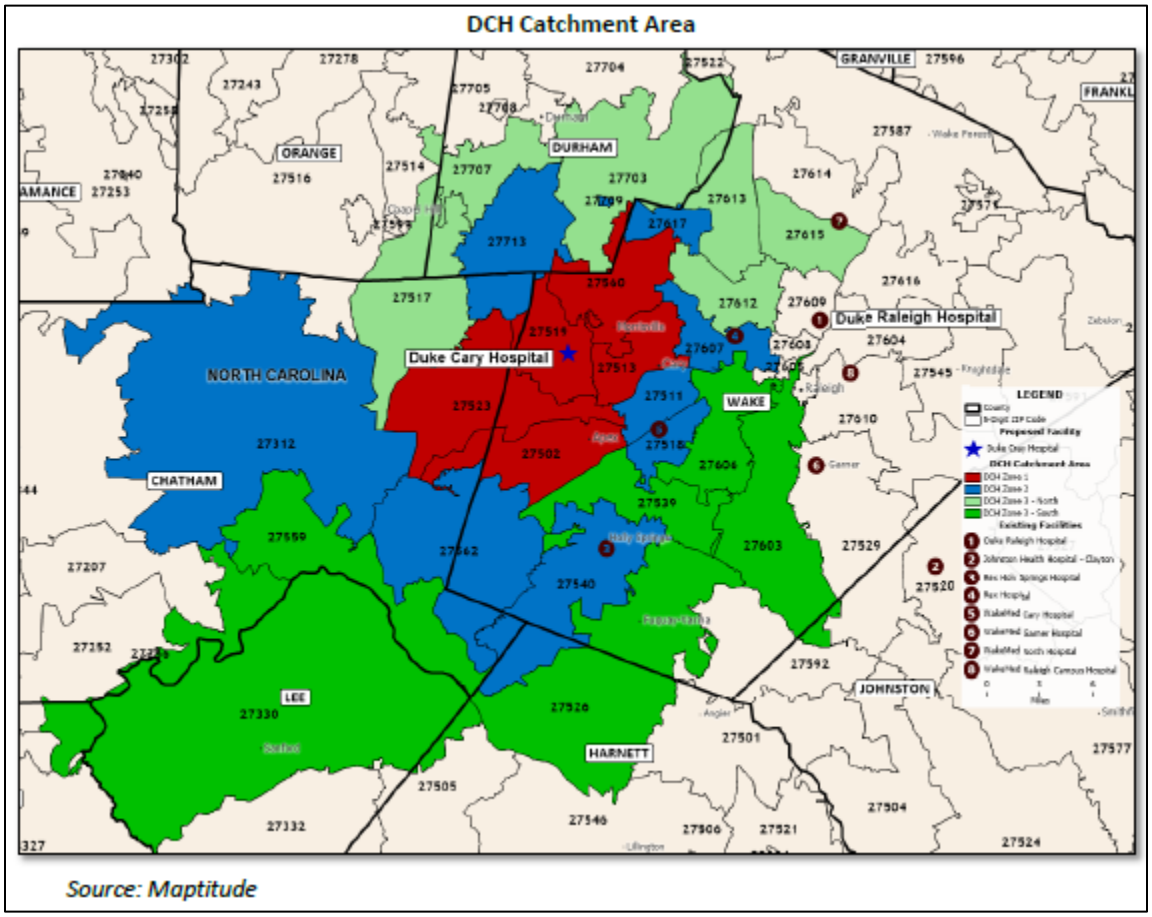
CON Review Criteria

3. The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

Overview

On page 59, the applicant identifies the population to be served as the "DCH Catchment Area," consisting of 26 ZIP Codes that cover Wake, Durham, Chatham, Lee, and Harnett counties. Duke states that the project is driven by population and utilization growth in the catchment area, the distance from existing services, and the opportunity to improve geographic access (p.56).

Figure 1: DCH Catchment Area



Source: DCH 2025 application p59

However, the applicant's own projections contradict these justifications. The more realistic DCH catchment area is only 19 ZIP Codes. Instead of presenting a consistent, evidence-based demonstration of need, the application relies on inflated assumptions, internal contradictions, methods that conflict with its own Original CON application and observed patient behavior, and math errors. Each of these issues is discussed below. The flaws appear across every major area of the methodology, including patient shifts, growth rates, ED projections, and OB utilization, and together they serve to artificially increase projected patient days and encounters at the planned DCH. The result is not a credible showing of need but a manufactured case for expansion.

Duke's methodology errors include:

- **Patient shift error:** Over 2,200 of the projected shifts are from ZIP Codes where Duke Cary is **farther** than another DUHS hospital. Counting these patients as DCH discharges assumes an exorbitant number of patients would bypass closer DUHS facilities. The reasons are unsupported.

- **Growth Rate Error:** To forecast discharges, Duke arbitrarily and unreasonably uses a compound annual growth rate ("CAGR") based on only two full years of historic utilization. This differs from the ZIP Code population CAGRs on page 140. Duke consistently used population CAGRs in previous applications and uses population CAGRs in this same application to project OB discharges on page 151.
- **ED visit error – math**: The incremental ED visit calculations contain a mathematical error in use-rate formulas, overstating discharges of inpatients hospitalized from the ED by 758. This results in the FY2034 average daily census being inflated by 10 patients.
- **ED visit error – market share**: Another 912 discharges are generated by inflated market shares that contradict DUHS own prior applications and reasonable patient travel patterns.
- **Inflated OB Market Share:** 227 of the OB discharges on page 152 are due to inflated market share estimates that contradict the applicant's own history

Table 1 below summarizes how Duke relies on errors to artificially generate utilization at DCH**. Correcting for those errors results in DCH having only 4,879 discharges in PY3, less than half of Duke's projections.**

Table 1: Corrections to DCH PY3 Discharges

Category	Duke Projection	Corrected Value	Notes
a. Discharges based on DUHS Shift	4,875	1,763	Remove shifts where DCH is farther and use population CAGR. See Table 6 and "Conclusions Regarding Duke's Patient Shift Calculations"
b. Discharges based on admits from incremental ED visits	3,328	1,658	Math errors and inflated market share. See Table 9 and Criterion 3, "Incorrect ED Use Rate" and "Inflated ED Market Share"
c. Non-OB In-migration	911	380	10% in-migration factor (Duke assumption) See Table 10
d. OB Discharges Based on DRH Shift	240	175	Remove shifts where DCH is farther. See "Errors in OB Discharges Based on DRH Shift"
e. OB Discharges from Incremental	1,022	795	Remove discharges from inflated market share. See "Errors in OB Incremental Discharges"
f. OB In-migration	140	108	10% in-migration factor (Duke assumption) See Table 12
Total Discharges	10,517	4,879	

Notes: Orange cells represent where the corrected values are detailed in these comments.

The methodology and this discussion involve four Duke Health hospitals: Duke Cary Hospital (DCH), Duke Raleigh Hospital (DRAH), Duke Regional Hospital in Durham (DRH) and Duke University Hospital (DUHS). The methodology groups ZIP Codes in Zones and creates Zone factors for forecasting.

The following sections A through F detail the nature of the errors in this methodology.

A: Errors in Shifted Discharges

Incorrect Proximity Assumptions

The applicant projects that nearly half of DCH's inpatient discharges in PY3 (5,115/10,517) will come from patients that would otherwise receive care at existing DUHS facilities. This projection relies on a fundamentally flawed shift methodology built on unreasonable assumptions. The applicant projects patient shifts by grouping catchment area ZIP Codes into zones based on proximity to DCH. This approach is inappropriate because DCH operates within the broader Duke University Health System, where patient preference should consider proximity to DCH relative to other DUHS hospitals, not to DCH in isolation.

The core flaw in the applicant's methodology is that it assumes patients will shift based primarily on proximity to DCH, without adequately accounting for the presence of other Duke Health system hospitals that are often closer or equally accessible. Duke clearly understands this is an unreasonable approach because Duke previously criticized UNC Rex stating:

"Most importantly, it does not show the relative drive times for other existing facilities even including UNC Rex Hospital, making it impossible to determine whether the Rex Wake Forest service area is reasonably defined and whether the proposed location will meaningfully increase geographic access to care." Source: Duke 2024 Wake Acute Care Bed Comments p7

While the applicant does divide Zone 3 into North and South, this minor adjustment does not address the more fundamental flaw in the methodology. As a result, shift estimates are inconsistent, unsupported, and disconnected from how patients actually choose among DUHS facilities. In fact, the methodology suggests that additional beds at DCH would **represent unnecessary duplication of services and would worsen geographic maldistribution**, rather than alleviate it.

Further, the applicant obscures the true impact and origin of shifts by presenting only Zone-level discharge projections rather than ZIP-level data. Although ZIP-level details were available to the applicant, they were omitted from the application. **This omission is significant because ZIP-level analysis reveals the unreasonable assumptions and errors that are masked at the Zone level.**

Using the applicant's own assumptions and growth rates (as outlined on Page 141 of the application), **Table 2** below reconstructs Duke's project year 3 (FY2034) discharges and resulting shifts by ZIP Code. **This table does not alter the applicant's methodology or any projections; it simply provides the ZIP-level transparency that the application attempts to conceal.** ZIP Code discharges sum to the Zone-level projections on page 144. The colors in the table match the Duke Zones in the application. Column c for each hospital shows the number of discharges shifted.

Table 2: Translation of Non-OB Discharges Shifted from Zone to Zip Codes from DUHS Hospitals to DCH, Project Year 3 (Per Duke CAGR)

ZIP Code	DRAH to DCH			DUH to DCH			DRH to DCH		
	Discharges appropriate to shift	% shifted	Discharges shifted to DCH	Discharges appropriate to shift	% shifted	Discharges shifted to DCH	Discharges appropriate to shift	% shifted	Discharges shifted to DCH
a	b	c	d	b	c	d	b	c	d
27502	45	75.0%	34	322	42.5%	137	25	42.5%	11
27513	50	75.0%	37	255	42.5%	108	52	42.5%	22
27519	87	75.0%	65	542	42.5%	230	48	42.5%	20
27523	32	75.0%	24	108	42.5%	46	17	42.5%	7
27560	45	75.0%	34	339	42.5%	144	70	42.5%	30
27312	29	75.0%	22	157	15.0%	24	21	10.0%	2
27511	134	75.0%	101	138	15.0%	21	12	10.0%	1
27518	76	75.0%	57	86	15.0%	13	11	10.0%	1
27540	116	75.0%	87	169	15.0%	25	14	10.0%	1
27562	4	75.0%	3	16	15.0%	2	-	10.0%	-
27607	99	75.0%	74	60	15.0%	9	2	10.0%	0
27617	165	75.0%	124	160	15.0%	24	51	10.0%	5
27709	-	75.0%	-	6	15.0%	1	4	10.0%	0
27713	78	75.0%	59	1,504	15.0%	226	761	10.0%	76
27330	39	60.0%	23	252	42.5%	107	27	42.5%	11
27517	19	35.0%	7	251	20.0%	50	91	20.0%	18
27559	7	60.0%	4	17	42.5%	7	6	42.5%	3
27612	352	35.0%	123	104	20.0%	21	9	20.0%	2
27613	381	35.0%	133	144	20.0%	29	62	20.0%	12
27615	627	35.0%	219	177	20.0%	35	31	20.0%	6
27703	174	35.0%	61	1,612	20.0%	322	1,718	20.0%	344
27707	66	35.0%	23	1,443	20.0%	289	990	20.0%	198
27526	194	60.0%	116	390	42.5%	166	25	42.5%	11
27539	76	60.0%	46	182	42.5%	77	16	42.5%	7
27603	350	60.0%	210	267	42.5%	113	21	42.5%	9
27606	148	60.0%	89	161	42.5%	68	19	42.5%	8
Total CA	**3,393**		**1,775**	**8,861**		**2,295**	**4,102**		**806**

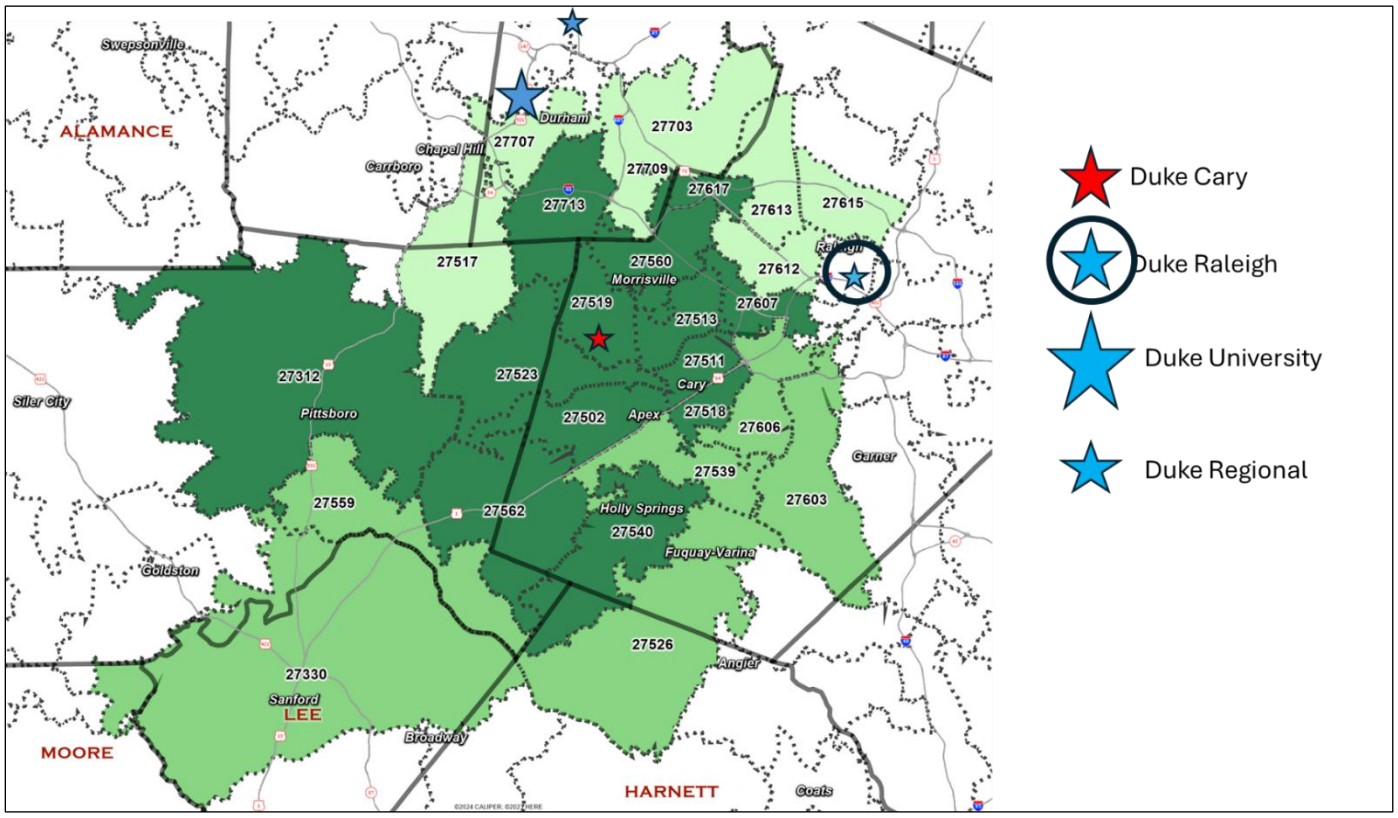
Notes: Values are rounded; minor discrepancies may occur

Zone 1: Red *Zone 2: Blue* *Zone 3 North: Green* *Zone 3 South: Yellow*

a. *FY2025 discharges * (1 + Zone Growth Rate) ^ 9; discharges from p138 and zone growth rates from p141*
b. *Based on the Zone on p143*
c. *a * b*

The following **Figure 2** illustrates the translation of this table for shifts from just one Duke Health hospital, from Duke Raleigh Hospital to Duke Cary Hospital. Examination of the color density reveals how the applicant used Zones to stretch the proximity estimates by ZIP Code. The darker color in the map, the larger the proposed percentage shift from DRAH to DCH. Zip Code 27607 is much closer to Duke Raleigh than Duke Cary but the methodology awards it with a high percentage shift to Duke Cary. The same disconnects between proximity and percentage shift applied occur in proposed shifts from other Duke Health hospitals to DCH.

Figure 2: Illustration of Methodology's Proposed Duke Raleigh Percentage Shifts to DCH by ZIP Code



Source: Duke Cary 2025 Application p143

Artificial Shifts to Manufacture Utilization

Inconsistency with Prior Applications:

Perhaps most revealing, the applicant's own past CON applications for this hospital expose the unrealistic flaws in this current methodology. In every DCH application submitted between 2021 and 2024, the applicant applied consistent shift percentages from its existing hospitals (DRAH, Duke Regional Hospital (DRH) and Duke University Hospital (DUH) to DCH. However, this application abruptly and dramatically inflates the shift percentages without offering any new evidence or justification. See **Table 3** below.

Table 3: Shifts to DCH from Other DUHS Hospitals, Previous Applications vs Current

	DRAH			DUH			DRH		
	Prev. Shift	**2025**	**Diff.**	**Prev. Shift**	**2025**	**Diff.**	**Prev. Shift**	**2025**	**Diff.**
ZONE 3 North	30.0%	35.0%	5.0%	0.0%	20.0%	20.0%	0.0%	20.0%	20.0%
ZONE 3 South	30.0%	60.0%	30.0%	0.0%	42.5%	42.5%	0.0%	42.5%	42.5%

Notes: In prior applications Duke did not split Zone 3. The North and South values above represent the single Zone 3 percentage previously used.

Source: Previous Shift: CON #J-012548-24 p181

In prior applications Duke projected a 0% Zone 3 shift from DUH and DRH to DCH. Now Duke claims Zone 3 will be the single largest source of discharges shifted from those two hospitals to DCH (application p144).

ZIP Code 27713 is another clear example of where Duke arbitrarily inflates shifts. In its 2024 CON (#J-012548-24, p.189), Duke explicitly acknowledged that this ZIP Code spans a wide geographic area, with many residents living closer to DUH than DCH. Duke therefore stated it was "...prudent to reduce the shift assumptions for this ZIP code to more conservatively anticipate patient utilization throughout the DCH catchment area," and applied a max of 4% shifts—consistent with its 2021 application.

Yet in the current filing, Table 2 shows that Duke abruptly discards its own caution and projects a 15% shift from 27713, identical to the rest of Zone 2. This nearly quadruples the previous shift percentage despite no change in geography. By its own prior reasoning, such an increase is unjustifiable. The only explanation is that Duke chose to inflate shifts in order to manufacture higher utilization at DCH. Far from a reasoned adjustment, this change exposes a deliberate inconsistency designed to create the illusion of need. Together with the inflated Zone 3 shifts, this example illustrates a broader pattern: Duke selectively abandons its own methodologies whenever doing so generates higher projected volumes at DCH.

Shifts of Durham County Residents to DCH:

While Duke frames the project as an opportunity for Wake County residents to avoid traveling to Durham, the applicant's own projections reveal the exact opposite: **Durham County residents would be required to travel farther to Wake County in order to utilize DCH.**

On page 62, Duke justifies the need for the project by stating:

> "DUHS conservatively proposes to bring 120 additional beds… which would allow a reasonable portion of these patients who are traveling to Durham for care to remain closer to home. Patients from the DCH catchment area has more than sufficient need to support 160 beds at DCH based only on the patient volume historically served by DUHS facilities."

And on page 50, Duke states:

> "…both Duke University Hospital and Duke Regional Hospital routinely provide care to Wake County residents who could be served in community hospitals closer to home if capacity existed."

These claims are misleading if not outright false. As shown in **Table 2** above, **66% of the projected discharges shifted from DRH to DCH come from only two ZIP Codes: 27703 and 27707** ((334+198)/806 =66%)**.** Additionally, the applicant projects shifting 611 discharges from these ZIP Codes from DUH to DCH. As shown in Attachment J, both ZIP Codes are in Durham County, not Wake County, and each is closer to both DRH and Duke University Hospital (DUH).

Data in **Table 2** above show that Duke projects shifting more than 1,100 Durham County patients from the two existing Duke Health Durham County hospitals to the proposed DCH site in Wake County (322+289+344+198 = 1,153). **These two ZIP Codes each account for more shifted patients than any other zip code. Moreover, ZIP Code 27703 alone shifts more than twice as many patients as the third-largest ZIP Code in the DCH Catchment Area.** This illustration directly contradicts the Applicant's own rationale that the project is needed to allow patients to "remain closer to home" and demonstrates that, instead of improving geographic accessibility, the proposal would worsen it.

This large shift also contradicts Duke's own arguments. In its 2024 comments on the Wake County Acute Care Bed review, Duke criticized WakeMed for projecting a relatively small patient shift:

> "In fact, proximity does not appear to be directly related to the percentage of patients shifted. For example, ZIP code 27604 is a Raleigh ZIP code immediately adjacent to WakeMed Raleigh's home ZIP code, yet WakeMed projected 11% of 27604 patients that have historically sought care at WakeMed Raleigh will drive further north to WakeMed North." p39

> "ZIP code 27545 – Knightdale… WakeMed again assumes that 11% of 27545 patients historically choosing WakeMed Raleigh will now drive further to WakeMed North, a smaller facility with a narrower scope of services." p39

WakeMed's shifts, together, involved only about 300 patients moving within the same city or county. Yet, as illustrated in **Table 2** above, Duke assumes higher percentage and total shifts from Durham County ZIP Codes that are closer to two existing Duke hospitals, resulting in more than 1,100 patients moving across not just city but county borders. Since Duke considered WakeMed's modest projection unrealistic, its own much larger assumptions are plainly indefensible.

Shifts from DRAH to DCH:

Similarly, the applicant projects unreasonable shifts from Duke Raleigh Hospital (DRAH) to DCH. An analysis of patient shifts shows that among the ten ZIP Codes with the largest number of projected discharges shifted, seven are drastically overstated. For example, the ZIP Code with the largest projected shift, 27615, is entirely closer to DRAH. Likewise, Duke assumes that 75 percent of discharges from 27607 will shift to DCH, even though the entire population of this ZIP is closer to DRAH. These and other examples are detailed in **Table 4** below.

Table 4: DRAH to DCH Patient Shift vs Proximity to DCH

ZIP	a. % Shifted in app	b. % of Population closer to DCH	c. Patients shifted in app
27511	75%	55%	101
27606	60%	6%	89
27603	60%	38%	210
27607	75%	0%	74
27612	35%	0%	123
27613	35%	21%	133
27615	35%	0%	219
Total			**949**

Notes:

a. *Application p143 and Table 2 in these comments*
b. *ARCGIS analysis detailed in Attachment K*
c. *Table 2 above*

As demonstrated in **Table 4** above, these seven ZIP Codes which are wholly, or in large part, closer to DRAH, account for 53 percent of patients projected to shift between DRAH and DCH. (949/1,775 = 53%)

Overall, **hundreds of the discharges shifted to DCH from the three existing DUHS hospitals come from ZIP Codes in which a substantial portion, or in most cases the entire ZIP Code, is closer to the existing DUHS hospitals.** On page 145 Duke cites, "approximately 70% of hospital inpatients nationwide are processed through the ED". It is unreasonable to believe that patients acutely in need of ED or inpatient services would travel further to be treated at a facility that offers a smaller scope of service.

The applicant's methodology therefore does not reflect actual patient behavior or proximity but instead manufactures patient shifts in order to justify additional beds. **This approach would divert patients away from the DUHS hospitals already closest to them, increase travel burdens, and create unnecessary duplication of services.** Far from demonstrating need, the projections reveal a proposal that worsens geographic accessibility and fails to conform to Criterion 3.

Inconsistent Shift Patterns

Beyond inflating overall patient shifts, the applicant's methodology produces internally inconsistent and unreasonable results. Though claiming to rely on raw proximity to DCH as the primary driver of patient behavior, the projections contradict common-sense expectations and cannot be considered reliable.

To evaluate these projections, WakeMed analyzed travel times based on ZIP Code Population Weighted Centroids, sourced from the U.S. Department of Housing and Urban Development. These centroids represent where people actually live within a ZIP Code and therefore provide a more accurate measure of access than simple geographic centroids. See Attachment J for the full drive time analysis.

This analysis demonstrates that Duke's assumptions are not only exaggerated but also inconsistent and illogical:

1. Examples of DRAH to DCH Shifts
    a. 27607 is six minutes closer to DRAH, not DCH, yet Duke projects a 75% shift—far higher than the 35% projected for 27517, which is actually 17 minutes closer to DCH.
    b. 27713 and 27707 are both 12 minutes closer to DCH than DRAH. Despite this equivalency, Duke assumes that 75% of discharges will shift from 27713 but only 35% from 27707. The inflated 75% cannot be reconciled with the equal travel advantage.
2. Examples of DUH to DCH Shifts
    a. 27707 is 12 minutes closer to DUH, not DCH, yet Duke still projects a 20% shift. This is greater than the 15% shift Duke assigns to 27312, which is 20 minutes closer to DCH. **Patients closer to DUH would not reasonably shift at higher rates than patients significantly closer to DCH.**
    b. 27562 is 15 minutes closer to DCH than DUH and projected at a 15% discharge shift. Yet 27560, only eight minutes closer to DCH, is projected to shift at nearly three times that rate (42.5%). Given the weaker access advantage, the 42.5% shift is grossly exaggerated.
    c. 27539, 27540, 27559, and 27562 are each 19 minutes closer to DCH than DUH. Despite this identical advantage, Duke projects 15% shifts from 27540 and 27562, but far higher shifts of 42.5% from 27539 and 27559.
3. Examples of DRH to DCH Shifts
    a. 27312 is 23 minutes closer to DCH than DRH and projected at a 10% shift. By contrast, 27703 is four minutes closer to DRH, not DCH, yet Duke projects a 20% shift (344 discharges). The inflated 20% projection for 27703 contradicts reasonable travel patterns.
    b. 27540 is 21 minutes closer to DCH than DRH and projected at a 10% discharge shift. Meanwhile, 27606, despite a smaller 12-minute advantage, is assumed to shift at a much higher 42.5%.

These examples illustrate the fundamental unreliability of the applicant's methodology. Duke projects extremely large shifts from ZIP Codes that are farther from DCH, while assuming smaller shifts from ZIP Codes with equal or greater proximity advantages. Similarly situated ZIP Codes are treated inconsistently, with arbitrary and inflated shift estimates.

The examples discussed above represent only a small sample of the many inconsistencies embedded in Duke's projections. Far from isolated or benign errors, these patterns reflect systemic flaws in the applicant's methodology. Such flaws defy common sense and confirm that the projections are not based on reasonable, evidence-based assumptions. If the methodology were valid, ZIP Codes with greater travel-time advantages to DCH would consistently show higher shift percentages than those with lesser advantages. Instead, the opposite is often true and unsubstantiated by the applicant.

Because the applicant's utilization projections lack internal consistency, are unsubstantiated, illogical, and unreliable, the application's shift methodology fails to conform with Criterion 3.

Inaccurate Growth Assumptions

On top of inflating shift percentages, Duke also dramatically changes the way it projects "discharges appropriate to shift." In its 2021 and 2024 applications, Duke relied on the ZIP Code population CAGR to grow discharges. That was a consistent and reasonable approach: as ZIP Code populations grow, the number of discharges grows proportionally.

In this application, however, Duke suddenly changes the formula without support. Abandoning the population CAGR only, the applicant now combines the population CAGR and a "utilization CAGR" based on 2023–2025 annualized figures. Mathematically, a CAGR is designed to adjust for fluctuations over a long time period. Averaging the two CAGRs destroys the time value and produces a compounding rate that increases the error over time. The result is a distorted unreliable projection. Duke's timeframe is far too short to be a CAGR, essentially only two years of actual data. The calculation is actually a one-time percent change. As warned by Investopedia, a leading financial information website, "The shorter the time frame used in the analysis, the less likely it will be for the realized CAGR to meet the expected CAGR when relying on historical results."[1].

The unreasonable nature of Duke's growth rate is evident. For example, the DCH Catchment Area ZIP Code with the highest discharges at DRAH is 27615. This ZIP Code grew at a CAGR of only 3.3% between 2023 and 2025 (annualized). Despite this, Duke applies the Zone's 6.6% CAGR, more than double its historic growth.

The effect is significant. As shown in **Table 5**, **had Duke used the same ZIP Code population CAGR method that it relied upon in every prior application, there would be nearly 5,000 fewer "discharges appropriate to shift."** By blending population growth with inflated annualized utilization, Duke manufactures thousands of additional discharges on paper that simply do not exist in reality.

[1] https://www.investopedia.com/terms/c/cagr.asp

Table 5: Comparison of FY2034 Discharges Appropriate to Shift to DCH: Application versus ZIP Code Population CAGR

	Discharges at Population CAGR			Difference: Application minus Discharges at Population CAGR		
ZIP Code	**DRAH**	**DUH**	**DRH**	**DRAH**	**DUH**	**DRH**
27502	47	214	14	(1)	108	11
27513	46	153	26	4	103	26
27519	90	361	27	(3)	181	21
27523	34	75	10	(3)	33	7
27560	48	232	41	(3)	107	30
27312	17	128	14	12	29	7
27511	67	98	7	67	41	5
27518	40	64	7	36	22	4
27540	66	137	9	49	32	5
27562	2	14	0	2	2	-
27607	54	46	1	45	14	1
27617	89	122	32	76	38	19
27709	0	4	2	-	1	1
27713	41	1120	466	37	384	295
27330	27	134	20	12	118	7
27517	12	224	55	7	27	35
27559	4	9	4	2	8	2
27612	212	89	5	141	14	4
27613	225	121	36	156	22	26
27615	364	147	17	263	30	13
27703	112	1490	1085	62	122	633
27707	39	1230	577	26	212	413
27526	143	222	20	50	168	5
27539	52	96	12	24	86	4
27603	242	142	16	108	125	5
27606	96	80	14	52	81	6
Total	2,169	6,752	2,519	1,224	2,109	1,584
			Overstated Discharges		4,917	

*Discharge Formula: FY2025 discharges * (1 + ZIP Population CAGR)*
Difference Formula: FY2034 discharges from application minus discharges at population CAGR
Source: FY2025 discharges from p138, ZIP Population CAGR from p140, FY2034 discharges from application detailed in Table 2

Even more telling, Duke does not even apply this new methodology consistently through the current CON application. When projecting OB discharges available to shift, Duke sticks with its ZIP Code population CAGR—the exact method it used in every prior CON application for DCH beds. This change up may be attributable to the fact that DRH's OB discharges have been declining, as shown on page 149. In other words, **Duke relies on the original population CAGR when it inflates its OB projections but abandons the population CAGR in favor of a utilization/population CAGR average when that produces higher totals for non-OB discharges.**

Additionally, Duke provides no explanation for how it annualized the 2025 data. In fact, a review of prior applications shows that the actuals ended up lower than the annualized projections. For example, in their 2024 CON application (J-012548-24 p214) Duke estimated 10,937 ED visits at DRAH in FY2024, annualized on 10 months of data. On page 162 of this application Duke shows that the actual ED visits were only 9,689 in FY2024, a difference of 1,248 visits and even less than their FY2023 ED visits**. In other words, Duke's history shows that their annualized numbers used in CON applications do not reflect subsequent actual history.** This inconsistency makes clear that the change has nothing to do with reasonable assumptions and everything to do with inflating projections. Far from a conservative forecast, this application represents a deliberate effort to exaggerate utilization through selective, misleading, and unreasonable assumptions.

Conclusions Regarding Duke's Patient Shift Calculations

Correcting the errors detailed above reduce DCH discharges in Project Year 3 by 3,112 (from 4,875 to 1,763) as shown in Table 6.

Taken together, these flaws confirm that the applicant's shift assumptions are neither reasonable nor credible. Ultimately, Duke's methodology fails for a multitude of reasons, which individually render the methodology non-conforming:

- Duke manufactures artificial shifts by reassigning patients from ZIP Codes that are not closer to DCH.
- Internally inconsistent shift rates. High shifts assigned to ZIP Codes less favorable to DCH while lower rates are assigned to areas with stronger access advantages.
- Using a projected growth rate based on only two full years of data. This leads to far higher growth than is realistic and higher than prior applications.

As shown in Attachment J, of the 26 DCH Catchment Area ZIP Codes, only 19 are closer to DCH. To correct Duke's numerous unreasonable assumptions, **Table 6** below recalculates Duke's Non-OB discharges shifted to DCH. All shift percentages remain unchanged from the application, even though, as discussed above, many of those rates are inflated.

The table contains only two changes to recalculate Duke's shift from DUHS facilities.

- Only the 19 ZIP Codes where DCH is closest are included.
- ZIP Code population CAGR is used. This is consistent with every prior Duke filing and is used in this application's CAGR for OB discharges.

Table 6: Translation of Non-OB Discharges Shifted from Zone to Zip Codes from DUHS Hospitals to DCH, Project Year 3 (19 ZIP Codes Corrected Per Population CAGR)

	DRAH			DUH			DRH		
ZIP Code	**Discharges appropriate to shift**	**% shifted**	**Corrected discharges shifted**	**Discharges appropriate to shift**	**% shifted**	**Corrected discharges shifted**	**Discharges appropriate to shift**	**% shifted**	**Corrected discharges shifted**
a	**b**	**c**	**d**	**b**	**c**	**d**	**b**	**c**	**d**
27502	47	75.0%	35	214	42.5%	91	14	42.5%	6
27513	46	75.0%	35	153	42.5%	65	26	42.5%	11
27519	90	75.0%	67	361	42.5%	153	27	42.5%	11
27523	34	75.0%	26	75	42.5%	32	10	42.5%	4
27560	48	75.0%	36	232	42.5%	99	41	42.5%	17
27312	17	75.0%	12	128	15.0%	19	14	10.0%	1
27511	67	75.0%	50	98	15.0%	15	7	10.0%	1
27518	40	75.0%	30	64	15.0%	10	7	10.0%	1
27540	66	75.0%	50	137	15.0%	21	9	10.0%	1
27562	2	75.0%	2	14	15.0%	2	-	10.0%	-
27617	89	75.0%	67	122	15.0%	18	32	10.0%	3
27709	-	75.0%	-	4	15.0%	1	2	10.0%	0
27713	41	75.0%	31	1,120	15.0%	168	466	10.0%	47
27330	27	60.0%	16	134	42.5%	57	20	42.5%	9
27517	12	35.0%	4	224	20.0%	45	55	20.0%	11
27559	4	60.0%	3	9	42.5%	4	4	42.5%	2
27613	225	35.0%	79	121	20.0%	24	36	20.0%	7
27526	143	60.0%	86	222	42.5%	94	20	42.5%	9
27539	52	60.0%	31	96	42.5%	41	12	42.5%	5
Total CA	**1,051**	**62.7%**	**659**	**3,527**	**27.1%**	**957**	**803**	**18.2%**	**146**
								Total Corrected Shifts	**1,763**

Notes: Zone 1: Red Zone 2: Blue Zone 3 North: Green Zone 3 South: Yellow

Page references are from DCH's 2025 CON application

a. *19 closer Zip Codes (Attachment J)*
b. *FY2025 Discharges p138 * (1 + ZIP CAGR p140) ^ 9*
c. *Zone shift percentage p143*
d. *b * c*

As shown in Table 6, when corrected for Duke's unrealistic growth rates and shifts that increase travel burdens, only 1,763 discharges would shift to DCH from DUHS hospitals. This is barely one-third of the 4,875 discharges Duke claimed. The difference is not a matter of interpretation but the direct result of Duke ignoring proximity in favor of inflated and inconsistent assumptions.

By presenting inflated, inconsistent, and unsupported shift assumptions, the applicant fails to demonstrate that the proposed beds at DCH are required or justified. More than isolated errors, these flaws reflect an unreasonable and unsound methodology that cannot be relied upon to project future utilization. The result is not a demonstration of need, but a manufactured case for expansion that would lead to unnecessary duplication of services and worsen geographic maldistribution.

B: Errors in Discharges From incremental ED Visits

Emergency Department (ED) projections are unreliable because they rest on mathematical errors and illogical assumptions. There are two critical flaws in the ED methodology, incorrect use rate, and inflated market share.

Incorrect ED Use Rate

The applicant's calculation of Wake County's ED visit rate is wrong. On page 164, **Duke claims the use rate is 428.6 visits per 1,000 residents, but the correct rate is 331 visits per 1,000 residents**. The error arises from Duke's understatement of Wake County's FY2023 population. Duke references Claritas as the source of Wake County population and uses 922,698 as the denominator. The application does not provide the Claritas data and Duke cites the correct population on page 44 of its own application, The correct Wake County 2023 population was 1,194,900—more than 30% higher than Duke used to calculate the ED use rate and incorrectly inflates Duke's ED use rate.

UNC Rex's 2025 FSED application (also submitted August 2025) presents the correct rate of 331 per 1,000, as shown in **Figure 3** below.

Figure 3: Wake County ED Use Rate as shown in CON # J-012679-25

Table 11: All Facility Wake County ED Use Rate, 2023

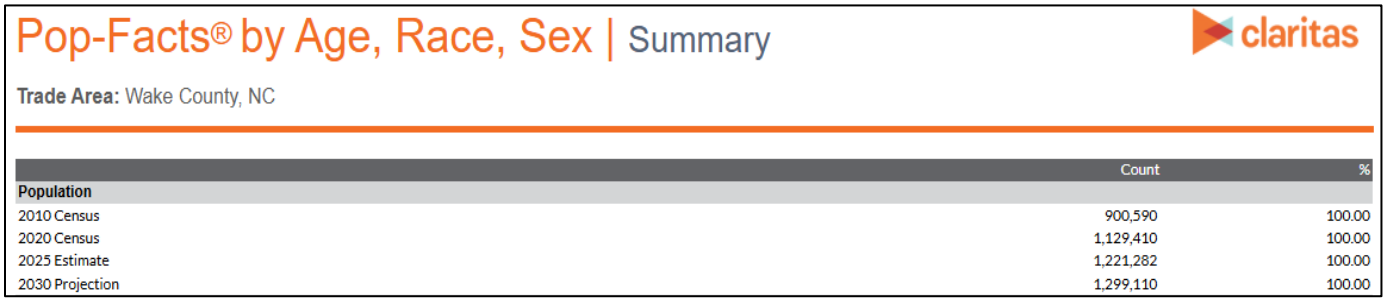
Wake County Population	1,194,900
ED Visits by Wake County Residents	395,481
***ED Visit Use Rate/1,000 population**	**331.0**

Source: OSBM population estimates, 2024 DHSR Patient Origin Reports

Source: CON # J-012679-25 p136

Duke attributes its population estimate to Claritas, but this claim is not credible. While Claritas does not currently publish 2023 figures, its 2020 and 2025 estimates are far higher than the number used in Duke's filing. **Figure 4** demonstrates this discrepancy.

Figure 4: Wake County Population from Claritas Pop-Facts



Pop-Facts® by Age, Race, Sex | Summary

claritas

Trade Area: Wake County, NC

	Count	%
Population		
2010 Census	900,590	100.00
2020 Census	1,129,410	100.00
2025 Estimate	1,221,282	100.00
2030 Projection	1,299,110	100.00

Source: Claritas Pop-Facts accessed 9.22.2025

Correcting the use rate reduces projected ED visits at DCH by nearly 5,000, and results in eliminating 758 inpatient discharges in Project Year 3 (FY2034). **Table 7** below shows the corrected calculations. **This table does not alter Duke's methodology; it simply applies the correct use rate.**

Table 7: Corrected 2034 DCH ED Visits from Wake County Use Rate

Zone	a Catchment Area Population 2034	b Catchment Area ED Visits 2034	c DCH Market Share	d DCH ED Visits	e Corrected Discharges from Incremental ED Visits
Zone 1	272,970	90,353	6.5%	5,873	880.9
Zone 2	273,119	90,402	4.0%	3,616	542.4
Zone 3 North	302,222	100,035	1.5%	1,501	225.1
Zone 3 South	285,269	94,424	6.5%	6,138	920.6
Total	**1,133,579**	**375,215**		**17,127**	**2,569**

Notes:

a. Zone populations from p140 grown at respective CAGR
b. a / 1,000 331 (correct Wake County ED use rate)*
c. p165
d. b * c
e. c * 15% (Duke assumes 15% of incremental ED visits result in admission)

Duke projected 3,328 inpatient discharges from incremental ED visits. As illustrated in table above, With the correct rate, the total is only 2,569 discharges—759 fewer than Duke's projection. **That difference alone equals an average daily census of 10 patients.**

The problem extends beyond math. On page 37, Duke states:

> "Accordingly, consistent with the original application, all other service components are anticipated to have the same patient origin pattern as the general acute care beds and could be calculated by applying the same percentages to the projected volumes included in Section Q."

This confirms a deeper flaw: Duke applies Wake County's use rate across its entire catchment area, even though the application indicates that **30% of projected patients come from outside Wake County**. Those non-Wake counties have far lower ED use rates—Durham at 316 per 1,000 and Chatham at 235 per 1,000.[2]

By miscalculating Wake County's population and then improperly applying its higher rate to all catchment counties, Duke inflates both ED visits and resulting inpatient discharges. These errors alone account for at least 759 phantom discharges, if not more, in the applicant's projections.

Inflated ED Market Share

In addition to the glaring mathematical errors, DCH's projected ED visits are overstated due to inflated market share assumptions that are demonstrated in **Table 8** below. In previous applications from 2021 through 2024, Duke applied far lower and more realistic market shares. In the current application, however, Duke uses the same methodology but arbitrarily increases market share. As Duke admits on page 161:

> "DUHS does not propose any changes to the approved Emergency Department as part of this project. Projected Emergency Department utilization is provided only to support the overall financial performance of DCH following the proposed project"

Duke provides no justification for the higher market shares. The application offers no analysis showing why market share would change between 2024 and 2025. Instead, the unexplained increases simply manufacture thousands of additional projected ED visits and from those – inflated inpatient discharges. None of the increases are supported by Duke's prior applications or by any explained change in patient behavior.

Table 8 below compares the assumed substantially higher market shares in 2025 to the DCH 2024 application.

Table 8: DCH ED Market Share in 2024 vs 2025 Application

Zone	a	b	c
	2024	**2025**	**Difference**
Zone 1	5.0%	6.5%	1.5%
Zone 2	4.0%	4.0%	0.0%
Zone 3 North	1.5%	1.5%	0.0%
Zone 3 South	1.5%	6.5%	5.0%

Notes: In prior applications Duke did not split Zone 3. The North and South values above represent the single Zone 3 percentage previously used.

a. CON J-012548-24 p217
b. Duke Cary 2025 application p165
c. b - a

[2] *DHSR 2024 Patient Origin Reports. Emergency Department Patients: Patient's County of Residence. https://info.ncdhhs.gov/dhsr/mfp/patientoriginreports.html*

These inflated percentages directly drive higher ED visit projections. As shown in **Table 9**, Duke kept the same market share assumptions as in the 2024 application, it would have projected more than 6,000 fewer ED visits and over **900 fewer inpatient discharges** (Table 9, Column g).

Table 9: Impact of Inflated Market Shares on ED Visits and Inpatient Discharges in Project Year 3 (2034)

Zone	a	b	c	d	e	f	g
	2034 Catchment Area ED Visits	ED Visits at 2024 Market Share	ED Visits at 2025 Market Share	Difference	Inpatient Discharges Originating from ED (2024 rate)	Inpatient Discharges Originating from ED (2025 rate)	Difference
Zone 1	90,353	4,518	5,873	1,355	678	881	203.3
Zone 2	90,402	3,616	3,616	-	542	542	-
Zone 3 North	100,035	1,501	1,501	-	225	225	-
Zone 3 South	94,424	1,416	6,138	4,721	212	921	708.2
Total	375,215	11,051	17,127	6,076	1,658	2,569	911.5

Notes:

a. Table 7, Column b
*b. a * Table 8 Column a*
*c. a * Table 8 Column b*
d. c – b
*e. b * 15% (Duke assumes 15% of incremental ED visits result in admission)*
*f. c * 15% (Duke assumes 15% of incremental ED visits result in admission)*

The largest discrepancy occurs in Zone 3 South, where Duke projects nearly 5,000 additional ED visits than at the 2024 market share. This zone is located 30 minutes from DCH. National studies show patients given a choice, typically travel only 17.3 minutes to reach an ED.[3] **Zone 3 South already has multiple existing or approved emergency departments that are far closer than DCH**, including Central Carolina Hospital's ED (owned by Duke LifePoint), WakeMed Fuquay-Varina, UNC Rex Holly Springs, WakeMed Cary, WakeMed Raleigh, WakeMed Garner, WakeMed Apex, WakeMed Wendell, and Duke Raleigh. Expecting thousands of patients from this zone to bypass nearby options in favor of DCH is unreasonable. **Yet the application relies on Zone 3 South to generate more ED visits than zones within a 10 minute drive.**

These inflated market shares are not supported by capacity changes, historical experience, or documented patient behavior. Instead, they represent an unfounded departure from Duke's own prior assumptions and result in overstated utilization. **As shown in Table 9 DCH would only have 1,658 discharges from ED at the 2024 market share.** As with the flawed patient shift projections, the use of inflated market shares further undermines the reliability of the applicant's need analysis.

[3] *Tolpadi, A., Elliott, M.N., Waxman, D. et al. National travel distances for emergency care. BMC Health Serv Res 22, 388 (2022). https://doi.org/10.1186/s12913-022-07743-7*

C: Recalculation of Non-OB In-migration

The applicant uses a discharge in-migration factor of ten percent (p146). Correcting the discharges as discussed in Section A and B above requires correction of the in-migration. With total non-OB discharges at 3,801 the correct in-migration is **380** not 1,051.

Table 10: Calculation of Corrected Non-OB In-migration

Metric	
a. Non-OB Discharges from DUHS Shift	1,763
b. Non-OB Discharges Based on incremental ED Visits	1,658
c. Total Non-OB Discharges	3,801
d. Non-OB In-Migration Discharges	380

Notes:

a. Table 6, "Total Correct Shift"
b. Table 9, Column e
c. (a + b) / 90% 90% = (1 – 10% In-migration)
*d. c * 10%*

D: Errors in OB Discharges Based on DRH Shift

As noted in Section A above, Duke's projections rely on unreasonable shifts of discharges associated with residents of Durham County ZIP Codes. These assumptions directly contradict Duke's claim that the project will improve geographic accessibility. Patients closer to DRH and would instead face increase travel burdens.

For obstetrics, Duke projects **74 discharges will shift from Zone 3 North**. As shown in Attachment J, two Durham County ZIP Codes (27703 and 27707) are closer to DRH and DUH than DCH. As shown on page 149 and 150 of the DCH application, these two Durham County ZIP Codes account for 88 percent of Zone 3's OB discharges in PY3 (527 of 594). This translates to **65 unreasonable OB discharges** that Duke projects will shift from DRH to DCH (74 * 88%=65). Excluding these 65 unreasonable shifts reduces the total OB discharges projected to move from DRH to DCH in PY3 from 240 to just 175 (240-65=175).

Excerpt from p149:

Zone 3 - North	27703	285	302	341	341	342	342	343	343	344	344	345	345
Zone 3 - North	27707	180	188	188	188	187	186	185	185	184	183	182	182

Excerpt from p150:

Zone 3 - North	27703	285	302	341	341	342	342	343	343	344	344	345	345
Zone 3 - North	27707	180	188	188	188	187	186	185	185	184	183	182	182
Zone 3 - North		566	565	596	596	596	595	595	595	595	594	594	594

E: Errors in OB Incremental Discharges

Duke projects that in DCH's third project year (FY2034), 1,022 discharges will come from incremental OB discharges (p152), but its market share assumptions are arbitrary and implausible given Wake County's competitive landscape.

Most notably, Duke's obstetrics forecast is inverted. **DCH is in Zone 1, yet Duke predicts more OB discharges will come from Zone 3 South, a half-hour away.** The application does not explain why more families in areas served by multiple closer hospitals would deliver at DCH in preference to closer hospitals.

Without clear supporting information, Duke assumes a 12.5% incremental share of catchment area births in Zone 3 South and 3% in Zone 3 North. These figures are indefensible: patients in Zone 3 South have multiple hospitals much closer than DCH, making it highly unlikely DCH would capture any significant share, let alone double-digit percentages. In other words, **Duke assumes it will secure four times the market share in Zone 3 South as in Zone 3 North, despite South having more easily accessible hospitals.** The notion that DCH, a currently undeveloped hospital, would outperform in the zone with greater competition defies both logic and patient behavior.

Duke's own history demonstrates the unreasonableness of these assumptions. As shown in **Table 11,** Duke Regional Hospital's actual 2025 market share among ZIP Codes located 20–30 minutes away, equivalent to DCH's Zone 3, is only 4.4% on average not 12.5 percent as the application forecasts.

Table 11: Actual 2025 DRH Market Share in ZIPs 20-30 Minutes Away

ZIP Code	a	b	c	d	e
	Travel Time to DRH	Women 15-44 Population	Projected Births	DRH Births	DRH Market Share
27519	26	15,210	754	30	4.0%
27523	29	4,060	201	12	6.0%
27560	23	10,718	532	26	4.9%
27607	26	7,347	364	4	1.1%
27617	22	5,344	265	14	5.3%
27613	28	9,652	479	26	5.4%
Average					**4.4%**

Notes: ZIP 27713 is excluded because some portions are only a 15-minute drive to DRH

a. *Attachment J*
b. *p151 of DCH's 2025 CON Application*
c. *b * .00496 (Duke assumes a birth rate of 49.6 per 1,000 women aged 15-44, p152 of DCH's 2025 CON Application)*
d. *p149 of DCH's 2025 CON Application*
e. *d / c*

On page 152 the applicant projects 351 births from Zone 3 South in project year 3 (FY2034). Applying the more reasonable market share of 4.4% from Table 11 yields only 124 births (124 = Projected total births for Zone 3 South FY34 of 2,812 p152 * DRH average market share of 4.4% from Table 11). Duke inflates projections by at least 227 (351 – 124 = 227) births. Adjusting for this overstatement **reduces DCH's incremental catchment births in FY2034 to just 795 (1,022 – 227 = 795).**

F: Recalculation of OB In-migration

The applicant uses a discharge in-migration factor of ten percent (p153). Correcting the discharges as discussed in Section D and E above requires correction of the in-migration. With total OB discharges at 1,078, the correct in-migration is **108** not 140.

Table 12: Calculation of Corrected OB In-migration

	Metric	
a	OB Discharges from DRH Shift	175
b	OB Discharges Based on incremental market share	795
c	Total OB Discharges	1,078
d	OB In-Migration Discharges	108

Notes:

a. *Table 1, Row D*
b. *Table 1, Row E*
c. *(a + b) / 90%* *90% = (1 – 10% In-migration)*
d. *c * 10%*

4. Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

Information provided in the DCH application indicates increasing demand for acute care beds in communities that are closer to other DUHS hospitals, but the application provides an incomplete or incorrect discussion of the capacity of those hospitals to provide the service. For that reason, the application should not be found conforming to Criterion 4.

5. Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs, as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

As discussed in Criterion 3, utilization projections are unreasonable. Therefore, all financial projections for the project are also unreasonable. Therefore, the project cannot be found conforming to Criterion 5.

6. The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

Excessive and Unneeded Addition

In Duke's 2024 Wake County Acute Care Bed Review Comments, Duke argued:

> *"WakeMed North would significantly expand its size to 131 beds (71 + 35 + 25 = 131). The current change of scope application represents a tremendous expansion in bed capacity at a single campus, an 85% growth in acute care beds. This is an excessive and unneeded addition, particularly when other Wake County hospitals and hospital systems are showing a greater bed need." P34*

Duke now seeks to add 120 non-neonatal plus 8 neonatal acute care beds to an approved 40-bed hospital, thus increasing the DCH campus from 40 to 168 beds. That is a 300+ percent increase, more than triple the "excessive and unneeded" growth for which Duke criticized WakeMed North. By its own reasoning, such a disproportionate expansion at a single hospital is unjustifiable.

In commenting on WakeMed North, Duke also suggested that beds should go to hospitals with the greater bed need. The 267-bed need identified in the 2025 SMFP was generated almost entirely by WakeMed and partially by UNC Rex, none of the need was generated by DRAH. Awarding nearly half of those beds to DCH would not serve true demand, but instead duplicate capacity already established by other providers.

By its own standard, Duke's application represents "an excessive and unneeded addition" and does not demonstrate compliance with Criterion 6, which requires avoidance of unnecessary duplication.

Duplication of Closer Existing Facilities

On page 62 of the DCH application Duke argues:

> *"This population of DUHS patients from the DCH catchment area is equivalent to an average daily census ("ADC") of 127.6 in FY 2025. These patients would require 179 beds in FY 2025 based on the target occupancy in the 2025 SMFP. DUHS conservatively proposes to bring 120 additional beds to this community for a licensed total of 160 (plus neonatal beds addressed separately), which would allow a reasonable portion of these patients who are traveling to Durham for care to remain closer to home. Patients from the DCH catchment area has more than sufficient need to support 160 beds at DCH based only on the patient volume historically served by DUHS facilities."*

The applicant asserts that patients from the DCH Catchment Area generate sufficient need to support 160 beds at DCH. This is inaccurate and misleading. While DUHS serves some patients from the DCH Catchment Area, many residents of the area are actually closer to existing DUHS hospitals. By ignoring this fact, the application manufactures a need case that is simply duplication of capacity already in place within the Duke Health acute care hospital system.

For these reasons, the application fails to demonstrate conformity with Criterion 6. The project is not a response to unmet need. It is duplication of services already available within DUHS.

7. The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

This project will require 872.06 FTEs (Page 194). Developing a new hospital workforce of this size will represent a significant challenge to the already strained healthcare labor supply in Wake County. The application does not explain how Duke intends to recruit this significant number of employees to a new hospital, or what experienced personnel it must attract or recruit away from existing institutions.

The proposed DCH will also require more travel for Duke physicians. No Duke physicians are located on this proposed campus at the time of this application.

As a result, the project cannot be found conforming to Criterion 7.

12. Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans

This project will require approximately $1 billion in capital investments. Because utilization forecasts are substantially overstated, as demonstrated in comments on Criterion 3 above, the cost of construction will unduly increase applicant cost of providing services, because the applicant will be obliged to carry that investment on a much smaller utilization base. Extensive delays associated with the smaller 40 bed hospital are confirmation of this likelihood.

For this reason, the project should be found non-conforming to criterion 12.

18a. The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for the service for which competition will not have a favorable impact.

In Section N on page 116, the application argues that the project is needed to solve capacity issues at Duke Health, arguing that DUHS integrated health system needs capacity to provide value based care. However, the application fails to discuss whether patients proposed to shift from DRH and DUHS would leave behind unused capacity. Without that information, it is impossible to find this application conforming to Criterion 18a.

Performance Standard

Hospital Occupancy Test

The errors identified above are only a fraction of the problems in the applicant's methodology. Even this limited correction shows Duke Cary's projected utilization entirely collapses once inflated assumptions are removed. **Table 13** below recalculates Cary's PY3 occupancy using the corrected discharges from **Table 1** and the applicant's reported ALOS.

Table 13: DCH Project Year 3 Occupancy Calculated

	Metric	**FY2034**
a	Non-OB Discharges	3,801
b	Non-OB ALOS	4.6
c	Non-OB Days of Care	17,485
d	OB discharges	1,078
e	OB ALOS	2.4
f	OB Days of Care	2,587
g	Total Days of Care	20,072
h	ADC	55
i	Beds	160
	% Occupancy	**34.4%**

Notes:

a. Table 10, Row c
b. DCH 2025 application p155
*c. a * b*
d. Table 12, Row c
e. DCH 2025 application p155
*f. d * e*
g. c + f
h. g / 365
i. DCH 2025 application p155

After correcting errors, DCH's non-neonatal acute care occupancy is only 34.4%, far below the statutory 66.7% target for a separately licensed hospital.

License Performance Standard Test

Duke proposes a license total of 425 acute care beds if the 2025 DRAH and DCH applications are approved. To satisfy the 75.7% performance standard, the license must achieve an average daily census (ADC) of 321.3 patients (425 × 75.7% = 321.3).

After correcting the applicant's errors, DCH achieves only an ADC of 55, as shown in **Table 13**. That leaves DRAH responsible for an ADC of 266.3 (321.3 – 55 = 266.3). An ADC of 266.3 translates to 97,199 annual days of care (266.3 × 365).

As shown on page 136 of the application, the only way for DRAH to reach 97,199 days of care would be if no patients shifted to DCH. Yet the applicant explicitly proposes shifting patients from DRAH to DCH. Once those shifts are applied, the combined DRAH/DCH license cannot reach the required 75.7% occupancy.

Moreover, even the projected days of care at DRAH are overstated, as detailed in the comments against Duke Raleigh filed in this same package. **After correcting Duke's errors and unreasonable assumptions, Duke Cary's occupancy rate falls to a mere 34.4%, the DRAH license falls short of the statutory threshold.**

ATTACHMENT J

Drive Times from ZIP Population Centroids to Duke Hospitals

		Drive time to (mins)				
Zone	ZIP Code	DCH	DRAH	DUH	DRH	Closest Hospital
Zone 1	27502	11	27	30	32	DCH
Zone 1	27513	12	22	29	31	**DCH**
Zone 1	27519	7	27	23	26	DCH
Zone 1	27523	6	28	27	29	DCH
Zone 1	27560	13	23	21	23	DCH
Zone 2	27312	25	44	45	48	DCH
Zone 2	27511	15	20	31	33	**DCH**
Zone 2	27518	18	20	33	36	**DCH**
Zone 2	27540	16	29	35	37	DCH
Zone 2	27562	15	28	34	36	DCH
Zone 2	27607	17	11	24	26	**DRAH**
Zone 2	27617	15	23	21	22	DCH
Zone 2	27709	x	x	x	x	x
Zone 2	27713	16	28	18	23	**DCH**
Zone 3S	27330	30	43	49	51	DCH
Zone 3N	27517	26	43	31	35	**DCH**
Zone 3S	27559	21	34	40	42	DCH
Zone 3N	27612	24	11	31	34	**DRAH**
Zone 3N	27613	19	19	26	28	**DRAH/DCH**
Zone 3N	27615	22	12	30	31	**DRAH**
Zone 3N	27703	19	30	14	15	**DUH**
Zone 3N	27707	25	37	13	16	**DUH**
Zone 3S	27526	28	39	47	49	DCH
Zone 3S	27539	14	25	33	35	DCH
Zone 3S	27603	23	20	38	40	**DRAH**
Zone 3S	27606	22	15	31	34	**DRAH**

Notes

Text in Red indicate ZIPs partially or entirely closer to another Duke Facility

Drive time analysis conducted on 9/8/2025 using google maps

Drive-time reflects the estimated travel time from the ZIP Code Population Weighted Centroids to facility, measured in minutes.

Source: *ZIP Population Weighted Centroids from Department of Housing and Urban Development*
https://hudgis-hud.opendata.arcgis.com/datasets/zip-code-population-weighted-centroids-1/about

ARCGIS Analysis of DCH Catchment ZIPs

	a	b	c	d
ZIP	2025 Population	Population Closer to DRAH	Population Closer to DCH	% of Population Closer to DCH
27511	33,912	15,421	18,491	55%
27606	51,676	48,394	3,282	6%
27603	62,268	38,478	23,790	38%
27607	25,831	25,831	-	0%
27612	40,894	40,894	-	0%
27613	46,446	37,298	9,718	21%
27615	43,011	43,011	-	0%

Notes:

a - c: Esri Demographics, 2025 (via ArcGIS Online).

d: c / a