

Comments on the Duke Green Level Hospital Certificate of Need Application Project ID # J-12029-21

March 31, 2021

In accordance with N.C. GEN. STAT. § 131E-185(a1)(1), University of North Carolina Hospitals at Chapel Hill and Rex Hospital, Inc. d/b/a UNC REX Hospital (collectively, "UNC Health") submit the following comments related to Duke University Health System, Inc.'s ("Duke's") application to develop Duke Green Level Hospital ("DGLH"), a new 40-bed acute care hospital on Green Level West Road in Cary, Wake County by relocating 40 acute care beds and two shared operating rooms from Duke Raleigh Hospital ("DRAH"). UNC Health's comments on this application include "discussion and argument regarding whether, in light of the material contained in the application and other relevant factual material, the application complies with the relevant review criteria, plans and standards." See N.C. GEN. STAT. § 131E-185(a1)(1)(c). To facilitate the Agency's review of these comments, UNC Health has organized its discussion by issue, noting the Certificate of Need statutory review criteria creating the non-conformity on the application.

General Comments

While the specific issues with the application are identified in the sections to follow, the proposed project is an unreasonable attempt to gain massive amounts of market share from other providers by relocating regulated assets to a part of Wake County that these assets are not being used to serve today. Although not stated directly, Duke assumes a growth of more than 26 percent in its average daily census, from 134 patients in 2020 to 169 patients by the third project year. In order to accomplish this feat, Duke makes numerous unsupported and unreasonable assumptions, analyzed in detail below. Further, in its apparent haste to submit this application, Duke omits required responses, fails to provide supporting assumptions, and perhaps most egregiously, appears to have copied language created for other applications filed by unrelated applicants. While any one of these issues would render the application non-conforming, the presence of so many blatant errors and omissions clearly demonstrate that the application does not conform with the relevant statutory and regulatory review criteria and that it should be denied.

In summary, while the comments below address the specific issues in the application, the following reasons demonstrate why UNC Health believes the proposed project should be denied:

- (1) Significant overstatement of acute care and emergency department utilization including an assumed emergency department (ED) use rate that is more than 20 percent higher than has historically been experienced in the service area;
- (2) Unsupported catchment area and utilization by ZIP code including the failure to address the development of UNC REX Holly Springs Hospital or provide reasonable and supported assumptions for incremental share gain, average length of stay, and the population to be served;
- (3) Failure to provide historical payor mix information for the facility from which service components will be relocated in order to enable the Agency to appropriately evaluate the application;
- (4) Failure to demonstrate that the cost, design and means of construction represent the most reasonable alternative; and,
- (5) Failure to demonstrate that the information in the application, including the need, alternatives, and utilization are based on Duke's actual plans and not the plans of another applicant.

Given these issues, explained in more detail below, UNC Health believes the proposed project should be denied.

Issue-Specific Comments

Significant overstatement of acute care, emergency department and other service utilization

As a basis of its projected utilization for virtually all its services, either because of the small number of patients Duke currently serves from its proposed service area or in order to minimize the number of "shifted" patients to preserve its ability to apply for beds and operating rooms elsewhere, or both, Duke's projected acute care utilization is largely built on its assumptions around emergency department ("ED") visits, which also impacts the utilization for the rest of its proposed services, as discussed below. In order to project sufficient volume in a new service area without shifting volume, the application significantly overstates DGLH's projected acute care and ED utilization. Specifically, Duke assumes that 1,233 DGLH discharges, or approximately 49 percent of its total projected acute care discharges, will be based on "Hospitalizations from Incremental ED Visits," as shown below excerpted from page 133.

Table Q.9: Duke Green Level Hospital
Discharges Based on Hospitalizations from Incremental ED Visits

	FY2027	FY2028	FY2029
ED Visits Based on			
Incremental Service Area Share	4,922	7,498	12,335
% Hospitalized from ED	8%	9%	10%
Discharges Based on Hospitalizations from			
Incremental ED Visits	394	675	1,233

See Section Q, Assumptions & Methodology for Projecting ED Utilization at Duke Green Level Hospital

However, DGLH's incremental ED visits are projected based on an assumed ED use rate that is more than 20 percent higher than has been historically experienced in the service area. As shown below, in projecting DGLH's ED utilization assumptions Duke "projects the demand for ED visits in the DGLH catchment area based on the statewide ED use rate."

ED Visits Based on Statewide ED Use Rate

The following table summarizes hospital emergency room visits per 1,000 population.

Table Q.40: Hospital Emergency Room Visits per 1,000 Population

Location	2018
North Carolina	462.0

Source: The Henry J. Kaiser Family Foundation, 2018 AHA Annual Survey

DUHS projects the demand for ED visits in the DGLH catchment area based on the statewide ED use rate.

Duke provides <u>no</u> support for its assumption that ED use in the DGLH catchment area is or will be equal to the statewide average, nor does it provide any reason that it abandoned the more specific use rates for the counties it proposes to serve in favor of the more general statewide rate. In fact, publicly reported data on Hospital License Renewal Applications, collected and aggregated by the Healthcare Planning and Certificate of Need Section, as well as hospital utilization data available to North Carolina hospitals (variously known as Truven, IBM Watson, or Hospital Industry Data Institute (HIDI) data), demonstrate

that ED use rates in the DGLH service area are significantly lower than the rate assumed by Duke. As shown in DGLH's projected patient origin, Duke projects its ED visits to be comprised of 86.0 percent Wake County residents and 9.4 percent Durham County residents in its third full fiscal year (see page 37). According to the Healthcare Planning and Certificate of Need Section's *Emergency Department Patients: Patient's County of Residence* publicly available report for 2019 data (see excerpt¹ in Attachment 1), North Carolina hospitals provided 114,428 ED visits to Durham County residents and 364,425 ED visits to Wake County residents in 2019. Using the Durham and Wake County populations for 2019 from the North Carolina Office of State Budget and Management (NC OSBM), UNC Health calculated the ED use rate in Durham and Wake Counties as shown below.

Durham and Wake County ED Use Rates

	ED Visits	Population	ED Use Rate per 1,000	Percentage Difference from Duke Assumed Rate of 462.0
Wake	364,425	1,085,297	335.8	-27%
Durham	114,428	316,934	361.0	-22%

Source: Healthcare Planning and Certificate of Need, NC OSBM.

As shown in the table above, **Duke's assumed ED use rate for the DGLH catchment area is 27 percent higher than the 2019 rate for Wake County and 22 percent higher than the 2019 rate for Durham County.** The application provides no basis to assume that the proposed project will have such a significant impact on ED use rates in Durham and Wake counties to affect such an increase, particularly given the small size of the facility and the availability of multiple other existing emergency departments within the catchment area. As such, Duke has significantly overstated projected ED utilization in the DGLH catchment area. As noted above, DGLH's incremental ED visits and its assumed hospitalizations (or discharges) from incremental ED visits rely on this overstated ED use rate. Moreover, as discussed separately below, Duke provides no basis for the estimated percentage of incremental ED visits that DGLH projects to serve. Given Duke's overstatement of DGLH catchment area ED use rates alone, UNC Health estimates that DGLH's acute care utilization is overstated by approximately 15 percent, and that DGLH's ED utilization is overstated by approximately 23 percent. Of note, DGLH's observation bed, operating room, procedure room, CT, ultrasound, X-ray, fluoroscopy, interventional radiology, SPECT, Echo, EEG, Lab, and Therapy utilization is projected based on its assumed acute care utilization and, as such, are <u>all</u> overstated by approximately 15 percent.

Based on the discussion above, it is clear that DGLH's projected utilization is erroneous, unreasonable, and unsupported. As such, the DGLH application is non-conforming with Criteria 3, 4, 5, 6, 18a, and the performance standards for CT scanners (10A NCAC 14C .2303).

Unsupported Catchment Area and Utilization by ZIP Code

Duke fails to demonstrate that its assumptions regarding its "catchment area" and utilization by ZIP code are reasonable, particularly for a small community hospital. On page 52 of the DGLH application, Duke describes the process by which it identified its proposed catchment area which includes the areas approximately within a 30-minute radius of the proposed facility, as follows:

Full report found at https://info.ncdhhs.gov/dhsr/mfp/pdf/por/2020/15-PatientOrigin ED-2020.pdf.

Duke Green Level Hospital Catchment Area

As previously stated, DUHS is aware that utilization of acute care services, especially in a metropolitan area like the Triangle, is not limited by county lines. DUHS defines "catchment area" as the area from which a facility attracts a population that uses its services. To project patient discharges and utilization at DGLH, DUHS identified a catchment area by zip code. DUHS reviewed the zip codes that are within a drive time of 0-10 minutes, 10-20 minutes, and 20-30 minutes of the DGLH site. Duke is a world-class healthcare provider whose facilities typically draw patients from a very wide catchment area spanning numerous counties and states depending on the service. Based on its experience providing acute care services and the scope of the proposed DGLH facility, DUHS conservatively believes it is reasonable to project patients within an approximate 30-minute radius will utilize the proposed hospital services. The drive times are illustrated in the following map.

While it may be true that Duke facilities typically draw patients from a very wide catchment area, the application fails to demonstrate that the proposed DGLH will provide the same types of services for which it can expect a wide catchment area. Further, given Duke's inexperience developing and operating small community hospitals (Duke Raleigh Hospital, with nearly 200 beds, is the smallest hospital in its system), it is simply unreasonable to base its "catchment" area for a 40-bed community hospital on an assumption related to the distance patients are willing to travel to Duke University Hospital.

While patients may be willing to travel significant distances for specialty tertiary or quaternary care at Duke University Hospital, Duke does not demonstrate that a 30-minute radius is reasonable for DGLH which will offer a much narrower scope of lower acuity services. This is a particular issue as Duke assumes that nearly one-half of its projected patients will be new to its system: 49 percent of DGLH's total projected acute care discharges are based on "Hospitalizations from Incremental ED Visits," and originate from this catchment area. The incremental patients are, by definition, patients that were not historically served by Duke facilities. As such, the DGLH application assumes that patients from across its assumed catchment area, based on its assumptions for incremental patients as well as shift of patients historically served by Duke facilities, will choose DGLH in the future. However, the application fails to demonstrate those assumptions are reasonable given the size of the catchment area and the location of existing and approved providers. For example, the catchment area includes a significant portion of southern and eastern Wake County where many residents would be closer to UNC REX Holly Springs Hospital, WakeMed Cary, or WakeMed Raleigh. Additionally, the catchment area includes areas of northern Wake County including ZIP code 27615 which borders the campus of WakeMed North. The catchment area includes ZIP code 27517 in Orange and Chatham counties which is located on the western side of Jordan Lake and borders the main campus of UNC Hospitals (please note that UNC Medical Center is not shown on DGLH's catchment area maps despite its proximity). Finally, the catchment area includes ZIP codes in Durham County which are more proximate to Duke University Hospital and Duke Regional Hospital than DGLH. Given the basis of Duke's projected utilization, nearly one-half of which stems from ED visits, as described above, the application provides no reasonable basis to assume that a significant portion of its patients will travel to DGLH for ED services for which many will need to be admitted. Geographic proximity is much more important in facility selection for Emergency Department patients, yet Duke fails to account for this in its assumptions, which further highlights the unreasonableness of Duke's projections.

Of particular note, the DGLH application fails to consider the impact of the development of UNC REX Holly Springs Hospital on its project. While the DLGH application refers to the "new" UNC REX Holly Springs Hospital in its application indicating that Duke understands that hospital is in Zone 2 of its catchment area, it includes no discussion of how the development of UNC REX Holly Springs may impact the historical patient selection patterns for southern Wake County residents who have historically chosen Duke facilities for care or how it may impact the projected number of patients that would be "incremental" to DGLH,

particularly as the opening of UNC REX Holly Springs later this year will add another emergency department in the catchment area.

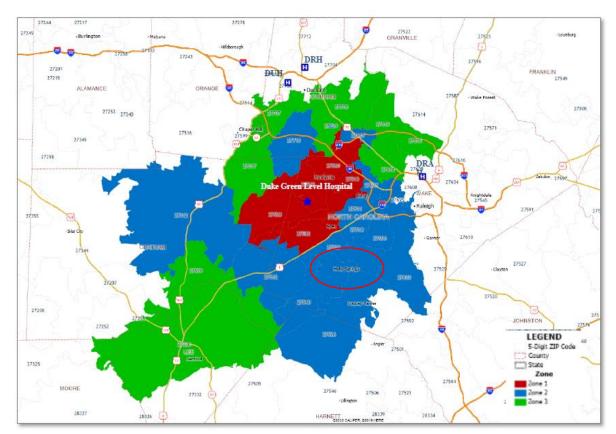
On page 132 of the application in Table Q.7, Duke provides the number of discharges it projects to shift from DUHS hospitals by Duke facility and Zone. UNC Health has summarized those projections by Zone in the table below.

DGLH Projected Discharges Based on Volume Shifted from DUHS Hospitals

		-		•
	FY2027	FY2028	FY2029	FY2029 % of Total
Zone 1	182	247	289	23%
Zone 2	507	599	695	55%
Zone 3	176	223	270	22%
Total	865	1,069	1,254	100%

Source: Table Q.7, page 132.

As shown above, the majority of DGLH's discharges that it projects to shift from DUHS hospitals are expected to originate from Zone 2. Despite its name, there are many portions of Zone 2 that are farther away from the proposed hospital than portions of Zone 3. In fact, as shown below, Zone 2 includes many areas of southern and eastern Wake County which are much closer to UNC REX Holly Springs Hospital (located in Holly Springs, circled on the map below). Yet, DGLH's projections make no mention of UNC REX Holly Springs or why it is reasonable to assume that 55 percent and 22 percent of its shifted discharges, respectively, will originate from Zones 2 and 3, which are more distant from DGLH than Zone 1. Further, the application fails to explain why it is reasonable to assume that patients who live closer to existing Duke facilities, including portions of Zones 2 and 3, would instead choose to travel further to the proposed DGLH.



Graphic Q.1: Duke Green Level Hospital Catchment Area

Similarly, the majority of DGLH incremental ED visits (which in turn are assumed to result in incremental discharges) are projected to originate from Zone 2 – including areas which would be much closer to UNC REX Holly Springs Hospital or other emergency departments, and the DGLH application fails to explain why it would assume the majority of its incremental ED visits would originate from farther away, much less to demonstrate that such an assumption is reasonable.

DGLH ED Visits Based on Incremental ED Visit Share in Catchment Area

	FY2027	FY2028	FY2029	FY 2029 % of Total
Zone 1	2,006	3,060	4,149	34%
Zone 2	2,116	3,222	6,544	53%
Zone 3	800	1,215	1,642	13%
Total	4,922	7,497	12,335	100%

Source: Table Q.49, page 15.

In fact, Duke provides no justification or rationale whatsoever for its assumed "incremental ED visit service area share gain." As shown below, Duke provides assumed percentage share gains but there is no information included to provide the Agency with the basis for its assumptions or to demonstrate that they are in any way reasonable.

DGLH's estimated ED visit Service Area Share based on the shift of ED volume from DRAH is extremely modest. DUHS reasonably expects the presence of a new acute care hospital and emergency department in western Wake County will result in incremental ED visit service area share gain at DGLH. DUHS projects the following incremental ED visit service area share gain at DGLH during initial project years.

Table Q.48: DGLH Incremental ED Visit Share in Catchment Area

	FY2027	FY2028	FY2029
Zone 1	2.0%	3.0%	4.0%
Zone 2	1.0%	1.5%	3.0%
Zone 3	0.5%	0.75%	1.0%

These market share gains, which are assumed without any basis provided in the application, are particularly questionable given the development of UNC REX Holly Springs Hospital. Please note that 49 percent of DGLH's total projected acute care discharges are based on the assumed incremental ED visits. Thus, if the assumed "incremental ED visit service area share gain" is unsupported, then DGLH's acute care utilization is also unsupported and unreasonable. Further, Duke also assumes, without providing any basis to demonstrate that the assumption is reasonable, that the admissions resulting from these incremental ED visits will have an average length of stay (ALOS) of 4.5 days, equivalent to the discharges that are projected to shift from DUHS facilities. If the assumed ALOS is unsupported, then DGLH's acute care utilization is also unsupported and unreasonable.

Based on DGLH's acute care utilization assumptions (specifically its assumed shift of DUHS discharges and incremental discharges by ZIP code using its assumptions by Zone), UNC Health estimated the following patient origin by ZIP code for acute care discharges excluding obstetrics. Please note that this distribution by ZIP code is consistent with DGLH's projected patient origin by county shown on page 36 based on an aggregation of the ZIP code utilization shown below into Wake, Durham, Chatham, Lee, and Orange counties.

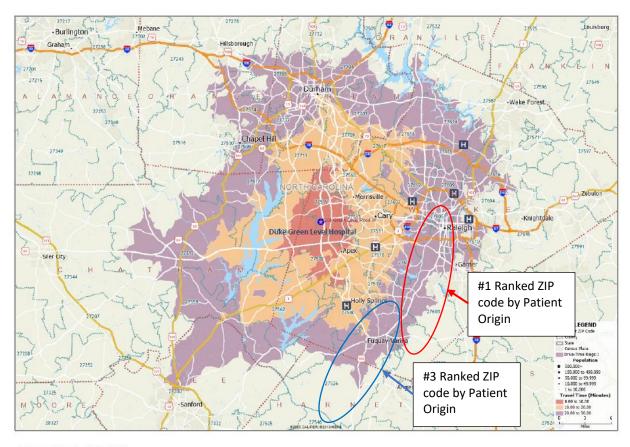
Projected 2029 DGLH Patient Origin by ZIP Code

ZIP Code	City	2029 Discharges	% of Total
27603	Raleigh	249	10.0%
27519	Cary	218	8.8%
27526	Fuquay Varina	173	7.0%
27713	Durham	168	6.8%
27606	Raleigh	161	6.5%
27513	Cary	157	6.3%
27615	Raleigh	144	5.8%
27502	Apex	143	5.7%
27560	Morrisville	141	5.6%
27540	Holly Springs	111	4.5%
27617	Raleigh	104	4.2%

27511	Cary	101	4.1%
27613	Raleigh	91	3.7%
27607	Raleigh	75	3.0%
27539	Apex	75	3.0%
27612	Raleigh	69	2.8%
27518	Cary	62	2.5%
27312	Pittsboro	57	2.3%
27703	Durham	57	2.3%
27523	Apex	46	1.8%
27330	Sanford	28	1.1%
27707	Durham	28	1.1%
27517	Chapel Hill	16	0.6%
27709	Durham	7	0.3%
27562	New Hill	5	0.2%
27559	Moncure	2	0.1%
Total		2,489	100.0%

Notably, Duke projects the <u>largest</u> number of DGLH non-obstetric discharges and 10 percent of its total from the Raleigh ZIP code 27603, which is the easternmost ZIP code in DGLH's catchment area and stretches from Johnston County into the central Raleigh. As shown on the drive time map on page 52 of the application, excerpted below, the closest portions of ZIP code 27603, circled in red below, to DGLH are within a 20 to 30-minute drive time, but a portion of the ZIP code is entirely outside of the 30-minute drive time, but was apparently not excluded in Duke's analysis. As shown on the map, the incremental patients that Duke projects to serve from ZIP code 27603 (those that are not currently served by a Duke facility) are assumed to seek care at DGLH rather than UNC REX Holly Springs, WakeMed Cary, and WakeMed Raleigh, all of which would be closer to most if not all of ZIP code 27603.

Duke projects that the third highest number of DGLH non-obstetric discharges and seven percent of its total will originate from the Fuquay-Varina ZIP code 27526, which is the southeastern most ZIP code in DGLH's catchment area and stretches into Harnett County. As shown on the excerpted map below, only a small portion of ZIP code 27526, circled in blue below, is within a 10 to 20-minute drive time of DGLH, an additional portion is within a 20 to 30-minute drive of DGLH, and another portion of the ZIP code is entirely outside of the 30-minute drive time. As shown on the map, the incremental patients that Duke projects to serve from ZIP code 27526 (those that are not currently served by a Duke facility) are assumed to seek care at DGLH rather than UNC REX Holly Springs or WakeMed Cary, both of which would be closer to most if not all of ZIP code 27526.



Source: Maptitude®, 2020

Notably, Duke has $\underline{\text{zero}}$ healthcare providers in either ZIP code 27603 or 27526, as shown on page 58 of its application.

Existing Duke Health Providers in the Duke Green Level Hospital Catchment Area (by Zip Code)

Zip Code	City	Duke Health Unique Providers
27713	Durham	392
27560	Morrisville	114
27707	Durham	113
27703	Durham	108
27540	Holly Springs	58
27518	Cary	47
27502	Apex	47
27607	Raleigh	31
27513	Cary	18
27511	Cary	15
27517	Chapel Hill	15
27613	Raleigh	12
27612	Raleigh	8
27519	Cary	5
27312	Pittsboro	2
	Total	983

Despite the existence of statewide data with detailed information for other providers by ZIP code, Duke failed to consider any other similarly-sized community hospitals on which to base or support its assumptions. For example, Johnston Health Clayton, part of UNC Health, is a 50-bed community hospital, and, based on 2019 data, the number one ZIP code from which its patients originate is the ZIP code in which it is located, 27520, which comprises approximately 30 percent of its patients. In fact, the vast majority of its patients, 80 percent or more, live in ZIP codes that are contiguous to Johnston Health Clayton's home ZIP code or no more than one ZIP code removed. While it is reasonable that any hospital might have a portion of its patients from outside its immediate area, the application fails to demonstrate that it is reasonable to assume that the largest and third-largest source of patients for the proposed hospital would originate in ZIP codes such a distance from the proposed hospital, particularly when so much of Duke's projected volume is assumed to come from incremental ED visits, or that patients living closer to other facilities, including other Duke facilities, would choose to travel to the proposed DGLH for care.

Based on the above discussion, UNC Health does not believe that the DGLH application has reasonably identified the patient population it proposes to serve or that its projected utilization is based on reasonable assumptions. Therefore, DGLH's projected utilization and assumptions are erroneous, unreasonable, and unsupported. As such, the DGLH application is non-conforming with Criteria 3, 4, 5, 6, 18a, and the performance standards for CT Scanners (10A NCAC 14C .2303).

Failure to provide historical payor mix data and to demonstrate that the medically underserved population will not be harmed by the proposed relocation.

On pages 99 to 101, Duke provides only a partial response in Section L of the application. Specifically, Duke fails to provide the requested information for the "facility from which service components will be relocated" to DGLH. The proposed project includes the relocation of 40 acute care beds and two operating rooms from DRAH to DGLH. However, Duke fails to provide the requested information for DRAH in Section L.1, which states in subparts a. and b. to "Complete the following tables for . . . [e]ach facility from which

service components will be relocated to the facility or campus identified in Section A, Question 4." As a result, the Agency cannot appropriately evaluate the DGLH application for conformity with Criterion 13, as no data are provided in the application regarding the applicant's current level of care to the underserved. Duke cannot simply remedy this problem through a response to these comments or otherwise since the information is not in the application and an applicant may not amend its application. While Duke may argue that this is a mere oversight or is otherwise unnecessary for the Agency's review, the CON statute says otherwise. N.C. GEN. STAT. § 131E-182(b) specifies that the Agency may only require such information from an applicant that is needed to determine conformity with the review criteria. Thus, the Agency, in its newly-modified CON application form, sought this specific information in order to make a determination under one of the statutory review criteria, as it is required to do. Absent this information, therefore, the applicant fails to uphold its burden of demonstrating conformity with the criteria, and the application should be denied.

Further, this information is vital to the Agency's review of the application under Criterion 3a, which requires applicants to demonstrate that the needs of the population currently served will continue to be met after the relocation and in particular what the impact of the proposed project will be on the medically underserved. Duke Raleigh Hospital, from which the beds and operating rooms will be relocated, currently serves a significant number of patients from Franklin and Johnston counties, for example, while the application projects that Duke Green Level Hospital will serve no patients from Franklin County and, at most, one patient from Johnston County. This is particularly concerning for Franklin County, which has no acute care beds or operating rooms in service, and which has a much higher percentage of medically underserved compared to Wake County, as shown below.

Geography	Median Household Income	Percentage with Income Below Poverty Level
Franklin County	\$55,193	13.2%
Johnston County	\$59,865	12.5%
Wake County	\$80,591	8.0%
ZIP Code 27519 (Proposed Location)	\$104,669	4.8%

Source: 2019 data from US Census Bureau, American Communities Survey, https://www.census.gov/programs-surveys/acs/data.html, accessed March 30, 2021.

Given the significant economic differences between the population currently being served by these beds and operating rooms and the population of the county that will largely supplant this current population, Wake County, the application has failed to provide sufficient data or to demonstrate that the proposed relocation will not have a negative impact on the medically underserved population currently utilizing the services at DRAH.

Based on the discussion above, it is clear that the DGLH application is non-conforming with Criteria 3a and 13.

<u>Failure to demonstrate that the cost, design and means of construction represent the most reasonable</u> alternative.

As discussed previously, UNC Health does not believe Duke has demonstrated the need for the proposed project, including the proposed 40 beds and two operating rooms, as well as the numerous other services

it proposes to develop. Nonetheless, even if the application had demonstrated the need for the project in terms of the services it proposes, Duke proposes to build a grossly oversized and overly costly facility, without even attempting to demonstrate that the design, costs or means of construction are reasonable.

As a brief comparison, the Agency recently reviewed New Hanover Regional Medical Center-Scotts Hill ("NHRMC-SH"), a 66-bed hospital in New Hanover County. Despite proposing a smaller number of acute care beds, Duke proposes to construct approximately 100,000 more square feet of space than NHRMC-SH. Of note, NHRMC-SH's project was found non-conforming with Criterion 12, but not because of the proposed size or the cost and design of its facility.

Sentara Albemarle Medical Center was approved in March 2021 to develop a replacement hospital in Elizabeth City (Project ID # R-12007-20)) with 110 beds and 8 operating rooms, much higher numbers than Duke is proposing. That application, which was found conforming with Criterion 12, proposed constructing a 220,343 square foot hospital, nearly 80,000 fewer square feet than Duke has proposed for much fewer services.

The table below compares these and another recently reviewed application (Caromont-Belmont) to the Duke proposal, demonstrating the significantly larger size of Duke Green Level Hospital.

Comparison of Recently Reviewed New Hospital CON Projects

Application	Acute Care Beds	Square Feet	Capital Costs	Square Feet per Bed
NHRMC-Scotts Hill (#O-011947-20)	66	197,891	\$209,946,248	2,998
Sentara Albemarle Medical Center (#R-12007-20)	110	220,343	\$159,348,513	2,003
Caromont Regional Medical Center-Belmont (#F-11749-19)	54	222,040	\$195,795,775	4,075
Duke Green Level Hospital	40	298,960	\$235,000,000	7,474

UNC Health understands that different projects have distinct requirements, such as land and site costs, soil conditions, scope of services and other factors that may influence the cost of the project. Duke's project includes no land costs, however, so the relatively high price of property in the Triangle area is not driving its costs, nor does it include an extensive array of services that are dramatically different from the others in the comparison group. What is noticeably different, however, in Duke's proposed project compared to the others, is the enormous size of the facility—nearly 300,000 square feet—which is obviously one-third or more larger than other new hospitals proposed in the last two years, even those with a much higher number of beds and services. Duke's response to Section K.1 simply says that "[t]he proposed new construction square footage is representative of the necessary spaces to support the project as proposed." (emphasis added) The line drawings in Exhibit K.1 tell a different story, however, as they include more than 72,000 square feet of administration (50,000+) and shell (21,500+) space, the justification for which the application completely omits. The total square footage for the 40-bed units includes only 31,100 square feet, which is just a fraction of the proposed space for administration. The application provides no explanation, no discussion, and no description of those spaces, much less why they are needed for such a small hospital.

While the Agency may not typically review or compare square footage or costs in this manner, as demonstrated in the recent decision on NHRMC-SH, the Agency can and does contact the Construction Section when questions arise regarding issues under review relating to Criterion 12. UNC Health respectfully requests that given the extensive issues described above, the Agency seek input from the Construction Section for this review as well to assess the reasonableness of the statement that these spaces are "necessary" to support the project.

Based on these issues, the DGLH application should be found non-conforming with Criteria 4 and 12.

<u>Failure to demonstrate that the proposed project is based on the actual ideas and plans of Duke University Health System.</u>

In multiple instances throughout the application, Duke uses language taken directly from at least one other application, Atrium Health Lake Norman (Project ID # F-12010-20), modified only to reflect Duke as the applicant or the specific geography being described. This language was developed for use in another application in a different service area, with a significantly different set of experiences and circumstances serving as the basis for the narrative. For example, in describing the alternatives to the proposed project on page 75, Duke writes:

and enhanced geographic access. DUHS has identified a sufficient number of patients who need and can support a new hospital in western Wake County. DGLH will offer another, convenient choice to patients in the western area of the county. Further, while the status quo would not require the projected capital expenditure to develop the proposed hospital, it would also fail to expand geographic and timely access to community-based DUHS acute care services in Wake County. Therefore, maintaining the status quo was not considered a practical alternative.

This language appears to be taken directly from the Atrium Health Lake Norman application, filed three months prior to the Duke application, as shown in this excerpt from page 84 of that application:

...when there is a <u>sufficient number of patients who need and can support a new hospital in the service area</u>....The proposed Atrium Health Lake Norman hospital <u>will offer another, convenient choice to patients in the northwest area of the county</u>. <u>Further, while the status quo would not require the projected capital expenditure to develop the proposed hospital, it would also fail to expand geographic and timely access to the patients in the part of the county north/west of the interstate corridors. <u>Therefore, maintaining the status quo was not considered a practical alternative</u>. (emphasis added to show copied phrases)</u>

This is only one of many examples where Duke appears to use work copyrighted by another organization in its application to further its own interests. The pervasiveness of this issue demonstrates that Duke's application is written in part in support of the need for a different project, provides information for a different applicant, and the alternatives considered by another hospital, thereby leaving serious unanswered questions as to the need for Duke's project as well as missing information regarding Duke's plans or the alternatives Duke considered.

Given this issue and the lack of sufficient reliable information regarding Duke's intentions for its project, the application should be found non-conforming with Criteria 3, 4, 5, 6, and 18a and should be denied.



Emergency Department Services

(2019 Data)

Patient Origin			Patient Origin		
Service Location	Number of Patients	% of Total	Service Location	Number of Patients	% of Total
Alamance			Halifax	9	0.01%
Alamance	53032	67.45%	Dare	8	0.01%
Orange	16716	21.26%	Montgomery	8	0.01%
Durham	3449	4.39%	Bladen	8	0.01%
Guilford	2531	3.22%	Scotland	8	0.01%
Chatham	719	0.91%	Franklin	8	0.01%
Rockingham	461	0.59%	Hoke	7	0.01%
Wake	445	0.57%	Wilson	7	0.01%
Forsyth	239	0.30%	Stanly	6	0.01%
Mecklenburg	131	0.17%	Henderson	6	0.01%
Person	75	0.10%	Haywood	6	0.01%
New Hanover	72	0.09%	Gaston	6	0.01%
Randolph	56	0.07%	Caldwell	5	0.01%
Brunswick	46	0.06%	Avery	5	0.01%
Carteret	40	0.05%	Davie	5	0.01%
Watauga	38	0.05%	McDowell	5	0.01%
Cumberland	32	0.04%	Cleveland	4	0.01%
Johnston	31	0.04%	Richmond	4	0.01%
Davidson	31	0.04%	Beaufort	4	0.01%
Buncombe	29	0.04%	Union	4	0.01%
Pitt	29	0.04%	Anson	3	0.00%
Lee	27	0.03%	Pasquotank	3	0.00%
Craven	22	0.03%	Hertford	3	0.00%
Cabarrus	22	0.03%	Robeson	3	0.00%
Rowan	21	0.03%	Lenoir	3	0.00%
Moore	21	0.03%	Columbus	3	0.00%
Vance	20	0.03%	Duplin	3	0.00%
Iredell	20	0.03%	Pender	2	0.00%
Catawba	16	0.02%	Edgecombe	2	0.00%
Onslow	15	0.02%	Alleghany	1	0.00%
Wayne	13	0.02%	Sampson	1	0.00%
Granville	12	0.02%	Stokes	1	0.00%
Nash	12	0.02%	Macon	1	0.00%
Jackson	12	0.02%	Swain	1	0.00%
Surry	12	0.02%	Transylvania	1	0.00%
Wilkes	10	0.01%	Rutherford	1	0.00%
Harnett	10	0.01%	Bertie	1	0.00%
			Mitchell	1	0.00%

ient Origin			Patient Origin		
Service Location	Number of Patients	% of Total	Service Location	Number of Patients	% of Tota
Lenoir	454	1.32%	Iredell	1	0.00%
Wake	251	0.73%	Avery	1	0.00%
Orange	153	0.44%	Granville	1	0.00%
Cumberland	115	0.33%	Jackson	1	0.00%
Durham	104	0.30%	Alleghany	1	0.00%
Johnston	89	0.26%	McDowell	1	0.00%
Craven	67	0.19%	Bertie	1	0.00%
Harnett	66	0.19%	Pasquotank	1	0.00%
Guilford	36	0.10%	Franklin	1	0.00%
Bladen	32	0.09%	Gaston	1	0.00%
Carteret	28	0.08%	Rockingham	1	0.00%
Mecklenburg	24	0.07%	Chatham	1	0.00%
Hoke	21	0.06%	Cleveland	1	0.00%
Beaufort	19	0.06%	Swain	1	0.00%
Wilson	15	0.04%	Total:	34405	
Robeson	15	0.04%	Durham	000	
Lee	14	0.04%			
Scotland	12	0.03%	Durham	88502	77.34%
Brunswick	12	0.03%	Wake	13637	11.92%
Union	11	0.03%	Orange	9211	8.05%
Nash	8	0.02%	Person	504	0.44%
Cabarrus	8	0.02%	Guilford	273	0.24%
Forsyth	7	0.02%	Granville	262	0.23%
Davidson	7	0.02%	Alamance	254	0.22%
Buncombe	7	0.02%	Mecklenburg	197	0.17%
Rowan	6	0.02%	New Hanover	157	0.14%
Columbus	6	0.02%	Forsyth	125	0.11%
Dare	5	0.01%	Vance	109	0.10%
Haywood	5	0.01%	Johnston	83	0.07%
Chowan	5	0.01%	Pitt	78	0.07%
Hertford	4	0.01%	Cumberland	71	0.06%
Moore	3	0.01%	Carteret	56	0.05%
Alamance	3	0.01%	Watauga	51	0.04%
Polk	3	0.01%	Nash	50	0.04%
Randolph	3	0.01%	Buncombe	49	0.04%
Watauga	2	0.01%	Franklin	43	0.04%
Henderson	2	0.01%	Wayne	43	0.04%
Wilkes	2	0.01%	Craven	38	0.03%
Vance	2	0.01%	Brunswick	38	0.03%
Edgecombe	2	0.01%	Lee	34	0.03%
Richmond	2	0.01%	Cabarrus	28	0.02%

Dare	ent Origin			Patient Origin		
Dare 26 0.02% McDowell 3 Wilson 23 0.02% Anson 2 Onslow 23 0.02% Jackson 2 Moore 22 0.02% Rutherford 2 Chatham 21 0.02% Bertie 2 Chatham 21 0.02% Polk 2 Chatham 21 0.02% Mitchell 1 Iredell 20 0.02% Washington 1 Iredell 20 0.02% Washington 1 Rockingham 20 0.02% Montgomery 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Total: 114428 Lenoir 14 0.01% Edgecombe 18950 Macon 14 0.01% Radgecombe 18950 Macon 14 0.01% Wilson 545 Wallifact 12	Service Location	Number of Patients	% of Total	Service Location	Number of Patients	% of Tota
Wilson 23 0.02% Anson 2 Onslow 23 0.02% Jackson 2 Moore 22 0.02% Rutherford 2 Chatham 21 0.02% Bertie 2 Robeson 21 0.02% Polk 2 Catawba 21 0.02% Mitchell 1 Iredell 20 0.02% Washington 1 Rockingham 20 0.02% Lincoln 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe 18950 Union 14 0.01% Edgecombe 18950 Union 14 0.01% Nash 16074 Rowan 14 0.01% Nash 16074 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01	Harnett	26	0.02%	Bladen	3	0.00%
Onslow 23 0.02% Jackson 2 Moore 22 0.02% Rutherford 2 Chatham 21 0.02% Bertie 2 Robeson 21 0.02% Polk 2 Catawba 21 0.02% Mitchell 1 Iredell 20 0.02% Washington 1 Rockingham 20 0.02% Lincoln 1 Bavidson 19 0.02% Lincoln 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe 18950 Lenoir 14 0.01% Rowan 14 10.1% Pitt 2826 Gaston 14 0.01% Pitt 2826 18950 Pasquotank 14 0.01% Wilson 545 Randolph 12 0.01% Wake 461 Surry 12 0.01% Wake	Dare	26	0.02%	McDowell	3	0.00%
Moore 22 0.02% Rutherford 2 Chatham 21 0.02% Bertie 2 Robeson 21 0.02% Polk 2 Catawba 21 0.02% Mitchell 1 Iredell 20 0.02% Mitchell 1 Rockingham 20 0.02% Montgomery 1 Davidson 19 0.02% Montgomery 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe 18950 Union 14 0.01% Edgecombe 18950 Wash 16074 Pitt 2826 Wash 16074 Pitt 2826 Pasquotank 14 0.01% Wilson 545 Wash 16074 Wash 461 Surry 12 0.01% Wash 461 Surry 12 0.01% Durham 106	Wilson	23	0.02%	Anson	2	0.00%
Chatham 21 0.02% Bertie 2 Robeson 21 0.02% Polk 2 Catawba 21 0.02% Mitchell 1 Iredell 20 0.02% Washington 1 Rockingham 20 0.02% Lincoln 1 Davidson 19 0.02% Montgomery 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe 18950 Union 14 0.01% Edgecombe 18950 Wash 16074 Pitt 2826 Union 14 0.01% Pitt 2826 Wash 16074 Pitt 2826 Wash 16074 Pitt 2826 Pasquotank 14 0.01% Wake 461 Randolph 12 0.01% Wake 461 Surry 12 0.01% Wayne 50	Onslow	23	0.02%	Jackson	2	0.00%
Robeson 21 0.02% Polk 2 Catawba 21 0.02% Mitchell 1 Iredell 20 0.02% Washington 1 Rockingham 20 0.02% Lincoln 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe Union 14 0.01% Edgecombe Rowan 14 0.01% Nash 16074 Pasquotank 14 0.01% Pitt 2826 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Wake 461 Surry 12 0.01% Wayre 50 Beaufort 11 0.01% Wayre 50 Scotland 10 0.01% Hertford 47 Henderson 10 0.01% Hertford	Moore	22	0.02%	Rutherford	2	0.00%
Catawba 21 0.02% Mitchell 1 Iredell 20 0.02% Washington 1 Rockingham 20 0.02% Lincoln 1 Davidson 19 0.02% Montgomery 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe Union 14 0.01% Edgecombe Rowan 14 0.01% Nash 16074 Gaston 14 0.01% Pitt 2826 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Wake 461 Surry 12 0.01% Durham 106 Beaufort 11 0.01% Wayne 50 Scorland 10 0.01% Union 47 Henderson 10 0.01% Hertford	Chatham	21	0.02%	Bertie	2	0.00%
Irredell 20 0.02% Washington 1 Rockingham 20 0.02% Lincoln 1 Davidson 19 0.02% Montgomery 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe Union 14 0.01% Edgecombe Rowan 14 0.01% Nash 16074 Gaston 14 0.01% Pitt 2826 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Orange 121 Surry 12 0.01% Wayne 50 Alleghany 11 0.01% Wayne 50 Alleghany 11 0.01% Guilford 47 Henderson 10 0.01% Lenoir 45 Henderson 10 0.01% Vance <td>Robeson</td> <td>21</td> <td>0.02%</td> <td>Polk</td> <td>2</td> <td>0.00%</td>	Robeson	21	0.02%	Polk	2	0.00%
Rockingham 20 0.02% Lincoln 1 Davidson 19 0.02% Montgomery 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe Union 14 0.01% Edgecombe Rowan 14 0.01% Nash 16074 Gaston 14 0.01% Pitt 2826 Pasquotank 14 0.01% Wilson 545 Randolph 12 0.01% Wake 461 Surry 12 0.01% Orange 121 Surry 12 0.01% Wayne 50 Alleghany 11 0.01% Wayne 50 Alleghany 11 0.01% Guilford 47 Henderson 10 0.01% Hertford 41 Macon 10 0.01% Hertford 41 Avery 8 0.01% Vance	Catawba	21	0.02%	Mitchell	1	0.00%
Davidson 19 0.02% Montgomery 1 Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe Union 14 0.01% Edgecombe Rowan 14 0.01% Nash 16074 Gaston 14 0.01% Pitt 2826 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Orange 121 Surry 12 0.01% Wayne 50 Surry 12 0.01% Wayne 50 Alleghany 11 0.01% Wayne 50 Scotland 10 0.01% Lenoir 45 Henderson 10 0.01% Lenoir 45 Hertford 41 Vance 34 Avery 8 0.01% Johnston 32 <t< td=""><td>Iredell</td><td>20</td><td>0.02%</td><td>Washington</td><td>1</td><td>0.00%</td></t<>	Iredell	20	0.02%	Washington	1	0.00%
Hoke 16 0.01% Total: 114428 Lenoir 15 0.01% Edgecombe Union 14 0.01% Edgecombe Rowan 14 0.01% Nash 16074 Pasquotank 14 0.01% Wilson 545 Randolph 12 0.01% Orange 121 Surry 12 0.01% Orange 121 Beaufort 11 0.01% Wayne 50 Alleghany 11 0.01% Guilford 47 Henderson 10 0.01% Lenoir 45 Henderson 10 0.01% Hertford 41 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Dayneston 32 Columbus 7 0.01% Beaufort 31 Columbus 7 0.01% Beaufort 31 Chowan 7 0.01% Carven 14 Halifax 26 Chowan 7 0.01% Cumberland 25 Edgecombe 18950 Bedgecombe 18950 I 14428 Edgecombe 18950 I 16074 Pitt 2826 Wilson 545 Wake 461 Orange 121 Durham 106 Wayne 50 Guilford 47 Lenoir 45 Hertford 41 Vance 34 Carteret 32 Johnston 32 Columbus 7 0.01% Beaufort 31 Columbus 7 0.01% Cumberland 25 Forsyth 22 Haywood 7 0.01% Bertie 21 Haywood 7 0.01% New Hanover 18 Creven 14 Hertford 6 0.01% New Hanover 18 Edgecombe 7 0.01% Forsyth 22 Bertie 21 New Hanover 18 Creven 14 Hertford 6 0.01% Mecklenburg 14 Franklin 13 Franklin 13 Franklin 13 Swain 4 0.00% Duplin 10 Dare 9	Rockingham	20	0.02%	Lincoln	1	0.00%
Lenoir	Davidson	19	0.02%	Montgomery	1	0.00%
Lenoir 15 0.01% Edgecombe Union 14 0.01% Edgecombe Rowan 14 0.01% Nash 16074 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Durham 106 Alleghany 11 0.01% Guilford 47 Henderson 10 0.01% Hertford 41 Henderson 10 0.01% Hertford 41 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Carteret 32 Duplin 8 0.01% Beaufort 31 Columbus 7 0.01% Beaufort 31 Columbus 7 0.01% Beaufort 31 Columbus 7 0.01% Beaufort 31 Coleveland 7 0.01% Bertie 21 Cleveland 7 0.01% Bertie 21 Cleveland 7 0.01% Bertie 21 Cleveland 7 0.01% Craven 14 Burke 5 0.00% Pasquotank 12 Columbus 9 0.01% Craven 14 Craven 1	Hoke	16	0.01%	Total-	114428	
Union 14 0.01% Edgecombe 18950 Rowan 14 0.01% Nash 16074 Pasquotank 14 0.01% Pitt 2826 Halifax 12 0.01% Wilson 545 Randolph 12 0.01% Wake 461 Surry 12 0.01% Durham 106 Alleghany 11 0.01% Wayne 50 Scotland 10 0.01% Hertford 41 Macon 10 0.01% Hertford 41 Caldwell 9 0.01% Carteret 32 Avery 8 0.01% Dunston 32 Duplin 8 0.01% Beaufort 31 Columbus 7 0.01% Beaufort 31 Columbus 7 0.01% Halifax 26 Chowan 7 0.01% Forsyth 22 Haywood 7 0.01% Bertie 21 Hertford 6 0.01% New Hanover 18 Edgecombe 14 Edgecombe 15 Forsyth 22 Haywood 7 0.01% Recklenburg 14 Edgecombe 16 Forayth 18 Edgecombe 17 Round 25 Hertford 18 Forsyth 22 Haywood 7 0.01% Recklenburg 14 Edgecombe 17 Round 25 Halifax 26 Craven 14 Hertford 6 0.01% Recklenburg 14 Edgecombe 17 Round 18 Stanly 5 0.00% Page 9	Lenoir	15	0.01%		(111.20	
Rowan 14 0.01% Nash 16074 Gaston 14 0.01% Pitt 2826 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Orange 121 Surry 12 0.01% Durham 106 Alleghany 11 0.01% Wayne 50 Scotland 10 0.01% Guilford 47 Henderson 10 0.01% Lenoir 45 Handerson 10 0.01% Hertford 41 Caldwell 9 0.01% Vance 34 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Beaufort 31 Pender 7 0.01% Cumberland 25 Chowan 7 0.01% Forsyth 22 Edgecombe 7 0.01	Union	14	0.01%	_		
Gaston 14 0.01% Pitt 2826 Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Orange 121 Beaufort 11 0.01% Durham 106 Alleghany 11 0.01% Wayne 50 Scotland 10 0.01% Guilford 47 Henderson 10 0.01% Lenoir 45 Henderson 10 0.01% Hertford 41 Caldwell 9 0.01% Vance 34 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Johnston 32 Columbus 7 0.01% Beaufort 31 Pender 7 0.01% Cumberland 25 Chowan 7 0.01% Forsyth 22 Edgecombe 7 <t< td=""><td>Rowan</td><td>14</td><td>0.01%</td><td></td><td></td><td>47.76%</td></t<>	Rowan	14	0.01%			47.76%
Pasquotank 14 0.01% Wilson 545 Halifax 12 0.01% Wake 461 Surry 12 0.01% Orange 121 Beaufort 11 0.01% Durham 106 Alleghany 11 0.01% Wayne 50 Scotland 10 0.01% Guilford 47 Henderson 10 0.01% Lenoir 45 Henderson 10 0.01% Hertford 41 Macon 10 0.01% Vance 34 Caldwell 9 0.01% Vance 34 Avery 8 0.01% Johnston 32 Duplin 8 0.01% Beaufort 31 Columbus 7 0.01% Beaufort 31 Pender 7 0.01% Cumberland 25 Chowan 7 0.01% Forsyth 22 Edgecombe 7 0.01% Reverse 21 Haywood 7 0.01% New	Gaston	14	0.01%			40.51%
Halifax 12 0.01% Wilson 545 Randolph 12 0.01% Wake 461 Surry 12 0.01% Drange 121 Beaufort 11 0.01% Wayne 50 Alleghany 11 0.01% Guilford 47 Henderson 10 0.01% Hertford 41 Caldwell 9 0.01% Carteret 32 Duplin 8 0.01% Donston 32 Duplin 8 0.01% Beaufort 31 Pender 7 0.01% Beaufort 31 Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Forsyth 22 Edgecombe 7 0.01% Bertie 21 Hertford 18 Hertford 25 Halifax 26 Cleveland 7 0.01% Bertie 21 New Hanover 18 Cleveland 7 0.01% Craven 14 Hertford 6 0.01% Franklin 13 Stanly 5 0.00% Franklin 13 Swain 4 0.00% Dare 9	Pasquotank	14	0.01%			7.12%
Randolph 12 0.01% Orange 121 Surry 12 0.01% Durham 106 Beaufort 11 0.01% Wayne 50 Alleghany 11 0.01% Wayne 50 Scotland 10 0.01% Lenoir 45 Henderson 10 0.01% Hertford 41 Macon 10 0.01% Vance 34 Caldwell 9 0.01% Carteret 32 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Beaufort 31 Columbus 7 0.01% Halifax 26 Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Bertie 21 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% Mecklenburg 14 Hertford 6	-	12	0.01%			1.37%
Surry 12 0.01% Orange 121 Beaufort 11 0.01% Durham 106 Alleghany 11 0.01% Wayne 50 Scotland 10 0.01% Guilford 47 Henderson 10 0.01% Lenoir 45 Henderson 10 0.01% Hertford 41 Caldwell 9 0.01% Vance 34 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Beaufort 31 Pender 7 0.01% Halifax 26 Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Bertie 21 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% Craven 14 Hertford 6 0.01% Franklin 13 Stanly 5 <	Randolph	12	0.01%			1.16%
Beaufort 11 0.01% Wayne 50 Alleghany 11 0.01% Guilford 47 Scotland 10 0.01% Lenoir 45 Henderson 10 0.01% Hertford 41 Macon 10 0.01% Vance 34 Caldwell 9 0.01% Carteret 32 Avery 8 0.01% Johnston 32 Duplin 8 0.01% Beaufort 31 Columbus 7 0.01% Halifax 26 Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Forsyth 22 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% New Hanover 18 Hertford 6 0.01% Franklin 13 Burke 5 0.00% Franklin 13 Stanly 5 0.00% Pasquotank 12 Wilkes 4 0.00%	Surry	12	0.01%	_		0.30%
Alleghany Scotland 10 0.01% Henderson 10 0.01% Macon 10 0.01% Hertford 41 Caldwell 9 0.01% Vance 34 Avery 8 0.01% Duplin 8 0.01% Columbus 7 0.01% Pender 7 0.01% Chowan 7 0.01% Edgecombe 7 0.01% Edgecombe 7 0.01% Haywood 7 0.01% Hertford 8 Hertford 10 Colow Haywood 7 0.01% Cleveland 7 0.01% Hertford 6 0.01% Hertford 6 0.01% Hertford 6 0.01% Hertford 6 0.00% Franklin 13 Pasquotank 12 Wilkes 4 0.00% Dare	-	11	0.01%			0.27%
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Henderson 10 0.01% Lenoir 45 Macon 10 0.01% Hertford 41 Caldwell 9 0.01% Vance 34 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Johnston 32 Columbus 7 0.01% Beaufort 31 Pender 7 0.01% Cumberland 25 Chowan 7 0.01% Forsyth 22 Edgecombe 7 0.01% Bertie 21 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% Craven 14 Hertford 6 0.01% Mecklenburg 14 Burke 5 0.00% Franklin 13 Stanly 5 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10		10	0.01%	Guilford	47	0.12%
Macon 10 0.01% Hertford 41 Caldwell 9 0.01% Vance 34 Avery 8 0.01% Carteret 32 Duplin 8 0.01% Johnston 32 Columbus 7 0.01% Beaufort 31 Pender 7 0.01% Halifax 26 Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Bertie 21 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% Craven 14 Hertford 6 0.01% Franklin 13 Stanly 5 0.00% Franklin 13 Swain 4 0.00% Duplin 10 Wilkes 4 0.00% Dare 9						0.11%
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Avery 8 0.01% Carteret 32 Duplin 8 0.01% Beaufort 31 Columbus 7 0.01% Halifax 26 Chowan 7 0.01% Forsyth 22 Edgecombe 7 0.01% Bertie 21 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% Craven 14 Eurke 5 0.00% Franklin 13 Swain 4 0.00% Dare 9	Caldwell	9		Vance		0.09%
Duplin 8 0.01% Johnston 32 Columbus 7 0.01% Beaufort 31 Pender 7 0.01% Halifax 26 Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Forsyth 22 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% New Hanover 14 Hertford 6 0.01% Mecklenburg 14 Burke 5 0.00% Franklin 13 Stanly 5 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9	Avery	8				0.08%
Columbus 7 0.01% Beaufort 31 Pender 7 0.01% Halifax 26 Chowan 7 0.01% Forsyth 22 Edgecombe 7 0.01% Bertie 21 Haywood 7 0.01% New Hanover 18 Cleveland 7 0.01% Craven 14 Hertford 6 0.01% Mecklenburg 14 Burke 5 0.00% Franklin 13 Stanly 5 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9						0.08%
Pender 7 0.01% Halifax 26 Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Forsyth 22 Halywood 7 0.01% Bertie 21 Cleveland 7 0.01% New Hanover 18 Craven 14 Hertford 6 0.01% Mecklenburg 14 Burke 5 0.00% Franklin 13 Stanly 5 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9	•					0.08%
Chowan 7 0.01% Cumberland 25 Edgecombe 7 0.01% Forsyth 22 Haywood 7 0.01% Bertie 21 Cleveland 7 0.01% New Hanover 18 Hertford 6 0.01% Craven 14 Burke 5 0.00% Mecklenburg 14 Stanly 5 0.00% Franklin 13 Pasquotank 12 Duplin 10 Wilkes 4 0.00% Dare 9		7		Halifax	26	0.07%
Edgecombe 7 0.01% Forsyth 22 Haywood 7 0.01% Bertie 21 Cleveland 7 0.01% New Hanover 18 Hertford 6 0.01% Craven 14 Burke 5 0.00% Franklin 13 Stanly 5 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9		7		Cumberland	25	0.06%
Haywood 7 0.01% Bertie 21 Cleveland 7 0.01% New Hanover 18 Hertford 6 0.01% Craven 14 Burke 5 0.00% Mecklenburg 14 Stanly 5 0.00% Franklin 13 Swain 4 0.00% Pasquotank 12 Duplin 10 Dare 9				Forsyth	22	0.06%
New Hanover 18	-			Bertie	21	0.05%
Hertford 6 0.01% Craven 14 Burke 5 0.00% Mecklenburg 14 Stanly 5 0.00% Franklin 13 Swain 4 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9	-			New Hanover	18	0.05%
Burke 5 0.00% Mecklenburg 14 Stanly 5 0.00% Franklin 13 Swain 4 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9				Craven	14	0.04%
Stanly 5 0.00% Franklin 13 Swain 4 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9				Mecklenburg	14	0.04%
Swain 4 0.00% Pasquotank 12 Wilkes 4 0.00% Duplin 10 Dare 9				Franklin	13	0.03%
Wilkes 4 0.00% Dare 9	-			Pasquotank	12	0.03%
Dare 9				Duplin	10	0.03%
	Richmond	4	0.00%	Dare	9	0.02%
Transylvania 3 0.00% Chowan 9				Chowan	9	0.02%

tient Origin			Patient Origin		
Service Location	Number of Patients	% of Total	Service Location	Number of Patients	% of Total
Transylvania	45	0.12%	Forsyth	420	0.12%
Lee	44	0.12%	Beaufort	418	0.11%
Macon	43	0.12%	Wilson	406	0.11%
Richmond	37	0.10%	Carteret	380	0.10%
Haywood	37	0.10%	Cumberland	312	0.09%
Avery	34	0.09%	Watauga	287	0.08%
Burke	34	0.09%	Franklin	232	0.06%
Davidson	34	0.09%	Lee	221	0.06%
Lenoir	33	0.09%	Wayne	217	0.06%
Scotland	33	0.09%	Moore	194	0.05%
Wilkes	33	0.09%	Granville	178	0.05%
Lincoln	30	0.08%	Craven	171	0.05%
McDowell	30	0.08%	Buncombe	167	0.05%
Jackson	29	0.08%	Alamance	138	0.04%
Stanly	28	0.08%	Onslow	110	0.03%
Caldwell	27	0.07%	Brunswick	105	0.03%
Swain	24	0.07%	Dare	100	0.03%
Cherokee	23	0.06%	Cabarrus	98	0.03%
Rutherford	21	0.06%	Halifax	98	0.03%
Pender	18	0.05%	Chatham	91	0.02%
Chatham	18	0.05%	Hoke	90	0.02%
Columbus	17	0.05%	Robeson	76	0.02%
Mitchell	16	0.04%	Lenoir	76	0.02%
Bladen	14	0.04%	Rowan	63	0.02%
Washington	12	0.03%	Pasquotank	63	0.02%
Montgomery	11	0.03%	Duplin	62	0.02%
Polk	11	0.03%	Jackson	57	0.02%
Total:	36517		Gaston	54	0.01%
	333		Edgecombe	52	0.01%
ake			Catawba	48	0.01%
Wake	328929	90.26%	Hertford	45	0.01%
Durham	8778	2.41%	Henderson	43	0.01%
Johnston	8122	2.23%	Avery	42	0.01%
Orange	5894	1.62%	Iredell	40	0.01%
Harnett	2953	0.81%	Randolph	39	0.01%
New Hanover	858	0.24%	Union	37	0.01%
Nash	654	0.18%	Transylvania	37	0.01%
Pitt	629	0.17%	Person	36	0.01%
Guilford	605	0.17%	Surry	34	0.01%
Vance	591	0.16%	Cleveland	32	0.01%
Mecklenburg	556	0.15%			

Thursday, August 20, 2020

Patient Origin			Patient Origin		
Service Location	Number of Patients	% of Total	Service Location	Number of Patients	% of Total
Davidson	30	0.01%	Edgecombe	8	0.09%
Bladen	30	0.01%	Forsyth	7	0.08%
Haywood	30	0.01%	Mecklenburg	7	0.08%
Scotland	30	0.01%	Jackson	6	0.07%
Chowan	29	0.01%	Alamance	6	0.07%
Pender	27	0.01%	Robeson	5	0.06%
Burke	25	0.01%	New Hanover	4	0.05%
Richmond	24	0.01%	Cumberland	4	0.05%
Caldwell	23	0.01%	Wilson	4	0.05%
Columbus	21	0.01%	Johnston	4	0.05%
Rockingham	20	0.01%	Craven	3	0.04%
Bertie	18	0.00%	Wayne	3	0.04%
Wilkes	17	0.00%	Harnett	2	0.02%
Davie	17	0.00%	Person	2	0.02%
Mitchell	17	0.00%	Beaufort	2	0.02%
Montgomery	15	0.00%	Watauga	2	0.02%
McDowell	15	0.00%	Hertford	2	0.02%
Swain	12	0.00%	Pasquotank	1	0.01%
Washington	10	0.00%	Randolph	1	0.01%
Alleghany	9	0.00%	Carteret	1	0.01%
Macon	9	0.00%	Rowan	1	0.01%
Lincoln	9	0.00%	Union	1	0.01%
Rutherford	5	0.00%	Macon	1	0.01%
Stokes	4	0.00%	Lincoln	1	0.01%
Anson	4	0.00%	Lenoir	1	0.01%
Polk	3	0.00%	Brunswick	1	0.01%
Sampson	3	0.00%	Gaston	1	0.01%
Total:	364425		Cabarrus	1	0.01%
Warren			Caldwell	1	0.01%
	0707	44.040/	Duplin	1	0.01%
Vance	3767	44.04%	Davie	1	0.01%
Franklin	1477	17.27%	Davidson	1	0.01%
Granville	1467	17.15%	Chatham	1	0.01%
Durham	593	6.93%	Pender	1	0.01%
Wake	388	4.54%	Total:	8554	
Nash	344	4.02%	Washington		
Halifax	285	3.33%	_	2007	4E 000/
Orange	77	0.90%	Washington	3607	45.82%
Pitt	32	0.37%	Chowan	2408	30.59%
Dare	25	0.29%	Pitt	619	7.86%
Guilford	11	0.13%	Bertie	397	5.04%