Comments on Competing Applications for Additional Acute Care Beds and Operating Rooms in Durham County

June 1, 2021

In accordance with N.C. GEN. STAT. § 131E-185(a1)(1), the University of North Carolina Hospitals at Chapel Hill (UNC Health) submits the following comments related to competing applications to develop additional acute care beds and operating rooms to meet needs identified in the *2021 State Medical Facilities Plan* (*2021 SMFP*) for 40 additional acute care beds and four operating rooms (ORs) in the Durham County/Caswell County service area. UNC Health's comments on these applications include "discussion and argument regarding whether, in light of the material contained in the applications and other relevant factual material, the applications comply 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. UNC Health's comments relate to the following applications:

- **Southpoint Surgery Center (SSC), Add four ORs, Project ID # J-12052-21**
- **Duke University Hospital (DUH), Add 40 acute care beds (hereafter referred to as the DUH Beds application), Project ID # J-12069-21**
- **DUH, Add two ORs (hereafter referred to as the DUH ORs application), Project ID # J-12070-21**
- **Duke Ambulatory Surgery Center Arringdon (Arringdon ASC), Add two OR, Project ID # J-12075-21**

UNC Health's detailed comments include general comments about the competing applications as well as application-specific comments related to each competing application and a comparative analysis related to its application.

GENERAL COMMENTS

As noted above, three applications in this review propose to develop ORs in Durham County and two applications propose to develop acute care beds (the UNC Hospitals-RTP application proposes to develop both beds and ORs). Given the competitive nature of this review, UNC Health understands that the Agency will conduct a comparative analysis of the applications. Given the analysis of the competing applications to follow, as well as the factors noted below, UNC Health believes it has presented the most compelling application to develop additional acute care bed and OR capacity among the applications in this review. In particular, the following factors demonstrate that UNC Hospitals-RTP is the most effective applicant:

- Geographic Accessibility
- Development of New Provider in Durham County
- Scope of Services
- Opportunity to Meet Multiple Needs

Each of these factors is discussed in turn below.

Geographic Accessibility

UNC Health proposes to develop UNC Hospitals-RTP, a new acute care hospital in Research Triangle Park in southern Durham County. All of the other applicants propose to develop additional acute care beds or ORs at existing or previously approved facilities. As such, no other application proposes to develop a new site of care for acute care beds or for ORs as proposed by UNC Health. As demonstrated in UNC Hospitals-RTP's application, the south region of Durham County where the proposed hospital will be located is a highly populated and fast growth region that lacks a hospital. While both SSC and Arringdon are also located in the south region of Durham County, neither will offer inpatient acute care services and both are already approved to develop OR capacity. Thus, neither will meet the need of providing acute care services and a new geographic location for acute care and surgical care.

For these reasons, UNC Health's proposal to develop UNC Hospitals-RTP is the most effective alternative.

Development of a New Provider

UNC Health's proposed project will enable the development of a new provider and the first new hospital in Durham County in over 45 years, enhancing competition for acute care and surgical services. There are two existing providers of operating rooms and acute care beds in Durham County: DUHS and NCSH. Both operate one or more hospitals or freestanding ambulatory surgical facilities (ASFs) in the county as well as approved but not yet developed facilities:

- DUHS:
    - Two hospitals: DUH and Duke Regional Hospital
    - Two ASFs: Arringdon ASC and James E. Davis Ambulatory Surgical Center

- NCSH
    - One hospital: NCSH
    - One ASF: SSC

As such, approval of UNC Hospitals-RTP will allow the development of new high quality provider in Durham County.

Scope of Services

Because UNC Health is the only proposal that seeks to develop shared operating rooms which will serve both inpatients and outpatients, its proposed project enables the development of surgical capacity that will serve a full scope of surgical services that will meet the growing need for both inpatient and outpatient surgical capacity in Durham County. As shown in the UNC Hospitals-RTP application and excerpted below, inpatient surgical cases in Durham County are growing at four times the rate of outpatient cases.

Durham County Facilities' Surgical Volume

Year	*Inpatient*	*Outpatient*	*Total*	*Percent Outpatient*
FFY 2015	22,806	35,329	58,135	60.8%
FFY 2016	22,545	34,393	56,938	60.4%
FFY 2017	23,580	34,928	58,508	59.7%
FFY 2018	23,882	35,017	58,899	59.5%
FFY 2019	24,312	35,901	60,213	59.6%
2015-2019 CAGR	**1.6%**	**0.4%**	**0.9%**	**-0.5%**

Source: *2016- 2021 SMFPs.*

No other provider proposes to develop capacity that will serve inpatients: DUH proposes to develop hospital-based dedicated ambulatory ORs and both SSC and Arringdon ASC propose to develop ASF-based dedicated ambulatory ORs. As such, approval of UNC Hospitals-RTP will allow the development of surgical capacity for both inpatient and outpatient surgical patients in Durham County.

Opportunity to Meet Multiple Needs

Because UNC Health's proposal seeks to develop only two of the four operating rooms identified in the need determination in the *2021 SMFP*, its proposed project enables the development of the two remaining operating rooms for other providers to meet other identified needs should the Agency find multiple applicants conforming with all applicable statutory and regulatory review criteria.

Nonetheless, as demonstrated below, UNC Health believes that it is the only applicant that has demonstrated conformity with the statutory and regulatory review criteria. The following sections provide detailed comments on each application as well as a more detailed comparative analysis.

SSC ISSUE-SPECIFIC COMMENTS

SSC's application to develop four additional operating rooms should not be approved. UNC Health has grouped the application's issues, each of which contributes to SSC's non-conformity:

(1) Failure to support growth rate assumption
(2) Failure to support physician recruitment and related incremental utilization
(3) Failure to demonstrate the availability of all specialties proposed
(4) Failure to address acquisition of major medical equipment and impact of relocation
(5) Failure to demonstrate maximization of healthcare value for resources expended

Each of the issues listed above is discussed in turn. Please note that relative to each issue, UNC Health has identified the statutory review criteria and specific regulatory criteria and standards creating the non-conformity.

1. The SSC application fails to support growth rate assumption.

As a basis of its projected utilization for North Carolina Specialty Hospital's (NCSH's) OR utilization prior to the shift of cases to the ASF, SSC projects growth "based on the assumption of 2 percent annual growth due to population growth, high patient satisfaction, physician recruitment, and increased market share" (page 115). However, this growth rate is unreasonable based on several factors. On page 42 of its application, SSC provides the projected population growth for Durham County, which indicates 1.4 percent annual growth from 2021 to 2026, according to NC OSBM, or less than the projected growth rate. Further, SSC provides no basis for NCSH's "high patient satisfaction," nor how it uses that qualitative factor to calculate a certain growth rate. Moreover, SSC uses NCSH physician recruitment as both the basis for NCSH's growth and the basis for nearly 2,000 incremental cases at SSC (see discussion below regarding the lack of support for the impact of physician recruitment at SSC). SSC does not demonstrate why it is reasonable to double-count the impact of the recruitment of additional physicians in both the NCSH baseline growth and the SSC projected utilization. Finally, it is not clear what SSC assumes will lead to increase market share at NCSH, nor does it quantify the particular impact of the assumed market share increase – SSC simply provides no basis for this assumption.

Moreover, SSC's projections actually assume 4.9 percent growth in Ambulatory procedure room (PR) Cases. As shown in the table below from excerpted from page 115 of the application, SSC assumes that "Ambulatory PR Cases" will grow from 2,752 in CY 2021 to 2,888 in CY 2022 or 4.9 percent. SSC provides no basis for this higher growth assumption in its application and the projected growth of those cases is Step 1 of the utilization methodology for SSC and NHSC. As a result, the remainder of SSC and NCSH's utilization projections are unsupported.

	Previous YR	Previous YR	Interim QTR	Current Interim YR	Interim Year	YR 1	YR 2	YR 3
OR Utilization	10/1/2018	10/1/2019 to	10/1/2020 to	1/1/2021 to	1/1/2022 to	1/1/2023 to	1/1/2024 to	1/1/2025 to
NCSH	9/30/2019	9/30/2020	12/30/2020	12/30/2021	12/30/2022	12/30/2023	12/30/2024	12/30/2025
# ORs	4	4	4	4	4	4	4	4
Inpatient Cases	1,588	1,260	238	1,260	1,285	1,311	1,337	1,364
Ambulatory Cases	4,128	4,024	955	4,024	4,104	4,187	4,270	4,356
# Procedure Rooms	5	5	5	5	5	5	5	5
Inpatient PR Cases	0	0	0	0	0	0	0	0
Ambulatory PR Cases	3,281	2,752	722	2,752	2,888	2,946	3,005	3,065

On pages 45 and 46 of its application, SSC provides the following historical data for North Carolina and for Durham County specifically.

Ambulatory Surgery Utilization Trends

According to the 2021 SMFP, the surgery utilization for all hospitals and ambulatory surgical facilities is comprised of 72.6% ambulatory cases and 27.4% inpatient cases. The following table provides the 4 -year Compound Annual Growth rates for inpatient and ambulatory surgery for all hospitals and ambulatory surgery centers.

	2017 SMFP	2021 SMFP	4-YR CAGR
North Carolina	2015 Data	2019 Data	
Inpatient Cases	247,251	257,040	0.98%
Ambulatory Cases	635,651	681,914	1.77%

Sources: 2017 and 2021 SMFPs

Utilization Data - 2020 SMFP and 2021 SMFP for Durham County Facilities	2017 to 2018 Data (2020 SMFP)		2018 to 2019 Data (2021 SMFP)		2018-2019 as Compared to Previous Year	
	Inpatient Cases	Ambulatory Cases	Inpatient Case	Ambulatory Cases	Inpt cases % Change	Amb Cases % Change
Duke Ambulatory Surgery Arringdon	0	0	0	0	NA	NA
James E. Davis Ambulatory Surgery Center	0	5,877	0	6,067	NA	3.23%
Duke University Hospital	18,300	22,215	18,733	22,139	2.4%	-0.3%
Duke Regional Hospital	4,061	3,581	3,991	3,555	-1.7%	-0.7%
Duke Health System Combined Totals	22,361	31,673	22,724	31,761	1.6%	0.3%
Southpoint Surgery Center	0	0	0	0	NA	NA
North Carolina Specialty Hospital	1,521	3,344	1,588	4,128	4.4%	23.4%
NCSH System Totals	1,521	3,344	1,588	4,128	4.4%	23.4%

Notably, SSC provides only two years of Durham County OR utilization whereas it provides five years of statewide utilization. It appears as though SSC has cherry-picked this data in an effort to support the need for its project and support its growth rate assumptions. As shown on page 65 of the UNC Hospitals-RTP application, inpatient surgical cases in Durham County over the five years from 2015 to 2019 (the same time period as shown above for North Carolina by SSC) grew 1.6 annually, while outpatient volume increased at a lower rate, 0.4 percent annually.

Durham County Facilities' Surgical Volume

Year	*Inpatient*	*Outpatient*	*Total*	*Percent Outpatient*
FFY 2015	22,806	35,329	58,135	60.8%
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2015-2019 CAGR	**1.6%**	**0.4%**	**0.9%**	**-0.5%**

Source: *2016- 2021 SMFPs.*

SSC does not demonstrate that the one year change in utilization at NCSH would reasonably continue in the future, or is supported by longer term trend of increasing utilization, particularly in light of the overall Durham County growth rate for outpatient surgical cases of 0.4 percent

annually. The one-year time period used in this analysis is misleading. The FY 2018 OP cases for NCSH were significantly lower than prior years after experiencing a 10.2 percent decline from FY 2017. This decline created a low base year for SSC's analysis. Looking at a broader time horizon demonstrates that NCSH's actual growth rates are significantly different than the 4.4 percent inpatient growth rate and 23.44 percent ambulatory growth rate presented in the application.

NCSH Case Volume by Year						
	FY 15	FY 16	FY 17	FY 18	FY 19	FY 15-19 CAGR
IP	1,597	1,629	1,649	1,521	1,588	-0.14%
OP	3,737	3,606	3,724	3,344	4,128	2.52%
Total	5,334	5,235	5,373	4,865	5,716	1.74%

In an effort to support its projected growth, SSC cites national growth projections, stating "*According to ECG Management Consultants, the number of THA and TKA cases is projected to increase from 1.1 million to approximately 1.9 million by 2026, and 51% of primary hip and knee replacements are expected to be performed in the outpatient setting*" (page 44). Although the application makes no attempt to compare this national projection with the more local market, an estimate of the potential maximum impact on Durham County can be extrapolated from this data, which suggests that this growth represents, at best, only 398 incremental cases performed in the outpatient setting between 2021 and 2026.

	2021	***2026***	***Growth***
US Population (US Census Bureau)	332,358,390		
Durham County Population (NC OSBM)	324,586	347,483	22,897
Durham as % of US	0.10%		
THA, TKA cases (ECG)	1,100,000	1,900,000	800,000
Durham County Cases (Calculated)	1,074	1,856	**781**
% Performed in Outpatient Setting (ECG)		51.0%	51.0%
Durham County OP Cases (Calculated)			398

Source: US Census Bureau website accessed on May 25, 2021. NC OSBM.

By contrast, as shown below, SSC projects on page 121 that its orthopedic case volumes alone will increase by 881 cases in a two year period after opening, from 3,026 to 3,907 cases. As such, SSC is projecting growth in its orthopedic cases of more than 221 percent of the estimated growth of the THA and TKA cases in the county, which clearly does not support the reasonableness of this projection.

Southpoint Surgery Center Projections of Ambulatory Surgery Cases

	Assumption	YR1	YR 1	YR 3
	Ambulatory %	Cases	Cases	Cases
Cardiothoracic (excluding Open Heart)	0.0%	0	0	0
General Surgery	0.0%	0	0	0
General Surgery	5.9%	313	367	405
Neurosurgery	0.0%	0	0	0
Obstetrics and Gynecology (excluding C-Section	0.4%	19	22	24
Ophthalmology	25.6%	1,348	1,579	1,741
Oral Surgery / Dental	0.7%	37	44	48
Orthopedics	57.4%	3,026	3,542	3,907
Otolaryngology	7.2%	381	446	492
Plastic Surgery	0.9%	49	57	63
Podiatry	0.6%	32	37	41
Urology	0.0%	0	0	0
Vascular Surgery	0.3%	15	17	19
Other	0.9%	49	57	63
Totals	100.0%	5,269	6,169	6,803

Based on the discussion above, it is clear that SSC's projected utilization is unsupported. As such, **the SSC application is non-conforming with Criteria 3, 4, 5, 6, and 18a, and the performance standards for Operating Rooms (10A NCAC 14C .2103).**

2. The SSC application fails to support physician recruitment and related incremental utilization.

In Step 5 of its utilization methodology, SSC projects that 22 surgeons to be recruited in the future will perform 90 additional cases on average resulting in 1,980 ambulatory OR cases at SSC. These 1,980 cases represent 29 percent of total projected SSC utilization in its third project year. However, SSC fails to support the reasonableness of its assumptions related to these cases. First, the projected recruitment of surgeons has little to no support. A table provided on page 48 of the application indicates that NCSH will add 22 surgeons between 2022 and 2025 including two general surgeons, five eye, eight orthopods, four ENT, two urology, and one vascular surgeon. SSC assumes that those 22 surgeons will perform an average of 90 OR cases at SSC. The only support for these assumptions is the applicant's statements on page 48 that it will work with the physician groups to recruit and one letter of support from the EmergeOrtho physician group. Notably, the EmergeOrtho letter indicates that the practice plans to recruit four surgeons which is only half of the eight orthopods SSC assumes and that the EmergeOrtho recruited surgeons "will have the option to obtain privileges" (emphasis added) at SSC and not that those surgeons would practice at SSC or that they would perform 90 cases on average. SSC does not indicate who would employ or recruit these physicians. Given the application's references to support letters, it would seem to suggest that these newly recruited surgeons would join existing groups. However, no support letter outside of the EmergeOrtho letter discuss surgeon recruitment; thus, it is unclear to what "physicians' recruitment projections" the application is referring. Based on the surgical specialty groups that provided letters of support, the largest number of surgeons to be recruited, nine eye/ENT surgeons, would likely be joining a Duke Health practice. That Duke Health practice, North Carolina Ear, Nose & Throat did not indicate in its letter of support for SSC that it was planning to recruit additional surgeons as suggested in the application. Further, Duke Health submitted competing CON applications to develop operating rooms in this review. Thus, even if

North Carolina Ear, Nose & Throat does recruit additional physicians, those surgeons may practice at facilities other than SSC.

Beyond the lack of support for the projected physician recruitment, SSC also fails to support its assumption regarding the impact of those surgeons. SSC assumes that the newly recruited surgeons will perform an average of 90 cases annually. On page 116, SSC compares its assumed 90 cases per surgeon to the number of cases per surgeon in support letters, which it claims to be 125 cases per physician. However, that number is not supported by the letters nor is it clear how SSC calculated 125 cases per physician, as many of the support letters in the application are for entire practices.

Further, SSC's projected surgical volumes by services are incongruent with and not supported by its recruitment assumptions. As shown on page 48 (excerpted below), SSC assumes that the 22 recruited physicians will include two urologists and one vascular surgeon.

North Carolina Specialty Hospital Medical Staff	Current Staff	Expected Increases and Recruitment for NCSH			
	2021	2022	2023	2024	2025
Anesthesia	32				
Pathology	3				
Radiology	8				
Intraoperative Monitoring	5				
General Surgery	3		1		1
Family Practice, Internal Medicine and Hospitalist	8				
Obstetrics Gynecology	12				
Ophthalmology	12	1	1	1	2
Oral Surgery	11				
Orthopedics	29	2	2	2	2
Otolaryngology	7	1	1	1	1
Pain Management	5				
Plastic Surgery Including Transgender	10				
Podiatry	5				
Urology	6	1		1	
Vascular Surgery	1		1		
Wound Care Hyperbaric	2				

However, SSC's year three projected utilization on page 121 includes only 19 vascular surgery cases (not 90 as could be assumed based on one new surgeon with 90 cases) and zero urology cases (not 180 as could be assumed based on two new surgeons with 90 cases each). Thus, the application provides no nexus among the number of projected physicians to be recruited, the number of expected cases per physician at SSC, and the projected utilization by specialty at SSC.

Based on the discussion above, it is clear that SSC's projected utilization is unsupported and unreasonable. As such, **the SSC application is non-conforming with Criteria 3, 4, 5, 6, and 18a, and the performance standards for Operating Rooms (10A NCAC 14C .2103).**

3. The SSC application fails to demonstrate that it will provide all specialties proposed.

On pages 17 and 48 of its application, SSC indicates that it will perform surgical cases in each of the specialties listed in the table below.

X	Gynecology
X	Otolaryngology
X	Plastic Surgery
X	General Surgery
X	Ophthalmology
X	Orthopaedic
X	Oral Surgery

However, there is no support in SSC's application for its representation that it will provide gynecology or oral surgery cases at the ASF. According to its 2021 license renewal application (provided in Exhibit C.8 of SCC's application), NCSH performed only 24 outpatient gynecology and 48 outpatient oral surgery cases, respectively, in FFY 2020, representing 0.6 percent and 1.2 percent of its total outpatient operating room cases, respectively. Further, the SSC application includes no evidence of support from surgeons of either specialty, calling into question the provision of either of these specialties at the ASF.

Based on the discussion above, the application provides insufficient evidence of support for the scope of services SSC proposes. As such, **the SSC application is non-conforming with Criteria 3, 4, and 8.**

4. The SSC application fails to address the acquisition of major medical equipment and the impact of relocating equipment.

On page 53 of its application, SSC states that NCSH owns two units of Stryker Robotic-Arm Assistant equipment that is used to perform total hip arthroplasty, total knee arthroplasty, and partial knee replacement procedures and that one of the two units will be relocated to SSC and ownership transferred to SSC. A letter in Exhibit C.8 of the SSC application from Randi Shults, Chief Executive Officer of NCSH, documents that SSC intends to enter into an operating lease agreement with NCSH to utilize one of the Stryker Robotic Systems for total joint surgery procedures. The letter indicates terms of the lease to include monthly payments of $23,000 for a period of seven years, representing a total cost of $1,932,000, which meets the definition of major medical equipment in the CON statute. N.C.G.S. 131E-176(14o) defines major medical equipment as a single unit or single system of components with related functions which is used to provide medical and other health services and which costs more than $750,000. N.C.G.S. 131E-176(16)p defines new institutional health service to include the acquisition by purchase, donation, lease, transfer, or comparable arrangement by any person of major medical equipment and indicates that the capital expenditure for the equipment shall be deemed to be the fair market value of the equipment or the cost of the equipment, whichever is greater. (emphasis added)

The SSC application is a change of scope to its previously approved Project ID # J-11626-18. Section C.8 requires an applicant proposing a change of scope to a previously approved project to compare

the scope of the proposal with the scope of the previously approved project, identify each proposed change, and explain the need the patients to be served have for each proposed change. In a full CON application (not a change of scope), the need for a proposed project is detailed by an applicant according to the instructions in Section C.4. In explaining the need for each proposed change in its application, SSC's application should address to the relevant instructions in Section C.4. Section C.4 of the CON application form in effect at the time of submission of the SSC application states that an applicant proposing to acquire major medical equipment or develop or expand a diagnostic center (excluding CT scanners, MRI scanners, PET scanners, and cardiac catheterization equipment) should include: a description of: 1) the annual maximum capacity per unit for each type of major medical equipment included in the proposal; and 2) the assumptions and methodology used to determine maximum capacity per unit. The SSC application fails to respond to this, and as such, has not adequately demonstrated the need for its proposed project, which involves the acquisition of major medical equipment by SSC from NCSH.

In addition, SSC fails to address Criterion 3(a) with regard to the transfer of the Stryker Robotic System from NSCH to SSC. In response to Section D.2.a of the CON application, which asks if the proposal involves reducing or eliminating some but not all the service components at a health service facility, SSC said no. Of note, the footnote to Question D.2.a in the CON application form reads: "Reducing or eliminating health service facility beds, health services, hospital services, or medical equipment to a different facility or campus." In response to Section D.3.b of the CON application form, which asks if the changes proposed in a change of scope application now include reducing or eliminating service components at an existing health service facility which were not proposed to be reduced or eliminated in the previously approved application, SSC responded in the negative. However, as noted above, it is clear from Section C.8 and Exhibit C.8 that the proposed change of scope project involves the transfer/relocation of major medical equipment from NCSH to SSC. The SSC application fails to address how the relocation of equipment from NCSH to SSC will impact existing patients served at NCSH.

Based on the discussion above, **the SSC application should be found non-conforming with Criteria 3, 3a, and 4.**

5. <u>The SSC application fails to demonstrate that it will maximize healthcare value for resources expended.</u>

As shown below, SSC's project, which is a change of scope to Project ID # J-11626-18, results in fewer patients served and higher charges per patient than the original project. According to the original application, SSC projected the following utilization (excerpted from page 105):

Southpoint Surgery Center	YR 1	YR 2	YR 3
OR Utilization Projections (4 ORs)	1/1/2021 to	1/1/2022 to	1/1/2023 to
	12/30/2021	12/30/2022	12/30/2023
OR Cases shifted from NCSH to Southpoint	2,129	2,353	2,400
OR Cases Added from New Surgeons	1,800	1,836	1,873
Total Ambulatory OR Cases at Southpoint	3,929	4,189	4,273
Southpoint Surgery Center	YR 1	YR 2	YR 3
Procedure Room Utilization Projections (2 Rooms)	1/1/2021 to	1/1/2022 to	1/1/2023 to
	12/30/2021	12/30/2022	12/30/2023
Procedure Room Cases Shifted from NCSH	2,162	2,205	2,249
Procedure Room Cases Added New Surgeons	800	816	832
Total Procedure Room Surgery Cases	2,962	3,021	3,081
Southpoint PR Cases as Percentage of Total OR and P	43%	42%	42%

In its current application, SSC projects revised utilization as follows (see page 118):

Southpoint Surgery Center	YR 1	YR 2	YR 3
OR Utilization Projections (4 ORs)	1/1/2023 to	1/1/2024 to	1/1/2025 to
Ambulatory Cases	12/31/2023	12/31/2024	12/31/2025
OR Cases shifted from NCSH to Southpoint ORs	2,512	2,776	2,831
PR Cases shifted from NCSH to Southpoint ORs	1,767	1,953	1,992
OR Cases Added from New Surgeons	990	1,440	1,980
Total Ambulatory OR Cases at Southpoint	5,269	6,169	6,803

As such, SSC's current project is requesting to convert two current procedure rooms to ORs despite a reduction in overall patient volume. As show below, a comparison of project years 1 through 3 shows a reduction in the number of cases between the two proposals for all three years.

CON Case Volume Comparison			
	Yr 1	Yr 2	Yr 3
2018 CON Total Cases	6,891	7,210	7,354
2021 CON Total Cases	5,270	6,169	6,803
Total Change in # of Cases	(1,621)	(1,041)	(551)
Total Change in # of Cases %	-23.5%	-14.4%	-7.5%

Despite the case count declining 7.5 percent in year 3, SSC's current application shows an additional $2.34 million, a 14.1 percent increase, in net patient revenues. The following table shows the change in revenue per year.

Net Revenue Comparison			
	Yr 1	Yr 2	Yr 3
2018 CON Net Revenue	$14,492,494	$15,770,865	$16,568,871
2021 CON Net Revenue	$13,804,780	$16,647,663	$18,909,333
Change in Net Revenue	$ (687,714)	$ 876,798	$ 2,340,462
Change in Net Revenue %	-4.7%	5.6%	14.1%

With a decrease in case volume, additional net revenue can only be driven by increasing the net revenue per case. The following tables show the net revenue for OR cases and procedure room cases in Project ID # J-11626-18:

Form F.5 Net Revenue Worksheet						
	First Full Fiscal Year					
	From	1/1/2021	To	12/31/2021		
	% of Total	# of Cases or Procedures	times	Projected Average Reimbursement Rate	equals	Net Revenue
Self Pay	0.7%	28	times	3,392	equals	$ 93,295
Charity Care	0.3%	12	times	0	equals	$ -
Medicare (including any managed care plans)	47.0%	1847	times	2,883	equals	$ 5,324,485
Medicaid (including any managed care plans)	3.0%	118	times	2,035	equals	$ 239,902
Insurance (including any managed care plans)	42.0%	1650	times	3,138	equals	$ 5,177,879
Workers Compensation	5.0%	196	times	2,544	equals	$ 499,795
TRICARE	2.0%	79	times	1,950	equals	$ 153,271
Other (Specify)	%	0	times	0	equals	$ -
Total	100.0%	3929		2,924		$ 11,488,626
	Second Full Fiscal Year					
	From	1/1/2022	To	12/31/2022		
	% of Total	# of Cases or Procedures	times	Projected Average Reimbursement Rate	equals	Net Revenue
Self Pay	0.7%	29	times	3,494	equals	$ 102,442.01
Charity Care	0.3%	13	times	0	equals	$ -
Medicare (including any managed care plans)	47.0%	1,969	times	2,970	equals	$ 5,846,511.89
Medicaid (including any managed care plans)	3.0%	126	times	2,096	equals	$ 263,422.31
Insurance (including any managed care plans)	42.0%	1,759	times	3,232	equals	$ 5,685,531.59
Workers Compensation	5.0%	209	times	2,620	equals	$ 548,796.49
TRICARE	2.0%	84	times	2,009	equals	$ 168,297.59
Other (Specify)	0.0%	0	times	0	equals	$ -
Total	100.0%	4,189		3,012		$ 12,615,002
	Third Full Fiscal Year					
	From	1/1/2023	To	12/31/2023		
	% of Total	# of Cases or Procedures	times	Projected Average Reimbursement Rate	equals	Net Revenue
Self Pay	0.7%	30	times	3,599	equals	$ 107,625.58
Charity Care	0.3%	13	times	0	equals	$ -
Medicare (including any managed care plans)	47.0%	2,008	times	3,059	equals	$ 6,142,345.39
Medicaid (including any managed care plans)	3.0%	128	times	2,159	equals	$ 276,751.48
Insurance (including any managed care plans)	42.0%	1,794	times	3,329	equals	$ 5,973,219.49
Workers Compensation	5.0%	214	times	2,699	equals	$ 576,565.59
TRICARE	2.0%	85	times	2,069	equals	$ 176,813.45
Other (Specify)	0.0%	0	times	0	equals	$ -
Total	100%	4,273		3,102		$ 13,253,321

Form F.5 Net Revenue Worksheet						
Procedure Rooms	**First Full Fiscal Year**					
	From	**1/1/2021**	**To**	**12/31/2021**		
	% of Total	**# of Cases or Procedures**	**times**	**Projected Average Reimbursement Rate**	**equals**	**Net Revenue**
Self Pay	1.5%	44	times	848	equals	$ 37,674
Charity Care	0.5%	15	times	0	equals	$ -
Medicare (including any managed care plans)	48.0%	1,422	times	975	equals	$ 1,386,401
Medicaid (including any managed care plans)	4.0%	118	times	848	equals	$ 100,464
Insurance (including any managed care plans)	41.0%	1,214	times	1,102	equals	$ 1,338,680
Workers Compensation	4.0%	118	times	954	equals	$ 113,022
TRICARE	1.0%	30	times	933	equals	$ 27,628
Other (Specify)	%	0	times	0	equals	$ -
Total	100.0%	2,962		1,014		$ 3,003,868
	Second Full Fiscal Year					
	From	**1/1/2022**	**To**	**12/31/2022**		
	% of Total	**# of Cases or Procedures**	**times**	**Projected Average Reimbursement Rate**	**equals**	**Net Revenue**
Self Pay	1.5%	45	times	873	equals	$ 39,580
Charity Care	0.5%	15	times	0	equals	$ -
Medicare (including any managed care plans)	48.0%	1,450	times	1,004	equals	$ 1,456,552
Medicaid (including any managed care plans)	4.0%	121	times	873	equals	$ 105,547
Insurance (including any managed care plans)	41.0%	1,239	times	1,135	equals	$ 1,406,417
Workers Compensation	4.0%	121	times	983	equals	$ 118,741
TRICARE	1.0%	30	times	961	equals	$ 29,026
Other (Specify)	0.0%	0	times	0	equals	$ -
Total	100.0%	3,021		1,045		$ 3,155,864
	Third Full Fiscal Year					
	From	**1/1/2023**	**To**	**12/31/2023**		
	% of Total	**# of Cases or Procedures**	**times**	**Projected Average Reimbursement Rate**	**equals**	**Net Revenue**
Self Pay	1.5%	46	times	900	equals	$ 41,583
Charity Care	0.5%	15	times	0	equals	$ -
Medicare (including any managed care plans)	48.0%	1,479	times	1,035	equals	$ 1,530,254
Medicaid (including any managed care plans)	4.0%	123	times	900	equals	$ 110,888
Insurance (including any managed care plans)	41.0%	1,263	times	1,170	equals	$ 1,477,582
Workers Compensation	4.0%	123	times	1,012	equals	$ 124,749
TRICARE	1.0%	31	times	990	equals	$ 30,494
Other (Specify)	0.0%	0	times	0	equals	$ -
Total	100.0%	3,081		1,076		$ 3,315,550

The following table shows the net revenue for OR cases and procedure room cases in SSC's current application:

Assumptions Regarding Average Net Revenue per Case

		1st Full FY	2nd Full FY	3rd Full FY
Average Net Revenue per Case		$2,620	$2,699	$2,780
Total Net Revenue		$13,804,780	$16,647,663	$18,909,333

An analysis of this data shows an increase in net revenue per case of 23.4 percent.

Average Net Revenue Comparison			
	Yr 1	Yr 2	Yr 3
2018 CON OR Case	2,924	3,012	3,102
2018 CON PR Case	1,014	1,045	1,076
2018 Blended Case Rate*	2,103	2,188	2,253
2021 CON OR Case	2,620	2,699	2,780
Net Revenue Per Case Change	517	511	527
Net Revenue Per Case Change %	24.6%	23.4%	23.4%
*Blended using OR and PR Case Volume			

SSC's projected increase in net revenue while reducing case volume results in an 86.3 percent increase in net income in year 3 in comparison to its previous project.

Net Income Comparison			
	Yr 1	Yr 2	Yr 3
2018 CON Net Income	$ 982,699	$ 1,559,310	$ 1,847,887
2021 CON Net Income	$ 834,124	$ 2,317,089	$ 3,442,141
Change in Net Income	$ (148,575)	$ 757,779	$ 1,594,254
Change in Net Income %	-15.1%	48.6%	86.3%

In summary, this project leads to reduced accessibility and increased patient costs. As such, **the SSC application is non-conforming with Policy GEN-3 and Criterion 1.**

DUH BEDS ISSUE-SPECIFIC COMMENTS

DUH's application to add 40 acute care beds should not be approved. DUH's application contains numerous errors, overstatements, and inconsistencies as well as insufficient responses to the Certificate of Need application form. The information in the application as submitted is insufficient to make a determination of conformity with the statutory review criteria and specific regulatory criteria and standards. UNC Health has grouped the errors, overstatements, inconsistencies, and insufficiencies by issue, each of which contributes to DUH's non-conformity:

(1) Failure to identify the population to be served
(2) Failure to demonstrate the reasonableness of projected utilization
(3) Failure to demonstrate that the least costly or most effective alternative has been proposed
(4) Failure to demonstrate financial feasibility
(5) Failure to demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative

Each of the issues listed above is discussed in turn. Please note that relative to each issue, UNC Health has identified the statutory review criteria and specific regulatory criteria and standards creating the non-conformity.

1. <u>The DUH Beds application fails to identify the population to be served.</u>

   DUH fails to identify the population to be served. Of note, the entire facility patient origin presented in the DUH Beds application does not match the entire facility patient origin presented in the DUH ORs application – see excerpts below.

DUH Beds Application – Patient Origin for Entire Facility (p.31)

Entire Facility: Acute Care Beds, ORs, Procedure Rooms, Emergency Department	Duke University Hospital					
	1st Full FY		2nd Full FY		3rd Full FY	
	07/01/2025 to 06/30/2026		07/01/2026 to 06/30/2027		07/01/2027 to 06/30/2028	
County or other geographic area such as ZIP code	Number of Patients **	% of Total	Number of Patients **	% of Total	Number of Patients **	% of Total
Alamance	62,588	4.4%	63,840	4.4%	65,117	4.4%
Caswell	5,061	0.4%	5,162	0.4%	5,266	0.4%
Chatham	13,291	0.9%	13,557	0.9%	13,828	0.9%
Cumberland	25,204	1.8%	25,708	1.8%	26,222	1.8%
Durham	516,709	35.9%	527,044	35.9%	537,584	35.9%
Franklin	15,274	1.1%	15,579	1.1%	15,891	1.1%
Granville	45,281	3.2%	46,186	3.2%	47,110	3.2%
Guilford	23,000	1.6%	23,460	1.6%	23,929	1.6%
Harnett	9,011	0.6%	9,192	0.6%	9,376	0.6%
Johnston	13,503	1.0%	13,773	1.0%	14,048	1.0%
Lee	7,278	0.5%	7,424	0.5%	7,572	0.5%
Nash	8,020	0.6%	8,180	0.6%	8,344	0.6%
Orange	105,402	7.3%	107,510	7.3%	109,660	7.3%
Person	42,068	2.9%	42,909	2.9%	43,767	2.9%
Robeson	9,789	0.7%	9,985	0.7%	10,184	0.7%
Vance	21,691	1.6%	22,125	1.6%	22,567	1.6%
Wake	232,009	16.1%	236,649	16.1%	241,382	16.1%
Warren	6,583	0.5%	6,714	0.5%	6,848	0.5%
Wilson	5,741	0.4%	5,856	0.4%	5,973	0.4%
Other NC Counties	152,825	10.8%	155,881	10.8%	158,999	10.8%
Virginia	59,207	4.2%	60,392	4.2%	61,599	4.2%
Other States	55,665	3.8%	56,779	3.8%	57,914	3.8%
International	53	0.0%	54	0.0%	55	0.0%
Total	**1,435,253**	**100.0%**	**1,463,958**	**100.0%**	**1,493,237**	**100.0%**

DUH ORs Application – Patient Origin for Entire Facility (p. 30)

Entire Facility: Acute Care Beds, ORs, Procedure Rooms, Emergency Department	Duke University Hospital					
	1st Full FY		2nd Full FY		3rd Full FY	
	07/01/2025 to 06/30/2026		07/01/2026 to 06/30/2027		07/01/2027 to 06/30/2028	
County or other geographic area such as ZIP code	Number of Patients **	% of Total	Number of Patients **	% of Total	Number of Patients **	% of Total
Alamance	65,757	4.4%	67,072	4.4%	68,413	4.4%
Caswell	5,370	0.4%	5,478	0.4%	5,587	0.4%
Chatham	13,739	0.9%	14,014	0.9%	14,294	0.9%
Cumberland	26,889	1.8%	27,427	1.8%	27,975	1.8%
Durham	541,454	35.9%	552,284	35.9%	563,329	35.9%
Franklin	16,429	1.1%	16,757	1.1%	17,092	1.1%
Granville	48,244	3.2%	49,209	3.2%	50,193	3.2%
Guilford	24,076	1.6%	24,557	1.6%	25,048	1.6%
Harnett	9,548	0.6%	9,739	0.6%	9,934	0.6%
Johnston	14,342	1.0%	14,629	1.0%	14,921	1.0%
Lee	7,667	0.5%	7,820	0.5%	7,976	0.5%
Nash	8,605	0.6%	8,777	0.6%	8,953	0.6%
Orange	109,395	7.3%	111,582	7.3%	113,814	7.3%
Person	44,276	2.9%	45,161	2.9%	46,065	2.9%
Robeson	10,522	0.7%	10,732	0.7%	10,947	0.7%
Vance	23,389	1.6%	23,857	1.6%	24,334	1.6%
Wake	242,622	16.1%	247,474	16.1%	252,424	16.1%
Warren	7,020	0.5%	7,160	0.5%	7,303	0.5%
Wilson	6,227	0.4%	6,352	0.4%	6,479	0.4%
Other NC Counties	162,271	10.8%	165,517	10.8%	168,827	10.8%
Virginia	62,692	4.2%	63,946	4.2%	65,225	4.2%
Other States	57,847	3.8%	59,004	3.8%	60,184	3.8%
International	64	0.0%	65	0.0%	67	0.0%
Total	**1,508,444**	**100.0%**	**1,538,613**	**100.0%**	**1,569,385**	**100.0%**

^Other includes obstetrics patients originating from Harnett and Johnston counties.

Given that the assumptions and time periods provided in the DUH Beds application and the DUH ORs application are consistent, it is unclear why the entire facility patient origin presented in these applications – submitted during the same review period – are inconsistent. Further, DUH fails to articulate any reason for this discrepancy between its two applications. Since the Agency has both applications under review at the same time, and since both applications are competitive with the UNC Health application, the inconsistency between the two applications should be considered.

In addition, the total number of patients included in the patient origin for adult inpatient beds presented on page 30 of the DUH Beds application – excerpted below – does not match the projections presented in the same application on page 89 – which are also excerpted below.

DUH Beds Application – Patient Origin for Adult Inpatient Beds (p. 30)

Acute Care Beds	Duke University Hospital – adult inpatient beds					
	1st Full FY		2nd Full FY		3rd Full FY	
	07/01/2025 to 06/30/2026		07/01/2026 to 06/30/2027		07/01/2027 to 06/30/2028	
County or other geographic area such as ZIP code	Number of Patients **	% of Total	Number of Patients **	% of Total	Number of Patients **	% of Total
Alamance	1,611	3.9%	1,627	3.9%	1,643	3.9%
Caswell	196	0.5%	198	0.5%	199	0.5%
Chatham	276	0.7%	279	0.7%	282	0.7%
Cumberland	976	2.4%	985	2.4%	995	2.4%
Durham	11,674	28.1%	11,791	28.1%	11,909	28.1%
Franklin	725	1.7%	732	1.7%	739	1.7%
Granville	1,629	3.9%	1,645	3.9%	1,662	3.9%
Guilford	628	1.5%	634	1.5%	641	1.5%
Harnett	357	0.9%	360	0.9%	364	0.9%
Johnston	534	1.3%	539	1.3%	544	1.3%
Lee	297	0.7%	300	0.7%	303	0.7%
Nash	405	1.0%	409	1.0%	413	1.0%
Orange	1,645	4.0%	1,661	4.0%	1,678	4.0%
Person	1,272	3.1%	1,285	3.1%	1,298	3.1%
Robeson	676	1.6%	683	1.6%	690	1.6%
Vance	1,176	2.8%	1,187	2.8%	1,199	2.8%
Wake	5,110	12.3%	5,161	12.3%	5,213	12.3%
Warren	357	0.9%	360	0.9%	364	0.9%
Wilson	262	0.6%	265	0.6%	268	0.6%
Other NC Counties	6,633	16.0%	6,699	16.0%	6,766	16.0%
Virginia	2,823	6.8%	2,851	6.8%	2,880	6.8%
Other States	2,236	5.4%	2,259	5.4%	2,281	5.4%
Total	**41,496**	**100.0%**	**41,911**	**100.0%**	**42,330**	**100.0%**

* This should match the name provided in Section A, Question 4.

** Home health agencies should report the number of unduplicated clients.

DUH Beds Application – Projections for Adult Inpatient Beds (p. 89)

				1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
	IP Adult Discharges								
	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Discharges	35,107	36,072	37,302	37,862	38,429	39,006	39,591	40,185	40,788
IP Days	238,726	253,430	262,246	266,180	270,172	274,225	278,338	282,513	286,751
ADC	654	694	718	729	740	751	763	774	786
ALOS	6.80	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03

Once again, DUH fails to articulate any reason for this discrepancy within its Beds application.

Based on these issues, the DUH Beds application fails to reasonably and consistently identify the population to be served by the proposed project in conformance with Criterion 3. As such, **the DUH Beds application should be found non-conforming with Criteria 1 and 3**.

2. <u>The DUH Beds application fails to demonstrate the reasonableness of projected utilization.</u>

DUH overstates its ALOS which results in inflated inpatient bed need projections. On page 89 of its Beds application, DUH discusses that its utilization in FY 2020 and 2021 were impacted by the COVID-19 pandemic, stating "[d]*ue to the impacts of COVID-19, DUH experienced declines in inpatient discharges in FY20 and FY21 compared to FY 2019. This was related to reductions in elective surgeries and other procedures (both due to restrictions implemented by the hospital and due to patient reluctance to seek non-emergent healthcare), reduced ED admissions with children home from school and limited extracurricular/sports options, etc. As vaccination efforts expand across the region, the downward impact of COVID on inpatient volume is anticipated to decrease into FY 22."*

DUH then states that "[a]*ccordingly, for purposes of this application, FY22 inpatient discharges are projected to return to FY19 utilization levels"* and that "[a]*fter returning to pre-COVID discharge volumes for FY22, conservative annual growth assumption of 1.5% and 1.0% are applied to project discharges to FY23-28 for Adult and Pediatric populations, respectively. As a point of reference, the CAGRs for Adult and Peds discharges from FY17-19 were 3.0% and 1.8%, respectively"* (page 89). DUH's projections are unsupported for several reasons. First, DUH's limited justification for its assumed growth rates discusses its FY17 to FY19 CAGRs but fails to provide the data to demonstrate the basis of those purported rates of growth. More significantly, DUH assumes that its average length of stay (ALOS) for all project years will be equal to its FY21 actual ALOS stating on page 89 that "[f]*or all projected years, inpatient days are based on the projected discharges and the FY21 YTD actual average length of stay*." As is clear from its own statements in the application, DUH's bed utilization was impact by COVID-19 and resulted in lower utilization and a different mix of patients (e.g. fewer elective surgeries and other procedures, reduced ED admissions). As shown in the table below, DUH's FY 2021 YTD actual ALOS was 7.7 percent higher than in FY 2019, the year which DUH assumes its utilization will return to in FY 22.

	FY 19	***FY 21 YTD***	***% Difference***
DUH ALOS	7.0	7.6	7.7%

Source: FY 2019 ALOS per DUH's 2020 Hospital License Renewal Application which shows 303,409 days of care and 43,055 discharges.

DUH does not demonstrate why its FY21 YTD ALOS is reasonable to use to project future days of care, particularly in light of the discussion in the application regarding the impact of COVID. In FY 2022 alone, this unsupported ALOS assumption results in an overstatement of 23,123 days of care at DUH, as shown below.

	FY 22 Per CON - Assumed Based on Return to FY 19 Levels	*FY 22 Using FY 19 ALOS*	*Difference*
Projected Discharges	42,384	42,384	
ALOS	7.6	7.0	
Projected Days of Care	321,803	298,680	**23,123**

As DUH uses this overstated ALOS throughout its utilization projections, all of its projected acute care days are similarly overstated.

Based on the discussion above, it is clear that the DUH Bed application's projected utilization is unsupported. As such, **the DUH Beds application is non-conforming with Criteria 3, 4, 5, 6, and 18a, and the performance standards for Acute Care Beds (10A NCAC 14C .3803).**

3. The DUH Beds application fails to demonstrate that the least costly or most effective alternative has been proposed.

DUH fails to demonstrate that it has proposed the least costly or most effective alternative. In Section E, pages 51 to 52, DUH discussed several alternatives it considered prior to the submission of its application as proposed. The alternatives considered by DUH include:

- Pursue no additional inpatient bed expansion (not an alternative to meet the need for the project)
- Construct an off-site facility in Durham County
- Renovate existing space at Duke Regional Hospital
- Renovate existing spaces for incremental beds (proposed alternative)

In reviewing the alternatives presented in the DUH Beds application – listed above – UNC Health believes that DUH failed to propose the most effective alternative. Namely, the DUH Beds application does not include any substantive discussion of an alternative involving the development of a new hospital, particularly in light of the *2021 SMFP's* identified need for additional acute care beds and ORs in the service area. Rather, DUH quickly writes off such alternative as cost prohibitive. However, as detailed in the UNC Hospitals-RTP application, the need for the development of new hospital in the service area is driven by many factors including: Durham County's large and growing population (particularly in the southern region of the county); the lack of geographic distribution of acute care services in the county; the number of decades since a new acute care hospital site has been developed in the service area; and, the absence of a moderately-sized hospital that is focused on community-level patient needs. Unlike UNC Hospitals-RTP's application, the DUH Beds application does not address the needs identified in the current market. In particular, the DUH Beds application fails to consider what is driving the need for more beds in the service area. Of note, DUH's response to C.4 is very brief, and simply points to its own overall utilization. In contrast, UNC Hospitals-RTP identifies the basis of the projected growth and need for additional acute care beds in the service area, which will be served at its proposed community hospital.

Given the need of patients in the service area, DUH failed to select the most effective alternative. Therefore, and based on the discussion above, DUH fails to demonstrate that it proposed the least costly or most effective alternative in accordance with Criterion 4. As such, **the DUH Beds application is non-conforming with Criteria 1, 3, and 4.**

4. <u>The DUH Beds application fails to demonstrate financial feasibility and reasonable financial assumptions.</u>

Since the Adult Inpatient Services financial statements show a net loss throughout the projection period, DUH's application includes Forms F.2a, F.2b, F.3a, and F.3b for the Duke University Health System (DUHS); however, these forms include several duplicate, but inconsistent years of financial projections. Specifically, Form F.2a for DUHS shows two columns for FY 23 with different financial results:

Form F.2a Historical and Interim Revenues and Net Income DUHS ('000s)	Last Full FY From: 07/01/2019 To: 06/30/2020	Interim Full FY From: 07/01/2020 To: 06/30/2021	Interim Full FY From: 07/01/202 To: 06/30/202	Interim Full FY From: 07/01/2022 To: 06/30/2023	Interim Full FY From: 07/01/202 To: 06/30/2023
Patient Services Gross Revenue					
Self Pay	$431,834	$662,352	$673,93	$707,113	$736,825
Insurance *	$4,318,342	$4,452,921	$4,530,79	$4,753,842	$4,953,593
Medicare *	$5,385,932	$5,882,697	$5,985,57	$6,280,240	$6,544,128
Medicaid *	$1,343,484	$1,566,769	$1,594,16	$1,672,649	$1,742,931
Other (Specify)	$515,802	$735,504	$748,36	$785,208	$818,201
Total Patient Services Gross Revenue	$11,995,394	$13,300,243	$13,532,83	$14,199,052	$14,795,678
Other Revenue (1)	$282,396	$216,411	$220,73	$225,154	$229,657
Total Gross Revenue (2)	$12,277,790	$13,516,654	$13,753,57	$14,424,206	$15,025,335
Adjustments to Revenue					
Charity Care	$460,819	$516,076	$525,10	$550,952	$574,102
Bad Debt	$0	$0	$	$0	$0
Contractual Adjustments	$7,942,540	$8,894,930	$9,050,48	$9,496,035	$9,895,046
Total Adjustments to Revenue	$8,403,359	$9,411,006	$9,575,58	$10,046,987	$10,469,148
Total Net Revenue (3)	$3,874,431	$4,105,648	$4,177,99	$4,377,219	$4,556,187
Total Operating Costs (from Form F.3.b)	$3,749,531	$4,013,933	$3,987,99	$4,158,358	$4,328,378
Net Income (4)	$124,900	$91,715	$190,00	$218,861	$227,809

Further, F.3a for DUHS shows two columns for FY 23 with inconsistent financial results:

Form F.3a Historial and Interim Operating Costs DUHS ('000s)	Last Full FY From: 07/01/2019 To: 06/30/2020	Interim Full FY From: 07/01/2020 To: 06/30/2021	Interim Full FY From: 07/01/202 To: 06/30/2022	Interim Full FY From: 07/01/2022 To: 06/30/2023	Interim Full FY From: 07/01/2022 To: 06/30/2023	Interim Full FY From: 07/01/2023 To: 06/30/2024	Interim Full FY From: 07/01/2024 To: 06/30/2025
Salaries (from Form H Staffing)	$1,412,552	$1,540,053	$1,530,10	$1,595,466	$1,660,699	$1,701,258	$1,738,610
Taxes and Benefits	$409,146	$403,126	$400,52	$417,631	$434,706	$445,323	$455,101
Independent Contractors (Consultants) (1)	$52,782	$56,451	$56,08	$58,482	$60,873	$62,360	$63,729
Travel Reimbursement (2)							
Training (2)							

Additionally, Form F.3a for DUHS also reports different total expenses for FY 25 ($4,531,445) than Form F.2a ($4,434,091).

Finally, Form F.2b for DUHS does not provide results for third full fiscal year after completion of the project. As shown in Section P, the DUH Bed project is expected to be complete on July 1, 2025. Thus, the third full fiscal year is July 1, 2027 to June 20, 2028. As shown below, Form F.2b fails to provide the results for that year.

Form F.2b Projected Revenues and Net Income upon Project Completion DUHS ('000s)	1st Full FY From: 07/01/2024 To: 06/30/2025	2nd Full FY From: 07/01/2025 To: 06/30/2026	3rd Full FY From: 07/01/2026 To: 06/30/2027
Patient Services Gross Revenue			
Self Pay	$754,993	$771,648	$786,848
Insurance *	$5,075,737	$5,187,704	$5,289,895
Medicare *	$6,705,492	$6,853,409	$6,988,413
Medicaid *	$1,785,908	$1,825,304	$1,861,260
Other (Specify)	$838,377	$856,870	$873,751
Total Patient Services Gross Revenue	$15,160,507	$15,494,935	$15,800,167
Other Revenue (1)	$234,250	$238,935	$243,714
Total Gross Revenue (2)	$15,394,757	$15,733,870	$16,043,881
Adjustments to Revenue			
Charity Care	$588,258	$601,234	$613,078
Bad Debt	$0	$0	$0
Contractual Adjustments	$10,139,036	$10,362,695	$10,566,828
Total Adjustments to Revenue	$10,727,294	$10,963,929	$11,179,906
Total Net Revenue (3)	$4,667,463	$4,769,941	$4,863,975
Total Operating Costs (from Form F.3)	$4,434,091	$4,531,445	$4,638,063
Net Income (4)	$233,372	$238,496	$225,912

*** Including any managed care plans**
F: = From
T: = To

(1) Identify each type of revenue included on this line and explain how the dollar amount for each type was determined.
(2) Total Gross Revenue = Total Patient Services Gross Revenue + Other Revenue
(3) Total Net Revenue = Total Gross Revenue - Total Adjustments to Revenue
(4) Net Income = Total Net Revenue - Total Operating Costs

Given these multiple inconsistencies, it is impossible to discern the actual projected revenue and expenses for each year of the forecast period, much less determine the reasonableness of those projections.

With regard to the service component financial statements, DUH's Forms F.3a and F.3b for Adult Inpatient Services in Section Q show zero expense for Depreciation-Buildings and zero expense for Depreciation-Equipment. As noted on page 27 of the DUH Bed application, DUH is currently undertaking or completing several capital projects related to Adult Inpatient Services that specifically impact its acute care beds including a new bed tower to accommodate the relocation of 350 beds and the development of an additional 102 beds in future years. Further, the proposed project to add 40 beds has a total capital cost of $3.5 million. DUH's financial statements do not reflect any depreciation expense for these capital projects and there is no discussion in the financial assumptions about depreciation expense, including an explanation as to why the depreciation for the proposed project is excluded from the financial statements.

As such, DUH has failed to reasonably demonstrate the financial feasibility of the proposed project and that its financials are based on reasonable assumptions of costs and charges.

Based on the discussion above, it is clear that the DUH Beds application is non-conforming with Criterion 5.

DUH ORs ISSUE-SPECIFIC COMMENTS

1. The DUH ORs application cannot be approved, as it is incomplete and fails to include all information necessary for the Agency to conduct the review pursuant to N.C. GEN. STAT. § 131E-182(b).

   Specifically, the DUH ORs application fails to provide all requested information required in response to the Certificate of Need application form as it fails to identify all related entities in response to Form O Facilities. Section O.1 of the CON application form (as of February 22, 2021), requires an applicant to "[i]dentify all existing and approved facilities ***providing the same service components included in this proposal*** that are owned, operated or managed by the applicant or a related entity in North Carolina by completing Form O Facilities, which is found in Section Q." [*emphasis added*].

   In response to Form O Facilities, the DUH ORs application identified existing and approved acute care hospitals that are owned, managed, or operated by DUHS in North Carolina. Given that the service component at issue in this application is ORs, DUH's response to Form O Facilities is incomplete as it does not include existing and approved ASFs that are owned, managed, or operated by DUHS in North Carolina. Further, other questions in Section O of the CON application form – specifically, Questions 4 and 5 – require an applicant to provide information regarding the facilities identified in Form O Facilities. As DUH's response to Form O Facilities is incomplete, likewise, its responses to Section O.4 and O.5 are incomplete.

   In addition, and of note, DUH fails to identify all other existing providers of the service component in response to Section G.1a. Section G.1a of the CON application form (as of February 22, 2021), requires an applicant to "[i]dentify all existing and approved health service facilities located in the proposed service area that ***provide the same service components proposed in this application***." [***emphasis added***]. Similar to how DUH responded to Form O Facilities, it once again identified acute care hospitals in the service area. Given that the service component at issue in this application is ORs, DUH's response to Section G.1a is incomplete as it does not include ASFs in the service area. See DUH ORs application, page 63. Further, other questions in Section G of the CON application form – specifically, Questions 1.b and 2 – require an applicant to provide information regarding the facilities identified in Section G.1a. As DUH's response to G.1a is incomplete, likewise, its responses to Section G.1b and G.2 are incomplete.

   Based on this issue, the DUH ORs application fails to provide information necessary to determine whether the proposed project is consistent with the review criteria implemented under N.C. GEN. STAT. § 131E-183 and with duly adopted standards, plans, and criteria. As such, **the DUH ORs application should be found non-conforming with Criteria 1 and 3**.

2. The DUH ORs application fails to identify the population to be served.

   As noted above relative to the DUH Beds application, the total patients projected for the entire facility patient origin presented in the DUH Beds application is inconsistent with the entire facility patient origin presented in the DUH ORs application – please see the excerpts provided above regarding the beds application.

Given that the assumptions and timeframe provided in the DUH Beds application and the DUH ORs application are consistent, it is unclear why the entire facility patient origin presented in these applications – submitted during the same review period – are inconsistent. Further, DUH fails to articulate any reason for this discrepancy between its two applications. Since the Agency has both applications under review at the same time, and since both applications are competitive with the UNC Health application, the inconsistency between the two applications should be considered.

Based on these issues, the DUH ORs application fails to identify the population to be served by the proposed project in conformance with Criterion 3. As such, **the Duke ORs application should be found non-conforming with Criteria 1 and 3**.

3. <u>The DUH ORs application fails to demonstrate the reasonableness of its utilization projections.</u>

The following table is presented throughout the DUH ORs application as well as the Duke Arringdon ASC application. As shown, DUH relied on its surgical utilization during FY 2018 to 2020 annualized to calculate a compound annual growth rate (CAGR).

Duke University Health System
Surgical Cases by Facility, FY2018-FY2020*

		FY2018	FY2019	FY2020*	*2-YR CAGR*
DASC	OP Cases	5,877	6,079	7,032	*9.4%*
DUH	IP Cases	18,300	18,733	18,843	*1.5%*
	OP Cases	22,215	22,139	23,103	*2.0%*
	Total Cases	40,515	40,872	41,946	*1.8%*
DRH	IP Cases	4,061	3,991	4,061	*0.0%*
	OP Cases	3,581	3,555	3,804	*3.1%*
	Total Cases	7,642	7,546	7,865	*1.4%*
DRAH	IP Cases	3,328	3,568	3,677	*5.1%*
	OP Cases	11,354	11,540	11,601	*1.1%*
	Total Cases	14,682	15,108	15,278	*2.0%*
DUHS Total	IP Cases	25,689	26,292	26,581	*1.7%*
	OP Cases	43,027	43,313	45,540	*2.9%*
	Total Cases	**68,716**	**69,605**	**72,121**	*2.4%*

*Annualized based on eight months data (July-Feb)
Source: DUHS internal data

In the analysis above, DUH annualizes data from July 2019 to Feb 2020 to calculate FY 2020 due to the impacts of COVID 19 temporarily suspending non-urgent procedures in March 2020. In its discussion of this analysis showing 2.9 and 1.7 percent annual growth for OP and IP cases, respectively, DUH states "[b]*y comparison, the most recent two-year CAGR for outpatient surgery cases statewide is 1.4 percent during FY2017-FY2019 . . . By comparison, the most recent two-year CAGR for inpatient surgery cases statewide is 0.1 percent during FY2017-FY2019.*" However, a closer examination of DUH's historical utilization suggests that it has overstated its growth.

As shown below, a comparison of the growth rates ending in FY 2019 and FY 2020 annualized demonstrates that total case growth through FY 2020 annualized was 3.6 percent compared to 1.3 percent annually through FY 2019. As demonstrated in the table below, DUH's calculated growth through FY 2020 annualized data exceeds the growth it experienced in prior time frames. Note that outpatient cases for DRAH presented in the DUH OR application methodology include both operating room cases and cases performed in unlicensed procedure rooms. As such, for purposes of this analysis, UNC Health adjusted DRAH's outpatient volume reported in the SMFP to include procedures performed in unlicensed operating rooms in order to be consistent with the DUH methodology. This adjustment results in slightly higher utilization in FY 2018 and FY 2019 than included in DUH's compound annual growth rate calculations above.

							Annual Growth				CAGR			DUHS CAGR in
		FY 15	FY 16	FY 17	FY 18	FY 19	FY 16	FY 17	FY 18	FY 19	FY 15-FY 19	FY 16-FY 19	FY 17-FY19	Application
DUHS Total	IP	24,825	25,305	26,025	25,689	26,292	1.9%	2.8%	-1.3%	2.3%	1.4%	1.3%	0.5%	1.7%
	OP	41,467	41,642	42,288	43,077	43,385	0.4%	1.6%	1.9%	0.7%	1.1%	1.4%	1.3%	2.9%
	Total	66,292	66,947	68,313	68,766	69,677	1.0%	2.0%	0.7%	1.3%	1.3%	1.3%	1.0%	2.4%
* Pulled from SMFP based on annual license renewal														

As the table shows, the CAGR utilized by DUHS exceeds the historical growth rates achieved. In particular, the outpatient growth rate of 2.9 percent is greater than the growth itshas achieved in any single year over the analysis period. The calculated two-year CAGR (2017-2019) is similar to the statewide averages of 1.4 percent for outpatient and 0.1 percent for inpatient as referenced by DUHS. It appears this discrepancy is based on the way in which DUHS annualized its FY 2020 volume, which may not have accounted for seasonality or other factors in its historical data.

Based on its calculated growth rates, DUH utilizes the following growth rates for its projections, using annualized 2020 as the base year.

Projected Growth Rates			Growth Rate Assumption
DASC	OP	5.0%	2-YR CAGR Capped at 5% Growth
DUH*	IP	1.5%	2-YR CAGR
	OP	2.0%	2-YR CAGR
DRH	IP	0.0%	2-YR CAGR
	OP	3.1%	2-YR CAGR
DRAH	IP	5.0%	2-YR CAGR Capped at 5% Growth
	OP	1.1%	2-YR CAGR

Notably, DUH projected FY 2021 volumes by growing FY 2020 annualized volumes by its assumed growth rates. However, as discussed by DUH, FY 2020 utilization was impacted by COVID with a reduction in volume in March through May 2020. As shown below, DUH's actual FY 2020 utilization per 2021 License Renewal Applications was 9.5 percent less than its FY 2020 annualized figures.

		FY 20 Ann	FY 20 Actual	Difference	%
DASC	OP	7,032	5,911	(1,121)	-15.9%
DUH	IP	18,843	17,804	(1,039)	-5.5%
	OP	23,103	20,659	(2,444)	-10.6%
	Total	41,946	38,463	(3,483)	-8.3%
DRH	IP	4,061	4,214	153	3.8%
	OP	3,804	3,468	(336)	-8.8%
	Total	7,865	7,682	(183)	-2.3%
DRAH	IP	3,677	3,369	(308)	-8.4%
	OP	11,601	9,851	(1,750)	-15.1%
	Total	15,278	13,220	(2,058)	-13.5%
DUHS Total	IP	26,581	25,387	(1,194)	-4.5%
	OP	45,540	39,889	(5,651)	-12.4%
	Total	72,121	65,276	(6,845)	-9.5%

While DUH's actual FY 2020 resulted in 9.5 percent fewer surgical cases than projected in the OR and Arringdon applications, this is not addressed by DUH. In fact, DUH fails to provide specific actual utilization data requested in the application. As stated in Section C.5.a, Instructions for All Forms:

- **Historical** – Provide actual annual utilization data for the last full fiscal year prior to the submission of the application. If a full year of utilization data is not available, annualized data may be necessary to complete the form as requested and is permissible. If it is necessary to include annualized utilization data, specify the number of months for which actual utilization data is available, provide the total actual utilization data for those months and describe the method used to annualize the partial year of actual utilization data.
- **Interim** – Provide projected annual utilization data for each full fiscal year starting with the first full fiscal year following the last full fiscal year prior to submission of the application until the project is complete. One year of annualized data may be necessary to complete the form as requested and is permissible. If it is necessary to include one year of annualized utilization data, specify the number of months for which actual utilization data is available, provide the total actual utilization data for those months and describe the method used to annualize the partial year of actual utilization data.

(emphasis added)

DUH's last full fiscal year prior to the submission of the application is FY 2020 (July 2019 to June 2020). Neither DUH's OR application nor its Arringdon ASC application includes its actual annual utilization for FY 2020 in its Form C worksheets in Section Q or anywhere else in the application as requested in the instructions above. DUH only provides its annualized FY 2020 utilization with the footnote that it is annualized based on eight months of data. Further, DUH's first interim year for the applications would be FY 2021, July 2020 to June 2021. The DUH OR application was submitted on April 15, 2021. Thus, DUH would have had access to several months of actual FY 2021 utilization at the time of submission. Notably, the DUH Beds application references FY 2021 through December 2020 or six months of data (see page 89 of the DUH Beds application). Despite having actual FY 2021 data, DUH does not provide the number of months for which actual utilization data is available or provide the total actual utilization for those months and describe the method used to annualize the partial year of actual utilization data as the CON application form instructions request. DUH's failure to provide this data makes it impossible to determine that its utilization projections are reasonable and supported. In summary, the most recent actual data provided in DUH's ORs and Arringdon ASC applications is through February 2020, over 14 months prior to the submission of the applications.

The DUH ORs and Arringdon ASC applications state that DUHS ambulatory surgery volume has recovered since the May 1, 2020 announcement to resume non-urgent procedures and that "*demand is representative of pre-COVID utilization*." No further information is provided to support these statements. However, the six month case data from April 1 through September 30, 2020 for North Carolina providers was included on the 2021 License Renewal Application forms and can provide further information to evaluate DUH's claims. As shown below, data for this six month period for DUHS facilities was annualized and compared to DUH's FY 2020 annualized statistics and DUH's FY 2020 actual data as provided on the its License Renewal Application forms. As shown below, annualized data based on April through September 2020 data indicates that DUH's total surgical cases were 22 percent below its stated FY 2020 annualized volume.

		FY 20 Ann	FY 20 Actual	Difference	%	4/1-9/30 Actual	Annualized	Difference from FY 20 Ann	%
DASC	OP	7,032	5,911	(1,121)	-15.9%	3,208	6,416	(616)	-8.8%
DUH	IP	18,843	17,804	(1,039)	-5.5%	7,984	15,968	(2,875)	-15.3%
	OP	23,103	20,659	(2,444)	-10.6%	9,215	18,430	(4,673)	-20.2%
	Total	41,946	38,463	(3,483)	-8.3%	17,199	34,398	(7,548)	-18.0%
DRH	IP	4,061	4,214	153	3.8%	1,576	3,152	(909)	-22.4%
	OP	3,804	3,468	(336)	-8.8%	1,626	3,252	(552)	-14.5%
	Total	7,865	7,682	(183)	-2.3%	3,202	6,404	(1,461)	-18.6%
DRAH	IP	3,677	3,369	(308)	-8.4%	1,585	3,170	(507)	-13.8%
	OP	11,601	9,851	(1,750)	-15.1%	2,869	5,738	(5,863)	-50.5%
	Total	15,278	13,220	(2,058)	-13.5%	4,454	8,908	(6,370)	-41.7%
DUHS Total	IP	26,581	25,387	(1,194)	-4.5%	11,145	22,290	(4,291)	-16.1%
	OP	45,540	39,889	(5,651)	-12.4%	16,918	33,836	(11,704)	-25.7%
	Total	72,121	65,276	(6,845)	-9.5%	28,063	56,126	(15,995)	-22.2%

DUH does not address this large reduction in case volume relative to its annualized projections and does not account for it in its case projections going forward. By contrast, in the DUH Beds application, DUH provides the following discussion on page 89 of in its Form C Assumptions:

Section Q – Excel Workbook

Form C.1 Assumptions

All years are fiscal, running from July-June. FY21 data are annualized based on the first six periods for FY 21 (July-December 2020). Due to the impacts of COVID-19, DUH experienced declines in inpatient discharges in FY20 and FY21 compared to FY 2019. This was related to reductions in elective surgeries and other procedures (both due to restrictions implemented by the hospital and due to patient reluctance to seek non-emergent healthcare), reduced ED admissions with children home from school and limited extracurricular/sports options, etc. As vaccination efforts expand across the region, the downward impact of COVID on inpatient volume is anticipated to decrease into FY22.

Accordingly, for purposes of this application, FY22 inpatient discharges are projected to return to FY19 utilization levels. This is reasonable in light of ongoing population and provider network growth, and looking to DUH's consistent pre-COVID growth. DUH also anticipates opening additional approved inpatient beds in FY 2022, which will alleviate capacity constraints that otherwise curtail the ability to accommodate transfers and elective admissions.

After returning to pre-COVID discharge volumes for FY22, conservative annual growth rate assumptions of 1.5% and 1.0% are applied to project discharges to FY23-FY28 for Adult and Pediatric populations, respectively. As a point of reference, the CAGRs for Adult and Peds discharges from FY17-FY19 were 3.0% and 1.8%, respectively. When existing capacity constraints begin to be eased with the implementation of additional beds, DUH expects that its growth may well return to prior rates.[7]

As shown in its Beds application, DUH utilizes FY 2021 data to adjust its analysis and projections. As noted above, this information was not provided in the DUH ORs or Arringdon ASC applications. The DUH statement related to the reduction in inpatient discharges would also impact surgical cases: "*this was related to reductions in elective surgeries and other procedures (both due to restrictions implemented by the hospital and due to patient reluctance to seek non-emergent healthcare), reduced ED admissions with children home from school and limited extracurricular/sports options*." While DUH discusses the negative impact of COVID-19 in the DUH Beds application, it does not address it in either the DUH ORs or Arringdon ASC applications.

Notably, in its Beds application, DUH projects that its acute care utilization in FY 2022 will equal its FY 2019 volume and grow forward based on its assumed annual growth rates, which were less aggressive relative to its pre-COVID-19 growth from FY 2017 to 2019 compared to the OR applications.

By contrast, in its ORs and Arringdon ASC applications, DUH uses FY 2020 annualized as its baseline and assumes its OR utilization will grow into the future without regard for its actual utilization since February 2020, over 14 months ago. Given the 9.5 percent difference between actual and projected FY 20 volume and the additional decline in volume evidenced by DUH's April to September 2020 annualized utilization, DUH has failed to support the reasonableness of using FY 2020 annualized data as its baseline year and growing it forward without regard to actual FY 2021 results. The most notable example of this unreasonableness is that the assumptions for Davis Ambulatory Surgery Center (DASC) include a growth rate of 5.0 percent annually despite the historical declines shown for FY 2020 actual and FY 2021 YTD, resulting in utilization projections which assume that it will perform more cases in FY 2028 with four fewer ORs than in annualized FY 2020, after a projected shift of a significant number of cases to the Arringdon ASC.

In order to evaluate a more reasonable estimate of DUH utilization projections, UNC Health conducted the analysis summarized below based on an approach consistent with DUH's bed utilization methodology. Specifically, DUH's OR utilization in FY 2022 is assumed to be equal to its FY 2019 utilization and that it will grow forward based on assumed annual growth rates, based on its pre-COVID-19 growth from FY 2017 to 19. The projected growth rates used in UNC Health's analysis were as follows:

DASC	OP	5.0%	2-YR CAGR Capped at 5%	
	IP	2.0%	2-YR CAGR	
DUH	OP	-1.0%	2-YR CAGR	
	IP	0.6%	2-YR CAGR	
DRH	OP	3.0%	2-YR CAGR	
	IP*	-6.6%	2-YR CAGR	
DRAH	OP	2.4%	2-YR CAGR	
*DRAH IP cases have no impact on Durham County Analysis				
as no IP cases are transferred to the new ORs				

As shown in the table below, based on an approach consistent with less aggressive assumptions used in DUH's bed utilization methodology and the two assumptions identified above (e.g., assuming FY 2022 OR utilization will equal FY 2019 and that growth will occur consistent with the FY 2017 to 2019 CAGRs, DUHS facilities would have a projected surplus of 1.0 ORs in FY 2028, which does not support the need for the proposed concurrent addition of two ORs to DUH and two ORs at Arringdon ASC.

2028 OR Need at DUHS Durham Co. Facilities					
	DASC	DUH	DRH	Arringdon	Total
Projected Cases					
IP	-	21,155	4,142	-	25,296
IP Allocated to Green Level & Garner		(78)	(20)		(98)
Adjusted IP Cases		21,077	4,122	-	25,198
OP	8,146	20,881	4,241	-	33,268
OP Allocated to Green Level & Garner	-	(827)	-	-	(827)
OP Allocated to Arringdon*	(2,150)	(2,891)	(100)	5,793	652
Adjusted OP Cases	5,996	17,163	4,141	5,793	33,093
Case Times					
IP		262.1	202		
OP	50.4	139.5	138.2	69.5	
Total Case Hours	5,037	131,975	23,414	6,710	167,136
Group	5	1	3	6	
Hr/OR/Yr	1,312.5	1,950.0	1,755.0	1,312.5	
Need	3.8	67.7	13.3	5.1	90.0
Existing/Approved/Proposed	4.0	68.0	13.0	6.0	91.0
Deficit/(Surplus)	(0.2)	(0.3)	0.3	(0.9)	(1.0)
*Includes allocation from DRAH					

Based on the discussion above, it is clear that the DUH OR projected utilization is unsupported. As such, **the DUH ORs application is non-conforming with Criteria 3, 4, 5, 6, and 18a, and the performance standards for Operating Rooms (10A NCAC 14C .2103).**

4. <u>The DUH ORs application fails to demonstrate the reasonableness of utilization of the Arringdon ASC.</u>

In its ORs application, DUH fails to provide support for its projected utilization at its Arringdon ASC. Pages 99-101 show the utilization of DUH, DRH, and DASC and state that that the assumptions and methodology for projecting the utilization at the Arringdon ASC from the complementary application are "*incorporated herein by reference.*" DUH does not indicate in the instant ORs application how it determined the total utilization and the shift to the Arringdon ASC from other facilities. Notably, Arringdon ASC's total Year 3 Utilization of 6,943 cases (per page 102) exceeds the projected shifts from other DUHS facilities (6,300). As a result, there is no explanation within the DUH ORs application for 643 Arringdon ASC cases.

FY 2028 Arringdon	***Notes***
6,943	**Total Cases per pg 102**
2,743	Shift from DASC per pg 101
114	Shift from DRH per page 100
3,443	Shift from DUH per pg 99
6,300	Shift Total
643	**Unexplained Cases**

Based on the discussion above, it is clear that the DUH OR projected utilization is unsupported. As such, **the DUH ORs application is non-conforming with Criteria 3, 4, 5, 6, and 18a, and the performance standards for Operating Rooms (10A NCAC 14C .2103).**

5. The DUH ORs application fails to demonstrate that the needs of the population will be met adequately by the proposed elimination of services (procedure rooms) and that the cost, design, and means of construction proposed represent the most reasonable alternative.

   DUH fails to consistently identify its scope in the DUH ORs application. Of note, there are several inconsistencies in the DUH ORs application:

   - The project description provided on page 18 of the DUH ORs application in response to Section A.5.a reads as follows: "Duke University Health System (DUHS) proposes to develop 40 additional acute care beds at Duke University Hospital."

   - The types of services to be provided in the DUH ORs application in response to Sections A.5.c and A.5.d (page 19), include acute care services.

   - In response to Section B.1a on page 22, the DUH ORs application indicates that it is being submitted in response to the following need determination "2021 SMFP, Durham/Caswell County, 40 acute care beds."

   - In response to projected patient origin in Section C.3.b on page 29, the table provided in the DUH ORs application includes inconsistent references to the service component as ORs as well as acute care beds.

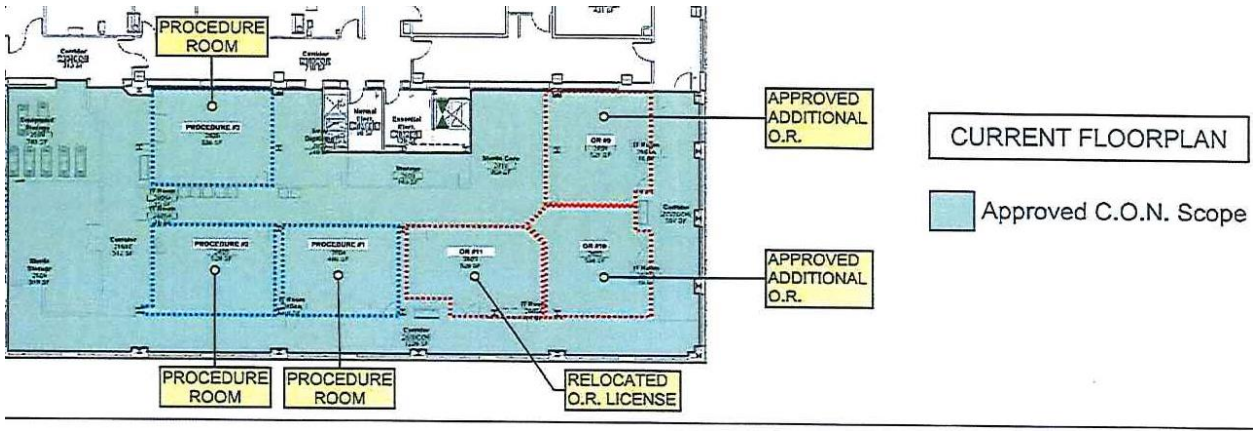
   - In response to Section K.1 on page 72, the DUH ORs application provides inconsistent responses regarding the scope of the proposed project, in particular, relative to new construction – while a portion of the response indicates "No" in response to whether the proposal includes construction of new space another portion of the response describes the construction as "The proposed project involves construction of a new 40-bed acute care hospital facility. The proposed new construction square footage is representative of the necessary spaces to support the project as proposed."

   - There are inconsistent responses regarding the capital cost of the DUH ORs application:
     - The Fee Sheet identifies the capital cost as $0.
     - The Petition for Expedited Review identifies the capital cost as $0 – see page 3 of the DUH ORs application.
     - Section A.3 identifies the capital cost as $3,500,000 – see page 16 of the DUH ORs application.
     - Section F.1 identifies the capital cost as $0, noting that "DUHS will not incur any additional costs beyond those already approved in conjunction with this project" – see page 54 of the DUH ORs application.
     - Section F.2.a does not identify any capital cost amount in the required tables – see page 54 of the DUH ORs application.
     - Form F.1b Capital Cost identifies the capital cost as $0.

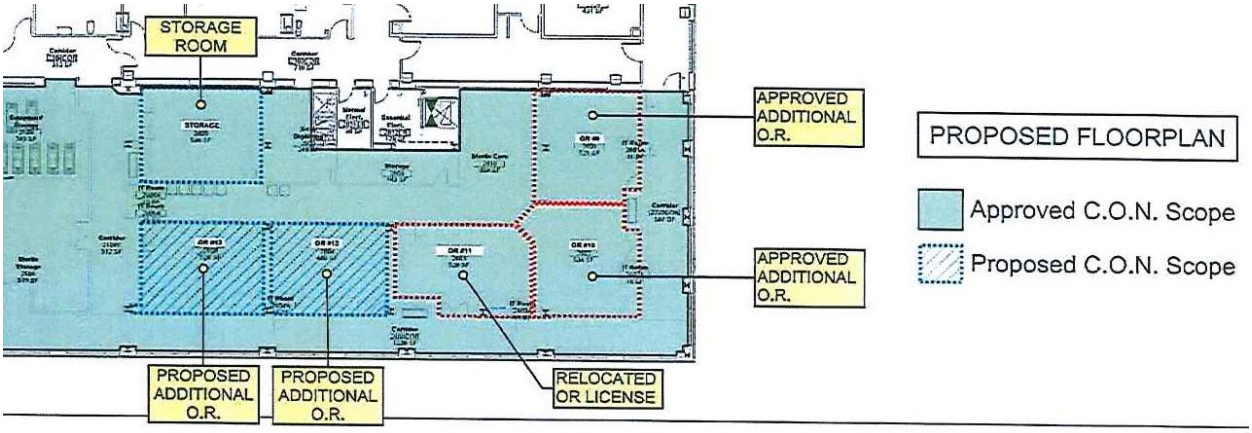
- Exhibit F.2 Construction Cost Certification identifies the capital cost as $17,853,600, the amount of the previously approved capital cost.

Further, and as noted previously, the DUH ORs application is presented as a change of scope to Project ID # J-11631-18, which sought to develop five total ORs in new construction (four new ORs and one OR relocated from another location in Duke North (see illustrations excerpted below from the Existing and Proposed Floor Plan Exhibits in the original, previously approved application, Project ID # J-11631-18).

The current DUH ORs change of scope application shows a "Current Floorplan" – excerpted below – with three ORs and three procedure rooms.



However, the "Proposed Floorplan" – excerpted below – for the DUH ORs change of scope application shows one of the rooms identified as a procedure room on the Current Floorplan as a storage room.



Given the information presented in the previously approved application, Project ID # J-11631-18, as well as the current DUH ORs application, it would appear that DUH proposed to develop – and was approved to develop – three procedure rooms. However, as detailed in the Proposed Floorplan excerpted above, it appears that DUH is eliminating all three previously approved procedure rooms – that is, not only is DUH converting one of the procedure rooms to a storage room, but also DUH appears to be backfilling the other two procedure rooms with ORs. Of note, the DUH OR application includes no discussion of the elimination of three planned procedure rooms with this project and the effect of the proposed elimination on the medically underserved and their access to healthcare services.

Based on these issues, the DUH ORs application fails to demonstrate that the needs of the population will be met adequately by the proposed elimination of services (procedure rooms) and that the cost, design, and means of construction proposed represent the most reasonable alternative. As such, **the Duke ORs application should be found non-conforming with Criteria 1, 3, 3a, and 12**.

6. <u>The DUH ORs application fails to demonstrate that the least costly or most effective alternative has been proposed.</u>

DUH fails to demonstrate that it has proposed the least costly or most effective alternative. In Section E, pages 51 to 53, DUH discussed several alternatives it considered prior to the submission of its application as proposed. The alternatives considered by DUH include:

- Status quo
- Develop all operating rooms at a new or different campus or facility in Durham County
- Develop all operating rooms at DUH
- Use existing spaces for 2 incremental ORs (proposed alternative)

In reviewing the alternatives presented in the DUH ORs application – listed above – UNC Health believes that DUH failed to propose the most effective alternative. Namely, the DUH ORs application does not include any substantive discussion of an alternative involving the

development of a new hospital, particularly in light of the *2021 SMFP's* identified need for additional acute care beds and ORs in the service area. Rather, DUH quickly writes off such alternative, noting DUH's need for additional capacity. However, as detailed in the UNC Hospitals-RTP application, the need for the development of new hospital in the service area is driven by many factors including: Durham County's large and growing population, (particularly in the southern region of the county); the lack of geographic distribution of acute care services in the county; the number of decades since a new acute care hospital site has been developed in the service area; and, the absence of a moderately-sized hospital that is focused on community-level patient needs. Unlike UNC Hospitals-RTP's application, the DUH ORs application does not address the patient need driving the determination for additional ORs in the service area.

Given the need of the patients in the service area, DUH failed to select the most effective alternative. Therefore, and based on the discussion above, DUH fails to demonstrate that it proposed the least costly or most effective alternative in accordance with Criterion 4. As such, **the DUH ORs application is non-conforming with Criteria 1, 3, and 4.**

7. <u>The DUH ORs application fails to demonstrate financial feasibility and reasonable financial assumptions.</u>

DUH's Forms F.2a, F.2b, F.3a, and F.3b for DUHS, which are provided to demonstrate the financial feasibility of the proposed project because the Surgical Services financial statements show a net loss throughout the projection period, include several duplicate, but inconsistent years of financial projections which do not match. Specifically, F.2a for DUHS shows two columns for FY 23 with inconsistent financial results:

Form F.2a Historical and Interim Revenues and Net Income DUHS ('000s)	Last Full FY From: 07/01/2019 To: 06/30/2020	Interim Full FY From: 07/01/2020 To: 06/30/2021	Interim Full FY From: 07/01/202 To: 06/30/202	Interim Full FY From: 07/01/2022 To: 06/30/2023	Interim Full FY rom: 07/01/202 To: 06/30/2023
Patient Services Gross Revenue					
Self Pay	$431,834	$662,352	$673,935	$707,113	$736,825
Insurance *	$4,318,342	$4,452,921	$4,530,793	$4,753,842	$4,953,593
Medicare *	$5,385,932	$5,882,697	$5,985,573	$6,280,240	$6,544,128
Medicaid *	$1,343,484	$1,566,769	$1,594,169	$1,672,649	$1,742,931
Other (Specify)	$515,802	$735,504	$748,367	$785,208	$818,201
Total Patient Services Gross Revenue	$11,995,394	$13,300,243	$13,532,837	$14,199,052	$14,795,678
Other Revenue (1)	$282,396	$216,411	$220,739	$225,154	$229,657
Total Gross Revenue (2)	$12,277,790	$13,516,654	$13,753,576	$14,424,206	$15,025,335
Adjustments to Revenue					
Charity Care	$460,819	$516,076	$525,101	$550,952	$574,102
Bad Debt	$0	$0	$0	$0	$0
Contractual Adjustments	$7,942,540	$8,894,930	$9,050,484	$9,496,035	$9,895,046
Total Adjustments to Revenue	$8,403,359	$9,411,006	$9,575,585	$10,046,987	$10,469,148
Total Net Revenue (3)	$3,874,431	$4,105,648	$4,177,991	$4,377,219	$4,556,187
Total Operating Costs (from Form F.3.b)	$3,749,531	$4,013,933	$3,987,991	$4,158,358	$4,328,378
Net Income (4)	$124,900	$91,715	$190,000	$218,861	$227,809

Further, F.3a for DUHS shows two columns for FY 23 with different financial results:

Form F.3a Historial and Interim Operating Costs DUHS ('000s)	Last Full FY From: 07/01/2019 To: 06/30/2020	Interim Full FY From: 07/01/2020 To: 06/30/2021	Interim Full FY From: 07/01/202 To: 06/30/2022	Interim Full FY From: 07/01/2022 To: 06/30/2023	Interim Full FY From: 07/01/2022 To: 06/30/2023	Interim Full FY From: 07/01/2023 To: 06/30/2024	Interim Full FY From: 07/01/2024 To: 06/30/2025
Salaries (from Form H Staffing)	$1,412,552	$1,540,053	$1,530,10	$1,595,466	$1,660,699	$1,701,258	$1,738,610
Taxes and Benefits	$409,146	$403,126	$400,52	$417,631	$434,706	$445,323	$455,101
Independent Contractors (Consultants) (1)	$52,782	$56,451	$56,08	$58,482	$60,873	$62,360	$63,729
Travel Reimbursement (2)							
Training (2)							

Additionally, Form F.3a for DUHS also reports different total expenses for FY 25 ($4,531,445) than Form F.2a ($4,434,091).

Finally, Form F.2b for DUHS does not provide results for third full fiscal year after completion of the project. As shown in Section P, the DUH ORs project is expected to be complete on July 1, 2025. Thus, the third full fiscal year is July 1, 2027 to June 20, 2028. As shown below, Form F.2b fails to provide the results for that year.

Form F.2b Projected Revenues and Net Income upon Project Completion DUHS ('000s)	1st Full FY From: 07/01/2024 To: 06/30/2025	2nd Full FY From: 07/01/2025 To: 06/30/2026	3rd Full FY From: 07/01/2026 To: 06/30/2027
Patient Services Gross Revenue			
Self Pay	$754,993	$771,648	$786,848
Insurance *	$5,075,737	$5,187,704	$5,289,895
Medicare *	$6,705,492	$6,853,409	$6,988,413
Medicaid *	$1,785,908	$1,825,304	$1,861,260
Other (Specify)	$838,377	$856,870	$873,751
Total Patient Services Gross Revenue	$15,160,507	$15,494,935	$15,800,167
Other Revenue (1)	$234,250	$238,935	$243,714
Total Gross Revenue (2)	$15,394,757	$15,733,870	$16,043,881
Adjustments to Revenue			
Charity Care	$588,258	$601,234	$613,078
Bad Debt	$0	$0	$0
Contractual Adjustments	$10,139,036	$10,362,695	$10,566,828
Total Adjustments to Revenue	$10,727,294	$10,963,929	$11,179,906
Total Net Revenue (3)	$4,667,463	$4,769,941	$4,863,975
Total Operating Costs (from Form F.3)	$4,434,091	$4,531,445	$4,638,063
Net Income (4)	$233,372	$238,496	$225,912

*** Including any managed care plans**
F: = From
T: = To

(1) Identify each type of revenue included on this line and explain how the dollar amount for each type was determined.
(2) Total Gross Revenue = Total Patient Services Gross Revenue + Other Revenue
(3) Total Net Revenue = Total Gross Revenue - Total Adjustments to Revenue
(4) Net Income = Total Net Revenue - Total Operating Costs

Given these multiple inconsistencies, it is impossible to discern the actual projected revenue and expenses for each year of the forecast period, much less determine the reasonableness of those projections.

With regard to the service component financial statements, DUH's Forms F.3a and F.3b for Surgical Services in Section Q show zero expense for Depreciation-Buildings and zero expense for Depreciation-Equipment. As noted on page 26 of the DUH ORs application, DUH's prior project to develop two operating rooms in its North Pavilion remains under development. DUH's financial

statements do not reflect any depreciation expense for this capital projects and there is no discussion in the financial assumptions about depreciation expense. In addition, please see the discussion above, which details DUH's inconsistent responses regarding the capital cost of the DUH ORs application.

As such, DUH has failed to reasonably demonstrate the financial feasibility of the proposed project.

Based on the discussion above, it is clear that the DUH ORs application is non-conforming with Criterion 5.

ARRINGDON ASC ISSUE-SPECIFIC COMMENTS

1. <u>The Arringdon application fails to demonstrate the reasonableness of utilization projections.</u>

The following table is presented throughout the DUH ORs application as well as the Duke Arringdon ASC application. As shown, DUH relied on its surgical utilization during FY 2018 to 2020 annualized to calculate a compound annual growth rate (CAGR).

Duke University Health System
Surgical Cases by Facility, FY2018-FY2020*

		FY2018	FY2019	FY2020*	*2-YR CAGR*
DASC	OP Cases	5,877	6,079	7,032	*9.4%*
DUH	IP Cases	18,300	18,733	18,843	*1.5%*
	OP Cases	22,215	22,139	23,103	*2.0%*
	Total Cases	40,515	40,872	41,946	*1.8%*
DRH	IP Cases	4,061	3,991	4,061	*0.0%*
	OP Cases	3,581	3,555	3,804	*3.1%*
	Total Cases	7,642	7,546	7,865	*1.4%*
DRAH	IP Cases	3,328	3,568	3,677	*5.1%*
	OP Cases	11,354	11,540	11,601	*1.1%*
	Total Cases	14,682	15,108	15,278	*2.0%*
DUHS Total	IP Cases	25,689	26,292	26,581	*1.7%*
	OP Cases	43,027	43,313	45,540	*2.9%*
	Total Cases	**68,716**	**69,605**	**72,121**	*2.4%*

*Annualized based on eight months data (July-Feb)
Source: DUHS internal data

In the analysis above, DUH annualizes data from July 2019 to Feb 2020 to calculate FY 2020 due to the impacts of COVID-19 temporarily suspending non-urgent procedures in March 2020. In its discussion of this analysis showing 2.9 and 1.7 percent annual growth for OP and IP cases, respectively, DUH states "[b]*y comparison, the most recent two-year CAGR for outpatient surgery cases statewide is 1.4 percent during FY2017-FY2019 . . . By comparison, the most recent two-year CAGR for inpatient surgery cases statewide is 0.1 percent during FY2017-FY2019.*" However, a closer examination of DUH's historical utilization suggests that it has overstated its growth.

As shown below, a comparison of the growth rates ending in FY 2019 and FY 2020 annualized demonstrates that total case growth through FY 2020 annualized was 3.6 percent compared to 1.3 percent annually through FY 2019. As demonstrated in the table below, DUH's calculated growth through FY 2020 annualized data exceeds the growth it experienced in prior time frames. Note that outpatient cases for DRAH presented in the DUH OR application methodology include both operating room cases and cases performed in unlicensed procedure rooms. As such, for purposes of this analysis, UNC Health adjusted DRAH's outpatient volume reported in the SMFP to include procedures performed in unlicensed operating rooms in order to be consistent with the DUH methodology. This adjustment results in slightly higher utilization in FY 2018 and FY 2019 than included in DUH's compound annual growth rate calculations above.

							Annual Growth				CAGR			DUHS CAGR in
		FY 15	FY 16	FY 17	FY 18	FY 19	FY 16	FY 17	FY 18	FY 19	FY 15-FY 19	FY 16-FY 19	FY 17-FY19	Application
DUHS Total	IP	24,825	25,305	26,025	25,689	26,292	1.9%	2.8%	-1.3%	2.3%	1.4%	1.3%	0.5%	1.7%
	OP	41,467	41,642	42,288	43,077	43,385	0.4%	1.6%	1.9%	0.7%	1.1%	1.4%	1.3%	2.9%
	Total	66,292	66,947	68,313	68,766	69,677	1.0%	2.0%	0.7%	1.3%	1.3%	1.3%	1.0%	2.4%
* Pulled from SMFP based on annual license renewal														

As the table shows, the CAGR utilized by DUHS exceeds the historical growth rates achieved. In particular, the outpatient growth rate of 2.9 percent is greater than the growth it has achieved in any single year over the analysis period. The calculated two-year CAGR (2017-2019) was similar to the statewide averages of 1.4 percent for outpatient and 0.1 percent for inpatient as referenced by DUHS. It appears this discrepancy is based on the way in which DUHS annualized its FY 2020 volume, which may not have accounted for seasonality or other factors in its historical data.

Based on their calculated growth rates, DUH utilizes the following growth rates for their projections and grew the annualized 2020 as the base year.

Projected Growth Rates			Growth Rate Assumption
DASC	OP	5.0%	2-YR CAGR Capped at 5% Growth
DUH*	IP	1.5%	2-YR CAGR
	OP	2.0%	2-YR CAGR
DRH	IP	0.0%	2-YR CAGR
	OP	3.1%	2-YR CAGR
DRAH	IP	5.0%	2-YR CAGR Capped at 5% Growth
	OP	1.1%	2-YR CAGR

Notably, DUH projected FY 2021 volumes by growing FY 2020 annualized volumes by its assumed growth rates. However, as discussed by DUH, FY 2020 utilization was impacted by COVID-19 with a reduction in volume in March through May 2020. As shown below, DUH's actual FY 2020 utilization per 2021 License Renewal Applications was 9.5 percent less than its FY 2020 annualized figures.

		FY 20 Ann	FY 20 Actual	Difference	%
DASC	OP	7,032	5,911	(1,121)	-15.9%
DUH	IP	18,843	17,804	(1,039)	-5.5%
	OP	23,103	20,659	(2,444)	-10.6%
	Total	41,946	38,463	(3,483)	-8.3%
DRH	IP	4,061	4,214	153	3.8%
	OP	3,804	3,468	(336)	-8.8%
	Total	7,865	7,682	(183)	-2.3%
DRAH	IP	3,677	3,369	(308)	-8.4%
	OP	11,601	9,851	(1,750)	-15.1%
	Total	15,278	13,220	(2,058)	-13.5%
DUHS Total	IP	26,581	25,387	(1,194)	-4.5%
	OP	45,540	39,889	(5,651)	-12.4%
	Total	72,121	65,276	(6,845)	-9.5%

While DUH's actual FY 2020 resulted in 9.5 percent fewer surgical cases than projected in the ORs and Arringdon applications, this is not addressed by DUH. In fact, DUH fails to provide specific actual utilization data requested in the application. As stated in Section C.5.a, Instructions for All Forms:

- **Historical** – Provide actual annual utilization data for the last full fiscal year prior to the submission of the application. If a full year of utilization data is not available, annualized data may be necessary to complete the form as requested and is permissible. If it is necessary to include annualized utilization data, specify the number of months for which actual utilization data is available, provide the total actual utilization data for those months and describe the method used to annualize the partial year of actual utilization data.
- **Interim** – Provide projected annual utilization data for each full fiscal year starting with the first full fiscal year following the last full fiscal year prior to submission of the application until the project is complete. One year of annualized data may be necessary to complete the form as requested and is permissible. If it is necessary to include one year of annualized utilization data, specify the number of months for which actual utilization data is available, provide the total actual utilization data for those months and describe the method used to annualize the partial year of actual utilization data.

(emphasis added)

DUH's last full fiscal year prior to the submission of the application is FY 2020 (July 2019 to June 2020). Neither DUH's ORs application nor its Arringdon ASC application includes its actual annual utilization for FY 2020 in its Form C worksheets in Section Q or anywhere else in the application as requested in the instructions above. DUH only provides its annualized FY 2020 utilization with the footnote that it is annualized based on eight months of data. Further, DUH's first interim year for the applications would be FY 2021, July 2020 to June 2021. The DUH ORs application was submitted on April 15, 2021. Thus, DUH would have had access to several months of actual FY 2021 utilization at the time of submission. Notably, the DUH Beds application references FY 2021 through December 2020 or six months of data (see page 89 of the DUH Beds application). Despite having actual FY 2021 data, DUH does <u>not</u> provide the number of months for which actual utilization data is available or provide the total actual utilization for those months and describe the method used to annualize the partial year of actual utilization data as the CON form instructions request. DUH's failure to provide this data makes it impossible to determine that its utilization projections are reasonable and supported. In summary, the most recent actual data provided in DUH's ORs and Arringdon ASC applications is through February 2020, over <u>14 months</u> prior to the submission of the applications.

The DUH ORs and Arringdon ASC applications state that DUHS ambulatory surgery volume has recovered since the May 1, 2020 announcement to resume non-urgent procedures and "*demand is representative of pre-COVID utilization*." No further information is provided to support these statements. However, the six month case data from April 1 through September 30, 2020 for North Carolina providers was included on the 2021 License Renewal Application forms which can provide further information to evaluate DUH's claims. As shown below, data for this six month period for DUHS facilities was annualized and compared to DUH's FY 2020 annualized statistics and DUH's FY 2020 actual data as provided on the its License Renewal Application forms. As shown below, annualized data based on April through September 2020 data indicates that DUH's total surgical cases were 22 percent below its stated FY 2020 annualized.

		FY 20 Ann	FY 20 Actual	Difference	%	4/1-9/30 Actual	Annualized	Difference from FY 20 Ann	%
DASC	OP	7,032	5,911	(1,121)	-15.9%	3,208	6,416	(616)	-8.8%
DUH	IP	18,843	17,804	(1,039)	-5.5%	7,984	15,968	(2,875)	-15.3%
	OP	23,103	20,659	(2,444)	-10.6%	9,215	18,430	(4,673)	-20.2%
	Total	41,946	38,463	(3,483)	-8.3%	17,199	34,398	(7,548)	-18.0%
DRH	IP	4,061	4,214	153	3.8%	1,576	3,152	(909)	-22.4%
	OP	3,804	3,468	(336)	-8.8%	1,626	3,252	(552)	-14.5%
	Total	7,865	7,682	(183)	-2.3%	3,202	6,404	(1,461)	-18.6%
DRAH	IP	3,677	3,369	(308)	-8.4%	1,585	3,170	(507)	-13.8%
	OP	11,601	9,851	(1,750)	-15.1%	2,869	5,738	(5,863)	-50.5%
	Total	15,278	13,220	(2,058)	-13.5%	4,454	8,908	(6,370)	-41.7%
DUHS Total	IP	26,581	25,387	(1,194)	-4.5%	11,145	22,290	(4,291)	-16.1%
	OP	45,540	39,889	(5,651)	-12.4%	16,918	33,836	(11,704)	-25.7%
	Total	72,121	65,276	(6,845)	-9.5%	28,063	56,126	(15,995)	-22.2%

DUH does not address this large reduction in case volume relative to its annualized projections and does not account for it in its case projections going forward. By contrast, in the DUH Beds application, DUH provides the following discussion on page 89 of in its Form C Assumptions:

Section Q – Excel Workbook

Form C.1 Assumptions

All years are fiscal, running from July-June. FY21 data are annualized based on the first six periods for FY 21 (July-December 2020). Due to the impacts of COVID-19, DUH experienced declines in inpatient discharges in FY20 and FY21 compared to FY 2019. This was related to reductions in elective surgeries and other procedures (both due to restrictions implemented by the hospital and due to patient reluctance to seek non-emergent healthcare), reduced ED admissions with children home from school and limited extracurricular/sports options, etc. As vaccination efforts expand across the region, the downward impact of COVID on inpatient volume is anticipated to decrease into FY22.

Accordingly, for purposes of this application, FY22 inpatient discharges are projected to return to FY19 utilization levels. This is reasonable in light of ongoing population and provider network growth, and looking to DUH's consistent pre-COVID growth. DUH also anticipates opening additional approved inpatient beds in FY 2022, which will alleviate capacity constraints that otherwise curtail the ability to accommodate transfers and elective admissions.

After returning to pre-COVID discharge volumes for FY22, conservative annual growth rate assumptions of 1.5% and 1.0% are applied to project discharges to FY23-FY28 for Adult and Pediatric populations, respectively. As a point of reference, the CAGRs for Adult and Peds discharges from FY17-FY19 were 3.0% and 1.8%, respectively. When existing capacity constraints begin to be eased with the implementation of additional beds, DUH expects that its growth may well return to prior rates.[7]

As shown in its Beds application, DUH utilizes FY 2021 data to adjust its analysis and projections. As noted above, this information was not provided in the DUH ORs or Arringdon ASC applications. The DUH statement related to the reduction in inpatient discharges would also impact surgical cases: "*this was related to reductions in elective surgeries and other procedures (both due to restrictions implemented by the hospital and due to patient reluctance to seek non-emergent healthcare), reduced ED admissions with children home from school and limited extracurricular/sports options*." While DUH discusses the negative impact of COVID-19 in DUH Beds CON, it does not address it in either the DUH ORs or Arringdon ASC applications. Notably,

in its Beds application, DUH projects that its acute care utilization in FY 2022 will equal its FY 2019 volume and grow forward based on its assumed annual growth rates, which were less aggressive relative to its pre-COVID-19 growth from FY 2017 to 2019.

By contrast, in its ORs and Arringdon ASC applications, DUH uses FY 2020 annualized as its baseline and assumes its OR utilization will grow into the future without regard for its actual utilization since February 2020, over 14 months ago. Given the 9.5 percent difference between actual and projected FY 2020 volume and the additional decline in volume evidenced by DUH's April to September 2020 annualized utilization, DUH has failed to support the reasonableness of using FY 2020 annualized data as its baseline year and growing it forward without regard to actual FY 2021 results. The most notable example of this unreasonableness is that the assumptions for DASC including a growth rate of 5.0 percent annually despite the declines shown for FY 2020 actual and FY 2021 YTD, resulting in utilization projections for DASC which assume that it will perform more cases in FY 2028 with four fewer ORs than in annualized FY 2020, after a projected shift of a significant number of cases to the Arringdon ASC.

In order to evaluate a more reasonable estimate of DUH utilization projections, UNC Health conducted the analysis summarized below based on an approach consistent with DUH's bed utilization methodology. Specifically, DUH's OR utilization in FY 2022 is assumed to be equal to its FY 2019 utilization and that it will grow forward based on assumed annual growth rates, based on its pre-COVID-19 growth from FY 2017 to 2019. The projected growth rates used in UNC Health's analysis were as follows:

DASC	OP	5.0%	2-YR CAGR Capped at 5%	
	IP	2.0%	2-YR CAGR	
DUH	OP	-1.0%	2-YR CAGR	
	IP	0.6%	2-YR CAGR	
DRH	OP	3.0%	2-YR CAGR	
	IP*	-6.6%	2-YR CAGR	
DRAH	OP	2.4%	2-YR CAGR	
*DRAH IP cases have no impact on Durham County Analysis as no IP cases are transferred to the new ORs				

As shown below, based on an approach consistent with less aggressive assumptions in DUH's bed utilization methodology and the two assumptions identified above (e.g., assuming FY 2022 OR utilization will equal FY 2019 and that growth will occur consistent with the FY 2017 to 2019 CAGRs, DUHS facilities would have a projected surplus of 1.7 ORs in FY 2025, which does not support the need for the proposed concurrent addition of two ORs to DUH and two ORs at Arringdon ASC.

2025 OR Need at DUHS Durham Co. Facilities					
	DASC	DUH	DRH	Arringdon	Total
Projected Cases					
IP	-	19,907	4,066	-	23,973
OP	7,037	21,501	3,883	-	32,421
OP Allocated to Green Level & Garner	-	(369)	-	-	(369)
OP Allocated to Arringdon*	(2,150)	(2,891)	(100)	5,793	652
Adjusted OP Cases	4,887	18,241	3,783	5,793	32,704
Case Times					
IP		262.1	202		
OP	50.4	139.5	138.2	69.5	
Total Case Hours	4,105	129,371	22,401	6,710	162,587
Group	5	1	3	6	
Hr/OR/Yr	1,312.5	1,950.0	1,755.0	1,312.5	
Need	3.1	66.3	12.8	5.1	87.3
Existing/Approved/Proposed	4	66	13	6	89.0
Deficit/(Surplus)	(0.9)	0.3	(0.2)	(0.9)	(1.7)
*Includes allocation from DRAH					

Based on the discussion above, it is clear that the Arringdon ASC projected utilization is unsupported. As such, **the Arringdon ASC application is non-conforming with Criteria 3, 4, 5, 6, and 18a, and the performance standards for Operating Rooms (10A NCAC 14C .2103).**

2. <u>The Arringdon ASC application fails to demonstrate financial feasibility and reasonable financial assumptions.</u>

Arringdon ASC significantly understates expenses, specifically Salary Expense as shown on Form H. The table below provides a comparison of Salaries expense as shown on Form F.3b in comparison to the total salary amount shown for the same years on Form H. As shown below, Arringdon ASC understates its salary expense in each year and by more than $1 million in Project Year 3.

	1st Full FY	***2nd Full FY***	***3rd Full FY***
Form F.3b Entire Facility Total Salaries	$ 3,324,074	$ 3,748,108	$ 4,396,811
Form H Total Salary Amount	$ 3,811,406	$ 4,524,842	$ 5,467,619
Difference	**$ 487,332**	**$ 776,734**	**$ 1,070,808**

Additionally, Arringdon ASC appears to provide inconsistent information regarding the financial results related to anesthesia services. On page 152, Arringdon ASC states:

> Other Revenue was calculated based on reimbursement for Anesthesia Technicians and CRNA services at Arringdon ASC reflecting the contractual utilization percentage and ramp-up of surgical utilization during project years.

However, on page 87, Arringdon ASC states that:

- Anesthesiology is provided via an arrangement with clinicians who directly bill patients for those professional services. Please see Exhibit C.4 for a letter from Paul Newman of PDC that indicates availability of anesthesiologists. Thus, no anesthesia expenses are reflected in the proforma financial statements.

If anesthesiology is provided via an arrangement with clinicians who directly bill patients for those professional services, it is unclear why Anesthesia Technicians and CRNAs would generate the reimbursement that Arringdon ASC projects as Other Revenue.

Based on the discussion above, it is clear that the Arringdon ASC application is non-conforming with Criterion 5.

COMPARATIVE ANALYSIS – OPERATING ROOMS

The UNC Hospitals-RTP Beds and ORs application (Project ID # J-12065-21), the SSC application (Project ID # J-12052-21), the DUH ORs application (Project ID # J-12070-21), and the Arringdon ASC application (Project ID # J-12075-21) each propose to develop operating rooms in response to the *2021 SMFP* need determination for Durham County. Given that multiple applicants propose to meet all or part of the need for the four additional operating rooms in Durham County, not all can be approved. To determine the comparative factors that are applicable in this review, UNC Health examined recent Agency findings for competitive operating room reviews. Based on that examination and the facts and circumstances of the competing applications in this review, UNC Health considered the following comparative factors:

- Conformity with Review Criteria
- Geographic Accessibility
- Provider Support
- Historical Utilization
- Patient Access to a New Provider
- Patient Access to Lower Cost Services
- Scope of Services/Patient Access to Multiple Surgical Services
- Access by Underserved Groups
    - Projected Charity Care
    - Projected Medicare
    - Projected Medicaid
- Projected Average Net Revenue per Case
- Projected Average Operating Expense per Case

UNC Health believes that the factors presented above and discussed in turn below should be used by the Project Analyst in reviewing the competing applications.

Conformity with Applicable Statutory and Regulatory Review Criteria

As discussed in the application-specific comments above, the SSC application, the DUH operating room application, and the Arringdon ASC application are non-conforming with multiple statutory and regulatory review criteria. In contrast, the UNC Hospitals-RTP application is conforming with all applicable statutory and regulatory review criteria. Therefore, with regard to conformity with statutory and regulatory review criteria, the UNC Hospitals-RTP application is the most effective alternative.

Geographic Accessibility

UNC Health proposes to develop UNC Hospitals-RTP, a new acute care hospital in Research Triangle Park. All of the other applicants propose to develop additional acute care bed or OR capacity at existing or previously approved facilities. As such, no other application proposes to develop a new site of care for acute care beds or for ORs as proposed by UNC Health. As demonstrated in UNC Hospitals-RTP's application, the south region of Durham County where the proposed hospital will be located is a highly populated and fast growth region that lacks a hospital. While both SSC and Arringdon ASC are also located in the south region of Durham County, neither will offer inpatient acute care services and both are already approved to develop OR capacity. Thus, neither will meet the need of providing acute care services and a new geographic location for acute care and surgical care. Further, the SSC, DUH ORs, and Arringdon ASC

applications are not conforming with statutory and regulatory review criteria. Therefore, with regard to geographic accessibility, the UNC Hospitals-RTP application is the most effective.

Provider Support

As noted in the application-specific comments, SSC fails to document adequate physician support for its proposed surgical specialties. The remaining applications proposing ORs each appear to document adequate provider support for their proposed project. Regardless, UNC Hospitals-RTP is the only applicant that is conforming with all statutory and regulatory review criteria. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to provider support.

Historical Utilization

Generally, the application submitted by the applicant with the highest utilization of its available surgical services is the more effective alternative with regard to this comparative factor. However, UNC Health is not an existing provider of surgical services in Durham County and SSC and Arringdon are not yet operational or have limited historical utilization.

According to the *2021 SMFP*, DUHS facilities, which include DUH and Arringdon ASC, have an operating room deficit of 2.49 rooms and NCSH facilities, which includes SSC, have a deficit of 1.04 rooms. Regardless, the applications submitted by DUH and Arringdon ASC are not conforming with statutory and regulatory review criteria. Therefore, they cannot be effective alternatives with regard to historical utilization, and, since UNC Health is not an existing provider of surgical services in Durham County, this comparative factor is not a valuable tool to compare the applications.

Patient Access to a New Provider

UNC Health's proposed project will enable the development of a new provider and the first new hospital in Durham County in over 45 years, enhancing competition for acute care and surgical services. There are two existing providers of operating rooms and acute care beds in Durham County: DUHS and NCSH. Both operate one or more hospitals or freestanding ASFs in the county as well as approved but not yet developed facilities:

- DUHS:
    - Two hospitals: DUH and Duke Regional Hospital
    - Two ASFs: Arringdon ASC and James E. Davis Ambulatory Surgical Center

- NCSH
    - One hospital: NCSH
    - One ASF: SSC

As such, approval of UNC Hospitals-RTP will allow the development of new high quality provider in Durham County and is the most effective application.

Patient Access to Lower Cost Services

UNC Health and DUH proposes to develop hospital-based licensed operating rooms. The remaining applicants would offer non-hospital licensed operating rooms in a freestanding setting. However, SSC and

Arringdon ASC are not conforming with statutory and regulatory review criteria. Therefore, they cannot be effective alternatives with regard to patient access to lower cost outpatient surgical services.

Scope of Services/Patient Access to Multiple Surgical Services

Because UNC Health is the only proposal that seeks to develop shared operating rooms which will serve both inpatients and outpatients, its proposed project enables the development of surgical capacity that will serve a full scope of surgical services that will serve to meet the growing need for both inpatient and outpatient surgical capacity in Durham County. As shown in the UNC Hospitals-RTP application and excerpted below, inpatient surgical cases in Durham County are growing at four times the rate of outpatient cases.

Durham County Facilities' Surgical Volume

Year	*Inpatient*	*Outpatient*	*Total*	*Percent Outpatient*
FFY 2015	22,806	35,329	58,135	60.8%
FFY 2016	22,545	34,393	56,938	60.4%
FFY 2017	23,580	34,928	58,508	59.7%
FFY 2018	23,882	35,017	58,899	59.5%
FFY 2019	24,312	35,901	60,213	59.6%
2015-2019 CAGR	**1.6%**	**0.4%**	**0.9%**	**-0.5%**

Source: *2016- 2021 SMFPs.*

No other provider proposes to develop capacity that will serve inpatients: DUH proposes to develop hospital-based dedicated ambulatory ORs and both SSC and Arringdon ASC propose to develop ASF-based dedicated ambulatory ORs. As such, approval of UNC Hospitals-RTP will allow the development of surgical capacity for both inpatient and outpatient surgical patients in Durham County.

Access by Underserved Groups

Projected Charity Care

The following table illustrates each applicant's percentage of total OR cases to be provided to Charity Care patients as stated in Section L.3 of the respective applications. Please note that the UNC Hospitals-RTP application provides Inpatient and Ambulatory Surgery services separately in Section L. As such, UNC Health has provided calculations in the table below using Form C inpatient and outpatient OR cases to demonstrate UNC Hospitals-RTP's charity care patients as a percentage of total OR cases.

Charity Care as Percentage of Total – Project Year 3

	Charity Care % of Total
UNC Hospitals-RTP IP OR Cases	*8.9%*
UNC Hospitals-RTP OP OR Cases	*2.1%*
UNC Hospitals-RTP OR Total	**4.8%**

	Charity Care % of Total
DUH ORs	3.5%
SSC	2.3%
Arringdon ASC	1.9%

Source: Forms C and L.3.

As shown in the table above, UNC Hospitals-RTP projects to serve the highest percentage of charity care patients. Therefore, with regard to access to charity care patients, UNC Hospitals-RTP is the most effective alternative.

Please note that UNC Health does not believe it would be appropriate to compare the applicants based on charity care dollar amounts given the differences in facility size of the applicants. Comparisons of percentages of total patients served allow direct comparisons of facilities of differing size.

Projected Medicare

The following table illustrates each applicant's percentage of total OR cases to be provided to Medicare patients as stated in Section L.3 of the respective applications. Please note that the UNC Hospitals-RTP application provides Inpatient and Ambulatory Surgery services separately in Section L. As such, UNC Health has provided calculations in the table below using Form C inpatient and outpatient OR cases to demonstrate UNC Hospitals-RTP's Medicare patients as a percentage of total OR cases.

Medicare as Percentage of Total – Project Year 3

	Medicare % of Total
UNC Hospitals-RTP IP OR Cases	44.6%
UNC Hospitals-RTP OP OR Cases	34.7%
UNC Hospitals-RTP OR Total	**38.6%**
DUH ORs	40.5%
SSC	44.3%
Arringdon ASC	42.6%

Source: Forms C and L.3.

As shown in the table above, SSC projects to serve the highest percentage of Medicare patients. Regardless, UNC Hospitals-RTP is the only applicant that is conforming with all statutory and regulatory review criteria. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to access to Medicare patients.

Projected Medicaid

The following table illustrates each applicant's percentage of total OR cases to be provided to Medicaid patients as stated in Section L.3 of the respective applications. Please note that the UNC Hospitals-RTP application provides Inpatient and Ambulatory Surgery services separately in Section L. As such, UNC Health has provided calculations in the table below using Form C inpatient and outpatient OR cases to demonstrate UNC Hospitals-RTP's Medicaid patients as a percentage of total OR cases.

Medicaid as Percentage of Total – Project Year 3

	Medicaid % of Total
UNC Hospitals-RTP IP OR Cases	19.0%
UNC Hospitals-RTP OP OR Cases	7.0%
UNC Hospitals-RTP OR Total	**11.8%**
DUH ORs	11.6%
SSC	4.1%
Arringdon ASC	5.4%

Source: Forms C and L.3.

As shown in the table above, UNC Hospitals-RTP projects to serve the highest percentage of Medicaid patients. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to access to Medicaid patients.

Projected Average Net Revenue per Case

The following tables show the projected net revenue per OR case in the third year of operation. Please note that the UNC Hospitals-RTP application provides separate financial results for Inpatient and Ambulatory Surgery and that its Ambulatory Surgery financial statements include outpatient OR cases and procedure room procedures. As such, UNC Health has provided calculations in the tables below using Form C inpatient and outpatient OR cases to demonstrate UNC Hospitals-RTP's net revenue per OR case.

UNC Hospitals-RTP Net Revenue per Patients/Cases – Project Year 3

	Projected Total Patients/ Cases	***Net Revenue***	***Average Net Revenue per Case***
UNC Hospitals-RTP Total IP	2,238	$47,034,482	$21,016
UNC Hospitals-RTP Ambulatory Surgery + Procedures	1,710	$14,460,727	$8,457

Source: Forms C and F.2b.

UNC Hospitals-RTP Net Revenue per OR Case – Project Year 3

	Projected Total Cases	*Average Net Revenue per Case*	*Net Revenue*
UNC Hospitals-RTP IP OR Cases	*764*	*$21,016*	*$16,056,454*
UNC Hospitals-RTP OP OR Cases	*1,161*	*$8,457*	*$9,818,073*
UNC Hospitals-RTP OR Total	**1,925**		**$25,874,527**

Source: Forms C and F.2b.

Please note that UNC Health has compared applications proposing to develop hospital-based ORs (UNC Hospitals-RTP and DUH ORs) separately from applications proposing to develop ASF ORs (SSC and Arringdon ASC) in order to provide conclusive comparisons among the applicants given the differences between the applicants' facilities.

Hospitals Net Revenue per OR Case – Project Year 3

	Projected Total Cases	*Net Revenue*	*Average Net Revenue per Case*
UNC Hospitals-RTP OR Total (from above)	1,925	$25,874,527	$13,441
DUH ORs	43,857	$865,679,841	$19,739

Source: Forms C and F.2b.

As shown above, UNC Hospitals-RTP projects the lowest average net revenue per case among hospital applicants. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to net revenue for hospital applicants.

ASFs Net Revenue per OR Case – Project Year 3

	Projected Total Cases	*Net Revenue*	*Average Net Revenue per Case*
SSC	6,803	$18,909,333	$2,780
Arringdon ASC	6,943	$39,153,846	$5,639

Source: Forms C and F.2b.

As shown above, SSC projects the lowest average net revenue per case among ASF applicants. However, neither ASF applicant is conforming with all statutory and regulatory review criteria. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to net revenue. Moreover, a comparison between the hospitals and ASFs would not be valid in this case given the differences in the scope of services and care settings.

Projected Average Operating Expense per Case

The following tables show the projected operating expense per OR case in the third year of operation. Please note that the UNC Hospitals-RTP application provides separate financial results for Inpatient and Ambulatory Surgery and that its Ambulatory Surgery financial statements include outpatient OR cases and

procedure room procedures. As such, UNC Health has provided calculations in the tables below using Form C inpatient and outpatient OR cases to demonstrate UNC Hospitals-RTP's operating expense per OR case.

UNC Hospitals-RTP Operating Expense per Patient/Cases – Project Year 3

	Projected Total Patient/ Cases	*Operating Expense*	*Average Operating Expense per Case*
UNC Hospitals-RTP Total IP	2,238	$42,521,459	$19,000
UNC Hospitals-RTP Ambulatory Surgery + Procedures	1,710	$14,282,521	$8,352

Source: Forms C and F.2b.

UNC Hospitals-RTP Operating Expense per OR Case – Project Year 3

	Projected Total Cases	*Average Operating Expense per Case*	*Operating Expense*
UNC Hospitals-RTP IP OR Cases	*764*	*$19,000*	*$14,515,815*
UNC Hospitals-RTP OP OR Cases	*1,161*	*$8,352*	*$9,697,080*
UNC Hospitals-RTP OR Total	**1,925**		**$24,212,895**

Please note that UNC Health has compared applications proposing to develop hospital-based ORs (UNC Hospitals-RTP and DUH ORs) separately from applications proposing to develop ASF ORs (SSC and Arringdon ASC) in order to provide conclusive comparisons among the applicants given the differences between the applicants' facilities.

Hospitals Operating Expense per OR Case – Project Year 3

	Projected Total Cases	*Operating Expense*	*Operating Expense per Case*
UNC Hospitals-RTP OR Total (from above)	1,925	$24,212,895	$12,578
DUH ORs	43,857	$1,812,568,353	$41,329

Source: Forms C and F.2b.

As shown above, UNC Hospitals-RTP projects the lowest average operating expense per case among hospital applicants. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to operating expense for hospital applicants.

ASFs Operating Expense per OR Case – Project Year 3

	Projected Total Cases	*Operating Expense*	*Average Operating Expense per Case*
SSC	6,803	$15,467,192	$2,274

	Projected Total Cases	*Operating Expense*	*Average Operating Expense per Case*
Arringdon ASC	6,943	$28,247,694	$4,069

Source: Forms C and F.2b.

As shown above, SSC projects the lowest average operating expense per case among ASF applicants. However, neither ASF applicant is conforming with all statutory and regulatory review criteria. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to operating expense. Moreover, a comparison between the hospitals and ASFs would not be valid in this case given the differences in the scope of services and care settings.

COMPARATIVE ANALYSIS – ACUTE CARE BEDS

The UNC Hospitals-RTP acute care bed and operating room application (Project ID # J-12065-21) and the DUH Beds application (Project ID # J-12069-21) each propose to develop acute care beds in response to the *2021 SMFP* need determination for Durham County. Given that both applicants propose to meet all of the need for the 40 additional acute care beds in Durham County, both cannot be approved as proposed. To determine the comparative factors that are applicable in this review, UNC Health examined recent Agency findings for competitive acute care bed reviews. Based on that examination and the facts and circumstances of the competing applications in this review, UNC Health considered the following comparative factors:

- Conformity with Review Criteria
- Geographic Accessibility
- Provider Support
- Historical Utilization
- Patient Access to a New Provider
- Access by Underserved Groups
    - Projected Charity Care
    - Projected Medicare
    - Projected Medicaid
- Projected Average Net Revenue per Case
- Projected Average Operating Expense per Case

UNC Health believes that the factors presented above and discussed in turn below should be used by the Project Analyst in reviewing the competing applications.

Conformity with Applicable Statutory and Regulatory Review Criteria

As discussed in the application-specific comments above, the DUH Beds application is non-conforming with multiple statutory and regulatory review criteria. In contrast, the UNC Hospitals-RTP application is conforming with all applicable statutory and regulatory review criteria. Therefore, with regard to conformity with statutory and regulatory review criteria, the UNC Hospitals-RTP application is the most effective alternative.

Geographic Accessibility

Both applicants, UNC Hospitals-RTP and DUH propose to develop the acute care beds in Durham County. DUH proposes to add the acute care beds to its existing facility in Durham and UNC Hospitals-RTP proposes to develop the 40 beds in a new acute care hospital in Research Triangle Park. Only the UNC Hospitals-RTP application proposes to develop a new site of care for acute care beds. As demonstrated in UNC Hospitals-RTP's application, the south region of Durham County where the proposed hospital will be located is a highly populated and fast growth region that lacks a hospital. Further, the DUH Beds application is not conforming with statutory and regulatory review criteria. Therefore, with regard to geographic accessibility, the UNC Hospitals-RTP application is the most effective alternative.

Provider Support

Both applications proposing acute care beds document adequate provider support of their proposed project. Regardless, UNC Hospitals-RTP is the only applicant that is conforming with all statutory and regulatory review criteria. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to provider support.

Historical Utilization

Generally, the application submitted by the applicant with the highest utilization of its available acute care beds is the more effective alternative with regard to this comparative factor. However, UNC Health is not an existing provider of acute care beds in Durham County. Regardless, the application submitted by DUH is not conforming with statutory and regulatory review criteria. Therefore, it cannot be an effective alternative with regard to historical utilization. Further, since UNC Health is not an existing provider of inpatient services in Durham County, this comparative factor is not a valuable tool to compare the applications.

Patient Access to a New Provider

UNC Health's proposed project will enable the development of a new provider and the first new hospital in Durham County in over 45 years, enhancing competition for acute care services. DUH operates two existing acute care hospitals in Durham County with 1,364 total acute care beds. As such, with regard to patient access to a new provider, UNC Hospitals-RTP is the most effective alternative.

Access by Underserved Groups

Projected Charity Care

The following table illustrates each applicant's percentage of total acute care bed patients to be provided to Charity Care patients as stated in Section L.3 of the respective applications.

Charity Care as Percentage of Total – Project Year 3

	Charity Care % of Total
UNC Hospitals-RTP	8.9%
DUH Beds	4.5%

Source: Section L.3.

As shown in the table above, UNC Hospitals-RTP projects to serve the highest percentage of charity care patients. Therefore, with regard to access to charity care patients, UNC Hospitals-RTP is the most effective alternative.

Please note that UNC Health does not believe it would be appropriate to compare the applicants based on charity care dollar amounts given the differences in facility size of the applicants. Comparisons of percentages of total patients served allow direct comparisons of facilities of differing size.

Projected Medicare

The following table illustrates each applicant's percentage of total acute care patients to be provided to Medicare patients as stated in Section L.3 of the respective applications.

Medicare as Percentage of Total – Project Year 3

	Medicare % of Total
UNC Hospitals-RTP	44.6%
DUH Beds	50.2%

Source: Forms C and L.3.

As shown in the table above, DUH projects to serve the highest percentage of Medicare patients. Regardless, UNC Hospitals-RTP is the only applicant that is conforming with all statutory and regulatory review criteria. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to access to Medicare patients.

Projected Medicaid

The following table illustrates each applicant's percentage of total OR cases to be provided to Medicaid patients as stated in Section L.3 of the respective applications.

Medicaid as Percentage of Total – Project Year 3

	Medicaid % of Total
UNC Hospitals-RTP	19.0%
DUH Beds	13.1%

Source: Section L.3.

As shown in the table above, UNC Hospitals-RTP projects to serve the highest percentage of Medicaid patients. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to access to Medicaid patients.

Projected Average Net Revenue per Case

The following tables show the projected net revenue per acute care bed patient in the third year of operation.

Net Revenue per Acute Care Bed Patient – Project Year 3

	Projected Total Patients	*Net Revenue*	*Average Net Revenue per Patient*
UNC Hospitals-RTP	2,238	$47,034,482	$21,016

	Projected Total Patients	*Net Revenue*	*Average Net Revenue per Patient*
DUH Beds	46,182	$1,152,860,372	$24,963

Source: Forms C and F.2b.

As shown above, UNC Hospitals-RTP projects the lowest average net revenue per patient. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to net revenue.

Projected Average Operating Expense per Case

The following tables show the projected operating expense per acute care bed patient in the third year of operation.

Hospitals Operating Expense per Acute Care Bed Patient – Project Year 3

	Projected Total Patients	*Operating Expense*	*Average Operating Expense per Patient*
UNC Hospitals-RTP	2,238	$42,521,459	$19,000
DUH Beds	46,182	$1,510,709,179	$32,712

Source: Forms C and F.2b.

As shown above, UNC Hospitals-RTP projects the lowest average operating expense per patient. Therefore, UNC Hospitals-RTP is the most effective alternative with regard to operating expense.

Please note that in no way does UNC Health intend for these comments to change or amend its application filed on April 15, 2021. If the Agency considers any of these comments to be amending UNC Health's application, those responses should not be considered.