Wake Forest Baptist Health
Petition for Adjustment to the Proposed 2019 SMFP
Davidson County Nursing Facility Bed Need Determination
July 25, 2018

1. Name, Address, Email Address, and Phone Number of Petitioner:

Wake Forest Baptist Health
Marisa A. Barone
Senior Health Planner, Strategic & Business Planning
Medical Center Boulevard
Winston-Salem, NC 27157
mbarone@wakehealth.edu
(336) 713-0697

2. Statement for the Proposed Adjustment

Wake Forest Baptist Health ("WFBH") requests that an adjustment be made to the 2019 State Medical Facilities Plan ("SMFP") need determination for the addition of 15 nursing facility beds in Davidson County.

3. Reasons for the Proposed Adjustment

Wake Forest Baptist Health is a regional healthcare system anchored by North Carolina Baptist Hospital ("NCBH"), an 885-bed tertiary care hospital in Winston-Salem that is the adult and pediatric Level I Trauma Center and Burn Center for the region. The system's network encompasses the 144-bed Brenner Children's Hospital and the 167-bed Comprehensive Cancer Center, located within NCBH, and three community hospitals: the 94-bed Lexington Medical Center ("LMC") in Davidson County, the 50-bed Davie Medical Center ("DMC") in Davie County, and the 130-bed Wilkes Medical Center ("WMC") in Wilkes County.

The development of DMC in Bermuda Run, Davie County consisted of a relocation of the original hospital from Mocksville, NC. Per conditions of a settlement agreement, the relocation of the Mocksville hospital occurred in two phases, with the first phase consisting of the relocation of outpatient services completed in 2013 and the second phase consisting of the relocation of inpatient services completed in 2017. As a result of the relocation of outpatient services, DMC lost its Critical Access Hospital ("CAH") status with CMS. However, the DMC-Mocksville facility was permitted by the NC DHHS Acute and Home Care Licensure Section and the Office of Rural Health and Community Care to maintain swing bed services until the 2017 relocation of inpatient services. As a swing bed provider, DMC was able to use its acute care beds to provide either acute or skilled nursing care. DMC's ability to provide swing bed services ceased upon the relocation of inpatient services to Bermuda Run in 2017.

The swing beds at DMC played an important role in caring for both patients of the WFBH health system and for the community in general. The annual average daily skilled nursing census at DMC ranged from 10-17 patients during FFYs 2014, 2015, and 2016. In FFY 2016, 89% of the

skilled nursing days at DMC were attributed to medically underserved patients, with self-pay/charity patients comprising 28% of this total and Medicaid patients comprising 61%. Please reference *Attachment 1* for the relevant pages from DMC's hospital license renewal applications.

Closure of the Mocksville campus of DMC and the subsequent loss of the swing bed access has created a gap in the care continuum for patients served by WFBH. In general, the patients that occupied the swing beds at DMC were patients that were medically complex and / or medically underserved, and as such are now very difficult to transfer to existing skilled nursing facilities in the region. These "difficult to place" patients often have one or more of the following attributes:

> *A patient who does not have health insurance or is not covered by a managed care plan or a governmental health program; is awaiting approval for Medicaid eligibility; who is a substance abuser being treated for medical conditions related to substance abuse; is morbidly obese; is ready for discharge and admission for skilled-nursing or other long-term care available at the Facility, but who cannot be placed at other area nursing facilities due to presence of a tracheotomy or decubitus ulcers, the need for IV antibiotics, Wound Vac treatment, bariatric treatment needs, requirement of bi-pap assistance, HIV or MRSA status, Medicare replacement plan status, dialysis, and other high costs medical needs*

These patients often meet the CMS clinical eligibility requirements for a skilled nursing facility ("SNF"). However, due to their medical complexity and / or their insurance status, WFBH is unable to find a facility that will accept them. As a result, the patients remain in acute care hospital beds. Although capacity exists at several skilled nursing facilities in Davie, Davidson, and Forsyth Counties, WFBH is unable to access this capacity for these "difficult to place" patients because these patients would place undue financial pressure on the SNF or have unique needs that are beyond the capabilities of many SNFs. Please reference *Attachment 2* for an assessment of SNF capacity in Davidson, Davie, and Forsyth counties[1].

In addition to the need to add capacity for "difficult to place" patients occupying acute care beds, WFBH has a need for more skilled nursing capacity to support patients served by the CHESS accountable care organization ("ACO")[2]. The Next Generation ACO ("NGACO") SNF three-day rule waiver makes available to approved NGACOs, such as CHESS, a waiver of the rule requiring a three-day stay in an inpatient hospital, acute care hospital, or critical access hospital with swing beds prior to admission to a SNF. In other words, this benefit enhancement allows for beneficiary admission to approved NGACO Next Generation Participant or Preferred Provider SNFs either directly or with an inpatient hospital stay of fewer than three days. The intent of this benefit is to allow for expedited placement of patients in the most appropriate care setting, thus improving care quality for the patient while improving value for the both the patient and the provider facility through care provision in a lower-cost setting. In order for a SNF to be eligible, it must have an

[1] 100 of the SNF beds in the Forsyth county inventory are attributed to Liberty Commons of Kernersville, which isn't currently operational and doesn't seem to have plans to open anytime soon. The inclusion of these beds in the inventory deflates the overall Forsyth County occupancy rate

[2] CHESS – Cornerstone Health Enablement Strategic Solutions is a CMS Next Generation ACO of which WFBH is a member

overall rating of three or more stars for the past 12 months under the CMS Five-Star Nursing Home Quality Rating System[3]. As illustrated in *Attachment 2* and summarized in the table below, there is limited capacity at SNFs with at least a three star rating in Forsyth, Davidson, and Davie counties.

Table 1 Skilled Nursing Facility Capacity
Facilities with at Least a Three Star Rating
Davidson, Davie, and Forsyth County

County	Name	Total Planning Inventory	Nursing Care Days	Occupancy Rate	Overall Star Rating
Davidson	Abbotts Creek Center	64	22,303	95.5	5
Davidson	Alston Brook	100	33,847	92.7	4
Davidson	Mountain Vista Health Park	60	20,198	92.2	5
Davidson	Piedmont Crossing	68	35,914	86.3*	4
Forsyth	Brookridge Retirement Community	58	22,838	81.3	4
Forsyth	Oak Forest Health and Rehabilitation	152	57,833	93.2*	4
Forsyth	PruittHealth-High Point	100	28,417	77.9	3
Forsyth	Accordius Health at Clemmons	120	26,533	60.6	3
Forsyth	Salemtowne	0	27,769	76.1*	3
Forsyth	Trinity Elms	96	34,144	93.5*	4
Forsyth	Trinity Glen	116	40,218	94.2*	5

Data Source: Proposed 2019 SMFP, 2018 License Renewal Applications, and CMS website
Note: Davie County does not have any SNFs with at least a three star rating
**Occupancy rate based on # of licensed/available beds, not # of beds in planning inventory*

Wake Forest Baptist Health has conducted an assessment of long length of stay patients bedded at NCBH to estimate the total potential daily census of patients that are appropriate to be placed in a skilled nursing bed, but are not due to the access issues outlined above. The result of this assessment, based on in-depth quantitative analysis in conjunction with input from respective physician leaders, is a total potential average daily census of 41. Patients originating from Forsyth, Davidson, and Davie Counties comprise 16 of the total census of 41.

WFBH has determined that 15 skilled nursing facility beds will be sufficient to meet the Wake Forest Baptist Health and community need for "difficult to place" patients as well as the CHESS ACO need for access to Next Generation Participant or Preferred Provider skilled nursing beds. This determination is based on the following: 1) WFBH analysis of "difficult to place" patient census results in a total potential average daily census of 16 patients from Forsyth, Davidson, and Davie Counties that could reasonably be expected to fill these beds; and 2) historic utilization of the swing beds at DMC illustrates that the annual average daily census ranged from a low of 10 to a high of 17.

While the proposed skilled nursing beds will serve patients from a wider geography than Davidson County alone, WFBH is proposing the adjusted need determination in Davidson County for several reasons: 1) Davidson County represents the second greatest concentration of long length of stay, "difficult to place" patients for WFBH, behind only Forsyth County; 2) Davidson County had the second highest patient origin for DMC swing bed patients[4]; 3) if the petition is

[3] https://innovation.cms.gov/Files/x/pioneeraco-snfwaiver.pdf
[4] Reference *Attachment 2*.

approved, WFBH intends to seek CON approval to develop the skilled nursing beds at LMC in order to leverage the existing infrastructure of that hospital; and 4) Davidson County is proximate for patients served by the CHESS ACO, which includes concentrations of providers and patients in High Point in Guilford County, Lexington in Davidson County, and Winston-Salem in Forsyth County.

Prior petitions[5] seeking adjusted need determination in similar circumstances have been approved by the SHCC.

- In 2017, Bermuda Village petitioned for an adjusted need determination for 21 nursing facility beds in Davie County in the 2018 SMFP. This petition was supported by the high utilization of Bermuda Village nursing facility beds although other facilities in Davie County did not have high utilization. Bermuda Village also supported its petition by noting the lack of private rooms in Davie County and outmigration of nursing facility patients. In the Agency findings, the occupancy rate of Davie County skilled nursing beds was recalculated based on operational beds, which increased the occupancy rate from 71% to 86%. The Agency recommended approval of this petition and the SHCC agreed with the recommendation.

- In 2017, Novant Health and HealthSouth petitioned for an adjusted need determination for 50 inpatient rehabilitation beds in HSA III. The Agency recommendation included an adjusted need determination for eight beds which was accepted by the SHCC and included in the 2018 SMFP.

- In 2015, LifeCare Hospitals of North Carolina requested an adjusted need determination for 40 additional nursing facility beds in the 2016 SMFP for medically complex patients. In this petition, LifeCare highlights the same challenges faced by WFBH with "difficult to place" patients. The Agency recommended approval of this petition, with the following qualifying language:

  > *In response to a petition, the State Health Coordinating Council approved the adjusted need determination for 40 additional nursing care beds for Nash County. Applicants must demonstrate these beds will be limited to patients who, upon admission, have the following conditions/needs: ventilator-dependency; tracheostomies; tracheostomies with bi-level positive airway pressure; bariatric status with tracheostomies; bariatric status over 300 pounds; IV antibiotics administered more than once daily; total parenteral nutrition; complex wounds; dialysis; ventilator dependency and/or tracheostomies combined with dialysis.*

The LifeCare petition is the most similar to the situation here. In both cases, the SMFP need methodology does not take into account the impact of difficult to place patients in acute care or LTCH beds. In both scenarios, there is an unmet need for skilled nursing capacity to support the unique needs of the medically complex and / or medically underserved patients that the SMFP is unable to quantify. These needs cannot be met by existing providers as these providers are

[5] The three petitions referenced herein and the Agency Reports on those petitions are attached as *Attachments 3-5*, respectively. Exhibits to those petitions are not included.

unwilling and / or unable to accept these patients. As a result, the patients remain in an unnecessarily higher-cost and higher level of care setting that is no longer appropriate for their needs.

A. Statement of the Adverse Effects on the Population

This proposal will have no adverse effect on the Davidson County population. To the contrary, the approval of this petition will create access to skilled nursing services for patients that are underserved as evidenced by the supporting information above. The intent of this petition is not to enable the development of skilled nursing beds that would compete with existing SNFs in the area; WFBH works with and discharges patients to those SNFs on a regular basis. The petition would, however, enable the development of skilled nursing beds to serve a patient population that currently must remain in an acute care hospital after their acute condition has subsided, due specifically to the lack of post-acute care resources for these patients.

B. Statement of the Alternatives Considered

WFBH considered several alternatives to petitioning for SNF beds in Davidson County. Maintaining the status quo was considered; however, given the accessibility barriers to skilled nursing placement for this population, this alternative was not deemed viable. WFBH considered petitioning for SNF beds in Davie County, however the need is greater in Davidson County and the desire to ultimately develop the beds at LMC eliminated this as an option. Lastly, WFBH considered a partnership with an existing SNF. However, as illustrated in the table above, there are a limited number of SNFs with at least a three star rating and the excess capacity needed to support WFBH's patients' needs.

4. The Project Will Not Result in an Unnecessary Duplication of Services

Approval of this petition will not result in an unnecessary duplication of services. This petition is requesting an adjusted need determination to serve a unique subset of patients that have inadequate access to skilled nursing services as a result of their medical complexity and / or insurance status. WFBH regularly attempts to place these patients in existing skilled nursing facilities; however, the existing facilities will not accept the patients.

5. The Project is Consistent with the Three Basic Principles Governing the Development of the SMFP: Safety and Quality, Access and Value

A. Safety and Quality

WFBH agrees with the SMFP's recognition of "the importance of systematic and ongoing improvement in the quality of health services". The requested adjusted need determination for 15 nursing facility beds in Davidson County is consistent with this principle. As noted above, the proposed beds will serve medically complex and underserved patients that currently lack sufficient access to skilled nursing and subacute rehabilitation care. These hard to place patients can be optimally cared for in a facility that has a focus on improving the patients' functional capacity and safety.

B. Access

WFBH also fully supports the principle of "equitable access to timely, clinically appropriate and high quality health care for all the people of North Carolina." WFBH provides high quality inpatient and outpatient services that regularly and routinely serve indigent and medically underserved patients. WFBH subsidizes services to indigent and medically underserved patients by adhering to its Financial Assistance Policy and providing over $57 million annually in charity care. Approval of this petition will result in enhanced access to nursing facility beds for the medically underserved. As referenced above, one of the variables that may make a patient difficult to place is a lack of health insurance. This lack of health insurance prevents access to the care that is needed, and instead results in patients remaining in the acute care setting. During FFY 2016, 89% of DMC skilled nursing inpatient days of care were attributed to self-pay/charity and Medicaid patients. Please reference *Attachment 1* for the relevant pages from the DMC 2017 License Renewal Application.

C. Value

WFBH supports the SMFP's definition of "health care value" as "the maximum health care benefit per dollar expended." In this case, the proposed need determination will further the ability of the health care system to provide greater value to patients and payers. A nursing facility bed represents the optimal setting for patients who no longer need acute care, but continue to need ongoing nursing and/or rehabilitation care for the complex medical conditions identified in this petition. SNF care is a fraction of the cost of the same care in a hospital, which is where many patients wait until a skilled nursing care bed is available. Furthermore, WFBH can develop the requested beds in a cost-effective manner on the existing LMC campus where they would be co-located with multiple existing support services.

Conclusion

While WFBH generally supports the nursing facility bed need methodology in the SMFP, in this instance, the methodology is unable to articulate the needs of medically complex and medically underserved patients in acute care hospitals awaiting access to skilled nursing beds.

WFBH respectfully requests that the need determination for 15 additional nursing facility beds in Davidson County be included in the 2019 SMFP.

INDEX OF ATTACHMENTS:
WAKE FOREST BAPTIST HEALTH PETITION TO SHCC
JULY 25, 2018

ATTACHMENT	DESCRIPTION
1	Pertinent Pages from DMC License Renewal Applications
2	Skilled Nursing Facility Capacity Assessment
3	Bermuda Village Petition and Agency Report
4	Novant Health and HealthSouth Petition and Agency Report
5	LifeCare Petition and Agency Report

ATTACHMENT 1

North Carolina Department of Health and Human Services
Division of Health Service Regulation
Acute and Home Care Licensure and Certification Section
1205 Umstead Drive, 2712 Mail Service Center
Raleigh, North Carolina 27699-2712
Telephone: (919) 855-4620 Fax: (919) 715-3073

For Official Use Only
License # H0171 Medicare # **340187**
FID #: 080175
PC _____ Date _____

License Fee: **$1,767.50**

2015
HOSPITAL LICENSE
RENEWAL APPLICATION

Legal Identity of Applicant: **Davie County Emergency Health Corporation**
(Full legal name of corporation, partnership, individual, or other legal entity owning the enterprise or service.)

Doing Business As
(d/b/a) name(s) under which the facility or services are advertised or presented to the public:

PRIMARY: **Davie Medical Center**
Other: _____
Other: _____

Facility Mailing Address: Medical Center Blvd

Winston-Salem, NC 27157

Facility Site Address: 329 NC Highway 801 N
Bermuda Run, NC 27006-7905
County: Davie
Telephone: (336)751-8100
Fax: (336)716-8202

PAID
CK NO. 004272
DATE 1-15-15
$1,767.50

Administrator/Director: Chad Brown
Title: President
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Chief Executive Officer: _____ **Title:** _____
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Name of the person to contact for any questions regarding this form:

Name: Lynn Pitman **Telephone:** 336-716-1046

E-Mail: lpitman@wakehealth.edu

Copy 2/9/2015

Facility Data

A. **Reporting Period** All responses should pertain to the period **October 1, 2013 to September 30, 2014.**

B. **General Information** (Please fill in any blanks and make changes where necessary.)

a. Admissions to Licensed Acute Care Beds: **include responses to "a – q" on page 5; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	148	
b. Discharges from Licensed Acute Care Beds: **include responses to "a – q" on page 5; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	140	
c. Average Daily Census: **include responses to "a – q" on page 6; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	9.6	
d. Was there a permanent change in the total number of licensed beds during the reporting period?	Yes	No X
If 'Yes', what is the current number of licensed beds?		
If 'Yes', please state reason(s) (such as additions, alterations, or conversions) which may have affected the change in bed complement:		
e. Observations: Number of patients in observation status and not admitted as inpatients, excluding Emergency Department patients.	0	

C. Designation and Accreditation

1. Are you a designated trauma center? ____ Yes (____ Designated Level #) ____X____ No
2. Are you a critical access hospital (CAH)? ____ Yes ____X____ No
3. Are you a long term care hospital (LTCH)? ____ Yes ____X____ No
4. Is this facility TJC accredited? ____X____ Yes ____ No Expiration Date: 12-31-16
5. Is this facility DNV accredited? ____ Yes ____X____ No Expiration Date: ____
6. Is this facility AOA accredited? ____ Yes ____X____ No Expiration Date: ____
7. Are you a Medicare deemed provider? ____X____ Yes ____ No

D. Beds by Service (Inpatient) *continued*

Number of Swing Beds *	Up to 49
Number of Skilled Nursing days in Swing Beds	3,519
Number of unlicensed observation beds	-

* means a hospital designated **as a swing-bed hospital** by CMS (Centers for Medicare & Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (total should be the same as D.1.a – q total on p. 6)	Emergency Visits (total should be the same as F.3.b. on p. 8)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (total should be same as F.8.d. Total Surgical Cases-Inpatient Cases on p. 13)	Ambulatory Surgical Cases (total should be same as F.8.d. Total Surgical Cases-Ambulatory Cases on p. 13)
Self Pay/Indigent/Charity	457	2,308	1,258	-	61
Medicare & Medicare Managed Care	1,170	2,054	12,025	-	1,134
Medicaid	1,620	2,575	2,398	-	102
Commercial Insurance	0	185	355	-	6
Managed Care	216	3,086	11,573	-	788
Other (Specify)	56	423	2,396	-	162
TOTAL	3,519	10,631	30,005	-	2,253

liability, Other Government Programs

F. Services and Facilities

1. Obstetrics	Enter Number of Infants
a. Live births (Vaginal Deliveries)	-
b. Live births (Cesarean Section)	-
c. Stillbirths	-

d. Delivery Rooms - Delivery Only (not Cesarean Section)	-
e. Delivery Rooms - Labor and Delivery, Recovery	-
f. Delivery Rooms – LDRP (include Item **"D.1.m"** on Page 6)	-
g. Normal newborn bassinets (Level I Neonatal Services) Do not include with totals under the section entitled Beds by Service (Inpatient)	-

2. Abortion Services Number of procedures per Year -

Patient Origin - General Acute Care Inpatient Services

Facility County: Davie

In an effort to document patterns of utilization of General Acute Care Inpatient Services in North Carolina hospitals, please provide the county of residence for each patient admitted to your facility.

County	No. of Admissions	County	No. of Admissions	County	No. of Admissions
1. Alamance		37. Gates		73. Person	
2. Alexander	2	38. Graham		74. Pitt	
3. Alleghany		39. Granville		75. Polk	
4. Anson		40. Greene		76. Randolph	4
5. Ashe	2	41. Guilford	4	77. Richmond	
6. Avery	1	42. Halifax		78. Robeson	
7. Beaufort		43. Harnett		79. Rockingham	2
8. Bertie		44. Haywood		80. Rowan	9
9. Bladen		45. Henderson		81. Rutherford	
10. Brunswick		46. Hertford		82. Sampson	
11. Buncombe		47. Hoke		83. Scotland	
12. Burke	2	48. Hyde		84. Stanly	
13. Cabarrus		49. Iredell	4	85. Stokes	5
14. Caldwell	3	50. Jackson		86. Surry	19
15. Camden		51. Johnston		87. Swain	
16. Carteret		52. Jones		88. Transylvania	
17. Caswell		53. Lee		89. Tyrrell	
18. Catawba	8	54. Lenoir		90. Union	
19. Chatham		55. Lincoln	2	91. Vance	
20. Cherokee		56. Macon		92. Wake	
21. Chowan		57. Madison		93. Warren	
22. Clay		58. Martin		94. Washington	
23. Cleveland		59. McDowell		95. Watauga	
24. Columbus		60. Mecklenburg		96. Wayne	
25. Craven		61. Mitchell		97. Wilkes	15
26. Cumberland		62. Montgomery		98. Wilson	
27. Currituck		63. Moore		99. Yadkin	2
28. Dare		64. Nash		100. Yancey	
29. Davidson	11	65. New Hanover			
30. Davie	3	66. Northampton		101. Georgia	
31. Duplin		67. Onslow		102. South Carolina	
32. Durham		68. Orange		103. Tennessee	
33. Edgecombe		69. Pamlico		104. Virginia	
34. Forsyth	35	70. Pasquotank		105. Other States	7
35. Franklin		71. Pender		106. Other	
36. Gaston		72. Perquimans		**Total No. of Patients**	140

REC'D JAN 2 0 2016

North Carolina Department of Health and Human Services
Division of Health Service Regulation
Acute and Home Care Licensure and Certification Section
1205 Umstead Drive, 2712 Mail Service Center
Raleigh, North Carolina 27699-2712
Telephone: (919) 855-4620 Fax: (919) 715-3073

For Official Use Only
License # H0171 Medicare # **340187**
FID #: 080175
PC 25 Date 1/25/16

License Fee: **$1,767.50**

2016
HOSPITAL LICENSE
RENEWAL APPLICATION

Legal Identity of Applicant: **Davie County Emergency Health Corporation**
(Full legal name of corporation, partnership, individual, or other legal entity owning the enterprise or service.)

Doing Business As
(d/b/a) name(s) under which the facility or services are advertised or presented to the public:

PRIMARY: **Davie Medical Center**
Other: _____
Other: _____

Facility Mailing Address: Medical Center Blvd
Winston-Salem, NC 27157

Facility Site Address: 329 NC Highway 801 N
Bermuda Run, NC 27006-7905
County: Davie
Telephone: (336)751-8100
Fax: (336)716-8202

Administrator/Director: Chad Brown
Title: President
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Chief Executive Officer: John D. McConnell, MD **Title:** CEO
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Name of the person to contact for any questions regarding this form:

Name: Lynn Pitman **Telephone:** (336)716-1046

E-Mail: lpitman@wakehealth.edu

PAID
CK NO. 007342
DATE 1-20-16
$1,767.50

"The N.C. Department of Health and Human Services does not discriminate on the basis of race, color, national origin, religion, age, or disability in employment or the provision of services."

*submission written in black
*changes noted in red

Facility Data

A. **Reporting Period** All responses should pertain to the period **October 1, 2014 to September 30, 2015.**

B. **General Information** (Please fill in any blanks and make changes where necessary.)

a. Admissions to Licensed Acute Care Beds: **include responses to "a – q" on page 6; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	228	
b. Discharges from Licensed Acute Care Beds: **include responses to "a – q" on page 6; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	228	
c. Average Daily Census: **include responses to "a – q" on page 6; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	166	
d. Was there a permanent change in the total number of licensed beds during the reporting period?	Yes	No X
If 'Yes', what is the current number of licensed beds?		
If 'Yes', please state reason(s) (such as additions, alterations, or conversions) which may have affected the change in bed complement:		
e. Observations: Number of patients in observation status and not admitted as inpatients, excluding Emergency Department patients.	0	

C. Designation and Accreditation

1. Are you a designated trauma center? ___Yes X No
   Designated Level # _____
2. Are you a critical access hospital (CAH)? ___Yes X No
3. Are you a long term care hospital (LTCH)? ___Yes X No
4. Is this facility TJC accredited? X Yes ___No Expiration Date: 12-31-2016
5. Is this facility DNV accredited? ___Yes X No Expiration Date: _____
6. Is this facility AOA accredited? ___Yes X No Expiration Date: _____
7. Are you a Medicare deemed provider? X Yes ___No

D. Beds by Service (Inpatient) *continued*

Number of Swing Beds *	Up to 49
Number of Skilled Nursing days in Swing Beds	6,041
Number of unlicensed observation beds	–

* means a hospital designated **as a swing-bed hospital** by CMS (Centers for Medicare & Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (total should be the same as D.1.a – q total on p. 6)	Emergency Visits (total should be the same as F.3.b. on p. 8)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (total should be same as F.8.d. Total Surgical Cases-Inpatient Cases on p. 12)	Ambulatory Surgical Cases (total should be same as F.8.d. Total Surgical Cases-Ambulatory Cases on p. 12)
Self Pay/Indigent/Charity	1,406	2,602	1,064	0	53
Medicare & Medicare Managed Care	1,186	2,526	14,775	0	1,433
Medicaid	2,999	3,060	2,451	0	129
Commercial Insurance	–	125	282	0	10
Managed Care	331	3,786	14,798	0	951
Other (Specify)	121	418	2,145	0	177
TOTAL	6,041	12,517	35,515	0	2,753

F. Services and Facilities

1. Obstetrics	Enter Number of Infants
a. Live births (Vaginal Deliveries)	–
b. Live births (Cesarean Section)	–
c. Stillbirths	–

d. Delivery Rooms - Delivery Only (not Cesarean Section)	–
e. Delivery Rooms - Labor and Delivery, Recovery	–
f. Delivery Rooms – LDRP (include Item **"D.1.m"** on Page 6)	–
g. Normal newborn bassinets (Level I Neonatal Services) Do not include with totals under the section entitled Beds by Service (Inpatient)	–

2. Abortion Services Number of procedures per Year –

(Feel free to footnote the type of abortion procedures reported)

All responses should pertain to **October 1, 2014 through September 30, 2015**.

Patient Origin - General Acute Care Inpatient Services

Facility County: Davie

In an effort to document patterns of utilization of General Acute Care Inpatient Services in North Carolina hospitals, please provide the county of residence for each patient admitted to your facility.

County	No. of Admissions	County	No. of Admissions	County	No. of Admissions
1. Alamance	2	37. Gates		73. Person	
2. Alexander	2	38. Graham		74. Pitt	
3. Alleghany		39. Granville		75. Polk	
4. Anson		40. Greene		76. Randolph	11
5. Ashe		41. Guilford	16	77. Richmond	
6. Avery	1	42. Halifax		78. Robeson	
7. Beaufort		43. Harnett		79. Rockingham	7
8. Bertie		44. Haywood		80. Rowan	8
9. Bladen		45. Henderson		81. Rutherford	
10. Brunswick		46. Hertford		82. Sampson	
11. Buncombe		47. Hoke		83. Scotland	
12. Burke	5	48. Hyde		84. Stanly	
13. Cabarrus	2	49. Iredell	5	85. Stokes	9
14. Caldwell	8	50. Jackson		86. Surry	7
15. Camden		51. Johnston	1	87. Swain	
16. Carteret		52. Jones		88. Transylvania	
17. Caswell		53. Lee		89. Tyrrell	
18. Catawba	7	54. Lenoir		90. Union	
19. Chatham		55. Lincoln		91. Vance	
20. Cherokee		56. Macon		92. Wake	
21. Chowan		57. Madison		93. Warren	
22. Clay		58. Martin		94. Washington	
23. Cleveland		59. McDowell		95. Watauga	
24. Columbus		60. Mecklenburg	2	96. Wayne	
25. Craven		61. Mitchell	1	97. Wilkes	7
26. Cumberland	1	62. Montgomery		98. Wilson	1
27. Currituck		63. Moore		99. Yadkin	10
28. Dare		64. Nash		100. Yancey	
29. Davidson	41	65. New Hanover			
30. Davie	16	66. Northampton		101. Georgia	
31. Duplin	54	67. Onslow		102. South Carolina	
32. Durham		68. Orange		103. Tennessee	1
33. Edgecombe		69. Pamlico		104. Virginia	7
34. Forsyth		70. Pasquotank		105. Other States	3
35. Franklin		71. Pender		106. Other	
36. Gaston		72. Perquimans		**Total No. of Patients**	228

RECD DEC 16 2016

North Carolina Department of Health and Human Services
Division of Health Service Regulation
Acute and Home Care Licensure and Certification Section
Regular Mail: 2712 Mail Service Center
Raleigh, North Carolina 27699-2712
Overnight UPS and FedEx only: 1205 Umstead Drive
Raleigh, North Carolina 27603
Telephone: (919) 855-4620 Fax: (919) 715-3073

For Official Use Only
License # H0171 Medicare # **340187**
FID #: 080175

PC dJ Date 12

License Fee: **$1,767.50**

2017
HOSPITAL LICENSE
RENEWAL APPLICATION

Legal Identity of Applicant: **Davie County Emergency Health Corporation**
(Full legal name of corporation, partnership, individual, or other legal entity owning the enterprise or service.)

Doing Business As
(d/b/a) name(s) under which the facility or services are advertised or presented to the public:

PRIMARY: **Davie Medical Center**
Other: _____
Other: _____

Facility Mailing Address: Medical Center Blvd

Winston-Salem, NC 27157

Facility Site Address: 329 NC Highway 801 N
Bermuda Run, NC 27006-7905
County: Davie
Telephone: (336)751-8100
Fax: (336)716-8202

PAID
CK NO. 010206
DATE 12-16-16
$1,767.50

Administrator/Director: Chad Brown
Title: President
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Chief Executive Officer: _____ **Title**: _____
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Name of the person to contact for any questions regarding this form:

Name: Lynn Pitman **Telephone**: 336-715-1046

E-Mail: lpitman@wakehealth.edu

Facility Data

A. **Reporting Period** All responses should pertain to the period **October 1, 2015 to September 30, 2016.**

B. **General Information** (Please fill in any blanks and make changes where necessary.)

a. Admissions to Licensed Acute Care Beds: **include responses to "a – q" on page 6; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	134	
b. Discharges from Licensed Acute Care Beds: **include responses to "a – q" on page 6; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	144	
c. Average Daily Census: **include responses to "a – q" on page 6; exclude responses to "2-9" on page 6; and exclude normal newborn bassinets.**	12.0	
d. Was there a permanent change in the total number of licensed beds during the reporting period?	Yes	(No)
If 'Yes', what is the current number of licensed beds?		
If 'Yes', please state reason(s) (such as additions, alterations, or conversions) which may have affected the change in bed complement:		
e. Observations: Number of patients in observation status and not admitted as inpatients, excluding Emergency Department patients.	0	
f. Number of unlicensed Observation Beds	—	

C. Designation and Accreditation

1. Are you a designated trauma center? ___Yes __X__No
   Designated Level # _____
2. Are you a critical access hospital (CAH)? ___Yes __X__No
3. Are you a long term care hospital (LTCH)? ___Yes __X__No
4. Is this facility TJC accredited? __X__Yes ___No Expiration Date: 12-13-16
5. Is this facility DNV accredited? ___Yes __X__No Expiration Date: _____
6. Is this facility AOA accredited? ___Yes __X__No Expiration Date: _____
7. Are you a Medicare deemed provider? __X__Yes ___No

E. Swing Beds

Number of Swing Beds *	Up to 49
Number of Skilled Nursing days in Swing Beds	4,384

* in a hospital designated **as a swing-bed hospital** by CMS (Centers for Medicare & Medicaid Services)

F. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Campus – *If multiple sites*: _____

Primary Payer Source	Inpatient Days of Care * (total should be the same as D.1.a – q total on p. 6)	Emergency Visits (total should be the same as G.3.b. on p. 8)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (total should be same as 9.d. Total Surgical Cases-Inpatient Cases on p. 12)	Ambulatory Surgical Cases (total should be same as 9.d. Total Surgical Cases-Ambulatory Cases on p. 12)
Self Pay/Indigent/Charity	1,243	2,804	1,228	0	51
Medicare & Medicare Managed Care	118	2,807	18,328	0	1,514
Medicaid	2,663	3,255	2,834	0	133
Commercial Insurance	0	125	305	0	13
Managed Care	229	4,333	17,378	0	1,026
Other (Specify)	131	467	2,078	0	174
TOTAL	4,384	13,791	42,151	0	2,911

* Represents swing days from Table E

G. Services and Facilities

1. Obstetrics	Enter Number of Infants
a. Live births (Vaginal Deliveries)	–
b. Live births (Cesarean Section)	–
c. Stillbirths	–

d. Delivery Rooms - Delivery Only (not Cesarean Section)	–
e. Delivery Rooms - Labor and Delivery, Recovery	–
f. Delivery Rooms – LDRP (include Item **"D.1.m"** on Page 6)	–
g. Normal newborn bassinets (Level I Neonatal Services) Do not include with totals under the section entitled Beds by Service (Inpatient)	–

2. Abortion Services Number of procedures per Year –

(Feel free to footnote the type of abortion procedures reported)

Patient Origin - General Acute Care Inpatient Services

Facility County: Davie

In an effort to document patterns of utilization of General Acute Care Inpatient Services in North Carolina hospitals, please provide the county of residence for each patient admitted to your facility. **Must match number of admissions on page 5, Section B-a.**

County	No. of Admissions	County	No. of Admissions	County	No. of Admissions
1. Alamance		37. Gates		73. Person	
2. Alexander	1	38. Graham		74. Pitt	
3. Alleghany		39. Granville		75. Polk	1
4. Anson		40. Greene		76. Randolph	1
5. Ashe	1	41. Guilford	4	77. Richmond	
6. Avery		42. Halifax		78. Robeson	
7. Beaufort		43. Harnett		79. Rockingham	3
8. Bertie		44. Haywood		80. Rowan	5
9. Bladen		45. Henderson		81. Rutherford	
10. Brunswick		46. Hertford		82. Sampson	
11. Buncombe		47. Hoke		83. Scotland	
12. Burke	1	48. Hyde		84. Stanly	
13. Cabarrus	1	49. Iredell	6	85. Stokes	6
14. Caldwell	5	50. Jackson		86. Surry	13
15. Camden		51. Johnston		87. Swain	
16. Carteret		52. Jones		88. Transylvania	
17. Caswell		53. Lee		89. Tyrrell	
18. Catawba	4	54. Lenoir		90. Union	
19. Chatham		55. Lincoln	1	91. Vance	
20. Cherokee		56. Macon		92. Wake	1
21. Chowan		57. Madison		93. Warren	
22. Clay		58. Martin		94. Washington	
23. Cleveland		59. McDowell		95. Watauga	4
24. Columbus		60. Mecklenburg		96. Wayne	
25. Craven		61. Mitchell		97. Wilkes	10
26. Cumberland		62. Montgomery		98. Wilson	
27. Currituck		63. Moore	1	99. Yadkin	5
28. Dare		64. Nash		100. Yancey	
29. Davidson	13	65. New Hanover			
30. Davie	8	66. Northampton		101. Georgia	
31. Duplin		67. Onslow		102. South Carolina	
32. Durham		68. Orange		103. Tennessee	
33. Edgecombe		69. Pamlico		104. Virginia	2
34. Forsyth	33	70. Pasquotank		105. Other States	
35. Franklin		71. Pender		106. Other	4
36. Gaston		72. Perquimans		**Total No. of Patients**	134

ATTACHMENT 2

County	SNF	Total Licensed/Available Beds in Nursing Homes	CON Bed Transfer	Sum of Exclusions	Total Planning Inventory	Nursing Care Days*	Occupancy Rate	Overall Star Rating
Davidson	Abbotts Creek Center	64	-	-	64	22,303	95.5	5
Davidson	Mountain Vista Health Park	60	-	-	60	20,198	92.2	5
Davidson	Alston Brook	100	-	-	100	33,847	92.7	4
Davidson	Piedmont Crossing	114	-	46	68	35,914	86.3	4
Davidson	Avante at Thomasville	120	-	-	120	23,837	54.4	2
Davidson	Lexington Health Care Center	90	-	-	90	29,942	91.1	2
Davidson	Brian Center Nursing Care/Lexington	106	-	-	106	34,553	89.3	1
Davidson	Pine Ridge Health and Rehabilitation Center	140	-	-	140	44,344	86.8	1
Davie	Bermuda Commons Nursing and Rehabilitation Center	117	-	-	117	30,157	70.6	2
Davie	Autumn Care of Mocksville	96	-	-	96	25,232	72.0	1
Davie	Bermuda Village Retirement Center	15	-	-	15	4,377	79.9	1
Forsyth	Trinity Glen	117	-	1	116	40,218	94.2	5
Forsyth	Trinity Elms	100	-	4	96	34,144	93.5	4
Forsyth	Brookridge Retirement Community	77	-	19	58	22,838	81.3	4
Forsyth	Oak Forest Health and Rehabilitation	170	-	18	152	57,833	93.2	4
Forsyth	PruittHealth-High Point	100	-	-	100	28,417	77.9	3
Forsyth	Accordius Health at Clemmons (FKA Regency Care of Clemmons)	120	-	-	120	26,533	60.6	3
Forsyth	Salemtowne (CCRC)	100	-	100	-	27,769	76.1	3
Forsyth	Brian Center Health & Retirement/Winston Salem	40	-	-	40	11,647	79.8	2
Forsyth	Homestead Hills	40	-	2	38	11,147	76.3	2
Forsyth	Silas Creek Rehabilitation Center	90	-	-	90	27,902	84.9	2
Forsyth	The Oaks	151	-	-	151	39,697	72.0	2
Forsyth	Piney Grove Nursing & Rehabilitation Center	92	-	-	92	19,224	57.2	1
Forsyth	Summerstone Health and Rehabilitation Center (FKA Liberty Commons Nsg & Rehab Ctr of Springwood; will be relocating all of its 100 beds to Liberty Commons at Silas Creek)	100	(100)	-	-	20,776	56.9	1
Forsyth	Winston Salem Nursing & Rehabilitation Center	230	-	-	230	71,386	85.0	1
Forsyth	Arbor Acres United Methodist Retirement Community (CCRC)	83	-	83	-	27,705	91.5	N/A
Forsyth	Liberty Commons Nsg and Rehab Center of Kernersville**	100	-	-	100		-	N/A
Forsyth	Liberty Commons Nsg and Rehab Center of Silas Creek (will be receiving all 100 transferred beds from Summerstone facility)	-	100	-	100		-	N/A

**Information per 2018 Licensure Renewal Applications*

***Facilities whose beds are licensed, but whose occupancy is reported as 0 due to renovation, replacement, and/or a decision not to decertify beds. These beds are counted in the planning inventory although they are not utilized*

ATTACHMENT
3

Petition to the State Health Coordinating Council Regarding Nursing Care Bed Adjusted Need Determination for Davie County For the *2018 State Medical Facilities Plan*

July 26, 2017

Petitioner:	***Contact:***
Bermuda Village Retirement Community 142 Bermuda Village Drive Bermuda Run, NC 27006	D. Gray Angell, Jr. Executive Director 336.345.7118 gray.angell@yahoo.com

STATEMENT OF REQUESTED CHANGE

On behalf of Bermuda Village Retirement Community (Bermuda Village), D. Gray Angell, Jr., Executive Director, requests the following special need adjustment to the *Proposed 2018 State Medical Facilities Plan (SMFP).* Bermuda Village asks that the *Proposed 2018 State Medical Facilities Plan* be modified to add a special need for 21 nursing home beds in Davie County. Specifically, this would modify Chapter 10 of the *Proposed SMFP*, as follows:

Table 10C: Nursing Home Bed Need Determination
(Proposed for Certificate of Need Review Commencing in 2018)

It is determined that the counties listed in the table below need additional nursing care beds as specified.

County	HSA	Nursing Bed Need Determination*	CON Application Due Date**	CON Beginning Review Date
Davie	III	21	TBD	TBD

***Application due dates are absolute deadlines. The filing deadline is 5:30 p.m. on the Application due date. The filing deadline is absolute (see SMFP Chapter 3).*

REASONS FOR THE REQUESTED CHANGES

Overview

Bermuda Village Retirement Center (Bermuda Village) is a no-entry-fee residential retirement community that has been in Davie County for over 30 years. Today, the community has 270 residents; capacity is about 330 and the resident count is growing at a rate of 10 to 15 a year. Independent living residents own their homes and have a management services contract that includes maintenance, social programs, and access to 15 days of care a year at Bermuda Village's 36-bed health center. The health center is licensed for both nursing home and assisted living beds. Bermuda Village health center currently has 15 licensed nursing home beds and 21 licensed adult care home beds. Some adult care beds have been off line during recent construction. Only seven adult care beds are in service until the construction finishes this month.

Although the primary focus of the nursing home beds is Bermuda Village residents, about half of the nursing home users live outside Bermuda Village. Most of Bermuda Village health center's residents are from Davie and Forsyth Counties.

Nationally, retirement communities attract people in their 80's. Many Bermuda Village residents are over 90 years old. The median age is 85 and is getting older each year, in part because residents are living longer. With the high median age, it is not surprising that Bermuda Village residents are using the Bermuda Village health center nursing home beds at a rate higher than the average North Carolina county. Nor is it surprising they require nursing home level care.

Although only 15 of the 36 health care facility beds are licensed and Medicare/Medicaid-certified for skilled nursing, skilled or nursing home level care is what most Bermuda Village users of the health center need. Demand from outside Bermuda Village is also for nursing home beds rather than adult care beds.

The nursing home beds at Bermuda Village stay close to 100 percent occupied and we regularly turn away requests from Davie County, both inside and outside Bermuda Village. When the nursing home beds are full, we meet Bermuda Village resident needs with a hybrid service, using our licensed home health care program and the health center's adult care beds. This is not an ideal solution, but it keeps residents in the community where their social support network is strongest.

Bermuda Village nursing home beds are full, yet other nursing home beds in Davie County are not. The reason is clear when we look at the supply of rooms. All 15 of the Bermuda Village nursing home beds are in private rooms. In all of Davie County there are only 17 other nursing home beds in private rooms. State policy encourages private rooms in the CON statute GS 131E-184(e) (2)(a) provides an exemption from CON for private room construction:

> *The entity proposing to incur the capital expenditure…. for one or more of the following purposes: Conversion of semi-private rooms to private rooms.*

Both state and national policy favor private rooms. Only 14 percent of Davie County nursing home beds are in private rooms, according to North Carolina Licensure Bed Assignment forms.

Quantitative Justification

The *Proposed 2018 State Medical Facilities Plan (SMFP)* shows no need for more nursing home beds in Davie County in 2021. However, standard methodology makes no adjustment for underused facilities or inventory that is unavailable because the beds are located in semi-private rooms that operate as single occupancy units. In Davie County, 86 percent of all nursing home beds are located in semi-private rooms. Table 1 shows the calculation.

Table 1: 2016 Inventory of Licensed Davie County Nursing Care Beds by Room Occupancy

Facility	Licensed Nursing Care Beds			Total Rooms	% Semi-Private Beds
	Private	Semi-Private	Total		
	a	b	c	d	e
Autumn Care of Mocksville	2	94	96	49	98%
Bermuda Commons Nursing and Rehab Center	15	102	117	66	87%
Bermuda Village Retirement Center	15	0	15	15	0%
Total	**32**	**196**	**228**	**130**	**86%**

Source: 2017 Nursing Home License Renewal Applications (LRA) and NC Licensure Bed Breakdown Forms

Notes:

a. Number of Nursing Care Beds in Private Rooms, Project ID # G-8431-09 and Bermuda Commons Bed Breakdown Form (Attachment A)
b. Number of Nursing Care Beds in Semi-Private Rooms, Project ID # G-8431-09 and Bermuda Commons Bed Breakdown Form (Attachment A)
c. A + B
d. A + (B / 2)
e. B / C

As mentioned, resident privacy, infection control, HIPAA requirements, and other concerns render semi-private rooms undesirable for most individuals who need nursing home care.[1] For example, most rehabilitation patients require single occupancy rooms because of their need to move around and practice therapy routines; infectious patients require single-occupancy quarantine.

The number of residents leaving the county for nursing home care confirm the lack of access to private nursing home beds in Davie County. Table 2 below shows that the percentage increased 4.9 percent annually from 2011 to 2015, an aggregate increase of 21 percent. In 2015, the latest data in the DHSR database shows 30 percent of Davie County residents in nursing home care beds were in facilities outside the county.

[1] Calkins, M., & Cassella, C. (2006). Exploring the cost and value of private versus shared bedrooms in nursing homes. The Gerontologist, 169-183.

Table 2: Number of Davie County Residents Leaving County for Nursing Care Services

	2011	2012	2013	2014	2015	CAGR	Net Change
						a	b
Number of Residents Leaving County	157	153	188	181	190	4.9%	21%

Source: 2012-2016 LRAs

Notes
a. Compound Annual Growth Rate = (190/157) ^ (1 / (2015-2011)) – 1
b. (157-190) / 157

An increasing number of residents leaving Davie County for nursing home care contributed to a decrease in Davie County's reported nursing home bed use rate in the *SMFP* methodology, because the use rate is based on occupancy of in-county beds. As the outmigration increased, the in-county provider nursing home bed use rate declined. Table 3 shows that Davie County's in-county nursing home bed use rate decreased by 2.87 percent, annually, from 2012 to 2016. The Davie County nursing home bed use rate declined faster than the state over the past five years.

Table 3: Nursing Home Bed Use Rate per 1,000 Residents by Facility Location, 2012-2016

	2012	2013	2014	2015	2016	CAGR (a)
Davie Co	4.2017	4.4071	4.0266	3.9542	3.7391	-2.87%
North Carolina	3.8998	3.8579	3.8277	3.6822	3.7006	-1.30%

Source: 2018 Draft SMFP Table 10B

Notes:
a. Compound Annual Growth Rate = (3.7391/4.2017) ^ (1 / (2016-2012)) - 1

The drop in Davie County nursing care bed use rate is not associated with a diminishing elderly population. From 2012 to 2016, the 65 and older population increased from 18 to 19 percent. In fact, as shown in Table 4, NC Demographer forecasts that, in five years, the percent of Davie population aged 65 and older will increase from 20 to 22 percent, which is above the state average. As the size of the aged 65 and older population in Davie County increases, so will the need for skilled nursing services.[2]

[2] https://www.caregiver.org/selected-long-term-care-statistics, Accessed 6/23/2017 and prior NC State Medical Facilities Plans that showed much higher use rates among populations over 65.

Table 4: Davie County Population by Age Group, 2012-2021

Age Group	2012	2016	2017	2018	2019	2020	2021
< 65	34,077	33,840	33,820	33,803	33,786	33,761	33,770
65-74	4,114	4,684	4,829	4,986	5,125	5,266	5,384
75-84	2,252	2,478	2,580	2,672	2,780	2,887	2,977
85 +	898	987	1,005	1,020	1,037	1,061	1,090
Total	41,341	41,989	42,234	42,481	42,728	42,975	43,221
Total 65 +	7,264	8,149	8,414	8,678	8,942	9,214	9,451
Davie Percent over 65	**18%**	**19%**	**20%**	**20%**	**21%**	**21%**	**22%**
State Percent of 65	**14%**	**15%**	**16%**	**16%**	**16%**	**17%**	**17%**

Source: NC OSBM, Accessed 6/14/2017

To support residents of Davie County and increase in-county access to nursing care beds in single occupancy rooms, Bermuda Village is requesting a special need determination for 21 nursing home beds. Table 1 shows that Davie has 228 beds but only 130 nursing home bedrooms. Thus, a request for 21 more beds in single occupancy rooms is modest.

Davie County's 2015 annual nursing home bed turnover rate was 5.68 residents per occupied bed. See Table 5.

Table 5: 2015 Davie County Nursing Home Bed Turnover Rate

		Beginning Census	Admissions	Total Residents Served
a	Autumn Care of Mocksville	81	171	252
b	Bermuda Commons Nursing and Rehab Center	84	624	708
c	Bermuda Village Retirement Center	2	27	29
d	Total	**167**	**822**	**989**
e	Total Beds Occupied			174
f	Residents per Bed			**5.68**

Source: 2016 Nursing Home Bed License Renewal Applications

Notes

b. Autumn Care of Mocksville
c. Bermuda Commons Nursing and Rehab Center
d. Bermuda Village Retirement Center
e. A + B + C
f. Total Davie County Nursing Home Beds Occupied at Time of Licensure
g. 989 / 174

We recognize that 100 percent private rooms could be excessive. Economics, couple requests, and some socialization requirements justify maintaining some beds in semi-private rooms. We are not asking that. Bermuda Village is petitioning to add only 21 nursing home beds to Davie County. As demonstrated in Table 6, the requested 21 beds would support only 61 percent of the forecast out-migration in 2021. This only takes into account residents that leave Davie County for skilled nursing care. Approximately seventy-one percent of residents leaving the county for nursing home care are going to adjacent counties. Thus, the 21 beds would only support 86 percent (61 / 71 = 0.86) of residents out-migrating for nursing home care. If approved, this request would also provide more private room options in Davie County.

Table 6: Additional Nursing Home Beds Needed to Absorb Davie Co. Out-Migration, 2016-2021*

		2016	2017	2018	2019	2020	2021
a	Out-migrated Davie Co. NH Residents	191	192	193	194	195	196
b	Average Residents per NH Bed 2015	5.68	5.68	5.68	5.68	5.68	5.68
c	Beds Needed for Out-migrated NH Residents	34	34	34	34	34	35
d	Bermuda Village Bed Request	21	21	21	21	21	21
e	Percent Bermuda Village Request of Out-migrated Need	62%	62%	62%	61 %	61%	61%

**Numbers may not foot due to rounding*

Notes

a. Forecast of Davie County residents out-migrating for nursing home beds using rate from Table 2
b. Average number of residents per bed from Table 5
c. A / B
d. Bermuda Village Request
e. D / C

Bermuda Village residents are feeling the impact, as they, too, are forced to use out-of-county nursing home beds to get appropriate care. In addition, hospitals are including nursing homes in care bundles. No Davie County nursing home is in a hospital care bundle. Bermuda Village is in the process of qualifying.

With 21 additional beds Bermuda Village could dedicate its entire 36-bed health center to nursing home care in single-occupancy rooms. A 36-bed nursing home could be staffed efficiently and offer a high level of quality. No individuals would be displaced by the change in bed designation because today the assisted living beds are only used for short-term care, and most of that care is at a skilled level that requires home health supplement. If the beds were licensed as skilled care, the facility could operate more efficiently. If the petition and subsequent CON application was approved, Bermuda Village would then consolidate its assisted living beds in a dedicated new assisted living facility. Approval of this request would serve special needs of both Bermuda Village and Davie County.

Adverse Effects on Provider of Not Making the Requested Changes

In short, the current 15 private nursing home beds at Bermuda Village are insufficient to serve Bermuda Village residents; and Davie County residents, in general, need more private skilled nursing beds.

Bermuda Village's nursing beds have operated at near 100 percent occupancy from 2009 to present. This is verified on NC Nursing Home LRAs.

Without the change, Bermuda Village will be forced to continue shuffling patients around in its facility, moving patients out of county, and turning away other county residents who are seeking care. Bermuda Village's contract with independent living residents provides up to 15 days of access to the health center, each year. The contract provides a minimum floor. The national average length of stay for skilled nursing in 2014 was 30 days, according to national actuarial service, Milliman.[3] In Davie County, the average in 2015 was 64 days (365 / 5.68). Without an adjustment, Bermuda Village cannot add beds. It will be forced to use less desirable alternatives, adult care beds, and private duty home care, to provide the level of nursing care patients need or refer residents to nursing home beds in other counties. These alternatives are difficult for the facility, the patients, and their families. Bermuda Village cannot correct the problem without a change in the SMFP, because the Proposed 2018 SMFP shows no nursing home beds needed in Davie County.

Moreover, with a larger facility, we can better accommodate surrounding hospitals' requirements to contract for nursing homes in "managed care bundles" that require single occupancy room use. Today, there are no Davie County nursing home beds in bundled arrangements, with any hospital. We are willing to make the effort to meet the requirements, but the existing 15 beds will not meet all of Davie County needs.

Adverse Effects on Consumers of Not Making the Requested Changes

Private rooms are increasingly the preferred option for nursing home care. If the petition is not approved, Davie County consumers will have insufficient available private nursing home beds in the county. Out-of-county beds will be the only option. The existing facilities are responding by filling double occupancy rooms with one individual. They are not building more single rooms.

With no competition, existing homes have no incentive to increase private room options.

Bermuda Village's entire health care facility, including the adult are beds, was full nine of the last 12 months. Most of the residents needed skilled nursing level care. During this time, the facility turned away nursing home patients or made shuffleboard arrangements for skilled nursing care using combinations of assisted living beds and in-home services. The adult care solution for skilled care is not available when adult care beds are full. It is important to note that Bermuda Village cannot provide the shuffleboard arrangements for people who are not members of the retirement community. Those people have no choice except to go elsewhere, often at some distance from their homes.

There is another adverse effect on persons who are served with alternative solutions. It is not good for residents to be shuffled around. Most people who need skilled care are old and frail. If the petition is not approved, the desired option of permitting people to "age in place" will not be available in Davie County. Residents who need skilled nursing facility care may be placed in facilities outside the county, away from their family support system. There is substantial evidence that family and social support are important, if

[3] Herbold, J., & Larson, A. (2016). Performance of skilled nursing facilities for the Medicare Population. Milliman.

difficult to measure elements in rehabilitation.[4]

Davie County is aging fast; and demand for nursing facility beds will accelerate as more people move into the age groups over 75. According to NC Office of State Budget Management (NC OSBM), in 2017, the median age in Davie County is 44.6 compared to the state's 38.6. By 2021, Davie will have a median age of 44.92, compared to the state's 39.22. As noted in Table 4, population in the age groups that are high users of nursing care beds is increasing in size and proportion of the population. Moreover, Table 7 shows the median age of Davie County from 2017 through 2021 will remain higher than the state.

Table 7: Davie County Median Age, 2017-2021

	2017	2018	2019	2020	2021
Davie County	44.46	44.6	44.76	44.87	44.92
North Carolina	38.6	38.75	38.92	39.07	39.22

Source: NC OSBM, Accessed 6/14/2017

Clearly, if this special need is not approved, more Bermuda Village and Davie County residents will be forced out of county to access nursing home beds in private rooms.

ALTERNATIVES TO THE REQUESTED CHANGES CONSIDERED AND REJECTED

We considered several alternatives, including status quo, requesting a different number of beds, acquisition of another facility, community-based or hospital inpatient care, and the petition to add 21 nursing home beds to Davie County is the most effective.

The *Proposed 2018 SMFP* has a new nursing home bed methodology. The new methodology has advantages, but one disadvantage is the fact that it does not make adjustments for facilities that have reached virtual capacity. In the status quo environment, Davie County will not have a new nursing home bed allocation for years to come, because beds are tied up in semi-private rooms in facilities that have been in the county for years. The current methodology masks the fact that the number of accessible nursing home care beds in Davie County is insufficient to meet the needs of its residents. Data show that Davie County residents are leaving the county at increasing rates to get nursing home care. The problem will get larger as the median age of Davie County increases and more people compete for the existing supply of beds.

Bermuda Village considered asking for a different number of beds. Fewer would not be efficient and would not meet the needs of Davie County residents. Slightly more is also inefficient and would create additional construction costs for Bermuda Village. We have demonstrated both need and capacity to fill the proposed 21 beds.

Buying an existing facility is not an option. None are available.

[4] Chronister, Julie, et al. The relationship between social support and rehabilitation related outcomes: a meta-analysis The Journal of Rehabilitation, Vol. 74(2)

Expensive round the clock home health care in Davie County or extended hospital stays are not good alternatives. Neither have the cost efficiency or health care quality of private room nursing home care in a licensed facility that maintains high standards.

EVIDENCE OF NO UNNECESSARY DUPLICATION

Davie County has only three nursing homes that together have an insufficient number of private nursing care beds to meet demand. Existing facilities have not used their bed inventory to address the need for private rooms. Also, hospitals have not included Davie County nursing homes in their approved rehabilitation bundles.

Bermuda Village represents a unique concentration of people who could fill many of the proposed 21 additional nursing home beds, but Davie County residents can easily fill the remainder. Last year, 190 people left Davie County for nursing home beds. This is 30 percent of all Davie County residents in nursing home beds. The proposed 21 additional nursing care beds would not duplicate needed service because they will only account for 61 percent of the out-migrated need by 2021. See Table 6.

Moreover, this is a pilot request against the relatively new *SMFP* Nursing Home Bed Need Methodology. If the out-migration reverses with 21 more beds in private rooms, as predicted, the State may wish to change the methodology for all; or, with competition, existing nursing home may change their configuration in response to competition.

EVIDENCE OF CONSISTENCY WITH NORTH CAROLINA MEDICAL FACILITIES PLAN BASIC GOVERNING PRINCIPLES

Overview

The SMFP has three governing principles: Safety and Quality, Access, and Value.

Safety and Quality

Bermuda Village has demonstrated quality in nursing home care, maintaining compliance with State Licensure and Medicare Certification requirements. Competition encourages high quality among competing facilities. In addition to the competitive aspects of quality, approval of the petition would increase Davie County consumer options for nursing home rooms that optimize HIPAA and infection control requirements.

Access

In 2017, people between the ages of 75 and 84 represent seven percent of Davie County population. This is 1.55 times NC average of 4.5 percent[5]. Thus, one would expect a higher than average nursing home bed use rate in Davie County. In fact, Davie County's nursing home bed use rate is less than the state average, according to Table 10C in the *Proposed 2018 SMFP*. This is indication of an access problem. Trends suggest that with 86 percent of its nursing care beds in double occupancy rooms, Davie County's use rate will stay low. Approval of this petition will improve patient choice and access.

Value

Approval of the requested beds would provide an opportunity for Bermuda Village to expand the number of nursing home beds in a small facility from 15 to 36, a size that could operate more efficiently, thus assuring longer-term viability. Bermuda Village offers competitive pricing for its nursing home services. This relatively inexpensive change would make it easy to sustain reasonable prices.

Bermuda Village has demonstrated its capacity to integrate patient care across the continuum, by providing for a Wake Forest University School of Medicine geriatric clinic in the community. It has demonstrated its capacity to reduce re-hospitalization by the quality of the care it provides to patients recently discharged from the hospital. All of the Bermuda Village nursing home beds are occupied by short stay residents, either avoiding hospitalization or obtaining post-hospital stabilization prior to returning home.

Improving HIPAA and infection control will improve value.

CONCLUSION

Approval of the requested 21 additional nursing home beds would benefit Davie County, accommodate state and national requirements for privacy and infection control, and be responsive to Davie County's fast-growing elderly population. It would not duplicate existing county resources because existing rooms are the limiting factor; and Davie County's nursing home bedrooms are virtually full. Approval would also provide an opportunity for Bermuda Village to right-size its nursing home facility.

Bermuda Village would accept a condition requiring that all 21 beds be in private, single occupancy rooms.

[5] NCOSBM

Long-Term Behavioral Health Committee
Agency Report
Petition for an Adjusted Need Determination for 21 Nursing Home Beds in Davie County
2018 State Medical Facilities Plan

Petitioner:
Bermuda Village Retirement Community
142 Bermuda Village Drive
Bermuda Run, NC 27006

Contact:
D. Gray Angell, Jr.
Executive Director
(336) 345-7118
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Request:
Bermuda Village Retirement Community (Bermuda Village) requests an adjusted need determination for 21 additional nursing home (NH) beds in Davie County in the *North Carolina Proposed 2018 State Medical Facilities Plan (Proposed 2018 SMFP).*

Background Information:
Chapter Two of the *Proposed 2018 SMFP* allows for "[a]nyone who finds that the North Carolina State Medical Facilities Plan policies or methodologies, or the results of their application, are inappropriate may petition for changes or revisions. Such petitions are of two general types: those requesting changes in basic policies and methodologies, and those requesting adjustments to the need projections." The *SMFP* annual planning process and timeline allow for submission of petitions for changes to policies and methodologies in the spring and petitions requesting adjustments to need projections in the summer. It should be noted that any person might submit a certificate of need (CON) application for a need determination in the Plan. The CON review could be competitive and there is no guarantee that the petitioner would be the approved applicant.

Nursing bed need is calculated by: (1) multiplying the county bed use rates by each county's corresponding projected civilian population (in thousands) for the target year (2021) to calculate the projected bed utilization, and (2) dividing each county's projected bed utilization by a 95% vacancy factor. For each county, the planning inventory is determined based on the number of licensed beds adjusted for Certificate of Need (CON) Approved/License Pending beds, beds available in prior Plans that have not been CON-approved, and exclusions from the county's inventory, if any.

For each county, the projected bed utilization with applied vacancy factor derived in Step 2 is subtracted from the planning inventory. The result is the county's surplus or deficit. If a county projects a deficit of beds, an adjusted occupancy of 90% will trigger a need. The number of beds to be allocated is determined by the amount of the deficit and is rounded to the nearest whole number. Using the standard need methodology, the *Proposed 2018 SMFP* shows that Davie County has a projected surplus of 64 NH beds for 2021. All NH beds in Davie County are located in nursing home facilities.

Analysis/Implications:

The Agency response focuses on three of the Petitioner's reasons to support the licensing of 21 additional NH beds in Davie County. They are:

1) not all NH beds in semi-private rooms are being considered by potential residents due to privacy preferences. The bed need methodology does not account for underused facility inventory due to semi-private rooms. Thus, occupancy appears artificially low;
2) because of a lack of private rooms in Davie County, nursing care patients from the County are leaving to seek skilled nursing care in other counties; and
3) quality of services may be negatively impacted when nursing care patients share rooms.

<u>Privacy Preferences and Occupancy Rates</u>

Based on data provided through '2017 License Renewal Applications to Operate a Nursing Home', the occupancy rate of licensed NH beds in Davie County is 71%. The Petitioner reasons that these beds are underutilized because individuals seeking nursing care are more likely to choose facilities that have available private rooms. In an effort to understand occupancy based on the actual number of beds available for use, the Agency communicated directly with each nursing facility administrator in Davie County and determined that 82% of licensed NH beds are operational. As shown in Table 1, approximately 71% of operational beds are located in semi-private rooms. If the occupancy rate calculation is adjusted to include only operational beds, the County's occupancy rate becomes 86%. Although none of the operational beds at Autumn Care of Mocksville are in private rooms and a little less than half the operational beds at Bermuda Commons Nursing and Rehab are private rooms, occupancy rates are similar. It is also noteworthy that while all of Bermuda Village's beds are in private rooms, it has the lowest occupancy rate.

Table 1. Occupancy Rates of Licensed and Operational Beds, Davie County

	# of licensed NH beds	# of Operational NH beds	% operational	% of operational NH beds in semi-private rooms	TOTAL Days of Care	Occupancy Rate, Licensed Beds	Adjusted Occupancy Rate, Operational Beds
Autumn Care of Mocksville	96	79	82.3%	100.0%	24,319	69.2%	84.1%
Bermuda Commons Nursing & Rehabilitation	117	93	79.5%	57.0%	30,412	71.0%	89.3%
Bermuda Village Retirement Center	15	15	100.0%	0.00%	4,250	77.4%	77.4%
DAVIE COUNTY	**228**	**187**	**82.0%**	**70.6%**	**58,981**	**71.2%**	**86.4%**

2017 License Renewal Applications

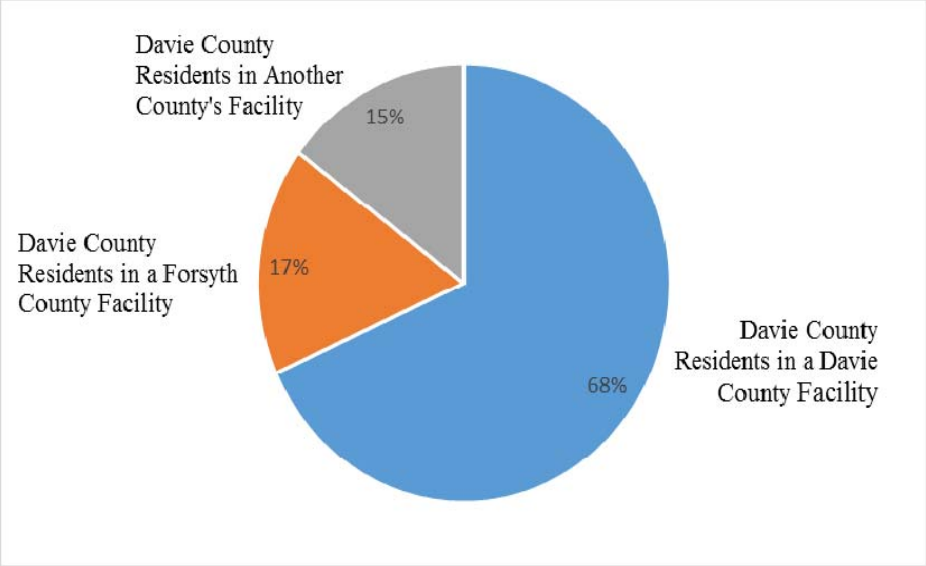
Impact on Quality of Care

The Petitioner also brought forth issues associated with quality of care. As described in the literature (Calkins & Cassella, 2007), there is an increased risk of influenza and gastroenteritis that occurs with room-sharing among aged populations. Lack of privacy also negatively impacts family visits with patients, disrupts patients' sleep and may increase rates of distressed behaviors. These situations may also affect those providing care. Observations of semi-private room facilities have revealed greater risk of medical error rates among nursing care staff and consumption of staff time with roommate conflict mitigation.

Nursing Home Patient Origin

The Petitioner also states concerns that privacy preferences are driving nursing care patients from Davie County to seek services in other counties. The Agency reviewed the origin of nursing care patients that are served within Davie County. As noted in the petition, 68% of Davie County residents stay in the County for nursing care (Figure 1). In the State overall, a greater proportion of people remain in their home counties for nursing care (77%).

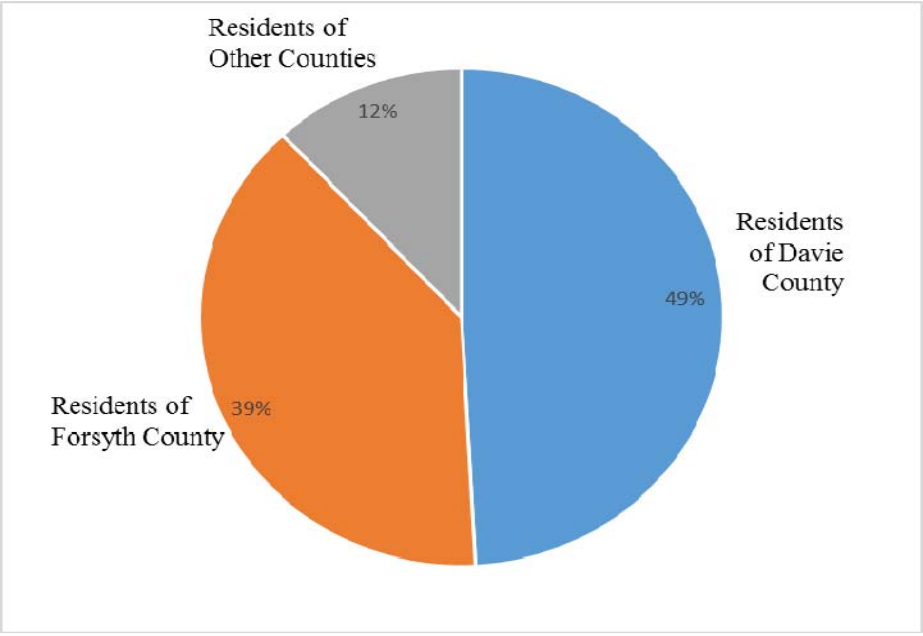
Figure 1. Location of Nursing Care Residents Originally from Davie County



2017 License Renewal Applications

As shown in Figure 2, the majority (51%) of the skilled nursing patients served by Davie County facilities come from outside the county, mostly from Forsyth County. Also, while Forsyth County serves 122 of nursing care residents originally from Davie County, Davie County serves 390 of nursing care residents originally from Forsyth County. However, the need methodology for nursing care beds assumes that all nursing care facility patients in a county will be residents of that county. Thus, it is relevant that a large amount of Davie County resources are not being allocated to serve the needs of Davie County residents.

Figure 2. Origin of Nursing Care Residents Served in Davie County



2017 License Renewal Applications

Population Trends

According to projections published by the North Carolina Office of State Budget and Management, from 2017 – 2021, the 65 years and older cohort will grow at about the same rate as the State's (3.08% vs. 3.49%, respectively). However, in Davie County, the proportion of the population that will be 65 and older (21.9%) in 2021 is expected to be larger than in the State overall (17.2%).

Impact If the Petition Were Approved

If the petition were approved, the number of licensed NH beds in Davie County would increase to 249. Based on current data, 208 of those beds would be operational with an adjusted operational percentage of 83.5%. Moreover, on August 25, 2017, a proposal submitted by Liberty Commons of Rowan County was approved to relocate 20 existing nursing home beds from Davie County to Rowan County pursuant to Policy NH-6. Assuming no appeal is filed and a certificate is issued effective September 26, 2018, the inventory of nursing home beds in Davie County will decrease from 249 to 229 beds.

Agency Recommendation:

Bermuda Village Retirement Community is requesting an adjusted need determination for 21 nursing care home beds in Davie County. The Agency agrees that if the high percentage of shared rooms, in-patient migration, and the growth and size of the aging population in Davie County are considered, additional beds may be warranted. The Agency supports the standard methodology for determining need for nursing homes as described in the *Proposed 2018 SMFP*.

Given the available information submitted by the August 10, 2017 deadline date for comments on petitions and comments, and in consideration of the factors discussed above, the agency recommends adjusting the need determination in Davie County to include 21 additional nursing home beds.

Calkins, M., & Cassella, C. (2007). Exploring the cost and value of private versus shared bedrooms in nursing homes. *The Gerontologist*, *47*(2), 169-183.

Received-Healthcare Planning
7/26/2017

ATTACHMENT
4

North Carolina State Health Coordinating Council
c/o Healthcare Planning and Certificate of Need Section
Division of Health Service Regulation
2714 Mail Service Center
Raleigh, NC 27699-2714

Re: Petition for Adjusted Need Determination for 50 Additional Rehabilitation Beds in HSA III in the 2018 State Medical Facilities Plan

I. Petitioner

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II. Requested Change

Novant Health, Inc. ("Novant Health") and HealthSouth Corporation ("HealthSouth") request that 50 additional inpatient rehabilitation beds be identified as needed in the HSA III Service Area in Chapter 8 of the 2018 State Medical Facilities Plan ("SMFP").

This Petition is being submitted jointly by Novant Health and HealthSouth. As healthcare services move into the future concentrating on population health, leadership at Novant Health and

HealthSouth determined that partnering HealthSouth's inpatient rehabilitation expertise with Novant Health's integrated system of physician practices, hospitals, outpatient centers, and more - each element committed to delivering a remarkable healthcare experience for patients - is an ideal match for the future of inpatient rehabilitation services in HSA III. Novant and HealthSouth already have partnered in a replacement 68-bed inpatient rehabilitation hospital, Novant Health Rehabilitation Hospital of Winston-Salem, LLC, which is expected to open in 2019[1]. One system, Carolinas Healthcare System ("CHS"), controls 95% of the inpatient rehabilitation beds in HSA III. In addition to limited choice and competition, patients in the Novant Health system have experienced difficulty gaining admission to CHS inpatient rehabilitation facilities in HSA III. Patient admissions have been delayed, or denied. As a result, patients end up receiving care in other settings which do not provide the same level of intensive rehabilitation with an experienced rehabilitation team as discussed in letters of support for the Petition included in Attachment 1.

III. Reasons for Proposed Adjustment

In Chapter 8 of the annual State Medical Facilities Plan, North Carolina's six Health Service Areas are defined as the planning regions for inpatient rehabilitation services. The SMFP states, "[t]he Health Service Areas remain logical planning areas for inpatient rehabilitation beds even though many patients elect to enter rehabilitation facilities outside the region in which they reside," (p. 108 of the 2017 SMFP). Novant Health and HealthSouth reviewed utilization for all inpatient rehabilitation facilities in North Carolina. HSA III has many distinct characteristics which support the need for additional inpatient rehabilitation beds that do not exist in other HSAs.

Utilization of total inpatient rehabilitation beds in HSA III has been over 80% or extremely close to 80% for the last three federal fiscal years as reflected in the following table. The need methodology in the annual SMFP utilizes data from the Annual Hospital Licensure Renewal Applications (LRA) and triggers a need for additional inpatient rehabilitation beds when current beds have been utilized at 80% or greater for two years in a row. The current methodology does not take into consideration rounding for purposes of prompting the inpatient rehabilitation bed need methodology. If it did, the need methodology would have been triggered this year and new inpatient rehabilitation beds would be identified as needed in the Proposed 2018 SMFP for HSA III.

[1] Project I.D. No. G-011211-16, approved by the CON Section on October 17, 2016.

HSA III Inpatient Rehabilitation Hospital Utilization – Total LRA Patient Days

Facility	Total Licensed and CON Approved Inpatient Rehab Beds	2013	2014	2015	2016	3 Year Average Annual Growth Rate 2013-2016
Novant Health Rowan Medical Center	10	2,537	1,891	1,723	1,731	
Stanly Regional Medical Center	0	1,060	0	0	0	
Carolinas Rehabilitation Hospital	70	32,270	23,221	23,437	20,686	
CMC-Levine Children's Hospital	13	3,489	3,811	4,250	4,159	
Carolinas Rehabilitation Hospital Mount Holly	40	11,547	10,843	11,460	11,916	
Carolinas Rehabilitation Hospital NorthEast	40	1,270	10,280	10,355	11,195	
Carolinas Rehabilitation Hospital Pineville	29	0	8,537	9,295	9,123	
HSA III Total	202	52,173	58,583	60,520	58,810	4.3%
Inpatient Rehab Bed Utilization Rate		70.76%	79.46%	82.08%	79.76%	

Source: Attachment 2, Table 1

This problem is unique to HSA III. Utilization in the other five HSAs in North Carolina is not approaching the 80% threshold as reflected in the following table. The only HSA approaching the threshold is HSA III.

North Carolina Inpatient Rehabilitation Hospital Utilization – Total LRA Patient Days

Facility	Total Licensed and CON Approved Inpatient Rehab Beds	2013	2014	2015	2016	3 Year Average Annual Growth Rate 2013-2016
HSA I Total	129	20,487	21,276	21,033	21,280	1.3%
Inpatient Rehab Bed Utilization Rate		43.5%	45.2%	44.7%	45.2%	
Annual Growth Rate			3.9%	-1.1%	1.2%	
HSA II Total	184	33,511	32,946	36,443	35,984	2.6%
Inpatient Rehab Bed Utilization Rate		49.9%	49.1%	54.3%	53.6%	
Annual Growth Rate			-1.7%	10.6%	-1.3%	
HSA III Total	202	52,173	58,583	60,520	58,810	4.3%
Inpatient Rehab Bed Utilization Rate		70.8%	**79.5%**	**82.1%**	**79.8%**	
Annual Growth Rate			12.3%	3.3%	-2.8%	
HSA IV Total	189	46,201	47,716	47,333	46,044	-0.1%
Inpatient Rehab Bed Utilization Rate		67.0%	69.2%	68.6%	66.7%	
Annual Growth Rate			3.3%	-0.8%	-2.7%	
HSA V Total	160	32,366	33,463	35,841	36,754	4.3%
Inpatient Rehab Bed Utilization Rate		55.4%	57.3%	61.4%	62.9%	
Annual Growth Rate			3.4%	7.1%	2.5%	
HSA VI Total	151	32,124	31,557	31,170	28,863	-3.5%
Inpatient Rehab Bed Utilization Rate		58.3%	57.3%	56.6%	52.2%	
Annual Growth Rate			-1.8%	-1.2%	-7.4%	

Source: Attachment 2, Table 1

The previous table also reflects the three-year inpatient rehabilitation growth rate for all North Carolina HSAs. Both HSA III and HSA V have growth rates exceeding 4.0%. However, HSA V has sufficient inpatient beds to meet the growing demand, with an overall utilization rate of only 62.9% in FFY 2016. Only HSA III has high utilization and high growth. The counties that comprise HSA III also have the highest population of all the HSAs in North Carolina.

Novant Health and HealthSouth reviewed Truven utilization data for all North Carolina inpatient rehabilitation providers in each of the six HSAs. Truven data was analyzed by revenue code for patients admitted to a licensed inpatient rehabilitation bed. Inpatient rehabilitation services in HSA III also are unique for the following reasons, all of which support the need for additional inpatient rehabilitation beds in HSA III:

- Extremely high in-migration from out of state;
- One inpatient rehabilitation hospital is dedicated to children;
- Inpatient rehabilitation population to bed ratio is the highest in the state; and,
- Lack of competition and impact on continuity of care.

Extremely High In-migration from Out of State

North Carolina is a large state and borders four other states. Therefore, it is reasonable to expect some North Carolina residents to seek inpatient rehabilitation care in Virginia, Tennessee, Georgia or South Carolina. Likewise, it is reasonable to expect some in-migration to North Carolina for inpatient rehabilitation services. For planning purposes, out-migration routinely is assumed to be consistent with in-migration. A review of actual in-migration, however, shows that in-migration to HSA III for inpatient rehabilitation services is 11.5%, which is considerably higher than all other HSAs and overall in-migration to North Carolina, as shown in the following table.

In-Migration to North Carolina Inpatient Rehabilitation Hospitals from Other States
Percent of In-Patient Rehabilitation Days

HSA		2013	2014	2015	2016
I	Percent from North Carolina	97.4%	97.2%	97.9%	96.2%
	Percent In-migration	2.6%	2.8%	2.1%	3.8%
II	Percent from North Carolina	95.0%	95.7%	95.1%	95.4%
	Percent In-migration	5.0%	4.3%	4.9%	4.6%
III	**Percent from North Carolina**	**88.2%**	**89.0%**	**87.2%**	**88.5%**
	Percent In-migration	**11.8%**	**11.0%**	**12.8%**	**11.5%**
IV	Percent from North Carolina	98.2%	98.5%	98.8%	98.7%
	Percent In-migration	1.8%	1.5%	1.2%	1.3%
V	Percent from North Carolina	97.8%	97.0%	97.8%	98.3%
	Percent In-migration	2.2%	3.0%	2.3%	1.7%
VI	Percent from North Carolina	99.1%	98.4%	98.5%	99.1%
	Percent In-migration	0.9%	1.6%	1.5%	0.9%
North Carolina Total	Percent from North Carolina	95.4%	95.4%	94.9%	95.3%
	Percent In-migration	4.6%	4.6%	5.1%	4.7%

Source: Attachment 2, Table 9

As shown in the previous table, in-migration to HSA III from out of state is more than twice the state average as well as considerably greater than all other HSAs. The 11.5% in-migration rate to HSA III represents an average daily census from 2014 to 2016 of 18.7 patients per day, which represents 23 beds operated at 80% target utilization. These are beds that are not available for HSA III residents, or North Carolina residents. While in-migration to HSA III is understandable, due to the size of the Charlotte MSA, which includes several South Carolina counties, it is nevertheless concerning because it means that beds are not available for North Carolina residents. The impact of in-migration is far more significant in HSA III (23 inpatient rehabilitation beds being used by out of state residents) than it is in the other five North Carolina HSAs which have a range of 1 to 5 inpatient rehabilitation beds routinely being used for out of state residents.

Novant Health and HealthSouth believe that the high level of in-migration to HSA III is a compelling factor that supports the addition of 50 inpatient rehabilitation beds in HSA III.

One Inpatient Rehabilitation Facility in HSA III is Dedicated to Children

The inpatient rehabilitation beds included on the Carolinas Medical Center acute care hospital license represent a 13-bed distinct-part inpatient rehabilitation unit used exclusively for children which is part of the Levine Children's Hospital (CMC-Levine). Inpatient rehabilitation services at CMC-Levine are highly utilized and meet the needs of many North Carolina children as well as many children from other states. Other inpatient rehabilitation hospitals in HSA III serve less than 1% of the 0-17-year-old population in the region. While the inpatient rehabilitation beds at CMC-Levine provide an extremely important service, these beds are not available to the adult population. Considering the impact of in-migration discussed above, and the fact that the CMC-Levine beds are not available to adults, means that only 166 inpatient rehabilitation beds, out of total planning inventory of 202 inpatient rehabilitation beds, are truly available in HSA III to North Carolina adult patients in need of inpatient rehabilitation services. Novant Health and HealthSouth believe that this is another compelling reason to add 50 inpatient rehabilitation beds to HSA III.

Inpatient Rehabilitation Population to Bed Ratio Highest in the State

Another way to consider the need for additional inpatient rehabilitation beds in HSA III is to compare the population per inpatient bed in HSA III to other HSAs and the state. Review of population per beds ratio has long been considered one evaluation step in determining future bed need.

The following table shows that HSAs III and IV have the highest population to bed ratios in the state with more than 11,000 persons per bed. The HSA III ratio is 8.6% greater than the state ratio and 22.2% greater than the HSA V ratio, which is the lowest rate, as shown in the following table.

Population per Inpatient Rehabilitation Bed

HSA	2013	2014	2015	2016	2017	2018	2019
I	10,279	10,339	10,396	10,452	10,508	10,563	10,617
II	8,932	8,994	9,046	9,101	9,157	9,215	9,272
III	**10,115**	**10,285**	**10,480**	**10,659**	**10,846**	**11,031**	**11,215**
IV	10,155	10,329	10,519	10,708	10,898	11,089	11,279
V	8,811	8,864	8,929	8,983	9,046	9,112	9,179
VI	10,033	10,034	10,049	10,076	10,105	10,137	10,171
Total State	9,711	9,805	9,908	10,008	10,113	10,217	10,323

Source: Attachment 2, Table 4

As discussed previously, HSA III has the highest in-migration from other states, significantly greater than all other HSAs and the state in-migration rate. Adjusting the planning inventory to reflect the high in-migration in HSA III by removing 23 beds, the population per inpatient bed in HSA III increases to one bed per 12,656 persons. This is 22.6% greater than the state ratio and 37.9% greater than the HSA V ratio as shown in the following table.

Population per Inpatient Rehabilitation Bed – Inpatient Rehabilitation Planning Inventory Adjusted for Out of State In-Migration

HSA	Percent of Patient Days from Out of State Residents	2013	2014	2015	2016	2017	2018	2019
I	2.9%	10,279	10,339	10,396	10,452	10,508	10,563	10,617
II	4.6%	8,932	8,994	9,046	9,101	9,157	9,215	9,272
III	**11.7%**	**11,415**	**11,606**	**11,826**	**12,029**	**12,240**	**12,449**	**12,656**
IV	3.3%	10,155	10,329	10,519	10,708	10,898	11,089	11,279
V	2.3%	8,811	8,864	8,929	8,983	9,046	9,112	9,179
VI	1.4%	10,033	10,034	10,049	10,076	10,105	10,137	10,171
Total State	4.8%	9,711	9,805	9,908	10,008	10,113	10,217	10,323

Source: Attachment 2, Table 4; Reflects 23 less beds in HSA III for in-migration from out of state patients in HSA III.

Finally, taking into consideration the distinct population served by CMC-Levine also impacts the population to bed ratio. Adjusting the planning inventory in HSA III by removing CMC-Levine, and taking into consideration the high in-migration from out of state, the population per inpatient bed in HSA III increases to one bed per 13,647 persons. This is 32.2% greater than the state ratio and 48.7% greater than the HSA V ratio as shown in the following table.

Population per Inpatient Rehabilitation Bed – Inpatient Rehabilitation Planning Inventory Adjusted for Out of State In-Migration and Levine Children's Inpatient Rehabilitation Hospital

HSA	Percent of Patient Days from Out of State Residents	2013	2014	2015	2016	2017	2018	2019
I	2.9%	10,279	10,339	10,396	10,452	10,508	10,563	10,617
II	4.6%	8,932	8,994	9,046	9,101	9,157	9,215	9,272
III	**11.7%**	**12,308**	**12,515**	**12,753**	**12,971**	**13,198**	**13,424**	**13,647**
IV	3.3%	10,155	10,329	10,519	10,708	10,898	11,089	11,279
V	2.3%	8,811	8,864	8,929	8,983	9,046	9,112	9,179
VI	1.4%	10,033	10,034	10,049	10,076	10,105	10,137	10,171
Total State	4.8%	9,711	9,805	9,908	10,008	10,113	10,217	10,323

Source: Attachment 2, Table 5; Reflects 23 less beds for in-migration from out of state and 13 less beds due to CMC-Levine specialization in HSA III.

The comparison of population per inpatient rehabilitation bed in the previous three tables illustrates the disparity in access to inpatient rehabilitation services between inpatient rehabilitation services in HSA III and other HSAs and supports the need for additional inpatient rehabilitation beds requested in this Petition. In addition, real population growth in HSA III is greater than any other HSA. The following table shows percentage growth by HSA, with HSA III growing at the second fastest rate in the state.

Total HSA Population Historical and Projected

	2013	2014	2015	2016	2017	2018	2019	CAGR
HSA I	1,326,018	1,333,729	1,341,056	1,348,325	1,355,483	1,362,569	1,369,581	0.52%
HSA II	1,643,505	1,654,856	1,664,421	1,674,507	1,684,911	1,695,472	1,706,136	0.63%
HSA III	**2,043,203**	**2,077,533**	**2,116,930**	**2,153,206**	**2,190,950**	**2,228,307**	**2,265,481**	**1.71%**
HSA IV	1,919,272	1,952,199	1,988,133	2,023,807	2,059,800	2,095,747	2,131,748	1.75%
HSA V	1,409,712	1,418,173	1,428,702	1,437,200	1,447,401	1,457,892	1,468,599	0.72%
HSA VI	1,514,954	1,515,140	1,517,441	1,521,430	1,525,808	1,530,664	1,535,854	0.32%
Total State	9,856,664	9,951,630	10,056,683	10,158,475	10,264,353	10,370,651	10,477,399	1.04%

Source: NCOSBM

However, total population growth in HSA III is higher than HSA IV, with population increasing at a rate of 36,000 to 37,000 persons per year from 2016 to 2019 compared to a slightly lower rate of 35,000 to 36,000 persons per year in HSA IV. This means that the disparity between population per inpatient rehabilitation bed in HSA III and other HSAs is increasing annually at a substantial rate when compared to other HSAs in North Carolina.

Lack of Competition in HSA III and Impact on Continuity of Care

There are 29 inpatient rehabilitation providers with 1,005 inpatient rehabilitation beds in North Carolina. As previously discussed, in Chapter 8 of the annual State Medical Facilities Plan, North Carolina's six Health Service Areas are defined as the planning regions for inpatient rehabilitation services. In five of the six HSAs, there is choice and competition within the HSA. Ownership and control of the inpatient rehabilitation services in these HSAs are distributed across three or more health systems. As shown in the following table, this is not the case in HSA III.

Bed Inventory in North Carolina by HSA

HSA	Facility	Total Planning Inventory	Percent under Common Ownership/ Management
I	Catawba Valley Medical Center	20	15.5%
	Care Partners Rehabilitation Hospital	80	62.0%
	Frye Regional Medical Center	29	22.5%
	HSA I Total	129	
II	High Point Regional - UNC	16	8.7%
	Hugh Chatham Memorial Hospital	12	6.5%
	North Carolina Baptist Hospital	39	21.2%
	Novant Health Rehabilitation Center (Previously Whitaker Rehabilitation Center)	68	37.0%
	Moses Cone Memorial Hospital - CHS	49	26.6%
	HSA II Total	184	
III	**Novant Health Rowan Medical Center**	**10**	**5.0%**
	Stanly Regional Medical Center - CHS	**0**	
	Carolinas Rehabilitation Hospital - CHS	**70**	
	CMC-Levine Children's Hospital - CHS	**13**	
	Carolinas Rehabilitation Hospital Mount Holly - CHS	**40**	
	Carolinas Rehabilitation Hospital NorthEast - CHS	**40**	
	Carolinas Rehabilitation Hospital Pineville - CHS	**29**	**95.0%**
	HSA III Total	**202**	
IV	Duke Regional Hospital - Duke	30	
	Duke Raleigh - Duke	12	22.2%
	Maria Parham Hospital - Duke/LifePoint	11	5.8%
	UNC Hospitals	30	15.9%
	WakeMed	106	56.1%
	HSA IV Total	189	
V	FirstHealth Moore	15	9.4%
	New Hanover Regional Medical Center	60	37.5%
	Scotland Memorial Hospital - CHS	7	4.4%
	Southeastern Regional Rehabilitation Center	78	48.8%
	HSA V Total	160	
VI	Nash General Hospital - UNC	23	
	Lenoir Memorial Hospital - UNC	17	26.5%
	Vidant Edgecombe - Vidant	16	
	Rehabilitation Center at Vidant Medical Center – Vidant	75	60.3%
	CarolinaEast Medical Center	20	13.2%
	HSA VI Total	151	

Source: Proposed 2018 SMFP Table 8A

In HSA III, CHS controls 95% of all inpatient rehabilitation beds. CHS controls 100% of the inpatient rehabilitation beds in Mecklenburg County, the State's most populous county.[2] The second most populous county in North Carolina, Wake County, has two different providers, and its health service area, HSA IV, has four different providers of inpatient rehabilitation services. Novant Health has one 10-bed unit in Salisbury in Rowan County. Under ideal traffic conditions, Novant Health Rowan Medical Center (NHRMC) is about a 1-hour drive from Novant Health Presbyterian Medical Center (NHPMC) in Charlotte, and even further for other Novant Health patients and patients from other hospitals in HSA III. The lack of choice and competition in the market impacts continuity of care for Novant Health patients in Mecklenburg and surrounding counties.

As documented in Attachments 1 and 3, Novant Health patients often experience delayed admission or are denied admission to CHS inpatient rehabilitation facilities due to the high utilization of those facilities. Further, once admitted, Novant Health physicians and staff have had difficulty getting medical records and patient information once a patient is discharged. This makes it difficult for Novant Health physicians, nurse navigators, and rehabilitation professionals to provide continuing care for patients in the Novant Health system. This severely impacts the continuity of care for Novant Health patients. Disruptions in the continuity of care are frustrating for patients and expensive and inefficient for the health care system.

HSA III needs additional inpatient rehabilitation beds. If approved, this Petition will allow Novant Health and HealthSouth, as well as other providers, to apply for a new inpatient rehabilitation facility in HSA III. Based upon CHS's current monopoly on inpatient rehabilitation beds in Mecklenburg County and HSA III, it is probable that a new provider would be approved. This would allow residents of HSA III and Novant Health providers in HSA III more choice and improved access to services.

The above variables all reflect the unique nature of inpatient rehabilitation services in HSA III. Novant Health and HealthSouth are not requesting a change in the inpatient rehabilitation need methodology in Chapter 8 of the Proposed 2018 SMFP. Novant Health and HealthSouth are asking the SHCC to consider the unique nature of inpatient rehabilitation services in HSA III and are requesting an adjusted need determination for 50 additional inpatient rehabilitation beds in HSA III in Chapter 8 of the Proposed 2018 SMFP.

IV. Need for Additional Inpatient Rehabilitation Beds in HSA III

The need for additional inpatient rehabilitation beds in HSA III is necessary to provide a choice for patients and providers in Mecklenburg and surrounding counties. Currently one highly utilized inpatient rehabilitation provider controls 95% of the inpatient rehabilitation beds in HSA

[2] According to the US Census Bureau, the population of Mecklenburg County was 1,054,835 as of July 1, 2016. *See* https://www.census.gov/quickfacts/fact/table/mecklenburgcountynorthcarolina/PST045216 (visited July 14, 2017). Wake County's population is comparable at 1,046,791 as of July 1, 2016. *See* https://www.census.gov/quickfacts/fact/table/wakecountynorthcarolina/PST045216.

III, and 100% of the inpatient rehabilitation beds in North Carolina's most populous county, Mecklenburg County. With current beds utilized in excess of 80% of capacity, less than 40% of NHPMC's inpatient rehabilitation referrals were admitted in the first four months of 2017 as reflected in Attachment 3.

In addition, Novant Health patients are waiting for an inpatient rehabilitation bed as documented in Attachment 1. When Novant Health physicians are successful in getting patients admitted there are often delays experienced in admitting them. Clearing the process to admit a patient to the existing inpatient rehabilitation hospitals involves considerable time completing an admission process that should be seamless, but is not. Delaying admission to inpatient rehabilitation deters post stroke rehabilitation for patients. Longer hospital stays increase a patient's susceptibility to hospital-acquired infections; and results in disgruntled family members. One reason for delays experienced by Novant Health providers, in addition to high occupancy at the existing inpatient rehabilitation hospitals in HSA III, is the decision made by CHS Rehabilitation facilities to not accept patients from Novant Health hospitals over the weekend. Further, after the weekend, since a PT/OT evaluation is required in the past 24 hours, NHPMC staff must re-evaluate the patient.

When the patient is re-evaluated by PT/OT on Monday, a patient previously appropriate for inpatient rehabilitation, might now meet criteria for discharge home; when they should have been placed in an inpatient rehabilitation setting three days earlier. The patient therefore, does not receive the level of care needed to maximize full recovery. They are discharged home with home health or outpatient rehabilitation which is not the same level of care. The patient does not receive the aggressive inpatient rehabilitation needed for their optimal post stroke recovery. In addition, some patients don't have resources or family support to go home, therefore they end up in a skilled nursing facility due to the admission delay; again, lacking the resources for their full recovery.

An analysis of stroke patients at NHPMC for the months of January to April 2015 and 2016, included in Attachment 3, shows that while the number of stroke patients at NHPMC have increased, the percentage of NHPMC referrals to CHS inpatient rehabilitation hospitals actually admitted has decreased. In addition, other Novant Health hospitals in Mecklenburg County also are experiencing difficulty and delays admitting patient to CHS inpatient rehabilitation facilities as evidenced in Attachments 1 and 3. The delay in treatment can impact the FIM gain for some patients. Letters from physicians, case managers and hospital administrative personnel documenting these delays and expressing their support for the Petition are included in Attachment 1.

As Novant Health moves into the future concentrating on population health, Novant Health has developed an integrated system of physician practices, hospitals, outpatient centers, urgent care, and more to meet the needs of the patients that choose Novant Health providers. Patients and physicians have immediate access to a single medical record which allows cost effective continuity of care. However, Novant Health patients do not have a choice of inpatient rehabilitation care in Mecklenburg County, and as a result, a significant break in continuity of

care occurs. When a Novant Health patient is admitted to a CHS inpatient rehabilitation hospital, medical records and patient information have not been readily available for Novant Health staff regarding the patient's inpatient stay. In addition, Novant Health staff does not routinely receive notification that the patient has been discharged. This makes it extremely difficult for Novant Health physicians, nurse navigators, and rehabilitation professionals to provide follow up outpatient care and continuing care for patients in their system. This in turn severely impacts the continuity of care for Novant Health patients. Letters from physicians, case managers, and hospital administrative personnel expressing their concern regarding the break in continuity of care and support for the Petition are included in Attachment 1. Novant Health and CHS just announced, at the end of June, plans to start sharing medical records. While this should help alleviate delay in getting records, it will not notify Novant Health providers that a patient has been discharged or speed up delays in the admissions process.

Due to delays in admission to the CHS inpatient rehabilitation hospitals and determinations made by CHS staff that Novant Health patients are not appropriate for inpatient rehabilitation services provided at the CHS inpatient rehabilitation hospitals, many Novant Health patients who meet inpatient rehabilitation requirements are being discharged to home and referred to home health services in lieu of inpatient rehabilitation services. Inpatient rehabilitation services provide intensive rehabilitation daily with a team approach to care. This same level of care is not provided as a home health patient. Home health, skilled nursing and long-term acute care hospitals are not replacements for inpatient rehabilitation as discussed in articles included in Attachment 6.

To determine the number of additional inpatient rehabilitation beds needed by the population of HSA III, Novant Health and HealthSouth reviewed several ongoing changes in inpatient rehabilitation care as well as reviewing the data associated with historical utilization of inpatient rehabilitation services in HSA III including:

- Increased use of inpatient rehabilitation by stroke patients;
- Underutilization of inpatient rehabilitation services; and,
- Analyzing Truven data instead of LRA data to project future utilization.

Increased Use of Inpatient Rehabilitation by Stroke Patients

In June 2016, the AHA/ASA Guidelines for Adult Stroke Rehabilitation and Recovery, published in the periodical *Stroke*, provided a synopsis of best clinical practices in the rehabilitative care of adults recovering from stroke. This report is included in Attachment 4. Also included in Attachment 4 are two recent additional articles supporting inpatient rehabilitation for stroke patients.

According to the AHA/ASA:

> *"Stroke rehabilitation requires a sustained and coordinated effort from a large team, including the patient and his or her goals, family and friends, other caregivers (e.g. personal care attendants), physicians, nurses, physical and occupational therapists, speech-language pathologists, recreation therapists, psychologists, nutritionists, social workers, and others. Communication and coordination among these team members are paramount in maximizing the effectiveness and efficiency of rehabilitation and underlie this entire guideline. Without communication and coordination, isolated efforts to rehabilitate the stroke survivor are unlikely to achieve their full potential."*

As systems of care evolve in response to healthcare reform efforts, post-acute care and rehabilitation are often considered a costly area of care that needs to be trimmed. This position fails to recognize the clinical impact of post-acute care and its ability to reduce the downstream risk of medical morbidity resulting from immobility, depression, loss of autonomy, and reduced functional independence. The provision of comprehensive rehabilitation programs with adequate resources, dose, and duration is an essential aspect of stroke care and should be a priority.[3]

The guidelines were endorsed by the American Academy of Physical Medicine and Rehabilitation, the American Society of Neurorehabilitation, the American Academy of Neurology, and the American Congress of Rehabilitation Medicine. Per the Guidelines[4] it is recommended "that stroke patients be treated at an in-patient rehabilitation facility (IRF) rather than a skilled nursing facility (SNF)."

The AHA/ASA noted that nearly 800,000 individuals suffer a stroke each year. Therefore, the need for effective management is essential. According to guidelines:

- The highest level of evidence supports that stroke patients receive IRF care "in preference to a SNF"
- The highest level of evidence supports that a functional assessment by a clinician with expertise in rehabilitation is recommended for patients with an acute stroke with residual functional deficits.
- The highest level of evidence supports that stroke patients receive "organized, coordinated, inter-professional care."
- Assessment of Rehabilitation needs are "best performed by an interdisciplinary team that can include a physician with experience in rehabilitation, nurses, physical, occupational and speech therapists, psychologists and orthotists."[5]

[3] AHA/ASA Guidelines for Adult Stroke Rehabilitation and Recovery, June 2016, http://stroke.ahajournals.org/
[4] Ibid.
[5] In-patient rehab recommended over nursing homes for stroke rehab, American Heart Association/American Stroke Association Scientific Statement Press Release, May 4, 2016. Attachment 4.

In HSA III, in 2016, only 17.0% of Medicare stroke patients converted from an acute care setting to an inpatient rehabilitation setting. Included in Attachment 5 is an analysis of Medicare stroke patients from hospitals in HSA III. The conversion rate (percent of acute care patients discharged to inpatient rehabilitation) for HSA III is significantly lower than the conversion rate to inpatient rehabilitation hospitals for Medicare stroke patients in HealthSouth markets in nearby states, which range from 21.9% in Tennessee to 26.3% in Georgia.

In 2016, only 43.7% of total Medicare stroke patients from hospitals in HSA III were referred for rehabilitation services at either an inpatient rehabilitation hospital (17.0%) or a skilled nursing facility (26.7%). Based upon the recent guidelines issued for Adult Stroke Rehabilitation and Recovery, this is well under the recommended guideline "that stroke patients be treated at an in-patient rehabilitation facility rather than a skilled nursing facility." The comparatively low number of stroke patients converting to inpatient rehabilitation facilities indicates that there are many stroke patients in the service area who should be receiving care at an IRF but are not.

Total Medicare discharges for patients from HSA III with stroke diagnoses in DRGs 61-66 in 2016 totaled 1,817 patients. The following table illustrates the impact of the new guidelines, which recommend that stroke patients be treated at an inpatient rehabilitation facility. The table shows the additional inpatient rehabilitation bed needed in HSA III if 50%, 75%, and 100% of all stroke patients were referred to an inpatient rehabilitation facility.

Impact of New AHA/ASA Stroke Guidelines
Medicare Stroke Patients from HSA III

Metric	50%	75%	100%
2016 Medicare Stroke Patients from Hospitals Located in HSA III	1,817	1,817	1,817
2016 HSA III Conversion Rate to Rehabilitation	17.00%	17.00%	17.00%
2016 HSA III Stoke Patients Referred to Rehabilitation	309	309	309
Patients NOT Referred to IRF	1,508	1,508	1,508
Estimated IRF Conversion Rate	50%	75%	100%
2016 Volume not in IRF	600	1054	1508
ALOS for Stroke	15.21	15.21	15.21
Increase in IRF Patient Days	9,120	16,029	22,938
ADC	25.0	43.9	62.8
Utilization Rate	80%	80%	80%
Projected Additional Bed Need	31	55	79

Source: Stroke Guidelines Attachment 4; HS Stroke ALOS 2016; Medicare SAF (Standard Analytical File) Attachment 5; Truven Data (DRGs 61-66) Medicare Only; Attachment 2, Table 10

The impact of the new AHA/ASA Stroke Guidelines alone illustrates the need for 31 to 79 additional rehabilitation beds to meet the needs of residents of HSA III as shown in the previous table. This analysis reflects a point in time and does not factor in expected growth in the 65+ age category. When the impact of age is added, the need for additional inpatient rehabilitation beds increases to a range of 38 to 95 additional beds as shown in the following table.

Impact of New AHA/ASA Stroke Guidelines
HSA III Medicare Patients All Hospitals

Metric	2016	CAGR 65+ HSA III Population 2016-2021	Projected 2021		
2016 Medicare Stroke Patients from Hospitals Located in HSA III	1,817	4.1%	2,189	2,189	2,189
2016 HSA III Conversion Rate to Rehabilitation			17.00%	17.00%	17.00%
2016 HSA III Stoke Patients Referred to Rehabilitation			372	372	372
Patients NOT Referred to IRF			1,817	1,817	1,817
Estimated IRF Conversion Rate			50%	75%	100%
2016 Volume not in IRF			723	1270	1817
ALOS for Stroke			15.21	15.21	15.21
Increase in IRF Patient Days			10,990	19,315	27,641
ADC			30.1	52.9	75.7
Utilization Rate			80%	80%	80%
Projected Additional Bed Need			38	66	95

Source: Stroke Study Attachment 4; Stroke Data Attachment 5; HS Stroke ALOS 2016; Attachment 2, Table 10

Note that the above two calculations are for Medicare patients only. In HSA III in 2016, an additional 1,887 patients from HSA III were admitted with a stroke diagnosis (DRGs 61-66) that were not included in the above analysis. This means that the need for inpatient rehabilitation beds is even greater than that shown in the previous analysis.

The analysis of stroke patients included in Attachment 5 shows that the hospital readmission rate from skilled nursing facilities in the service area for Medicare stroke patients reached 14.2% in 2016 compared to a readmission rate of only 12.2% from inpatient rehabilitation hospitals. Readmissions are not preferable for the patient and are very costly to the healthcare system. Inpatient rehabilitation hospitals play an important role in reducing readmission rates for stroke patients and other patients who are appropriate candidates for inpatient rehabilitation hospitals. Additional comparisons between inpatient rehabilitation and skilled nursing facilities are included in Attachment 6.

Further, NHPMC received Joint Commission certification as an Advanced Comprehensive Stroke Center in in June of this year, documentation of which is included in Attachment 7. The Joint Commission has developed an Advanced Certification for Comprehensive Stroke Centers for hospitals that have specific abilities to receive and treat the most complex stroke cases. This new level of certification recognizes the significant differences in resources, staff and training that are necessary for the treatment of complex stroke cases. NHPMC is the only provider in HSA III with this designation. As a result, NHPMC expects increased referrals and emergency department visits for complex stroke cases, as well as non-complex cases, as EMS protocols should change as a result of the NHPMC designation.

In preparation for designation as a Comprehensive Stroke Center, NHPMC added neurology trained hospitalists and intensivists. This provides 24/7 coverage for both hospital inpatient units and emergency services at NHPMC. The availability of 24/7 coverage for the emergency department has now been in place for over three months, and inpatient admissions and patient days at NHPMC have increased as a result. Inpatient stroke admissions are up 23.2% for the first six months of 2017 compared to the same timeframe in 2016. Utilization of all services associated with the Novant Health Neuroscience Services is up 17.0% in the first three months of 2017 and This includes inpatient and outpatient services at all Novant Health facilities in the Greater Charlotte Market (GCM) and includes care for patients with strokes, neurosurgical needs, medical neurology, seizures, as well as other neurological admissions.

NHPMC also has initiated a systemwide tele-stroke network in the GCM, a pilot program for Novant Health. Software and hardware are in place at NHPMC, Novant Health Matthews Medical Center (NHMMC), Novant Health Huntersville Medical Center (NHRMC), and Novant Health Rowan Medical Center (NHRMC) to allow 24/7 emergency coverage for stroke patients in the emergency departments at these hospitals. NHPMC Tele-neurologists provide coverage remotely to allow rapid treatment for patients presenting with stroke symptoms. The top priority for this program is to keep patients in their home community while providing specialty services using technology. Patients in need of complex stroke care will be quickly identified and transported to NHPMC via Critical Care Transport (CCT) as needed. This model, which will result in improved outcomes for patients, has the potential to be utilized not only by other Novant Health facilities in the future, but also by non-Novant Health facilities. In addition, this will increase the number of complex stroke patients treated at NHPMC in need of inpatient rehabilitation.

This designation, combined with the AHA/ASA Guidelines for Adult Stroke Rehabilitation and Recovery, will increase the number of stroke patients at NHPMC in need of inpatient rehabilitation services. Novant Health and HealthSouth believe that the addition of 50 inpatient rehabilitation beds in HSA III will be a great start to meeting the future needs of stroke patients in HSA III.

More Patients Could Benefit from Inpatient Rehabilitation Services in HSA III

HealthSouth is one of the nation's largest providers of post-acute healthcare services. HealthSouth's priority is to deliver high-quality patient care and the team of experts at HealthSouth's rehabilitation hospitals have extensive experience in today's most advanced therapeutic methods and technologies. HealthSouth leads the way, consistently exceeding national quality benchmarks and utilizing proprietary processes and systems, including a rehabilitation-specific electronic medical record (EMR) to offer the highest quality of care available. HealthSouth continually strives for excellence in all that it does, partnering with every patient to find a treatment plan that works for them.

Novant Health Rehabilitation Hospital of Winston-Salem, LLC, a joint venture between Novant Health and HealthSouth, has been approved to develop a 68-bed inpatient rehabilitation hospital

which will replace and relocate the existing inpatient rehabilitation hospital currently located on the campus of Novant Health Forsyth Medical Center. In addition, HealthSouth operates and manages 123 inpatient rehabilitation hospitals across the country and in Puerto Rico. Thirty-seven of these hospitals are joint ventures with acute care hospitals. Thirty-four of these joint ventures are with not-for-profit partners. The average size of HealthSouth's joint venture rehabilitation hospitals is 66 beds, with 110 beds being the largest and 25 beds the smallest. The average age of a HealthSouth joint venture exceeds 15 years.

A general overview and additional details about HealthSouth's deep expertise in providing inpatient rehabilitation services are included in Attachment 8. Based upon HealthSouth's experience and knowledge of inpatient rehabilitation, Novant Health and HealthSouth analyzed HSA III utilization of inpatient rehabilitation services and the number of acute care patients discharged to inpatient rehabilitation. This volume was then compared to the expected HealthSouth conversion rate of appropriate patients to inpatient rehabilitation to determine how many additional patients should be receiving inpatient rehabilitation services in HSA III.

The metric used in this analysis is the Acute Care Conversion Rate to Inpatient Rehabilitation which can be used to evaluate the need for additional inpatient rehabilitation beds in HSA III. The Acute Care Conversion Rate to Inpatient Rehabilitation is the percentage of total acute care discharges for a subset of patients, identified by DRGs, diagnoses and procedures, that are typically appropriate patients that are discharged from an acute care setting to an inpatient rehabilitation hospital.

HealthSouth has extensive experience working with joint venture partners across the United States. A review of discharge data from HealthSouth markets in the US showed that 13.6% of the DRG acute care discharge subset were discharged to inpatient rehabilitation hospitals. This compares to the HSA III Acute Care Conversion Rate to Inpatient Rehabilitation of only 10.5% in 2016.

The following table estimates the number of additional HSA III patients that potentially could have benefited from inpatient rehabilitation services assuming a 13.6% Acute Care Conversion Rate to Inpatient Rehabilitation.

Potential Increase in Discharges to Inpatient Rehabilitation in HSA III

	2016	CAGR HSA III Population 17+ 2016-2021	2021
DRG Subset* of Acute Care Discharges for HSA III Patients - All Hospitals	11,226	1.70%	12,180
2016 HSA III Actual Conversion Rate to IRF	10.5%		10.5%
HSA III Acute Care Discharges in DRG Subset Admitted to IRF	1,184		1,285
2015 Average Acute Care Conversion Rate to IRF - HS Facilities	13.6%		13.6%
Potential IRF Admissions Based upon HS Average	1,527		1,657
Patients NOT Referred to IRF	343		372
HS ALOS	12.5		12.5
Potential Increase in IRF Patient Days	4,277		4,641
ADC	11.7		12.7
Utilization Rate	80%		80%
Projected Additional Bed Need	15		16

Source: Truven Data; HS Data; NCOSBM; Attachment 2, Table 11

*Note: Includes a subset of patients defined by DRG, Diagnosis and Procedures that historically have resulted in referrals to Inpatient Rehabilitation based upon HS experience.

The impact of adjusting the HSA III Acute Care Conversion Rate to Inpatient Rehabilitation alone illustrates the need for 16 additional rehabilitation beds to meet the needs of residents of patients in HSA III as shown in the previous table. Note that this methodology does not take into consideration any increase in utilization by the stroke patient population discussed in the previous section. Therefore, this methodology supports the need for additional inpatient rehabilitation beds in HSA III and, when combined with the stroke methodology presented above, support more than 50 additional inpatient rehabilitation beds.

Truven Data Shows Higher Inpatient Rehabilitation Volumes in HSA III

The annual SMFP utilizes the Truven Inpatient Database for projecting future acute care inpatient beds. Staff for the Health Planning Section also compares data from the Annual Hospital Licensure Renewal Applications (LRAs) and Truven, and facilities with a 5% difference are asked to reconcile the data. However, for inpatient rehabilitation beds, data from the Annual Hospital Licensure Renewal Applications are utilized and not compared to the Truven database. Inpatient rehabilitation beds are a separately licensed category of beds and the Truven database includes a specific revenue code for inpatient rehabilitation.

Novant Health and HealthSouth reviewed Truven data and compared it to the annual LRA data for HSA III inpatient rehabilitation hospitals. The following chart shows that data was consistently reported from 2013 to 2016, based upon the 5% comparison rate. From 2013 to 2015 total utilization reported in the LRAs was greater than total utilization reported in the Truven data.

However, in 2016, reported Truven data shifted and is greater than LRA reported data for the first time in four years.

Comparison of Truven Data to LRAs – Inpatient Rehabilitation Patient Days

	2013	2014	2015	2016
Carolinas HealthCare System Carolinas Medical Center - Levine Children's				
Truven Data	3,602	3,779	4,366	3,941
LRA Data	3,489	3,811	4,250	4,159
Truven % of LRA	103.2%	99.2%	102.7%	94.8%
Carolinas HealthCare System Charlotte Institute of Rehab				
Truven Data - Includes all CHS Rehabilitation Facilities except Levine	44,960	42,974	44,600	44,479
LRA Data Mount Holly	11,547	10,843	11,460	11,916
LRA Data NorthEast	1,270	10,280	10,355	11,195
LRA Data Charlotte Rehab	32,270	23,221	23,437	20,686
LRA Data Combined	45,087	44,344	45,252	43,797
Truven % of LRA	99.7%	96.9%	98.6%	101.6%
CMC - Pineville				
Truven Data		6,271	9,075	9,145
LRA Data		8,537	9,295	9,123
Truven % of LRA		73.5%	97.6%	100.2%
Novant Health Rowan Medical Center				
Truven Data	344	1,891	1,670	1,731
LRA Data	2,537	1,891	1,723	1,731
Truven % of LRA	13.6%	100.0%	96.9%	100.0%
Stanly Regional Medical Center				
Truven Data	1,083			
LRA Data	1,060			
Truven % of LRA	102.2%			
HSA III				
Truven Data	49,989	54,915	59,711	59,296
LRA Data	52,173	58,583	60,520	58,810
Truven % of LRA	**95.8%**	**93.7%**	**98.7%**	**100.8%**

Source: Attachment 2, Table 8

Since LRA data is utilized in the methodology the inpatient rehabilitation need methodology was not triggered as discussed above. However, if Truven data had been utilized in the SMFP methodology, utilization of inpatient rehabilitation beds in HSA III would have exceeded 80% two years in a row and the inpatient rehabilitation bed need methodology would have been triggered as shown in the following table.

HSA III Inpatient Rehabilitation Bed Utilization – Inpatient Rehabilitation Patient Days

	2013	2014	2015	2016
Truven Data	49,989	54,915	59,711	59,296
Utilization of 202 Inpatient Rehabilitation Beds	67.8%	74.5%	81.0%	80.4%
LRA Data	52,173	58,583	60,520	58,810
Utilization of 202 Inpatient Rehabilitation Beds	70.8%	79.5%	82.1%	79.8%

Source: Attachment 2, Table 8

As shown in the previous table, utilization of the 202 inpatient rehabilitation beds in HSA III exceeded 80% in 2015 and 2016 when Truven data is utilized instead of LRA data. This would trigger the inpatient rehabilitation need methodology in Chapter 8 of the Proposed 2018 SMFP resulting in the need for additional inpatient rehabilitation beds in HSA III.

Novant Health and HealthSouth utilized the Truven data included in the previous table to project future inpatient rehabilitation bed need. Based upon the Inpatient Rehabilitation Bed Need Methodology included in Chapter 8 of the Proposed 2018 SMFP, Novant Health and HealthSouth calculated HSA III's three-year average annual growth rate for inpatient rehabilitation days of care using the four most recent years of Health Service Area data as shown in the following table. Note that in 2013 NHRMC Truven data was significantly understated, therefore NHRMC LRA data is substituted for NHRMC in 2013 in the following table to calculate the growth rate, resulting in a more conservative growth rate.

Historical HSA III Inpatient Rehabilitation Utilization Growth – Inpatient Days

	2013*	2014	2015	2016
HSA III Truven Data*	52,182	54,915	59,711	59,296
Annual Growth Rate		5%	9%	-1%
Three Year Average Growth Rate				4.4%

Source: Attachment 2, Table 8
*NHRMC LRA data utilized

The Rehabilitation Bed Need Methodology included in Chapter 8 of the Proposed 2018 SMFP does not provide any direction regarding how many years out in the future bed need should be projected. Because of the special circumstances in HSA III discussed previously, it is evident that a new inpatient rehabilitation provider is needed to provide improved access for Novant Health patients and another choice for patients in HSA III. In addition, it is necessary to account for the time lag involved in completing the annual planning process in 2017 and completing the Certificate of Need process in 2018. Therefore, projections for only one year out, for 2017, are already out dated prior to publishing the 2018 SMFP. Furthermore, there is a time component to be considered in the development and construction of a new 50-bed inpatient rehabilitation hospital in HSA III. Based upon HealthSouth's experience, the following projections utilize a three-year development and construction timeframe.

Using the three-year growth rate and the five-year timeframe, two years for planning and CON processes, and three years for development and construction, Novant Health and HealthSouth calculated future inpatient rehabilitation beds needed for HSA III using Truven data.

Projected Inpatient Rehabilitation Bed Need HSA III – Truven Data

Facility	2013*	2014	2015	2016	3 Yr Avg Annual Growth Rate	2017	2018	2019	2020	2021 - 5 Yr Timeframe	Beds Needed @ 80% Utilization
Novant Health Rowan Medical Center	2,537	1,891	1,670	1,731							
Stanly Regional Medical Center	1,083	0	0	0							
CMC-Levine Children's Hospital	3,602	3,779	4,366	3,941							
Carolinas Rehabilitation Hospital**	44,960	42,974	44,600	44,479							
Carolinas Rehabilitation Hospital Pineville	0	6,271	9,075	9,145							
HSA III Total	52,182	54,915	59,711	59,296		61,920	64,660	67,522	70,510	73,630	50
Annual Growth Rate		5.2%	8.7%	-0.7%	4.4%						

Source: Attachment 2, Table 3
*2013 NHRMC Truven data was significantly understated; LRA data is utilized in the above table
**Includes Carolina Rehabilitation Hospital; Carolina Rehabilitation Hospital Mount Holly; Carolina Rehabilitation Hospital NorthEast

Using the LRA data included in the Proposed 2018 SMFP, the resulting three-year growth rate and the five-year timeframe discussed above, Novant Health and HealthSouth also calculated future inpatient rehabilitation beds needed for HSA III using LRA data.

Projected Inpatient Rehabilitation Bed Need HSA III – LRA Data

Facility	2013	2014	2015	2016	3 Yr Avg Annual Growth Rate	2017	2018	2019	2020	2021 5 Yr Timeframe	Beds Needed @ 80% Utilization
Novant Health Rowan Medical Center	2,537	1,891	1,723	1,731							
Stanly Regional Medical Center	1,060	0	0	0							
CMC-Levine Children's Hospital	3,489	3,811	4,250	4,159							
Carolinas Rehabilitation Hospital	32,270	23,221	23,437	20,686							
Carolinas Rehabilitation Hospital Mount Holly	11,547	10,843	11,460	11,916							
Carolinas Rehabilitation Hospital NorthEast	1,270	10,280	10,355	11,195							
Carolinas Rehabilitation Hospital Pineville	0	8,537	9,295	9,123							
HSA III Total	52,173	58,583	60,520	58,810		61,313	63,922	66,642	69,478	72,435	46
Annual Growth Rate		12.3%	3.3%	-2.8%	4.3%						

Source: Attachment 2, Table 2

As shown in the previous tables, current utilization and the methodology in Chapter 8 of the Proposed 2018 SMFP support the need for 50 additional inpatient rehabilitation beds when a reasonable timeframe is taken into consideration.

Rehabilitation services in HSA III are unique as discussed above. Novant Health and HealthSouth are not requesting a change in the inpatient rehabilitation need methodology in Chapter 8 of the Proposed 2018 SMFP. Novant Health and HealthSouth are asking the SHCC to consider the unique nature of inpatient rehabilitation services in HSA III and are requesting an adjusted need determination for 50 additional inpatient rehabilitation beds in HSA III in Chapter 8 of the Proposed 2018 SMFP.

V. Statement of Adverse Effects on the Population if the Adjustment is Not Made

Patients in the Novant Health system currently experience difficulty gaining admission to the only inpatient rehabilitation provider in Mecklenburg, Gaston and Cabarrus counties in HSA III as documented in Attachments 1 and 3. In addition, patients often experience delayed admission or are denied admission to CHS inpatient rehabilitation facilities due to the high utilization of those facilities as discussed in Attachment 1. Patient admissions are often delayed, or denied,

and many patients end up receiving care in other settings which do not provide the same level of intensive rehabilitation with an experienced rehabilitation team.

Further, once admitted, even though Novant Health physicians and staff are given assurances otherwise, medical records and patient information are not readily available for Novant Health staff once a patient is discharged. This makes it extremely difficult for Novant Health physicians, nurse navigators, and rehabilitation professionals to provide continuing care for patients in their system. This severely impacts the continuity of care for Novant Health patients. Disruptions in continuity of care are frustrating for patients and costly and inefficient for the health care system.

HSA III needs additional inpatient rehabilitation beds. If approved, this Petition will allow Novant Health and HealthSouth, as well as other providers, to apply for a new inpatient rehabilitation facility in HSA III. Based upon the current monopoly on beds held by CHS in Mecklenburg County and HSA III, it is reasonable that a new provider should be approved. This would allow residents of HSA III and Novant Health providers in HSA III more choice and improved access to services. The need for choice and competition is highlighted by the fact that one provider controls 95% of the inpatient rehabilitation beds in a highly-populated HSA, and 100% of the inpatient rehabilitation beds in the State's most populous county.

The proposed adjustment will allow the potential development of a new inpatient rehabilitation hospital with which Novant Health will have an established relationship allowing ease of access for Novant Health patients and seamless sharing of patient data and information in HSA III.

VI. Statement of Alternatives to the Proposed Adjustment that Were Considered and Found Not Feasible

A. Maintain the Status Quo

Existing CHS facilities in Mecklenburg, Cabarrus, and Gaston counties in HSA III have been operating at more than the 80% SMFP planning target for inpatient rehabilitation beds in North Carolina for the last three years. The Stanback Rehabilitation Center at Novant Health Rowan Medical Center (Stanback Center) is the only other provider of inpatient rehabilitation services in HSA III. The Stanback Center is a small unit with only 10 beds. It provides high quality services to its patients, over 80% of whom are from Rowan County. Outcome data and functional independence measure (FIM) scores are above average for patients treated at the Stanback Center. However, the Stanback Center does not have all the resources and tools available in a 50-bed inpatient rehabilitation hospital to meet the needs of all types of rehabilitation patients. The Stanback Center is over an hour away for most residents of HSA III in Mecklenburg, Cabarrus, Union, Gaston and Iredell Counties; therefore, it is not the most effective alternative to meeting the needs of HSA III residents identified in this Petition.

Therefore, maintaining the status quo is not a reasonable alternative.

B. Wait for SMFP to show need

But for the fact that SMFP does not round up, there would be a need in the 2018 SMFP. As discussed above, inpatient rehabilitation services in HSA III are unique. One provider has a total monopoly on inpatient rehabilitation beds in Mecklenburg County and an almost total monopoly on inpatient rehabilitation beds in HSA III. As demonstrated throughout this Petition, the need for more inpatient rehabilitation beds is real and immediate, especially when one considers the new Stroke Guidelines and the fact that patients are not receiving timely access to the services they need. See Attachment 4. Therefore, it is not reasonable to wait for future SMFP beds to be identified in HSA III.

C. Request fewer beds

Novant Health and HealthSouth have provided three methodologies which support the addition of as many as 97 new inpatient rehabilitation beds. Using the SMFP Inpatient Rehabilitation Bed Need Methodology in Chapter 8 of the Proposed 2018 SMFP, including a development and construction timeframe, results in a need for 46 to 50 beds.

HealthSouth has extensive experience in the operation of inpatient rehabilitation hospitals and believes that a 50-bed hospital will allow a new provider to develop a cost-effective alternative in HSA III. If approved, this Petition will allow for the development of a new inpatient rehabilitation provider in HSA III improving access and choice for HSA III residents. Therefore, Novant Health and HealthSouth believe that 50 beds is the correct number of additional inpatient rehabilitation beds needed in HSA III.

VII. Duplication of Health Resources

The addition of 50 new inpatient rehabilitation beds in HSA III will not result in a duplication of health resources in the HSA. Existing CHS facilities in Mecklenburg, Cabarrus, and Gaston counties in HSA III have been operating at more than the 80% SMFP planning target for inpatient rehabilitation beds in North Carolina for the last three years.

The Stanback Rehabilitation Center at Novant Health Rowan Medical Center (Stanback Center) is the only other provider of inpatient rehabilitation services in HSA III. The Stanback Center is a small unit with only 10 beds. It provides high quality services to its patients, over 80% of whom are from Rowan County. Outcome data and FIM scores are above average for patients treated at the Stanback Center. However, the Stanback Center does not have all the resources and tools available in a 50-bed inpatient rehabilitation hospital to meet the needs of all types of rehabilitation patients. The Stanback Center is over an hour away, in good traffic, for most residents of HSA III in Mecklenburg, Cabarrus, Union, Gaston and Iredell Counties so it is not the most effective alternative to meeting the needs of HSA III residents. Please see Attachment 1 for a letter of support for the Petition from NHRMC.

The need for additional rehabilitation beds is justified to meet the demand discussed above. Therefore, the proposed adjustment would not result in a duplication of existing services.

VIII. Consistency with SMFP Basic Principles

The petition is consistent with the provisions of the Basic Principles of the *State Medical Facilities Plan.*

A. Safety and Quality Basic Principle

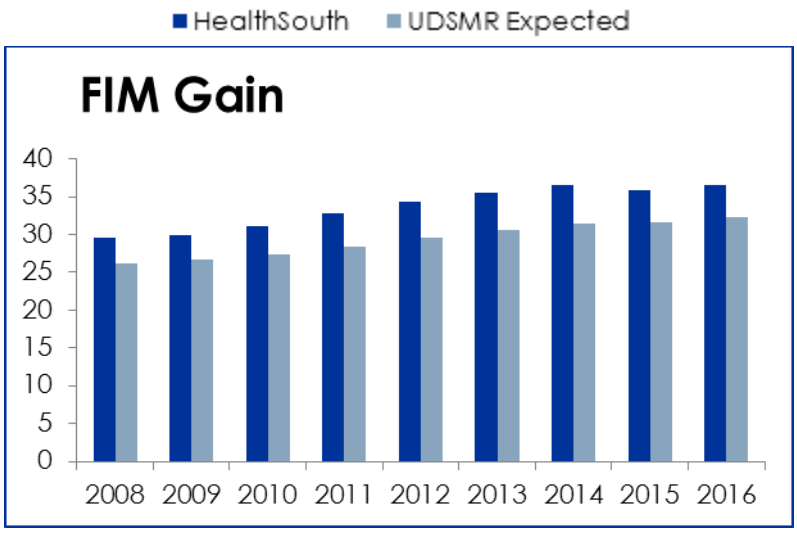
The State of North Carolina recognizes the importance of systematic and ongoing improvement in the quality of health services. Emerging measures of quality address both favorable clinical outcomes and patient satisfaction, while safety measures focus on the elimination of practices that contribute to avoidable injury or death and the adoption of practices that promote and ensure safety. Providing appropriate care in the appropriate setting works to assure quality care for patients. As a result of the Affordable Care Act, quality, transparency and accountability in community hospitals is more important than ever. In the future payment will be based upon quality measures and community hospitals are moving rapidly to assure high quality, cost effective care.

Novant Health and HealthSouth have a long and impressive record on providing high quality care for acute inpatient care and inpatient rehabilitation patients. Perhaps the most important characteristic of successful healthcare is the ability to demonstrate superior levels of care and quality.

HealthSouth's quality scores exceed industry benchmarks demonstrating a superior level of quality care. HealthSouth utilizes Uniform Data System for Medical Rehabilitation (UDSMR®), the rehabilitation industry's most widely recognized outcomes measurement tool, to monitor overall patient outcomes. UDSMR® also allows HealthSouth to benchmark its rehabilitation hospitals against regional and national performance data. As demonstrated in the following graphs, HealthSouth hospitals achieve superior results when compared to other rehabilitation providers:

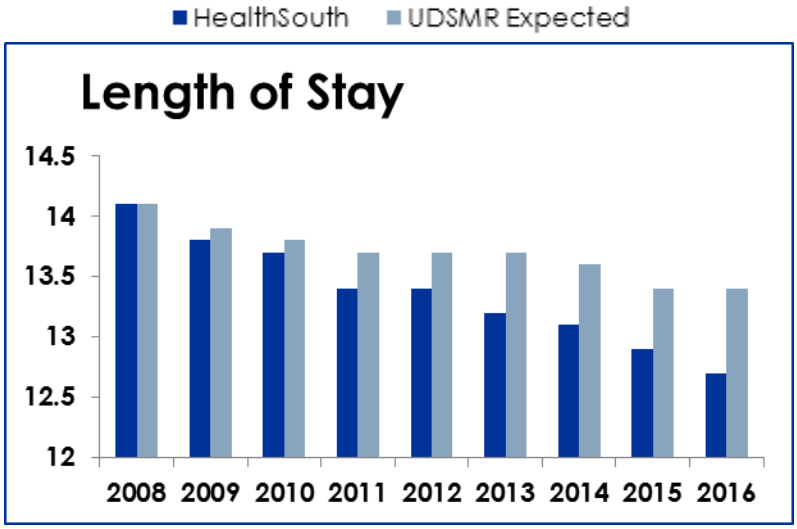
FIM® Gain

FIM® Gain is a measure of functional improvement from admission to discharge and indicates the degree of practical improvement toward the patient's rehabilitation goals. This tool includes 18 cognitive and functional measures including walking, climbing stairs, transfers, bowel and bladder function and dressing. As indicated by the chart on the following page, HealthSouth's FIM® Gain exceeded the UDSMR® expected FIM® Gain for each of the last nine years.



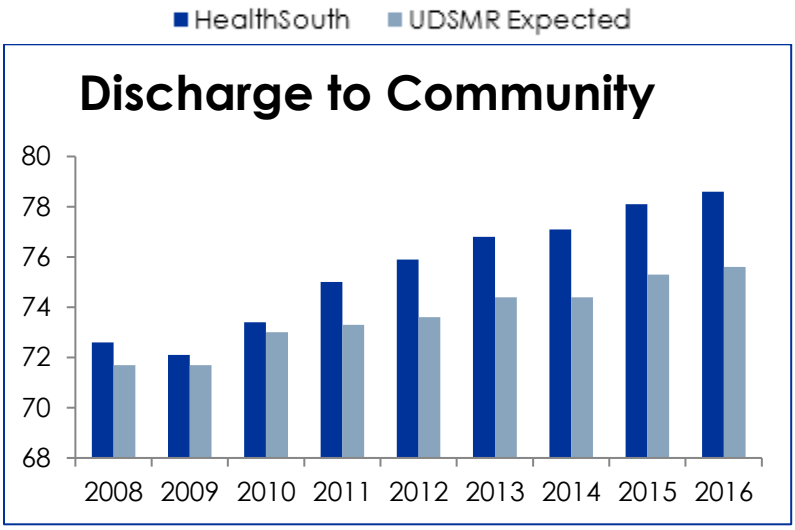
Length of Stay

Length of stay is the number of days a patient resides in a hospital from admission to discharge. As the following chart demonstrates, HealthSouth's patients on average have a length of stay that is shorter than the UDSMR® expected length of stay, meaning that patients return home or to a less intensive care setting faster than the UDSMR® expected.



Percent of Patients Discharged to the Community

As the following chart demonstrates, HealthSouth also discharges a greater percentage of its patients to the community than the UDSMR® expected.



Novant Health has a system wide quality program called "First Do No Harm: Leadership Methods in a Safe Culture" that improves patient safety using proven management techniques. The program educates leaders on basic human performance factors and relates how they affect patient safety. The program also provides leadership strategies which encourage employees to identify, question and correct behaviors to improve patient care. Employees are encouraged to practice with a questioning attitude; to communicate clearly when sharing information; to know Red Rules and practice Red Rules with 100% compliance (Red Rules are rules defined within Novant Health to address any act that has the highest level of risk or consequence to patient or employee safety if not performed exactly, each and every time[6]); to self-check and focus on tasks at hand; and to support each other.

Novant Health also has implemented evidenced-based best practice methods (Safety F.I.R.S.T. Methods for Leaders) that will reduce errors resulting in patient harm by helping build accountability while finding and fixing system problems. There are several national organizations that define the best ways to measure quality. These organizations use research and expert calculations to decide what data to gather, how to analyze it, and how to display the information. They set standards to ensure that any hospital that participates has reliable and accurate data. This information will help patients determine what level of care they are receiving and will help us identify areas where we can grow and improve. Novant Health's quality measures were chosen because they meet these goals:

[6]An example of a red rule is: An employee will always verify patient identity using 2 identifiers prior to any treatment, therapy, transport, or procedure.

- Transparency - we want measures to be up-front and easy to understand.
- Public methodology - the methods of collecting and analyzing data are available for study.
- Validity - we want measures to be validated by reputable research or expertise.
- Comparisons - we want measures that can be compared to a national average so you can compare us with the high standards set for hospitals across the nation.
- Expertise - we choose measures that have been developed and tested by the most well-respected, independent national experts.
- Relevance - we choose measures that are relevant to our patients to help you understand, select and plan for high quality healthcare.

Novant Health displays information in a way that is understandable and useful to patients because that is what is most valuable. Results are shared consistently over time. Novant Health believes patients and families need the facts to make an informed decision about their healthcare as reflected on the Novant Health web site at: https://www.novanthealth.org/home/quality--safety.aspx .

The current monopolistic inpatient rehabilitation environment in HSA III impedes continuity of care for Novant Health patients which is a basic component of providing high quality safe patient care. Both Novant Health and HealthSouth have a demonstrated commitment to providing patient centric high-quality care. This Petition will provide the opportunity for the development of a new 50-bed inpatient rehabilitation hospital in Mecklenburg County or elsewhere in HSA III that has seamless connections to Novant Health, allowing improved patient care for HSA III residents.

B. Access Basic Principle

Equitable access to timely, clinically appropriate and high-quality health care for all the people of North Carolina is a foundation principle for the formulation and application of the *North Carolina State Medical Facilities Plan.* The formulation and implementation of the *North Carolina State Medical Facilities Plan* seeks to reduce all those types of barriers to timely and appropriate access. The first priority is to ameliorate economic barriers and the second priority is to mitigate time and distance barriers. The *SMFP* is developed annually as a mechanism to assure the availability of necessary health care services to a population.

As previously discussed and documented in Attachments 1 and 3, Novant Health patients are experiencing delays in admission to the existing CHS inpatient rehabilitation facilities in HSA III due to high utilization. This Petition will provide the opportunity for the development of a new 50-bed inpatient rehabilitation hospital in Mecklenburg County or elsewhere in HSA III that will expand access to inpatient rehabilitation for HSA III residents.

C. Value Basic Principle

The SHCC defines health care value as maximum health care benefit per dollar expended. Disparity between demand growth and funding constraints for health care services increases the need for affordability and value in health services. Measurement of the cost component of the value equation is often easier than measurement of benefit. Cost per unit of service is an appropriate metric when comparing providers of like services for like populations. The development of a new 50-bed inpatient rehabilitation hospital in HSA III will result in a cost-effective alternative which will improve access and provide value to residents of HSA III.

IX. Conclusion

The proposed Adjusted Need Determination for 50 additional inpatient rehabilitation beds in HSA III in the 2018 SMFP will allow the development of needed services and the potential addition of competition in an HSA in which one provider controls 95% of the inpatient rehabilitation beds.

This Petition for 50 additional inpatient rehabilitation beds in HSA III will allow an opportunity for a Novant Health and HealthSouth joint venture company to apply for a Certificate of Need in HSA III. As healthcare services move into the future concentrating on population health, leadership at HealthSouth determined that partnering HealthSouth's inpatient rehabilitation expertise with Novant Health 's integrated system of physician practices, hospitals, outpatient centers, and more - each element committed to delivering a remarkable healthcare experience for patients – is an ideal match for the future of inpatient rehabilitation services for HSA III. Currently, patients in the Novant Health system have difficulty gaining admission to the current inpatient rehabilitation provider in Mecklenburg, Gaston and Cabarrus counties in HSA III. Patient admissions are often delayed, or denied, and many patients end up receiving care in other settings which do not provide the same level of intensive rehabilitation with an experienced rehabilitation team. The adjustment requested in this Petition is needed to improve the health of the citizens of HSA III.

Novant Health and HealthSouth
Petition for Adjusted Need Determination
50 Additional Rehabilitation Beds in HSA III in the 2018 SMFP
Attachment List

Acute Care Committee
Agency Report
Petition for an Adjusted Need Determination for
50 Inpatient Rehabilitation Beds in HSA III
2018 State Medical Facilities Plan

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Request:
Novant Health, Inc. and HealthSouth Corporation request an adjusted need determination for 50 inpatient rehabilitation beds in Health Service Area (HSA) III in the *North Carolina Proposed 2018 State Medical Facilities Plan (Proposed 2018 SMFP).*

Background Information:
Chapter Two of the *Proposed 2018 SMFP* allows for "[a]nyone who finds that the North Carolina State Medical Facilities Plan policies or methodologies, or the results of their application, are inappropriate may petition for changes or revisions. Such petitions are of two general types: those requesting changes in basic policies and methodologies, and those requesting adjustments to the need projections." The *SMFP* annual planning process and timeline

allow for submission of petitions for changes to policies and methodologies in the spring and petitions requesting adjustments to need projections in the summer. It should be noted that any person might submit a certificate of need (CON) application for a need determination in the Plan. The CON review could be competitive and there is no guarantee that the petitioner would be the approved applicant.

Need for inpatient rehabilitation beds is determined when the average occupancy rate in an HSA is 80% or higher during the two fiscal years prior to developing the NC Proposed SMFP. The number of beds needed is decided by (1) calculating the HSA's three-year average annual growth rate for inpatient rehabilitation days of care using the four most recent years of HSA data, (2) calculating the projected days of care in the HSA by multiplying the HSA's most recent year's days of care by the three-year average annual rate of change calculated in Step 1, then adding this to the HSA's most recent year's days of care and (3) determining how many additional beds are needed in the HSA such that the utilization rate for the sum of the HSA's total planning inventory and the additional beds is 80%.

Analysis/Implications:

The Petitioner presented several points to support the 50 bed adjusted need determination in the service area including: out-of-state patient migration into HSA III, the population-to-bed ratio, and the recent certification by The Joint Commission (TJC) of Novant Presbyterian Hospital as a Comprehensive Stroke Center.

The Agency does not have access to patient migration data for inpatient rehabilitation beds. Based on the data presented in the Petition, it does appear the beds in HSA III have had higher in-migration than other health service areas. This is to be expected based on the geographical location of Mecklenburg County since it borders South Carolina. It would be fair to assume that HSA III has some out migration as well. Health South has a 50-bed inpatient rehabilitation hospital in Rock Hill, SC just over the state border. Data on the Joint Annual Report from the SC Department of Health and Environmental Control shows this facility is well utilized with an occupancy rate of 82.22% in the last reporting year, suggesting that it may serve patients originally from the HSA III service area.

As noted in the petition, the bed-to-population ratio in HSA III is one of the highest. However, a review of the 'Table 8A Inventory and Utilization of Inpatient Rehabilitation Beds' shows that HSA I, the third highest bed-to-population ratio in the State according to the Petition, has the lowest occupancy rate at 45.1%. For this reason, this particular measure may not accurately reflect the need in the service area.

Finally, the Petitioner discussed an increase in the occupancy of the inpatient rehabilitation beds by stroke patients due to the recent certification of the Petitioner, Novant Presbyterian Hospital, as a Comprehensive Stroke Center. This is the highest certification provided by TJC for stroke care. In addition, to the Petitioner, there are two other hospitals in NC with this designation: UNC Hospitals (UNC) and Wake Forest Baptist Medical Center (WFBMC). Information on the TJC website shows that UNC became certified in early 2017, too recent to review the data. WFBMC became certified in May of 2015. A review of their most recent data indicates there was a slight increase in the days of care for inpatient rehabilitation beds in 2015 to 2016 from

9,502 to 10,403. The difference is 901 days of care which divided by 365 days translates to an annual increase in use of 2.5 beds.

The Agency believes the conditions the Petitioner notes regarding in-migration, the bed-to-population ratio and Novant Presbyterian Hospital's certification as a Comprehensive Stroke Center could have an influence on the utilization of inpatient rehabilitation beds in HSA III. However, as described above, it is not clear to the Agency that increases in utilization will support an adjusted need for 50 beds.

Occupancy Rates and Bed Need Determination

Historically, the occupancy of inpatient rehabilitation beds in HSA III has been fairly high. According to 'Table 8A: Inventory and Utilization of Inpatient Rehabilitation Beds' in the *Proposed 2018 SMFP*, this service area has an inventory of 202 beds in 6 facilities. In the most recent data year, four of the facilities had a greater than 80% occupancy. There is one facility, Novant Health Rowan Regional Medical Center, which had the lowest occupancy in the HSA III at 47.3%.

As noted in the Petition, despite high occupancy in the service area, a need has not been triggered. In 2014, HSA III's inpatient rehabilitation beds had a reported occupancy rate of 79.5%. In 2015, the occupancy rate, at 82.1%, was above the threshold. In 2016, the occupancy rate was 79.5%. The Agency notes that the standard need methodology does not address rounding and agrees with the Petitioner that it is reasonable to round the rate in 2016 to 80%. Therefore, for two consecutive years, HSA III will have met the 80% threshold as required by the methodology. The Agency ran the standard methodology which generated a need for 8 beds (see Table).

Table. Inpatient Rehabilitation Bed Need Determination, HSA III

					Methodology				
					Step 1	Step 2	Step 3		
	Days of Care				HSA Average Annual Growth Rate 2012-2015	Projected Days of Care	Projected Beds Needed	Beds Needed, (adjusted)	Additional Beds Needed
Total Planning Inventory	2013	2014	2015	2016					
202	52,173	58,583	60,520	58,810	0.04255652	61,312.75	167.52	209.4	7.4

Agency Recommendation:

The Agency supports the methodology for inpatient rehabilitation bed need determination. According to the Agency's view, it is appropriate to round the occupancy rate in HSA III such that it has reached the threshold for determining need. In-migration of patients from nearby South Carolina and increases in stroke patients may have some impact on occupancy, but the effect on bed need, to the extent that 50 beds are needed, is not clear. Based on the standard need methodology, eight (8) beds are needed.

Given the available information submitted by the August 10, 2017 deadline date for comments

on petitions and comments, and in consideration of the factors discussed above, the agency recommends approving an amendment to the Petitioners' request to show a need for eight (8) inpatient rehabilitation beds in the *2018 SMFP*.

Received 7-29-15

ATTACHMENT 5

PETITION

Petition for Special Need Adjustment for Nursing Care Beds in Nash County

PETITIONER

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STATEMENT OF REQUESTED ADJUSTMENT

LifeCare Hospitals of North Carolina (LifeCare) respectfully petitions the State Health Coordinating Council (SHCC) to create an adjusted need determination for 40 additional nursing care beds in Nash County in the *2016 State Medical Facilities Plan.* In order to ensure that the beds do not duplicate services already available in the area, while providing access to the target population, LifeCare suggests that the following language be added to the need determination, if approved:

> *In response to a petition from LifeCare Hospitals of North Carolina, the State Health Coordinating Council approved an adjusted need determination for 40 nursing care beds in Nash County. Applicants must demonstrate that the beds will be available to patients in all of the following categories of conditions/needs: ventilator-dependency; tracheostomies; tracheostomies with bi-level positive airway pressure; bariatric status with tracheostomies; bariatric status over 300 pounds; IV antibiotics administered more than once daily; total parenteral nutrition; complex wounds; dialysis; ventilator dependency and/or tracheostomies combined with dialysis. Further, applicants shall not be required to demonstrate that the patient populations they propose to serve in these beds live within any particular distance of the facility.*

Please note that it is LifeCare's intent that the language above require applicants to be willing to take patients in all of the categories, although a single patient may have only one of the conditions listed.

BACKGROUND

LifeCare operates a 50-bed long term care hospital (LTCH) in Rocky Mount in Nash County. LTCHs were created by Congress in the 1980s to facilitate prompt discharge of medically complex patients from acute care hospitals, in an effort to decrease Medicare spending. LTCHs are designed to provide highly specialized, acute care for critically chronically ill patients who are clinically complex, have multiple acute or chronic conditions (co-morbidities), and thus require long hospitalizations. LTCH patients average a length of stay of 25 days or more, along with specialized, twenty-four hours a day/seven days a week treatment and/or therapeutic intervention. While the needs of many within the LTCH patient population no longer warrant care in an expensive critical/intensive care setting, the patient needs are too complex and resource-intensive to be adequately met on a general medical/surgical unit, and the patient acuity level is too high for any post-acute milieu. Thus, the LTCH serves as a vital part of providing care to a unique subset of patients.

A similar set of challenges that led to the creation of the LTCH model also exists for LTCH patients that no longer need acute care, but continue to need ongoing nursing care. Once the acute condition has subsided, LTCH patients are typically discharged to home or a post-acute setting, such as skilled nursing facilities. Just as the discharge of patients from a general acute care hospital to an LTCH is a cost-effective, clinically appropriate method for their care, so, too, is the discharge of patients from a LTCH to a skilled nursing facility. For a substantial subset of these patients, however, discharge to a skilled nursing facility (SNF), though clinically appropriate, is impossible. Specifically, patients with certain conditions are not accepted by the majority of skilled nursing facilities in the entire state, even though they could otherwise be treated in the nursing facility. These include patients with the following conditions/needs:

- Ventilator dependency
- Tracheostomies
- Tracheostomies with bi-level positive airway pressure (BiPAP)
- Bariatric patients with Tracheostomies
- Bariatric patients over 300 pounds
- IV antibiotics administered more than once daily
- Total Parenteral Nutrition
- Complex wounds
- Dialysis
- Ventilator dependency and/or Tracheostomies combined with dialysis.

LifeCare does wish to note that one SNF in Nash County does accept patients with tracheostomies; however, that facility is often full, and the percentage of patients with tracheostomies as their only condition (i.e. not combined with bariatric status or dialysis, etc.) is small. Given the nature of LTCH care, a significant number of LifeCare's patients have one or more of these conditions, as detailed below. As a result, patients who would otherwise be discharged to a SNF either remain at LifeCare, or, if possible, are discharged to a distant SNF that will accept patients with these conditions. This creates several potential issues, such as:

- Occupying higher cost LTCH beds when lower cost nursing beds would be appropriate;
- Preventing the admission of patients from a general acute care setting into the LTCH, resulting in unnecessary costs in the general acute care setting; and,
- Necessitating extensive travel for patients and families if an accepting SNF is found at a distance.

One additional background issue drives the need for this petition. For LTCH patients, The Centers for Medicare and Medicaid Services (CMS) currently reimburses under a separate LTCH PPS; however, as of October 1, 2016, payment under the LTCH PPS will be limited to patients that either a) had at least a three-day length of stay in a critical/intensive care unit, or; b) has experienced 96 hours or more of ventilator care. LifeCare expects these changes to have multiple impacts, including increasing the acuity of its (already acute) patient population and making post-acute placement even more challenging, particularly for patients who were not successfully weaned off their ventilators.

REASON FOR THE REQUESTED ADJUSTMENT

As described in the section above, there is a subset of patients with certain conditions who can be cared for in a lower cost nursing care setting once their condition has subsided and acute care is no longer needed, yet LifeCare (and other providers) struggle to place these patients in SNFs because they still have unique needs which are beyond the capabilities of most SNFs. The following discussion explains the need for the proposed 40 beds to serve these patients. It should be noted that most electronic patient record systems make it difficult to identify a precise number of patients that fit into one of these categories who had difficulty finding a nursing facility; however, LifeCare believes the numbers presented below are conservative estimates, as they include only those patients that could be verified as falling into one of the categories listed above.

Lack of Available Ventilator Beds

As the SHCC is aware, there are currently only three skilled nursing facilities in the state that accept ventilator dependent patients: Kindred Hospital in Greensboro, Oak Forest Health and Rehabilitation in Winston-Salem, and Valley Nursing and Rehabilitation Center in Taylorsville. Although occupancy specific to the ventilator beds is not available publicly, according to their license renewal applications, Kindred and Oak Forest maintain high overall occupancies (near or above 90 percent), and, based on difficulty placing patients, Valley Nursing's ventilator beds are often full as well. In total, these facilities operate 90 beds for ventilator-dependent patients. Even if one of these facilities has a ventilator bed available, given their locations in western North Carolina, the distance from Nash County and the eastern North Carolina region represents a significant barrier to patients and their families.

The need for additional ventilator beds is well-known to the SHCC and the Agency. In response to UNC Hospitals' 2014 petition for an additional nursing facility policy, the Agency replied[1] that while additional ventilator beds are needed, a new policy was unwarranted given that a provider can petition for a special need determination for ventilator beds. Please note that the Agency Report also recognized the particular need in eastern North Carolina. While LifeCare is not proposing to operate the nursing care beds solely for ventilator patients, the proposed beds would be available to ventilator patients, as well as patients with numerous other conditions described above.

LifeCare admits patients from UNC Hospitals and its affiliates, including Rex Hospital and, within Rocky Mount, Nash Health Care. Based on UNC Hospitals' petition, it identified a need for 55 nursing care beds for its ventilator patients alone. Given this need, which does not include patients with any other conditions or from any other hospitals, LifeCare believes there is a need for at least 40 nursing care beds to serve these patients.

Need for Nash Health Care Patients

LifeCare works closely with Nash Health Care (NHC) in Rocky Mount, accepting many of its patients needing long term acute care. According to data from NHC, it treats more than 700 patients each year that fall into one of these categories, qualify clinically for skilled nursing care, but cannot be transferred because of a lack of a SNF able or willing to accept the patient. The most prevailing need for

[1] http://www2.ncdhhs.gov/dhsr/mfp/pdf/2014/ltbh/0417_nh_unc_agencyrep.pdf

NHC is dialysis patients and those needing multiple daily IV antibiotic treatments. Assuming a SNF ALOS of 23 days for these patients (see discussion below regarding ALOS assumption), these patients alone generate a need for 49 nursing care beds, as shown in the following table. Please note that these are patients that would have been transferred directly from NHC to a SNF, and do not include patients that were transferred to LifeCare for LTCH care.

Total patients	700
x ALOS of 23 days =	
Total SNF patient days	16,100
÷ 365 days =	
ADC	44.1
÷ 90% occupancy	
Total bed need	**49**

Need for LifeCare Patients

LifeCare examined its own patient population to determine the need for nursing care beds to serve patients in one of these categories. In 2014, approximately 220 patients were candidates for skilled nursing care after their acute condition waned, but they were unable to be transferred to a SNF due to one or more of the listed conditions. Based on the first six months of 2015, LifeCare expects to have a similar number of patients unable to be transferred this year as well.

To determine the number of nursing care beds these patients could utilize, one needs to know the expected average length of stay, or ALOS for the patients. The ALOS varies widely based on multiple factors, most notably the patient's condition. For instance, patients with ventilator dependency often have lengths of stay approaching one year or more in a skilled nursing facility (see, e.g. Patient Case 1 below and UNC Hospitals' 2014 petition relating to ventilator nursing care beds, in which a SNF ALOS of 335 days was assumed[2]). Patients with another condition, such as the need for multiple daily doses of IV antibiotics, may need nursing care for a much shorter time. Lengths of stay also vary depending on whether the patient needs only short-term rehabilitation care or long term/permanent care. According to the National Care Planning Council, the nationwide ALOS for long term nursing home patients is approximately 270 days, and the ALOS for a short term rehabilitation (Medicare) patient is approximately 23 days[3]. LifeCare believes that the shorter ALOS is more

[2] http://www2.ncdhhs.gov/dhsr/mfp/pets/2014/ltbh/0306_nh_unch.pdf
[3] http://www.longtermcarelink.net/eldercare/nursing_home.htm

reasonable (and more conservative), given that it would not expect to house permanent patients and does not intend to replace existing local SNFs. While LifeCare recognizes that some patients' conditions may require long term placement, assuming the shorter length of stay results in a more conservative bed need. As shown in the table below, based solely on LifeCare's patients, the total need for nursing care beds for patients with these conditions is 15 beds.

Total patients	220
x ALOS of 23 days =	
Total SNF patient days	5,060
÷ 365 days =	
ADC	13.9
÷ 90% occupancy	
Total bed need	**15**

Thus, based on projections from Nash Health Care and LifeCare, there is a need for at least 64 nursing care beds in Nash County for these patients, not including the additional 55 beds needed for UNC Hospitals' ventilator patients.

Patient Examples

While the number of patients described above is an important justification for the petition, it is also vital to understand the patients behind the numbers. The following are examples of real patients[4] who would have benefitted from the availability of nursing care beds in Nash County to care for patients with the conditions described in this petition.

Patient Case 1: Ms. Y

A patient, Ms. Y, was admitted to LifeCare Hospitals of North Carolina in August 2012 from Vidant Medical Center with Acute Respiratory Failure requiring ventilator support. The patient's hospital course was complicated by multiple co-morbidities including: Dysphagia, Obesity Hypoventilation Syndrome, Coronary Artery Disease, Chronic Obstructive Pulmonary Disease, and Chronic anemia.

After multiple failed vent weaning attempts, Ms. Y was deemed a "chronic vent" patient and attempted referrals to Skilled Nursing Facilities began in April 2013. At that time, LifeCare attempted to refer Ms. Y to the four SNFs accepting

[4] Names have been altered to maintain HIPAA compliance.

ventilator patients: Pungo District Hospital, Valley Nursing and Rehab, Kindred of Greensboro, and Oak Forest. None of the facilities were able to accept Ms. Y. The reasons of denials included: no beds available, unable to accept due to morbid obesity (the patient weighed 304 pounds), mobility status, and no active Medicaid (although the patient did eventually receive approval for Medicaid).

Finally, after a 342 day length of stay at LifeCare, space became available and the patient was transferred to Valley Nursing and Rehab in Taylorsville, which is approximately 250 miles from the patient's primary residence.

While placement in a SNF was eventually possible, the length of time spent waiting for an available bed, as well as the distance from the patient's home to the accepting facility demonstrate that additional beds are needed, in eastern North Carolina, to care for these patients.

Patient Case 2: Ms. Q

Ms. Q was admitted to LifeCare Hospitals of North Carolina in November 2014 from a SNF in Scotland County with Providencia stuartii infected sacral wound. Patient received aggressive wound care and intravenous antibiotics throughout her stay. The patient's hospital course was complicated by uncontrolled diabetes, leukocytosis with elevated temperature, bedridden status, and hemodialysis.

In January 2015 the physician felt the patient clinically stable for discharge from LifeCare Hospitals of NC and referral to skilled nursing facilities was initiated. Attempts were made to refer the patient to facilities in 33 counties. Three SNFs initially offered a bed to the patient; however, none of them were ultimately able to accept the patient because the closest dialysis facilities, operated by one of the two largest outpatient dialysis providers in the state, would not accept non-ambulatory (i.e. stretcher-bound) dialysis patients.

The Nephrologist following the patient at LifeCare Hospitals of NC became involved, and helped the patient be accepted at Roanoke Landing in Plymouth, with hemodialysis provided by a local dialysis facility. The patient remained at LifeCare for 90 days and discharged in mid-February, 2015.

In this case, the length of stay at LifeCare was more than 30 days longer than necessary, dictated not by the patient's condition, but by the lack of available local facilities that could provide dialysis care for bed-ridden SNF patients. Approval of the petition would pave the way for development of a facility in Nash County that would accept long term care patients needing dialysis treatment, including those that are not ambulatory.

Patient Case 3: Ms. K

Ms. K was admitted to LifeCare Hospitals of North Carolina in November 2013 from Vidant Medical Center with Acute Respiratory Failure requiring ventilator support. The patient's hospital course was complicated by multiple co-morbidities including: Morbid Obesity, Chronic Anemia, Coronary Artery Disease, and bedridden status.

After multiple failed vent weaning attempts, Ms. K was deemed a "chronic vent" patient and referrals to Skilled Nursing Facilities began in February 2014. At that time, Ms. K was referred to the all three of the long term vent facilities in North Carolina. Reasons of denials included: inability to accept due to morbid obesity (patient weighed 454 pounds) and non-ambulatory status.

Skilled Nursing Facility referrals were extended to out-of-state facilities. The patient was eventually accepted at Wyndridge Health and Rehab in Crossville, Tennessee, which is approximately 526 miles from the patient's primary residence. The patient remained in our hospital for 118 days and was discharged in March 2014.

In the case of Ms. K, given the expectation that neither her ventilator dependency nor her morbid obesity would change, the only alternative was to refer her to a facility many hours away from home. LifeCare believes this type of care should be available to patients in North Carolina, particularly those in the eastern part of the state.

Patient 4: Mr. Z

Mr. Z was admitted to LifeCare Hospitals of NC in June 2015 from Wilson Medical Center with Acute and Chronic Respiratory Failure. The patient's hospital course has been complicated by tachycardia, leukocytosis, thrombocytopenia, and pulmonary fibrosis with acute exacerbation.

The patient's acute status has subsided, yet he continues to be an inpatient at LifeCare Hospital due to high oxygen demand. Patient is on six liters high flow oxygen via nasal cannula at rest but requires 10 to 12 liters high flow with movement. Patient resides in Wilson County and there are no Skilled Nursing Facilities in that county that will accept 10 to 12 liters high flow oxygen.

The patient currently has a length of stay at LifeCare Hospitals of 32 days. Patient will remain at LifeCare Hospital of North Carolina at least until oxygen

> *is weaned to eight liters with movement. Even then there is no guarantee that Mr. Z will be able to be placed, as only one facility in Nash and Edgecombe counties will accept patients on eight liters of oxygen.*

If nursing care beds were available for patients with conditions described in this petition, LifeCare would be able to transfer Mr. Z to that facility immediately, providing him and the healthcare system more cost-effective care close to home.

Summary

LifeCare believes that the data presented above clearly show the need for 40 nursing care beds to treat patients with one or more of the listed conditions. Although LifeCare recognizes that approval of the petition is not a guarantee that it would receive the CON for the nursing care beds, it would like the SHCC to understand that LifeCare believes it can develop the beds in a cost-effective manner. If approved, LifeCare would develop the beds on its existing campus, where they would be co-located with multiple support services. As such, these services would not need to be duplicated for the nursing care beds. In addition, the beds would likely be located in existing space that could be renovated to accommodate the beds without requiring new construction.

ADVERSE EFFECTS IF PETITION IS NOT APPROVED

If not approved, access to skilled nursing care beds for certain medically complex patients will continue to be limited across North Carolina, particularly in Nash County and the eastern part of the state. Patients with ventilator dependency, tracheostomies, weight over 300 pounds, etc. will have limited access to the optimal care setting. Patients will remain in higher cost settings, potentially for months at a time, until they can be placed in a more appropriate lower cost setting. These patients will not be receiving optimal care that would be available to them in a nursing care facility. Acute care hospital and LTCH capacity will continue to be constrained by these patients and less available for acutely ill patients. Finally, the overall healthcare system will continue to incur unneeded costs as these patients will receive care in hospitals or LTCHs when it could be provided in a lower cost setting.

ALTERNATIVES CONSIDERED

LifeCare considered several alternatives to petitioning for SNF beds in Nash County. First, maintaining the status quo was considered, but given the ongoing need for skilled nursing beds to serve these patients in a lower acuity setting, LifeCare determined that it should file this petition.

Next, LifeCare considered applying for a CON for nursing care beds under Policy NH-1, which allows the conversion of up to 10 beds to from acute care to nursing care. However, this alternative is not feasible for several reasons. First, LifeCare's 50 LTCH beds currently operate at around 80 percent occupancy; thus, converting any of them over to nursing care would prevent LifeCare from meeting the need for its long term acute care patients. Second, Policy NH-1 requires hospitals to be located in a non-metropolitan county, as defined by the U.S. Office of Management and Budget. Although LifeCare believes that Nash County is essentially rural, it does not meet the definition of non-metropolitan, and thus, could not apply for nursing care beds under this policy. For these reasons, LifeCare rejected its consideration of Policy NH-1.

Next, LifeCare considered a request for more or fewer than 40 beds. As shown above, considering the need at LifeCare, Nash Health Care and UNC Hospitals alone, 119 nursing care beds could be filled on an annual basis. LifeCare is aware that need determinations for nursing care beds are typically for 90 beds or more to allow the development of new providers. However, given the surplus of beds in Nash County, even though most of those beds are not available to any of these patients, LifeCare determined that a lower, more conservative number would be more appropriate at this time. After consideration of the need for a sufficient number of beds to be financially feasible, LifeCare determined that 40 beds allowed for the development of a feasible service that would also appropriately serve a portion of the significant need that exists for this care.

Given that none of the other potential alternatives would result in the same benefits to patients and the healthcare system overall, LifeCare believes that its petition represents the most effective alternative.

EVIDENCE THAT THE PROPOSED CHANGE WOULD NOT RESULT IN UNNECESSARY DUPLICATION

From the discussion above, it is clear that approval of this petition would not result in unnecessary duplication, because there are no facilities in Nash County that provide skilled nursing care to the majority of these patients. Moreover, only three SNFs in the entire state current accept ventilator-dependent patients. As explained above, the intent of this petition is not to enable the development of skilled nursing beds that would compete with the existing SNFs in the area; LifeCare works with and discharges patients to those SNFs on a regular basis. The petition would, however, enable the development of SNF beds to serve a patient population that currently must remain in the LTCH after their acute

condition has subsided, due specifically to the lack of existing resources to care for these patients in a post-acute (i.e. SNF) setting.

In addition, although the *Proposed 2016 SMFP* does show a small surplus of SNF beds in Nash County (16), that number is considerably lower than the surplus in previous years due to the recent closure of a 60-bed SNF facility in Nashville. In fact, the Nursing Home Workgroup is currently developing a revised methodology for use in future *SMFPs* which shows a **deficit** of SNF beds in Nash County according to materials distributed at the July 29th meeting. Moreover, and to the point of this petition, **none of the existing beds in Nash County serve the vast majority of patients** that are the subject of this petition.

Finally, due to the special nature of the care provided at LifeCare, which would also be reflected in the patients served with the proposed SNF beds if LifeCare is able to develop them, LifeCare's patient origin shows that, unlike SNF facilities that traditionally serve patients close to home, the majority of its patients are not from Nash County, but from a broader region:

LifeCare LTCH Beds FFY 2014 Patient Origin by County

County	*Percentage of Patients*
Nash	21%
Edgecombe	11%
Halifax	12%
Wayne	9%
Pitt	7%
Wilson	6%
Wake	4%
Other counties and states	30%

In contrast, a review of data from existing Nash County SNFs shows that, on average, approximately two-thirds of their patients are from Nash County, with over 80 percent originating from Nash and Edgecombe counties. Therefore, even if the proposed beds were serving patients that could be served in existing SNFs, any impact would be spread among many facilities in multiple counties. However, since there are no SNFs in any of these seven named counties providing care for the vast majority of the types of patients described in the petition, none of the patients could have been cared for in SNFs in these counties, and LifeCare's petition will not *duplicate* existing services, and will thus not result in *unnecessarily* duplication.

LifeCare has included proposed language for the need determination in order to ensure that, if approved, the allocation of 40 additional nursing care beds will not result in unnecessary duplication. In particular, it has recommended that the beds can only be approved for facilities willing to take patients with any one or more of the conditions listed; that is, the approved facility cannot single out one or two conditions of patients that it would accept, but must be willing and able to care for all of the listed conditions. In addition, LifeCare recommends that the geographic limitation of 45 miles, which is currently the standard in the CON rules for nursing care beds. While this standard is important to ensure care is available locally for standard nursing care beds, given the unique nature of the patients to be treated in the beds requested in this petition, LifeCare believes that removing this limitation would help to prevent unnecessary duplication of services available locally.

EVIDENCE OF CONSISTENCY WITH THE THREE BASIC PRINCIPLES

LifeCare believes the petition is consistent with the three basic principles: safety and quality, access, and value.

SAFETY AND QUALITY

As noted above, the proposed adjusted need determination would enable the development of 40 beds that will serve medically complex patients that currently lack sufficient access to nursing care beds. These patients can be optimally cared for in a skilled nursing facility with increased quality of life. For example, ventilator patients who do not have an acute condition are best served in skilled nursing facilities with a service dedicated to the care and treatment of this patient population. Research suggests that medical care for ventilator-dependent patients may be superior in a long-term nursing facility ventilator unit. In particular, the ability to successfully wean a patient from ventilator care has been linked to the healthcare provider's skill and experience with patients with prolonged mechanical ventilation. Ventilator-dependent patients have a decreased risk of acquiring nosocomial infections and increased quality of life in skilled nursing settings. Similarly, patients with the other listed conditions will benefit from the care received by a clinical staff dedicated to a limited set of issues, whose goal is improving the patient and discharging the patient home, if possible, or to another long term care setting. As such, the proposed service would improve the safety and quality of care provided to these patients.

ACCESS

As explained throughout this petition, there is currently limited access to nursing care beds for the medically complex patients listed above, as evidenced by the months-long wait for patient placement experienced by LifeCare, NHC, and UNC Hospitals. The proposed adjusted need determination will increase access for patients of these facilities as well as more broadly in Eastern North Carolina, which has no ventilator beds at this time, and few beds serving any of the other types of patients as well.

VALUE

The proposed adjusted need determination will further the ability of the healthcare system in the state to provide greater value to patients and payors. A skilled nursing facility bed represents the optimal setting for patients who no longer need acute care, but continue to need ongoing nursing care for the complex medical conditions identified in this petition. Skilled nursing facility care is a fraction of the cost of the same care in a hospital or LTCH, which is where many patients wait until a skilled nursing care bed is available. Furthermore, LifeCare can develop the requested beds in a cost-effective manner on its existing campus where they would be co-located with multiple existing support services.

CONCLUSION

In conclusion, LifeCare requests that the SHCC approve the petition for an adjusted need determination for 40 nursing care beds with language requiring that applicants demonstrate that the beds will be available to patients with one or more of the identified medical conditions/needs. The proposed change will enable the development of a vital service that is greatly needed.

Thank you for your consideration.

Long Term & Behavioral Health Committee
Agency Report
Petition for an Adjusted Need Determination for 40 Nursing Care Beds in Nash County
Proposed 2016 State Medical Facilities Plan

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Request:

LifeCare Hospitals of North Carolina (LifeCare) respectfully petitions the State Health Coordinating Council (SHCC) to create an adjusted need determination for 40 additional nursing care beds in Nash County in the *2016 State Medical Facilities Plan.* In order to ensure that the beds do not duplicate services already available in the area, while providing access to the target population, LifeCare suggests that the following language be added to the need determination, if approved:

> *In response to a petition from LifeCare Hospitals of North Carolina, the State Health Coordinating Council approved an adjusted need determination for 40 nursing care beds in Nash County. Applicants must demonstrate that the beds will be available to patients in all of the following categories of conditions/needs: ventilator-dependency; tracheostomies; tracheostomies with bi-level positive airway pressure; bariatric status with tracheostomies; bariatric status over 300 pounds; IV antibiotics administered more than once daily; total parenteral nutrition; complex wounds; dialysis; ventilator dependency and/or tracheostomies combined with dialysis. Further, applicants shall not be required to demonstrate that the patient populations they propose to serve in these beds live within any particular distance of the facility.*

Background Information:
Chapter Two of the *State Medical Facilities Plan (SMFP)* describes the purpose and process for submitting petitions to amend the *SMFP* during its development. Petitions may be sent to Healthcare Planning twice during the course of plan development. Early in the planning year petitions related to basic *SMFP* policies and methodologies that have a statewide impact may be considered before publication of the *Proposed 2016 SMFP*.

Later in the planning cycle when need projections are complete, petitions can be submitted seeking adjustments to the projected need determination in any service area based on extenuating circumstances if the area believes its needs are not fully addressed by the standard methodology. These petitions are considered before publication of the *2016 SMFP*. This petition is seeking an adjusted need determination for 40 nursing care beds in Nash County.

Need is determined by calculating the statewide five-year average use rate per 1,000 population for each of four age groups based on data from annual license renewal applications. The utilization per county is then calculated into a five-year average annual rate of change statewide utilization rate, establishing a trend line per Age Group, projected forward for 30 months, which is then applied to the projected population going forward three years, for each county. The amount of need per county is then established based on the size of the county's projected surplus or deficit when the projected utilization is compared to the inventory of existing and approved beds.

Included in the basic assumptions (No. 6) of the nursing home bed methodology is the requirement that "when substantial blocks of nursing care beds have been converted to care for head injury or ventilator-dependent patients, the beds will be removed from the inventory" (*2015 SMFP*, p. 189). This policy was enacted when the current nursing care bed methodology was created in order to encourage nursing care providers to create ventilator beds in their facilities.

The petitioner's request for 40 beds for medically complex patients is not limited to, but includes patients with both bariatric and/or ventilator needs. Table 1 provides a historical look at the number of beds and facilities willing to provide care for each.

Table 1: Statewide Totals of Nursing Care Beds: Ventilator and Bariatric, 2011-2015

License Renewal Application	Ventilator Beds	Bariatric Beds	Number of Facilities Capable of Treating Bariatric Patients
2011	120	3	N/A*
2012	120	N/A*	143
2013	100**	0	163
2014	100**	0	176
2015	90	0	204

Sources: 2011, 2012, 2013, 2104, 2015 License Renewal Applications (LRA)

*2011 LRA did not ask about bariatric capabilities; 2012 LRA did not include field for bariatric bed category.

**Avante at Charlotte was excluded. The facility had licensed ventilator beds, but were using them as general nursing care beds.

Table 1 demonstrates that the number of ventilator beds has decreased 25% over the five years. Conversely, the number of facilities that have capabilities to treat bariatric patients has steadily

increased from 143 to 204, a 42.7% increase. Of the approximately 413 licensed nursing homes, almost half state they have capability to treat bariatric patients. However, the Nursing Home License Renewal Application does not allow for a data breakdown of the bariatric patients that may need a higher level of care. Thus, a review of the data on patients requiring mechanical ventilation is important.

Table2: Statewide Locations and Bed Totals for Ventilator Beds, 2015

Facility	County	Total Ventilator Beds	Total Licensed Beds
Valley Nursing Center	Alexander	49	183
Oak Forest Health and Rehabilitation	Forsyth	18	170
Kindred East	Guilford	23	23
	Totals	90	376

Currently, there are a total of 90 ventilator beds in nursing homes statewide. The geographical distribution of these beds is limited to the western region of NC. The last remaining facility with ventilator beds in the east, Vidant Pungo Hospital, closed in 2014. Nash County is located in the eastern region of NC.

Analysis/Implications:

Carson, et al. (2006) in the article entitled, *The Changing Epidemiology of Mechanical Ventilation: A Population-Based Study*, utilized hospital discharge data from all NC hospitals, excluding federal and psychiatric, from 1996 to 2002 to determine how the rates of ventilator patients has changed over time. The research shows an 11% increase in the incidence of mechanical ventilation during the 7 years studied.[1] The most current incidence calculated for 2002 data, is 314 patients per 100,000 (18 and older population).[2] Assuming a continued minimum of 11% growth from 2003 to present, an estimated rate of 349 patients per 100,000 population is derived. This rate can be used to estimate the current number of ventilator patients in NC. Table 1 below provides a summary of this calculation.

Table 1: Projected Number of Patients Requiring Ventilator Beds, 2015

Projected Population July 2015	Number of Ventilator Patients based on 349 per 100,000 Rate
7,753,766	27,061

Source: Office of State Budget and Management

Furthermore, the research performed by Carson, et al. (2006) found the median length of stay (LOS) for ventilator patients was 9 days, and the percentage of patients discharged from the acute care hospital to nursing homes and another other type hospitals (rehabilitation and long term care hospitals), to be 10.7% and 8% respectively. Applying these data assumptions to the number of ventilator patients calculated from Table 2 provides the opportunity to determine the estimated number of beds needed.

Table 3: Projected Number of Beds for Ventilator Patients

	Total Estimated Patients Discharges, 2002	NC Discharge Percentages, 2002	Estimated Number of Patients Per Discharge Category	Estimated Patient Days (LOS 9)	Estimated Number of Beds
Skilled Nursing Facility	27,601	10.70%	2,953	26,580	73
Another Type of Hospital*	27,601	8%	2,208	19,873	54
Totals			5,161	46,452	127

Table 3 above applies the median, 9 LOS, days to the number of patient for each category. The estimated patient days is then divided by 365 to obtain the number of beds. A total of 127 beds is calculated given the assumptions in the available data. If the 90 existing beds are subtracted from 127, the result is 37 beds, just three beds lower than requested in the petition.

Agency Recommendation:

The petitioner requests an adjusted need determination for 40 nursing care beds exclusive for medically complex patients. As discussed above, the eastern region of NC does not currently have beds licensed specifically for patients requiring special care such as mechanical ventilation. Nash County, due to its geographical location, would provide greater access to these specialized beds for patients from the eastern region. The Agency weighed all available information submitted by the August 14, 2015 deadline date for comments on petitions and comments. In consideration of the factors discussed above, the Agency recommends that the petition for an adjusted need determination be approved with the following qualifying language for *Table 10C: Nursing Care Bed Need Determinations:*

> *In response to a petition, the State Health Coordinating Council approved the adjusted need determination for 40 additional nursing care beds for Nash County. Applicants must demonstrate these beds will be limited to patients who, upon admission, have the following conditions/needs: ventilator-dependency; tracheostomies; tracheostomies with bi-level positive airway pressure; bariatric status with tracheostomies; bariatric status over 300 pounds; IV antibiotics administered more than once daily; total parenteral nutrition; complex wounds; dialysis; ventilator dependency and/or tracheostomies combined with dialysis.*

[1,2]Carson, S. S., Cox, C. E., Holmes, G. M., Howard, A., & Carey, T. S. (2006). The Changing Epidemiology of Mechanical Ventilation: A Population-Based Study. *Journal of Intensive Care Medicine,* 21, 173-182.