

**RESPONSE OF FIRSTHEALTH OF THE CAROLINAS, INC.
TO PETITION BY CAPE FEAR VALLEY HEALTH SYSTEM TO
CHANGE LINEAR ACCELERATOR NEED METHODOLOGY FOR HOKE COUNTY**

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FirstHealth of the Carolinas, Inc. files this response in opposition to the "Petition to Change the Linear Accelerator ("LINAC") Need Methodology" to include Hoke County in both Linear Accelerator Service Areas 17 and 18, as submitted by Cape Fear Valley Health System ("CFVHS") (the "Petition"). CFVHS is asking for a significant, unprecedented and potentially far-reaching change in the SMFP based on a patient origin difference of 18 patients in one year. The Petition does not identify any health planning problem that needs to be solved, and accordingly, the Petition should be denied.

FirstHealth operates FirstHealth Moore Regional Hospital (collectively, "FirstHealth"), a not-for-profit, 372 acute-care bed hospital located in Pinehurst, Moore County, North Carolina. Because Hoke County has a population far less than 120,000, it is included in Linear Accelerator Service Area 17, which is comprised of Moore, Hoke, Lee, Montgomery, Scotland and Richmond Counties. See 2011 SMFP, p. 137. Currently, there are no counties whose LINAC volumes are counted in more than one defined service area. That is because it would make no sense to count the population of any county twice. Nonetheless, the Petition seeks to do just that—include Hoke County LINAC volumes in two different service areas. This is because in one year, FY 2009, CFVHS served 31 linear accelerator patients from Hoke County, whereas FirstHealth served 13 linear accelerator patients from Hoke County. The difference between these two numbers is 18. Thus, on the basis of one year's worth of data and a difference of 18 patients, CFVHS is asking the SHCC to do something that has, to the best of FirstHealth's knowledge, never been done before: assign one county to two different linear accelerator service areas. CFVHS is further asking the SHCC to keep track of the percentage of Hoke residents who go to Cumberland County for linear accelerator services and the percentage of Hoke residents who go to Moore County for linear accelerator services. Again, to the best of FirstHealth's knowledge, the SHCC has never done this before for linear accelerator services. As acknowledged by CFVHS in its Petition and discussed below, these unprecedented changes in Service Area 17 will have a ripple effect on other LINAC Service Areas as well.

FirstHealth is opposed to the Petition submitted by CFVHS for the following reasons:

- (1) A change in the Service Area definition for LINAC services in Hoke County is not needed. CFVHS supports its proposed change with statistically insignificant data and fails to demonstrate that this change is justified.

- (2) The State Medical Facilities Plan ("SMFP") does not require the change requested by CFVHS.
- (3) The majority of service lines for Hoke residents are provided by FirstHealth Moore Regional located in Moore County. Therefore, no change in the LINAC methodology is necessary in order to appropriately meet the needs for LINAC services among Hoke County residents.
- (4) The change requested by CFVHS is not consistent with the three basic principles of the State Medical Facilities Plan ("SMFP").

I. CFVHS' Petition fails to show a change in the Hoke County LINAC Service Area is Justified or Needed.

CFVHS cites to FY 2008, FY 2009 and FY 2010 patient origin data from Cape Fear Valley Medical Center ("CFVMC") and FirstHealth for its conclusion that "[g]rouping Hoke County in Linear Accelerator Service Area 17 is no longer accurate." (Petition, p. 7). CFVHS' conclusion is wrong for several reasons.

First, of the last three fiscal years cited, the *only* year in which more Hoke County residents received LINAC services at CFVHS than at FirstHealth was FY 2009. In FY 2010, the most recent year for which data was available and provided, the number of Hoke County residents receiving LINAC services at FirstHealth was *again* higher than the number receiving those services at CFVHS. The same was true in FY 2008. Thus, CFVHS attempts to bootstrap a change in the Service Area definition for Hoke County on one outlier year merely to serve its own agenda. This does not make good health planning sense and fails to justify the change requested.

Second, the volume of LINAC procedures relied upon by CFVHS is statistically insignificant. Of the plus 47,000 residents of Hoke County,¹ only between 44 and 64 patients in total received LINAC services at either FirstHealth or CFVHS between FY 2008 and FY 2010. That is less than one thousandth of a percentage of the Hoke County population. Over the three year horizon used in CFVHS's Petition, the highest number of linear accelerator patients originating from Hoke County and receiving treatment anywhere in North Carolina was 72. It is also noteworthy that FY 2009, the only year in which CFVHS provided more LINAC services to Hoke County residents than did FirstHealth, only 44 total Hoke County patients received LINAC services at either facility. The difference in the number of Hoke County patients served at either CFVHS and FirstHealth that year was 18. Clearly, a difference in 18 patients for one year is not enough for the SHCC to make the kind of unprecedented change that CFVHS is seeking.

¹ The 2011 SMFP reports that the population of Hoke County in 2010 was 47,337. See 2011 SMFP, p. 137.

The SHCC should be reluctant to change LINAC Service Area definitions based on such a few number of procedures and over such a short period of time, especially when the "pattern" CFVHS relies upon is in actuality, only one year's worth of data, FY 2009.

CFVHS attempts to shore up its argument by using an average number of LINAC procedures from FY 2008- FY 2010. The average is 29 patients going to CFVHS and 27 patients going to FirstHealth, a difference of only two patients. That two patient difference, however, is attributable to the one year (FY 2009) that CFVHS treated more Hoke County linear accelerator patients than did FirstHealth. So, there is no pattern of Hoke residents choosing to go to Cumberland County for linear accelerator services and there is no plurality of Hoke County residents seeking linear accelerator treatments at CFVHS. In fact, the numbers show just the opposite: the pattern is that more Hoke residents going to FirstHealth for linear accelerator services and the plurality of Hoke residents go to FirstHealth for linear accelerator services. Therefore, statistically, there is no reason to make the unprecedented change that CFVHS is seeking.

Under CFVHS' reasoning, each year there is a slight change in the provision of LINAC services (or potentially any other service provided under a multi-county service area definition), the Service Area (and any other Service Areas consequently affected) would have to be re-defined. Thus, the service area could arguably flip-flop merely because two patients on average over three years receive LINAC treatment at one facility over another. This does not comport with the reasoning behind the Service Area definitions in the SMFP. Before making any such drastic change to the SMFP Service Area definitions, the SHCC should have the benefit of more than one year of data consisting of only 44 total patients, especially when the following year the trend went back to its historical norm, that is, with the majority of Hoke County patients receiving LINAC services at FirstHealth.

In addition to CFVHS' failure to show that a change in the LINAC Service Area for Hoke County is justified, the proposal is not truly limited to Service Area 17. CFVHS' proposal will also likely have a ripple effect on other LINAC multi-county Service Areas. Although CFVHS helpfully points out in its Petition that Service Areas 1, 2 and 4 may need to be "reviewed," there is no discussion as to any potentially negative impact a reconfiguration of these Service Areas may have for the respective populations. *See* Petition, p. 7. CFVHS glosses over this point without analysis, leaving it to the SHCC to sort out what could be a significant change in Service Areas and the future need for additional LINAC services in those Service Areas. Even more significantly, a great deal of weight should be given to the fact that no other entities in any Service Area, including Service Areas 1, 2 or 4, have petitioned the SHCC to alter the current LINAC Service Area configurations.

II. A Change in the LINAC Service Area is Not Required by the SMFP.

The SMFP need methodology provides guidance for when the SHCC may determine whether there is a need for an additional LINAC in any of the defined service areas. As part of that need methodology, the SMFP states on pages 127 and 128 that LINAC Service Areas were organized to address two points:

- a. Where patient origin data indicate [sic] a county's primary use of a linear accelerator that is not the closest, the county is aligned with the linear accelerator county where most or a plurality of its citizens go for linear accelerator services. Example: Alleghany to Forsyth.
- b. When a linear accelerator county has a population too small to support it, that county is combined with an adjacent county to which a sizable percentage of patients go for linear accelerator services, according to the base county's patient origin data. Example: Haywood – Buncombe

See pages 127-128 of the 2011 SMFP.

CFVHS attempts to rely upon subsection a. to argue that "over the last three fiscal years, a growing plurality of Hoke County residents received linear accelerator treatment services on linear accelerators licensed to Cape Fear Valley in Cumberland County than at FirstHealth Moore Regional ("FHMR") in Moore County." However, CFVHS' reliance upon subsection a. above is misplaced. This subsection is not applicable because Hoke County is adjacent to both Moore and Cumberland County. Neither Moore nor Cumberland Counties would be counties that are "not the closest" to Hoke County.

With respect to subsection b., CFVHS states a sizable percentage of LINAC services were provided in Cumberland County. First, the language in the SMFP states the county will be combined with "an" adjacent county to which a sizable percentage of patients go for LINAC services. See page 128 of the 2011 SMFP (emphasis added). This plain language assumes that counties will be represented in only *one* LINAC Service Area, and not multiple service areas. That is further demonstrated by the fact that no other counties appear in more than one LINAC Service Area. This is only logical because it would make no sense to count population of any county twice. The "sizable" number upon which CFVHS relies is 31 patients. In FY 2008 and FY 2010, FirstHealth's linear accelerators not only served more than 31 Hoke residents but also served more Hoke County residents on its linear accelerators than did CFVHS. Moreover, the health planning process that culminates in the annual SMFP considers the long-term need for all services and does not envision a rolling service area definition that changes from year to year based only on one year's worth of data, as noted above.

CFVHS also states that the LINAC Service Areas should be treated the same as acute care, surgical services, MRI and cardiac catheterization services, where Hoke County appears in both the Cumberland and Moore County Service Areas. CFVHS does not explain why it believes this to be so; it simply advocates consistency for consistency's sake.

LINAC Service Areas are different than acute and surgical services areas and the reasoning behind those changes are inapposite to the current proposal by CFVHS. For example, the acute care methodology specifically provides that the three most recent years of patient origin data are utilized to determine multicounty Acute Care Bed Service Areas, which

are specifically updated every three years. Acute Care Bed Service Areas are also governed by a rule that a county without a licensed acute care hospital, such as Hoke County, will be grouped in multiple counties if at least 35% of residents receive services from a facility in that county. *See* 2011 SMFP, p. 47. The same is true for surgical services. *See* 2011 SMFP, pp. 64-65. There are no such requirements in the SMFP with respect to LINAC Service Areas, as detailed above, and therefore, CFVHS's "consistency" argument is irrelevant.

III. The Majority of Services Provided to Hoke County Residents is Provided at FirstHealth Moore Regional in Moore County, Consistent with Current LINAC Service Area Definitions.

The current LINAC Service Area grouping Hoke County with Moore County adequately addresses the needs of that population and is consistent with the majority of product lines for which Hoke County residents seek care.

The most recent data available shows that from October 1, 2009 through September 30, 2010, as measured by days of care, FirstHealth provided the majority of services to Hoke County residents for twenty of the thirty inpatient product line Diagnosis Related Groups ("DRGs") as reported in the State Inpatient PivotTable Report- Market Share by Hospital. *See* Exhibit A, attached hereto. FirstHealth provided more services to Hoke County residents than did CFVHS in:

- Detoxification
- Endocrine
- Ears, Nose, Throat
- General Surgery
- Gastroenterology
- Immunology
- Infectious Diseases
- Internal Medicine
- Medical Cardiology
- Nephrology
- Neurology
- Oncology
- Ophthalmology
- Orthopedics
- Psychiatry
- Pulmonary
- Rheumatology
- Spine
- Surgical Cardiology
- Thoracic Surgery
- Urology

Excluding newborns, FirstHealth's total market share of all product lines for Hoke County residents was 48.5%. See Exhibit A. CFVHS surpassed FirstHealth in services to Hoke County residents in only seven product lines, relating primarily to women and children's services, as well as open heart, vascular, and rehabilitation services. See Exhibit A. FirstHealth exceeded oncology services to Hoke County residents over CFVHS by 14.3% during this same time period. See Exhibit A. Including newborns, FirstHealth had a 46% market share of Hoke County residents and 41.69% of Total Days of care. See Exhibit B, attached hereto. The CFVHS market share during that time was only 43.5% of Hoke residents.

Therefore, if consistency is important, the SHCC should maintain the current LINAC Service Areas as designated, with Hoke County being included in Service Area 17 along with Moore County. This result is the most accurate representation of the provision of the majority of historical LINAC, oncology, and multiple other product lines and services by FirstHealth, and will lead to the most accurate need determinations as they may be determined in future SMFPs.

IV. The Change Requested by the CFVHS Petition Fails to Further the Basic Principles of the SMFP.

Petitioners seeking a change in the SMFP must provide "[e]vidence that the requested change is consistent with the three Basic Principles governing the development of the North Carolina State Medical Facilities Plan: Safety and Quality, Access, and Value." CFVHS' Petition is void of any evidence that the basic principles of the SMFP would be furthered by its proposal.

CFVHS merely states the change would result in a "proper and consistent" alignment of service areas. Although FirstHealth is unsure what CFVHS means by a "proper alignment," grouping a county in a particular service area for one service such as LINAC just because that county is grouped in a particular service area for another service, is not a justification, let alone a reason that furthers the promotion of safety, quality, access or value.

In fact, CFVHS states the change requested is necessary to ensure that its LINAC services will *continue* to be available to Hoke County residents. See Petition, page 8. This statement makes no sense. The LINAC service area definitions have no impact on the availability of CFVHS' services to patients from any county or service area. CFVHS will presumably continue to treat Hoke County residents who choose CFVMC for radiation oncology services, no matter what service area Hoke County happens to be in. After all, CFVHS' stated mission is "supporting progressive services in a compassionate environment for all people."²

Without support, CFVHS claims that the requested change will allow it to improve geographic access to linear accelerator treatment services for Hoke County residents. See Petition, p. 8. CFVHS does not explain how the requested change will improve access.

² See CFVHS website <http://www.capefearvalley.com/foundation/index.html> (emphasis added).

CFVHS provides no evidence that Hoke County residents currently experience any problems accessing existing services at FirstHealth, CFVMC or any other provider from whom they receive LINAC treatment. In this regard, it is important to note that CFVHS cites no support for its proposal from local physicians or oncology patients or any other empirical data that would tend to show that there is an access problem that needs to be solved. Moreover, it is not necessary to change the Linear Accelerator Service Area for CFVMC to continue providing the same services to those Hoke County residents choosing to utilize those services. There is no other mention in the CFVHS Petition regarding how the proposal will further the basic principles of the SMFP.

CFVHS would have the focus of the SMFP shift from health planning to score keeping. This is clearly stated on page 1 of the Petition, where CFVHS asks the SHCC to revise the service area for Hoke County (and Hoke County only) to reflect the percentage of LINAC patients who go to Cumberland County versus the number of LINAC patients who go to Moore County. See Petition, page 1. Thus, what CFVHS is really asking the SHCC to do is to revise the LINAC service area annually so that alignment of the service area moves as frequently as market share. Yet health planning, and indeed the entire premise of the SMFP, is about carefully planning resources for the long term. It is not about making sudden changes based on one year of data. Carried to its logical conclusion, this same scorekeeping activity would be required in all LINAC service areas and would create annual realignment of service areas to keep pace with changes, however minute they may be, in market share shifts. Health planning should not be so tied to shifting market share.³

Unless there is a genuine health planning problem that needs to be solved, the SHCC should be reluctant to make changes to the service areas in the SMFP, especially where those changes can have a significant and possibly negative ripple effect. CFVHS's Petition has failed to identify any health planning problem that needs to be solved. Hoke County residents have ready access to radiation oncology services today, and they will continue to have access to them in the future. Allowing Hoke County to be the only state in North Carolina that is part of two linear accelerator service areas does not make linear accelerator services more convenient, accessible or affordable for Hoke County residents. The requested change leads to double counting of population and may have ripple effects for other counties.

For the reasons stated above, FirstHealth respectfully requests the SHCC deny the request by CFVHS to change the LINAC Service Area definition for Hoke County.

³ The fact that page 66 of the 2011 SMFP made note of Hoke County patient origin for purpose of operating room service areas is irrelevant because operating room service areas are defined differently than linear accelerator service areas. See Chapter 6 of the 2011 SMFP, pages 64 and 65.

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2009 - 09/30/2010
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: FirstHealth Moore Rgnl
 ** Normal Newborns are Excluded

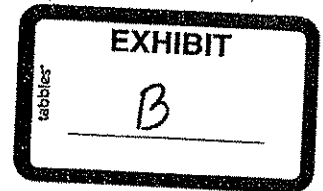


Hoke

DRG Product Line	Cape Fear Valley Hlth Sys			FirstHealth Moore Rgnl			UNC Hospitals			Total		
	Patients	Total Days	ALOS	Patients	Total Days	ALOS	Patients	Total Days	ALOS	Patients	Total Days	ALOS
DTX	3 6.8%	16	5.3	33 75.0%	119	3.6	4 9.1%	10	2.5	44 100.0%	150	3.4
Endocrine	42 39.3%	120	2.9	51 47.7%	162	3.2	6 5.6%	21	3.5	107 100.0%	412	3.9
ENT	8 30.8%	21	2.6	10 38.5%	28	2.8	3 11.5%	8	2.7	26 100.0%	92	3.5
General Surgery	90 41.9%	698	7.8	102 47.4%	551	5.4	10 4.7%	85	8.5	215 100.0%	1,449	6.7
GEO	83 29.4%	333	4.0	163 57.8%	528	3.2	21 7.4%	78	3.7	282 100.0%	1,011	3.6
Gynecology	23 46.0%	57	2.5	18 36.0%	53	2.9	5 10.0%	17	3.4	50 100.0%	136	2.7
IMM	2 22.2%	37	18.5	3 33.3%	26	8.7	4 44.4%	23	5.8	9 100.0%	86	9.6
INF	54 38.3%	410	7.6	73 51.8%	398	5.5	6 4.3%	32	5.3	141 100.0%	952	6.8
INT	42 27.5%	143	3.4	94 61.4%	356	3.8	7 4.6%	24	3.4	153 100.0%	665	4.3
Medical Cardiology	150 34.2%	545	3.6	267 60.8%	965	3.6	4 0.9%	31	7.8	439 100.0%	1,600	3.6
Neonatology	106 74.6%	734	6.9	19 13.4%	86	4.5	9 6.3%	261	29.0	142 100.0%	1,248	8.8
Nephrology	27 21.1%	113	4.2	95 74.2%	409	4.3	2 1.6%	4	2.0	128 100.0%	543	4.2
Neuro Surgery	5 18.5%	77	15.4	4 14.8%	56	14.0	8 29.6%	55	6.9	27 100.0%	254	9.4
Neurology	67 39.0%	264	3.9	82 47.7%	283	3.5	12 7.0%	44	3.7	172 100.0%	656	3.8
Obstetrics Del	364 74.9%	960	2.6	99 20.4%	186	1.9	5 1.0%	61	12.2	486 100.0%	1,252	2.6
Obstetrics ND	47 73.4%	118	2.5	9 14.1%	21	2.3	4 6.3%	8	2.0	64 100.0%	157	2.5
Oncology	14 25.0%	104	7.4	22 39.3%	92	4.2	7 12.5%	38	5.4	56 100.0%	300	5.4
Open Heart	10 41.7%	144	14.4	8 33.3%	62	7.8	2 8.3%	12	6.0	24 100.0%	272	11.3
Ophthalmology	1 20.0%	1	1.0	3 60.0%	7	2.3	1 20.0%	2	2.0	5 100.0%	10	2.0
Orthopedics	54 26.6%	225	4.2	126 62.1%	428	3.4	14 6.9%	83	5.9	203 100.0%	823	4.1

DRG Product Line	Cape Fear Valley Hlth Sys			FirstHealth Moore Rgnl			UNC Hospitals			Total		
	Patients	Total Days	ALOS	Patients	Total Days	ALOS	Patients	Total Days	ALOS	Patients	Total Days	ALOS
Psychiatry	26 16.8%	104	4.0	107 69.0%	592	5.5	4 2.6%	27	6.8	155 100.0%	868	5.6
Pulmonary	112 36.4%	483	4.3	170 55.2%	836	4.9	7 2.3%	47	6.7	308 100.0%	1,634	5.3
Rehabilitation	32 47.1%	399	12.5	29 42.6%	294	10.1	3 4.4%	28	9.3	68 100.0%	782	11.5
Rheumatology	2 25.0%	4	2.0	6 75.0%	29	4.8	0 0.0%	0	0.0	8 100.0%	33	4.1
Spine	1 1.6%	2	2.0	45 73.8%	165	3.7	5 8.2%	31	6.2	61 100.0%	228	3.7
Surgical Cardiology	34 37.8%	175	5.1	50 55.6%	202	4.0	3 3.3%	11	3.7	90 100.0%	396	4.4
Thoracic Surgery	8 23.5%	113	14.1	16 47.1%	260	16.3	6 17.6%	138	23.0	34 100.0%	770	22.6
Trauma	3 33.3%	9	3.0	2 22.2%	3	1.5	4 44.4%	20	5.0	9 100.0%	32	3.6
Urology	13 29.5%	72	5.5	19 43.2%	68	3.6	5 11.4%	23	4.6	44 100.0%	184	4.2
Vascular	31 52.5%	170	5.5	24 40.7%	125	5.2	2 3.4%	9	4.5	59 100.0%	318	5.4
Grand Total	1,454 40.3%	6,651	4.6	1,749 48.5%	7,390	4.2	173 4.8%	1,231	7.1	3,609 100.0%	17,313	4.8

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County	Hoke
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HospitalName	Data			
	Patients	MS %	Total Days	% TD
FirstHealth Moore Rgnl	1,830	46.0%	7,533	41.69%
Cape Fear Valley Hlth Sys	1,730	43.5%	7,234	40.04%
UNC Hospitals	174	4.4%	1,236	6.84%
Scotland Memorial Hosp	58	1.5%	203	1.12%
Duke University Med Ctr	55	1.4%	753	4.17%
Southeastern Reg Med Ctr	42	1.1%	176	0.97%
The NC Baptist Hospitals	14	0.4%	75	0.42%
Highsmith-Rainey Mem Hosp	11	0.3%	430	2.38%
Holly Hill Hospital	10	0.3%	98	0.54%
WakeMed	9	0.2%	56	0.31%
New Hanover Regional M.C.	6	0.2%	22	0.12%
Carolinas Medical Center	5	0.1%	28	0.15%
Sandhills Regional M.C.	5	0.1%	25	0.14%
Durham Regional Hospital	4	0.1%	13	0.07%
Betsy Johnson Mem Hosp	3	0.1%	14	0.08%
Duke Health Raleigh Hosp	3	0.1%	3	0.02%
FirstHealth Richmond Mem	3	0.1%	6	0.03%
Kindred Hosp Greensboro	2	0.1%	96	0.53%
Pitt County Memorial Hosp	2	0.1%	6	0.03%
Presbyterian Hosp Matthew	2	0.1%	4	0.02%
Rex Healthcare	2	0.1%	5	0.03%
Bladen County Hospital	1	0.0%	2	0.01%
Brynn Marr Behavioral HS	1	0.0%	10	0.06%
Lexington Memorial Hosp.	1	0.0%	2	0.01%
Mission Hospital	1	0.0%	7	0.04%
NC Specialty Hospital	1	0.0%	3	0.02%
Presbyterian Hospital	1	0.0%	2	0.01%
Roanoke-Chowan Hospital	1	0.0%	2	0.01%
Rowan Regional Med Center	1	0.0%	1	0.01%
Thomasville Medical Ctr	1	0.0%	1	0.01%
WakeMed Rehab Hospital	1	0.0%	22	0.12%
Washington County Hosp	1	0.0%	1	0.01%
Grand Total	3,981	100.0%	18,069	100.00%