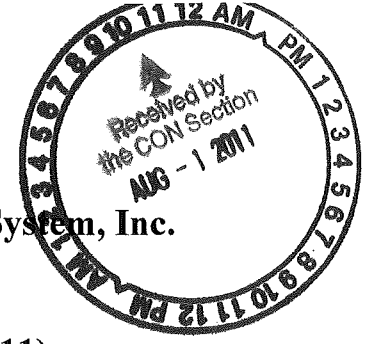


**Comments in Opposition from Cumberland County Hospital System, Inc.**
**d/b/a Cape Fear Valley Health System**
**Regarding FirstHealth of the Carolinas, Inc.**
**Certificate of Need Application (Project I.D. # N-8690-11)**
**Submitted June 15, 2011 for July 1, 2011 Review Cycle**

# I. Introduction

In accordance with N.C.G.S. Section 131E-185(a1)(1), Cumberland County Hospital System, Inc. d/b/a Cape Fear Valley Health System (Cape Fear Valley) submits the following comments in opposition regarding the June 15, 2011 Certificate of Need Application Project I.D. # N-8690-11 submitted for the July 1, 2011 review cycle by FirstHealth of the Carolinas, Inc. (FirstHealth).

The following two CON Applications were submitted in response to a need determination for sixty-five acute care beds in the Cumberland-Hoke Service Area in the *2011 State Medical Facilities Plan* (*2011 SMFP*):

- Project I.D. # M-8689-11: Cumberland County Hospital System, Inc. d/b/a Cape Fear Valley Medical Center to develop an acute care hospital with 65 acute care beds and 2 shared operating rooms in northern Cumberland County (Cape Fear Valley North).

- Project I.D. # N-8690-11: FirstHealth of the Carolinas, Inc. d/b/a FirstHealth-Moore Regional Hospital (FMRH), FirstHealth Hoke Community Hospital (FHCH) to develop an acute care hospital in Raeford (Hoke County) with 65 acute care beds and 2 operating rooms relocated from FMRH. This is the third CON FirstHealth has submitted for a hospital in Hoke County. A detailed chronology of Hoke County CONs is provided below in Section V.

# II. Chronology of Important Events

The following is a summary of important events that occurred in the two years before the submission of the two CON Applications submitted on June 15, 2011.

## June 15, 2009

The following two CON Applications were submitted to the CON Section:

- Project I.D. # M-8353-09: Cape Fear Valley West, a satellite hospital in Cumberland County at a site on the Cumberland-Hoke border, with 41 acute care beds relocated from CFVMC, 2 operating rooms, 1 relocated from CFVMC and 1 relocated from Highsmith-Rainey Hospital, and 9 observation beds (Cape Fear Valley West Application)

- Project I.D. # N-8354-09: FHCH, an acute care hospital with 8 acute care beds, 1 operating room, and 1 MRI scanner, all relocated from FMRH (FHCH Application #1)

The CON Section deemed the Cape Fear Valley West Application and the FHCH Application #1 to be competitive.

## July 6, 2009

Cape Fear Valley submitted a Petition to the Medical Facilities Planning Section requesting the following specific adjustments be made to the *Proposed 2010 SMFP*:

- Designating Hoke and Cumberland Counties as one multi-county service area for acute care beds, operating rooms, and MRI, as a result of updated data used to define service areas in accordance with Step 1 of the Acute Care Bed and operating Room Need Methodologies

- Designating Moore County as a single county service area for acute care beds, operating rooms, and MRI, as a result of updated data.

## October 9, 2009

The SHCC denied Cape Fear Valley's Petition, and instead adopted the following for inclusion in the *2010 SMFP*:

- Hoke County was assigned to Moore and Cumberland Counties, respectively. This change results in eight two-county service areas:
  - Cumberland-Hoke Multi-county Acute Care Bed Service Area
  - Cumberland-Hoke Multi-county Operating Room Service Area
  - Moore-Hoke Multi-county Acute Care Bed Service Area
  - Moore-Hoke Multi-county Operating Room Service Area
  - Cumberland-Hoke Multi-county Cardiac Catheterization Service Area
  - Cumberland-Hoke Multi-county MRI Service Area
  - Moore-Hoke Multi-county Cardiac Catheterization Service Area
  - Moore-Hoke Multi-county MRI Service Area

The SHCC also established a "35% decision rule" under which patient origin, at or above a threshold of 35% will determine composition of a Multi-county Service Area containing Hoke County.

## August 17, 2009

Project I.D. # N-8393-09, Surgery Center of Hoke, LLC, an ambulatory surgery center with 2 ambulatory surgery operating rooms relocated from Surgery Center of Pinehurst in Moore County (Surgery Center of Hoke Application #1) was submitted to the CON Section for review by FirstHealth.

## November 25, 2009

The CON Section conditionally approved Cape Fear Valley West and FHCH Application #1. The CON Section's decisions on the two Applications were appealed.

## January 28, 2010

The CON Section denied the Surgery Center of Hoke Application #1. The denial was appealed on February 24, 2010.

## April 14, 2010

The following two CON Applications were submitted to the CON Section:

- Project I.D. # N-8499-10: Hoke Healthcare, LLC, a 41 acute care beds relocated from CFVMC and 2 operating rooms (HCMC Application)

- Project I.D. # N-8497-10: FHCH, an acute care hospital with 8 acute care beds and 1 operating room relocated from FMRH (FHCH Application #2).

The CON Section deemed the HCMC Application and the FHCH Application #2 to be competitive.

Project I.D. # N-8494-10, Surgery Center of Hoke, LLC, an ambulatory surgery center with 2 ambulatory surgery operating rooms relocated from Surgery Center of Pinehurst in Moore County (Surgery Center of Hoke Application #2) was submitted to the CON Section for review by FirstHealth.

## September 27, 2010

The CON Section conditionally approved the FHCH Application #2 and the HCMC Application. Both decisions have been appealed.

The CON section denied Surgery Center of Hoke Application #2. There was no appeal filed.

## Relevant Dates

On April 1, 2011, FHCH Application #1 and the Cape Fear Valley West Application withdrew appeals on the first round of CON Applications pursuant to a stipulated dismissal, leaving only the FHCH Application #2 and the HCMC Application approvals on appeal.

On page 000004 of the Executive Summary to the FHCH Application, FirstHealth states that "is not abandoning" the FHCH Application #2. If the CON Section approves the FHCH Application #3, then "FirstHealth will relinquish" the FHCH Application #2.

Despite that representation, the CON Section must evaluate the FHCH Application #3 in the context of two previously-approved acute care hospitals in Hoke County: Hoke Community Medical Center (41 acute care beds, 9 observation rooms, 2 operating rooms, 1 C-section room, and 16 ED spaces) and the FHCH Application #2 (8 acute care beds, 1 operating room, and 8 ED spaces).

## III. FirstHealth Willing to Withdraw Its Application

On June 20, 2011 at a meeting called by the Hoke County Commissioners, Chuck Frock, CEO for FirstHealth, indicated that FirstHealth would withdraw the above-referenced Application submitted on June 15, 2010 for a 65-bed acute care hospital in Hoke County (Project I.D. #N-8690-11) if Cape Fear Valley would withdraw its appeal of the previously approved 8-bed acute care hospital approved for FirstHealth, Project I.D. # N-8497-10, FirstHealth Hoke Community Hospital's Application for an acute care hospital with 8 acute care beds (FHCH Application #2). Included in Attachment 1 is a copy of news articles associated with the meeting and the statement made by Mr. Frock.

Based upon the statements made by FirstHealth's CEO, it appears that FirstHealth believes the 8-bed CON plus the 41-bed Hoke Community Medical Center, Project I.D. # N-8499-10 (Hoke Community Medical Center Application), are sufficient to meet the needs of the community and that the 65-bed hospital proposed in this review is not needed and its application for 65-beds is frivolous.

## IV. FirstHealth Fails to Acknowledge the Approval of Hoke Community Medical Center

Throughout its CON Application FirstHealth mentions the CON approval of the 41-bed Acute Care Hoke Community Medical Center (HCMC) only a few times.

In Section III on pages 153 and 154 when discussing alternatives, FirstHealth mistakenly assumes the inclusion of new acute care beds in the *2011 SMFP* by the State Health Coordinating Council (SHCC) for the Cumberland-Hoke Service Area beds means the beds should be in Hoke County. In doing so, FirstHealth first ignores the fact that Cumberland County, with a growing population of over 320,000 in 2010 far exceeds the 47,000 residential population in Hoke County and that real population growth in Cumberland County has far exceeded the actual population growth in Hoke County. Secondly, Cape Fear Valley Medical Center (CFVMC) in Cumberland County is a tertiary hospital providing care to residents of more than just Cumberland and Hoke Counties and the growth and high utilization of CFVMC generated the need for the additional beds in the *2011 SMFP*. Finally, FirstHealth completely ignores the fact that 49 acute care beds have already been approved by the CON Section for Hoke County, 41 of which are in a full service community hospital, which once developed will be sufficient to meet the acute care needs of the residents of Hoke County.

The next mention of HCMC in the FirstHealth Application is on page 198, where FirstHealth attempts to justify the need for 106 acute care beds in Hoke County using a "North Carolina days of care" use rate which was calculated using data from Table 5A in the *2011 SMFP*. However,

the data in Table 5A includes a significant amount of in-migration to North Carolina from surrounding states, in particular, South Carolina and Virginia, based in part due to the large tertiary hospitals in Charlotte, Durham and Winston Salem – which FirstHealth failed to acknowledge or make any adjustments. Therefore, the actual NC patient day use rate is less than that reflected on page 198 of FirstHealth's Application. In addition, the comparison of Hoke County use rates to the State of NC use rates reflected on page 198 are not age adjusted and assumes no difference in patient use rates across the State.

In addition, on page 198 of its Application, FirstHealth uses a Hoke County inpatient day use rate of 337.0 per 1,000 (33.7 per 100) population, based upon total Hoke County admissions of 3,981 in FFY 2010. The volumes reflected on page 198 are more than 15% greater than Thomson data for Hoke County admissions reflected herein on page 7. This Thomson data utilized below is included in Attachment 2, Table 19. FirstHealth calculates total patient days for Hoke County of 15,925 patient days in FFY 2010 assuming an ALOS of 4.0 for FirstHealth, which is 6.0% greater than Hoke County patient days reflected below, which also is from Thomson data included in Attachment 2, Table 19. FirstHealth references Exhibit A in its Application as the source of its data. However, Exhibit A does not include any historical inpatient data. (Exhibit A data provides only ancillary historical volume). Therefore, the data used by FirstHealth in this analysis is unsubstantiated.

Finally, the analysis on page 198 that attempts to justify 106 total acute beds assumes that 100% of Hoke County patients would receive care in Hoke County which is impossible as the proposed FHCH 65-bed hospital and the CON Approved 41-bed Hoke Community Medical Center are community hospitals and will not provide tertiary levels of care. Therefore, the addition of 65 additional acute care beds in Hoke County results in substantial duplication of existing services and the proposed FHCH 65-bed hospital should be denied.

## V. Hoke County Residents Do Not Need 106 Acute Care Beds

The following analyses projects future bed need for Hoke County residents using two methodologies: one based upon inpatient admission use rates determined using the Thomson Reuters NCHA Hospital Database and a second using NCDHSR 2011 Licensure Renewal Application data.

In September 2010, the CON Section approved two hospitals in Hoke County with a total of 49 acute care beds.

Hoke Community Medical Center will be part of Cape Fear Valley Health System. It will have 41 acute care beds, 9 observation beds, and 2 operating rooms. It will offer obstetrical, surgical and 24-hour emergency, laboratory and pharmaceutical services, as well as diagnostic imaging. The projected cost is $92 million with construction projected to be finished by October 2013, which is two years before the projected opening of the proposed FHCH 65-bed hospital; scheduled to be operational October 2015.

The CON Section also approved an 8-bed acute care hospital in Hoke County (FirstHealth Hoke Application #2) – which Cape Fear Valley is currently appealing. If the FHCH Application at issue in this review is approved, FirstHealth will not develop the approved 8-bed acute care hospital.

Together, those previously-approved Applications total 49 beds (8+41 = 49) in Hoke County. If the FHCH Application #3 is approved, then together, there will be a total of 106 beds (41+65 = 106) in Hoke County.

**Methodology #1 – Use Rate Analysis Based upon Thomson NCHA Hospital Database**

As shown in the following tables, there is not a need for additional acute care beds in Hoke County.

Currently, there is not an acute care hospital in Hoke County, which results in Hoke County residents being admitted to hospitals in other North Carolina counties, primarily Cape Fear Valley Medical Center in Cumberland County and FirstHealth-Moore in Moore County. The following table shows total acute care inpatient utilization by Hoke County residents regardless of where the provider is located for the last six years.

**Hoke County**
**Acute Care Inpatient Utilization**
**October 1, 2004 – September 30, 2010**

| Hoke County | Inpatient Admissions | | | | | | Three Year Avg 2008-2010 |
|---|---|---|---|---|---|---|---|
| FFY | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | |
| Inpatient Cases | 2,787 | 2,914 | 2,849 | 3,175 | 3,270 | 3,331 | |
| Population | 39,891 | 41,530 | 42,796 | 44,432 | 45,591 | 47,298 | |
| Use Rate per 1,000 | 69.87 | 70.17 | 66.57 | 71.46 | 71.72 | 70.43 | 71.20 |
| Annual % Change | | 0.4% | -5.1% | 7.3% | 0.4% | -1.8% | |
| **Hoke County** | **Inpatient Days** | | | | | | **Three Year Avg 2008-2010** |
| **FFY** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | |
| Inpatient Days | 13,091 | 14,141 | 13,865 | 14,355 | 14,729 | 15,015 | |
| Population | 39,891 | 41,530 | 42,796 | 44,432 | 45,591 | 47,298 | |
| Use Rate per 1,000 | 328.17 | 340.50 | 323.98 | 323.08 | 323.07 | 317.46 | 321.20 |
| Annual % Change | | 3.8% | -4.9% | -0.3% | 0.0% | -1.7% | |
| **Hoke County** | **ALOS = Inpatient Days/Inpatient Admisson** | | | | | | **Three Year Avg 2008-2010** |
| **FFY** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | |
| ALOS | 4.70 | 4.85 | 4.87 | 4.52 | 4.50 | 4.51 | 4.51 |
| Annual % Change | | 3.3% | 0.3% | -7.1% | -0.4% | 0.1% | |

*Source: Thomson data included in Attachment 2, Table 19*

The following table demonstrates the number of acute care beds needed in Hoke County using a three-year average use rate of 71.2 admissions per 1,000 population and a three year ALOS of 4.51 days of care as reflected in the previous table. The previous table includes all acute care patients regardless of diagnosis. However, all inpatients are not clinically appropriate for care in a community hospital setting. For example, HCMC will not provide cardiac surgery or other

tertiary level services currently provided at CFVMC or FMRH. Based upon previous analysis completed in previous CFVHS CON Applications for a community hospital in Hoke County, approximately 65% of all Hoke County patients are appropriate for a community hospital setting. Therefore, the following table reflects an acuity adjustment[1] of 65% of all admissions being appropriate for care in a community setting.

**Hoke County**
**Acute Care Projected Inpatient Utilization**
**October 1, 2009 – September 30, 2018**

| | Actual | Projected | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Data Year** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** |
| Projected Population | 47,298 | 48,873 | 50,451 | 52,025 | 53,599 | 55,172 | 56,749 | 58,325 | 59,898 |
| 3 Yr Avg Use Rate (2008-2010) | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 |
| Estimated Inpatient Cases | 3,368 | 3,480 | 3,592 | 3,704 | 3,816 | 3,928 | 4,041 | 4,153 | 4,265 |
| 3 Yr Avg ALOS (2008-2010) | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 |
| Estimated Inpatient Days | 15,192 | 15,698 | 16,205 | 16,710 | 17,216 | 17,721 | 18,228 | 18,734 | 19,239 |
| ADC | 42 | 43 | 44 | 46 | 47 | 49 | 50 | 51 | 53 |
| Planning Target Occupancy Rate | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% |
| **Acute Care Beds Needed** | **62.4** | **64.5** | **66.4** | **68.6** | **70.7** | **72.8** | **74.9** | **77.0** | **79.0** |
| CON Approved Acute Care Beds | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 |
| Additional Acute Care Bed Need (Assuming 100% of patient days remain in Hoke County) | 13.4 | 15.5 | 17.4 | 19.6 | 21.7 | 23.8 | 25.9 | 28 | 30 |
| Acuity Adjustment* | 65% | 65% | 65% | 65% | 65% | 65% | 65% | 65% | 65% |
| Acuity Adjusted Inpatient Days | 9,875 | 10,204 | 10,533 | 10,862 | 11,190 | 11,519 | 11,848 | 12,177 | 12,506 |
| ADC | 27 | 28 | 29 | 30 | 31 | 32 | 32 | 33 | 34 |
| Planning Target Occupancy Rate | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% |
| **Acute Care Beds Needed** | **40.6** | **41.9** | **43.1** | **44.6** | **46.0** | **47.3** | **48.7** | **50.0** | **51.4** |
| CON Approved Acute Care Beds | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 |
| Additional Acute Care Bed Need (Assuming 65% acuity adjusted patient days remain in Hoke County) | -8.4 | -7.1 | -5.9 | -4.4 | -3.0 | -1.7 | -0.3 | 1.0 | 2.4 |

*Source: Attachment 2, Table 20*
Planning target occupancy rate for acute care hospitals with 1-99 ADC – 66.7%
*Acuity adjustment of 65% is consistent with the CON Section's analysis in the FMC-Clemmons Community Hospital decision, Project I.D. #G-8165-08 and recent Hoke County community hospital applications. In the first FirstHealth Application, Project I.D. # N-8354-09, FirstHealth assumed a 70% acuity adjustment which if utilized here would result in a need for 55.3 community acute care beds in Hoke County, or a need for 6.3 additional acute care beds in 2018.

As shown in the previous table, the population of Hoke County, through FFY 2018 will not support the proposed 65-bed acute care FHCH -- in addition to the approved 41-bed Hoke Community Medical Center and the 8-bed FHCH Application. Hoke Community Medical Center is the right-size for Hoke County. Furthermore, any need reflected in the previous table would NOT be allocated in the 2018 SMFP per the SMFP rule that there must be a need of at least 20 beds or at least 10% of the licensed and CON beds before an allocation is included.

[1] Acuity adjusted = No rehabilitation, psychiatric, or newborn patients and inclusion of all Medicare patients with a case mix index of 2.0 or less.

Therefore, **NO** need would be included in the annual SMFF until after 2018, or in 2018 if using a 70% acuity adjustment factor.

## Methodology #2 – Licensure Renewal Application Data

The following table illustrates acute care bed need for Hoke County residents based solely upon data included in the 2011 Licensure Renewal Applications submitted by CFVMC and FMRH. Out-migration to other facilities is assumed to continue at the same rate.

**Hoke County 2010 Bed Need Based Upon 2011 Licensure Renewal Application Data**

| | Total Inpt Patient Origin LRA pg 19 | Total Patient Days LRA pg 4 | Total ALOS | Hoke County Inpt Patient Origin LRA pg 19 | Estimated Hoke County Residents Patient Days |
|---|---|---|---|---|---|
| CFVMC | 29,287 | 155,926 | 5.32 | 1,355 | 7,214 |
| FHMRH | 23,895 | 83,807 | 3.51 | 1,832 | 6,425 |
| Total Hoke Days | | | | | 13,639 |
| ADC Hoke Residents | | | | | 37.4 |
| Total Acute Care Beds Needed @ 66.7% | | | | | 56.0 |
| Acuity Adjusted Bed Need at 65% Acuity | | | | | 36.4 |

*Source: 2011 LRAs; Attachment 2, Table 35*

As shown in the previous table, based upon 2010 data from the 2011 LRAs, Hoke County residents utilized an average of 37.4 bed days in 2010 at CFVMC and FMRH. When acuity is adjusted, this reflects a community level bed need of only 36 acute care beds in 2010. Furthermore, this analysis may be skewed toward the high side due to use of the ALOS for the two tertiary care hospitals. In fact, ALOS at the community level could be less, depending on patient mix, for example, if a facility is delivering babies, ALOS would be less.

Increasing the estimated 2010 patient days above for Hoke County residents, by the CFVMC growth rate of 3.15% annually, as used in the *2011 SMFP*, results in projected 2018 patient days of approximately 17,480 patient days. This reflects an ADC of 47.9 patients per day, or a need for 71 acute care beds at 66.7% occupancy in 2018. Adjusting patient acuity level for this volume to 65%, in order to reflect need at the community level, results in a need for 46.7 acuity adjusted acute care beds in Hoke County for Hoke County residents or a surplus of 2.3 acute care beds in 2018.

As reflected in the previous two methodologies, the resident's of Hoke County do not need 106 total acute care beds. In addition, as will be discussed below, the in-migration assumptions made by FirstHealth are unreasonable and unjustified. Therefore, the FHCH Application at issue in this review is duplicative of approved acute care beds in Hoke County and should be denied.

## VI. CON Review Criteria

The following comments are submitted based upon the CON Review Criteria found at G.S.131E-183. While some issues impact multiple Criteria, they are discussed under the most relevant review Criteria and referenced in others to which they apply.

### G.S. 131E-183 (1)

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

#### A. Policy Gen-3 – Basic Principles

FirstHealth failed to adequately demonstrate the need for the project, and therefore failed to document how its projected volumes incorporate the Basic Principles in meeting the need for 65 acute care beds in the Cumberland-Hoke Service Area identified in the *2011 SMFP*. Consequently, the FHCH Application #3 is not conforming to Policy Gen-3 and does not conform to Criterion (1). Please see also discussion in the context of Criterion (3) below.

#### B. Operating Room Need Methodology – Results in Surplus of Operating Rooms

Surgical volume is overstated in the FHCH Application #3. As a result, projected utilization fails to justify FirstHealth's total operating rooms in the Moore-Hoke Service Area. There is a surplus of operating rooms based upon the Operating Room Need Methodology in the *2011 SMFP*, and the methodology utilized by FirstHealth to project volume at FMRH. Therefore, FirstHealth is non-conforming to Criterion (1). Please see also discussion in the context of Criterion (3) and Criterion (6).

### G.S. 131E-183 (3)

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

FirstHealth uses three different Need Methodologies in the FHCH Application #3 and an expanded service area to justify the need for the proposed project. The proposed 4-County Service Area is significantly overstated.

The Direct Inpatient Admission Need Methodology and the Outpatient Department Need Methodology only project utilization from Hoke and Cumberland counties. However, each of

the three methodologies is based on flawed and unreasonable assumptions, resulting in overstated volume projections.

## A. Overstated Service Area

FirstHealth erroneously identifies a 4-County Service Area for its Emergency Services Methodology, and includes Cumberland County in the service area for the Direct Inpatient Admission Methodology which results in significantly overstating the population to be served by the proposed project. On page 130 of the Application, FirstHealth identifies Cumberland, Hoke, Robeson and Scotland Counties as the proposed service area and states "that many residents from these counties who would travel to FMRH for [emergency] services will instead receive [emergency] services at FHCH." Two of these counties, Cumberland and Robeson, have successful tertiary care hospitals, and the third, Scotland, has a very successful community hospital. It is more reasonable to assume that any patient from one of these counties, who leaves his own communities seeking emergency care at FMRH, is seeking tertiary level services, or seeking care from a specific physician or surgeon at FMRH. As a result it is unlikely that such a patient would utilize emergency or inpatient services at FHCH. See Table 33 in Attachment 2.

FMRH is a tertiary care hospital providing a large range of services which will not be provided at FHCH, including, but not limited to, trauma, open heart surgery, neurosurgery, and NICU. On pages 268 and 269 of the Application, FirstHealth reflects the current medical staff for FMRH, which includes 225 physicians and surgeons, and the proposed medical staff for FHCH, which includes only 44 physicians and surgeons. Furthermore, there are a large number of medical specialties that are not listed as part of the FHCH medical staff on page 44.

In addition, FirstHealth fails to provide any documentation related to type of care residents of Cumberland, Robeson, and Scotland Counties receive at FMRH. As reflected on pages 268 and 269 all of the medical staff at FMRH will not join the medical staff at FHCH. The letters submitted by physicians, included in Exhibit U of the Application, indicate that less than half indicated an interest in joining the medical staff of FHCH.

Finally, FirstHealth ignored the development of HCMC which will be located in Hoke County, between FHCH and the Cumberland County line. FirstHealth provides no documentation or even a discussion regarding why residents from Cumberland County, who currently seek emergency care at CFVMC, would drive past HCMC, which will be owned and operated by CFVMC, to seek emergency care at FHCH.

Therefore, it is doubtful that FirstHealth's statement on page 130 is reasonable and it is more likely to assume that patients from Cumberland, Robeson and Scotland Counties seeking emergency or inpatient care at FMRH come for tertiary services, which will not be provided at FHCH. As reflected in Attachment 2, Table 33, of those patients from the 4-County Service Area admitted to FMRH from the emergency room in the first nine months of 2010, 7.2% were admitted for mental health issues, and 20.2% were admitted for cardiac services. Therefore, including the three additional counties in the FHCH Service Area overstates the population to be served and thereby the need resulting from this population base.

Each of the three methodologies utilized by FirstHealth are discussed below.

## B. Emergency Department Need Methodology

The large majority of inpatient volumes projected for FHCH are the result of the following methodology: FirstHealth projects emergency department visits to FHCH, from which it then projects observation days, inpatient utilization, surgical cases, imaging procedures, laboratory tests, and other ancillary volumes. The Emergency Department Need Methodology relies on a county use rate, held constant, with significant increases in market share achieved through shifting volume from non-FirstHealth providers. As will be shown below, FirstHealth overstates its emergency department visits, which results in overstated observation days, inpatient ED admissions, surgical cases, imaging procedures, laboratory tests, and other ancillary volumes.

Furthermore, the database utilized by FirstHealth was an outpatient only database until April 2010 and is therefore inappropriately used in this methodology. FirstHealth then utilizes internal emergency data which is not acuity adjusted or adjusted by county. As a result of these two inconsistent databases, the inpatient ED admissions projected by FirstHealth **are overstated by over 60%**. The following comments are presented as they relate to the Steps in this methodology outlined in the FirstHealth Application.

### Step 1. FHCH's Proposed 4-County Service Area is Over-inclusive

As discussed above, FirstHealth defined a four-county service area for the Emergency Department Need Methodology. FirstHealth must include all four counties population in order to generate a base ED visit volume large enough to support all 12 ED spaces, and from which to generate 60-65% of its total inpatient admissions.

For comparison purposes, in the FHCH Application #2, FirstHealth limited its service area to Hoke County, and 8 ED spaces, 8 acute care beds with no direct patient admissions, and 1 operating room.

The approved 41-bed HCMC has a service area that includes all of Hoke County, three zip codes in southwest Cumberland County, and one zip in the northern corner of Robeson County. FirstHealth did not address the CON 41- bed approved HCMC which has 16 ED spaces.

### Step 1 and Step 2. Thomson Emergency Department Data

FirstHealth utilized historical ED volumes from the NCHA Data System-Emergency Department Data Set to estimate ED use rates for the 4-County Service Area and to project future inpatient utilization. However, until April, 2010 the data set utilized by FirstHealth included **only outpatient emergency volumes**. Therefore, the data reflected on page 176 for 2008 and 2009 reflects only outpatient emergency volumes and the 2010 volume includes only six months of inpatients admitted through the emergency room. This fact was confirmed by Thomson Reuters on July 15, 2011 as reflected in Attachment 3. Therefore, use rates utilized by FirstHealth do not reflect all patients admitted to the hospital. As a result, the projections by FirstHealth are

unreasonable, skewed, and unsubstantiated. This alone is sufficient to deny FirstHealth's proposed 65-bed hospital.

As will be shown in the following analysis, using the correct Thomson inpatient ED admission volumes to determine a use rate and project future inpatient ED admissions results in well under half of the projected inpatient ED admissions for FirstHealth: only 1,009 inpatient ED admissions vs. 2,811 inpatient ED admissions calculated in Step 11.

Assuming the FHCH ALOS of 3.4 days per patient, reflected on page 201 of the Application, multiplied by 1,802 overstated inpatient ED admissions (2,811 - 1,009 = 1,802) results in overstating inpatient days at the proposed FHCH by 6,127 inpatient days patient days or 38.6% of total patient days reflected on page 201 of the Application. This also results in projected inpatient occupancy rate well under the required 66.7%. This overstatement alone results in an occupancy rate of only 41.1% of the proposed 65 acute care beds (15,879 - 6,127 = 9,752 / 365 / 65 = 41.1%).

Cape Fear Valley determined it important to illustrate that use of the correct data set, inpatient ED admissions. This results in significantly different results as shown in the following analysis. This analysis follows the FirstHealth Steps to the extent possible, using the inpatient ED database to project inpatient ED volumes. This negates the need for several Steps at the end of the methodology used by FirstHealth to convert total ED volumes into inpatient, outpatient and observation volumes.

When inpatient ED admissions were added to the data set in April, 2010, billing codes were included which allows the segregation of inpatient ED and outpatient ED volumes. The following table estimates county specific hospital inpatient ED admission rates for the CY 2010 timeframe for each of the four counties defined in the FHCH Service Area based upon the nine months of data from April through December 2010.

**Step 1 - County Specific Estimated 2010 Inpatient ED Admission Rates**

| County | 2010 ED Admissions | Population | Use Rate Per 100 Population |
|---|---|---|---|
| Cumberland | 5,716 | 321,018 | 1.78 |
| Hoke | 816 | 47,298 | 1.73 |
| Robeson | 4,547 | 134,502 | 3.38 |
| Scotland | 940 | 36,098 | 2.60 |

*Source: Thomson Emergency Department Data Attachment 2, Table 34*
*Note: CY 2010 data was estimated based upon April-December actual inpatient ED utilization included in Attachment 2, Table 33 and Attachment 4.*

In Step 2, FirstHealth utilized a significantly higher use rate to project total ED visits for each County. However, the above rates reflect more specific data, inpatient only data, from the same data set utilized by FirstHealth. Using the above data and holding both the use rate and FMRH market share constant results in significantly different projected inpatient ED admissions.

## Step 3. Projected Inpatient ED Admissions

Projected ED admissions for 2018, calculated using projected population included in the FirstHealth Application and holding the 2010 inpatient ED admission use rate calculated in Step 2 constant, consistent with assumptions in the FH Application, for each county in the 4-County Service Area are shown in the following table.

**Step 3 - Estimated 2018 Projected Inpatient ED Admissions**

| County | 2010 Use Rate Per 100 Population | 2018 Population | 2018 Inpt ED Admissions All Providers |
|---|---|---|---|
| Cumberland | 1.78 | 357,722 | 6,370 |
| Hoke | 1.73 | 59,898 | 1,033 |
| Robeson | 3.38 | 145,381 | 4,914 |
| Scotland | 2.60 | 34,930 | 910 |

*Source: Thomson Emergency Department Data Attachment 2, Table 34*

As shown in the previous table projected inpatient ED admissions are significantly less than total ED visits projected by FirstHealth on page 178 of the Application which reflect total ED visits, not just ED visits resulting in inpatient admissions which are reflected here. For purposes of this analysis CFVHS has focused on the most significant part of the need associated with the development of a new hospital, the need for inpatient beds.

This is an important distinction between the Methodology in the Application and the analysis included in these Comments. FirstHealth did not project inpatient ED admissions until Step 11 of the Application, based upon an entirely different data set. The data set used in Step 11 was not based upon Thomson data but was based upon internal ED experience of the FMRH emergency department and while it is specific to the combined patients from the 4-County Service Area, it does not differentiate between admissions by county, which the Thomson data does, and does not reflect any acuity adjustment by county. While the following projections continue to follow the FirstHealth methodology, these projections are specific to inpatient ED admissions, not total ED volumes.

## Step 4. Calculate FMRH and FHCH Market Share of Inpatient ED Admissions

The following table illustrates FMRH's market share of inpatient ED admissions based upon the Thomson inpatient ED admission data reflected in Attachment 2, Table 33.

**Step 4 - FirstHealth Moore Regional Market Share Inpatient ED Admissions**

| County | Hospital | 2010 Estimated FH ED Admissions (See Note) | Mkt Share |
|---|---|---|---|
| Cumberland | Cape Fear Valley Health System | | 92.8% |
| | First Health Moore Regional Hospital | **71** | **1.2%** |
| | All Other | | 5.9% |
| | Total | | 100.0% |
| Robeson | Cape Fear Valley Health System | | 8.7% |
| | First Health Moore Regional Hospital | **212** | **4.7%** |
| | Scotland Memorial Hospital | | 8.4% |
| | Southeastern Regional Medical Center | | 74.4% |
| | All Other | | 3.8% |
| | Total | | 100.0% |
| Hoke | Cape Fear Valley Health System | | 36.8% |
| | First Health Moore Regional Hospital | **469** | **57.5%** |
| | All Other | | 5.7% |
| | Total | | 100.0% |
| Scotland | Scotland Memorial Hospital | | 68.5% |
| | First Health Moore Regional Hospital | **132** | **14.0%** |
| | All Other | | 17.4% |
| | Total | | 100.0% |

*Source: Thomson Emergency Department Data Attachment 2, Table 33*
*Note: Estimated 2010 reflects April-December data annualized.*

As reflected in the previous table when the nine months of data from April through December is annualized, FMRH admitted only 884 patients from the 4-County Service Area through the ED in 2010 (71 + 212 + 469 + 132 = 884). FirstHealth does not provide any actual data from FMRH in its Application which reflects the number of patients admitted by county through the emergency room for the 4-County Service Area which would have allowed a point of comparison.

As shown above FMRH's market share of inpatient ED admissions in 2010 varied widely across the 4-County Service Area. Consistent with the assumptions made in Step 4 of the FirstHealth ED Methodology in the Application, no change in market share or total combined FirstHealth inpatient ED admission volumes, assuming no market share change, were calculated below.

**Step 4 - Estimated 2018 Combined FirstHealth Projected Inpatient ED Admissions**

| County | Total Projected 2018 Inpt ED Admissions | FH Mkt Share | 2018 FH Projected Inpt ED Volume |
|---|---|---|---|
| Cumberland | 6,370 | 1.2% | 79 |
| Hoke | 1,033 | 57.5% | 594 |
| Robeson | 4,914 | 4.7% | 229 |
| Scotland | 910 | 14.0% | 128 |

*Source: Thomson Emergency Department Data Attachment 2, Table 34*

As reflected in the previous table holding the inpatient ED admission use rate constant, as assumed in the FirstHealth methodology, results in projected admissions of only 1,030 patients to FirstHealth from the 4-County Service Area in 2018.

## Step 5. Calculate FirstHealth Hoke Inpatient ED Admissions

The following table illustrates projected FirstHealth's inpatient ED admissions based upon current market share and the FirstHealth assumptions regarding volumes shifted to FHCH from FMRH on page 180 of the Application.

**Step 5 - Estimated 2018 FHCH Projected ED Inpt Admissions**

| County | FH Projected Inpt ED Volume | Volume Shift | FHCH Projected Inpt ED Volume |
|---|---|---|---|
| Cumberland | 79 | 50% | 39 |
| Hoke | 594 | 75% | 446 |
| Robeson | 229 | 50% | 115 |
| Scotland | 128 | 50% | 64 |
| Total Projected Inpatient ED Admissions | 1,030 | | 664 |

*Source: Thomson Emergency Department Data Attachment 2, Table 34*

As reflected in the previous table projected inpatient ED admissions at FHCH total only 664 in FFY 2018 which is Project Year 3 for the proposed project.

This projection is based upon **actual ED admission data**, which was available to FirstHealth when the Application was submitted. However, instead of using specific inpatient ED admission data, the methodology utilized by FirstHealth was based upon total ED utilization. Inpatient and outpatient projections were based upon a secondary database from FMRH's Emergency Department which did not differentiate between counties or acuity levels. It is clear that use of **actual county specific inpatient ED admission data** results in a more accurate and reasonable projection of future utilization: which is considerably less than projections included in the FirstHealth Application.

### Step 6 and Step 7. Calculate FirstHealth Hoke Increase in Inpatient ED Admissions from Cumberland and Hoke Counties

After calculating the FirstHealth volume based upon current market share, FirstHealth calculated additional inpatient ED admissions expected by increasing market share by decreasing volumes currently provided by other hospital emergency rooms to residents of Cumberland and Hoke Counties. In Step 6, FirstHealth assumed that 50% of all remaining emergency visits not provided by FirstHealth, to residents of Hoke County would seek care at FHCH and assumed that an additional 2% of all remaining emergency visits not provided by FirstHealth by residents of Cumberland County would choose to seek care at FHCH in the future. FirstHealth states on page 182 that these assumptions are based upon the fact that,

> *"Other Hoke County residents will seek care at FHCH because it is within the county borders and closer to their home than either FH Moore Regional or CFVMC. Additionally Cumberland County residents will seek care at FHCH because currently no alternative exists to the Emergency Department at CFVMC that is within a 20 minute drive of Fayetteville."*

However, FirstHealth failed to acknowledge the CON approval and future development of HCMC which will be located in Hoke County and will provide a full range of community hospital services, including a full service emergency department. HCMC is owned by Cape Fear Valley. Cape Fear Valley currently provides 36.8% of all inpatient ED admissions for residents of Hoke County and 92.8% of all inpatient ED admissions for residents of Cumberland County. FirstHealth provided no documentation to support its assumption that patients would pass HCMC for FHCH. Therefore, the assumptions made in Steps 6 and 7 are unreasonable and unsubstantiated.

However, even if these were reasonable assumptions, the inpatient ED admissions projected remain substantially overstated as reflected in the following table which reflects Steps 6 and 7 as included in methodology in the Application using inpatient ED admissions projected using the inpatient ED admissions use rate calculated based upon Thomson data previously discussed.

**Step 7 - FHCH Projected "Additional" Inpatient ED Admissions**

| County | 2018 Projected Inpt ED Admissions | FH Projected Inpt ED Volume Based upon Current Mkt Share | 2018 ED Inpt Admits Less FH Volume Based upon Current Mkt Share | Percent Shift to FHCH | Projected "Additional" FHCH Inpt ED Admits Due to Increase in Mkt Share |
|---|---|---|---|---|---|
| Cumberland | 6,370 | 79 | 6,291 | 2% | 126 |
| Hoke | 1,033 | 1,033 | 493 | 50% | 220 |
| Total | | | | | 345 |

*Source: Thomson Emergency Department Data Attachment 2, Table 34*

Combining the 345 projected "additional" inpatient ED admissions from Cumberland and Hoke Counties, reflected in the previous table, with the 664 projected inpatient ED admissions calculated above in Step 5 results in total projected Inpatient ED Admissions at FHCH of only

1,009 in FFY 2018 which is Project Year 3 for the proposed project. This is considerably less than the 2,811 inpatient ED admissions projected in Step 11 on page 189 of the Application.

Assuming the FHCH ALOS of 3.4 days per patient, reflected on page 201 of the Application, results in 6,127 excess inpatient days at the proposed FHCH

### Steps 6 - 9. Increase in ED Visits and Market Share from Cumberland and Hoke Counties

### Market Share Comparison Inpatient ED Admissions

The following table compares projected market share and projected inpatient ED admissions reflected in the FirstHealth application and projected market share when calculated using the actual inpatient ED admission use rate using Thomson data.

**Total Projected 2018 FHCH Market Share of Inpatient ED Admissions by County**

| County | FHCH 2018 Projected Inpatient ED Admissions | FHCH 2018 Projected Market Share FirstHealth Methodology | *FirstHealth Emergency Department Need Methodology* 2018 Projected Total County Inpatient ED Admissions | FHCH 2018 Projected Inpatient ED Admissions | *Thomson Inpatient ED Admission Use Rate Methodology* 2018 Projected Total County Inpatient ED Admissions | FHCH 2018 Projected Market Share Thomson Inpatient ED Admission Rate Methodology |
|---|---|---|---|---|---|---|
| A | B = Page 164 | C = Page 184 | D = B / C | B = Page 164 | E = Attachment 2, Table 34 | F = B / E |
| Hoke | 1,872 | 62.3% | 3,005 | 1,872 | 816 | 229.4% |
| Cumberland | 468 | 2.6% | 18,000 | 468 | 5,716 | 8.2% |
| Robeson | 301 | 1.8% | 16,722 | 301 | 4,547 | 6.62% |
| Scotland | 170 | 4.6% | 3,696 | 170 | 940 | 18.1% |

*Source: FHCH Application #3; Attachment 2, Table 34*

As reflected in the previous table, county specific inpatient ED admissions projected based upon the FirstHealth methodology (Column D above) are well over three times greater than inpatient ED admissions projected using actual inpatient ED admission data from Thomson (Column E above). As a result, projected FHCH volumes are unreasonably inflated as reflected in the higher market shares reflected in the previous table. In particular, projected ED admissions from Hoke County included in the Application are over 3.5 times greater than projected Hoke ED admissions, thereby reflecting more admissions at FHCH (Column B above) than total available admissions from Hoke County (Column E above).

### Market Share Analysis Total Emergency Visits

The following discussion relates to the project total emergency room volumes as projected by FirstHealth in the Application and raises significant questions regarding FirstHealth's assumptions regarding increasing total emergency visit market share from Cumberland and Hoke Counties.

Finding insufficient ED volume to shift from FMRH to support all proposed 12 ED spaces, in Step 6 of the Emergency Department Need Methodology, FirstHealth projects ED volume will shift to FHCH from non-FirstHealth providers in Hoke and Cumberland counties, as shown in the following table. There is no volume shift from providers in Robeson and Scotland counties.

**FHCH**

**Projected Emergency Department Volume Shifted from non-FirstHealth Providers**

| FFY | 2016 | 2017 | 2018 | |
|---|---|---|---|---|
| | Non-FH-Moore Projected ED Visits | | | % Change 2016-2018 |
| Hoke | 8,286 | 8,516 | 8,746 | 5.5% |
| Cumberland | 101,594 | 102,620 | 103,555 | 1.9% |
| Robeson | 90,767 | 91,632 | 92,497 | 1.9% |
| Scotland | 19,382 | 19,300 | 19,220 | -0.8% |
| Total | 220,030 | 222,069 | 224,018 | 1.8% |
| | FH-Hoke Projected "Shift" Rates of non-FH-Moore ED Visits | | | % Change 2016-2018 |
| Hoke | 40% | 45% | 50% | 25.0% |
| Cumberland | 1% | 1.5% | 2% | 100.0% |
| Robeson | 0% | 0% | 0% | |
| Scotland | 0% | 0% | 0% | |

*Source: Project I.D. # N-8690-11, pages 177-190, reflected in Attachment 2, Table 10*

Projected ED visits shifting from Hoke County, shown in the previous table, will come from the approved HCMC, which is projected to open in October 2014 and will be the only other provider of emergency care in Hoke County. ED visits projected to shift from Cumberland County comes from CFVMC.

A shift of ED volume from non-FirstHealth providers to FHCH is a market share increase, as shown in the following table.

**FHCH**

**Projected Emergency Department Volume Shifted from non-FirstHealth Providers**

| FFY | 2010 | 2016 | 2017 | 2018 | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|---|---|---|---|
| Non-FH ED Visits = Actual ED Visits – FH-Moore ED Visits | | Non-FH Projected ED Visits | | | | |
| Hoke | 6,901 | 8,286 | 8,516 | 8,746 | 26.7% | 5.5% |
| Cumberland | 92,954 | 101,594 | 102,620 | 103,555 | 11.4% | 1.9% |
| Robeson | 85,515 | 90,767 | 91,632 | 92,497 | 8.2% | 1.9% |
| Scotland | 19,850 | 19,382 | 19,300 | 19,220 | -3.2% | -0.8% |
| Total | 205,220 | 220,030 | 222,069 | 224,018 | 9.2% | 1.8% |
| | | FH-Hoke Projected "Shift" Rates of non-FH ED Visits | | | | % Change 2016-2018 |
| Hoke | | 40% | 45% | 50% | | 25.0% |
| Cumberland | | 1% | 1.5% | 2% | | 100.0% |
| Robeson | | 0% | 0% | 0% | | |
| Scotland | | 0% | 0% | 0% | | |
| Total | | | | | | |
| | | FH-Hoke Projected ED Visits of non-FH ED Visits | | | | % Change 2016-2018 |
| Hoke | | 3,315 | 3,832 | 4,373 | | 31.9% |
| Cumberland | | 1,016 | 1,539 | 2,071 | | 103.9% |
| Robeson | | 0 | 0 | 0 | | |
| Scotland | | 0 | 0 | 0 | | |
| Total | | 4,330 | 5,372 | 6,444 | | 48.8% |
| ED Spaces Needed at 1,333 Visits/Space | | 3 | 4 | 5 | | |
| FH-Moore Actual ED Visits | | FH-Hoke Total Projected ED Visits | | | % Change 2010 – 2018 | % Change 2016-2018 |
| Hoke | 6,701 | 7,343 | 9,215 | 10,751 | 60.4% | 46.4% |
| Cumberland | 1,098 | 1,510 | 2,100 | 2,700 | 145.9% | 78.9% |
| Robeson | 3,195 | 1,356 | 1,540 | 1,727 | -45.9% | 27.4% |
| Scotland | 2,018 | 786 | 880 | 974 | -51.7% | 24.0% |
| Total | 13,012 | 10,994 | 13,735 | 16,152 | 24.1% | 46.9% |
| FH Market Share | | FH-Hoke Total Projected Market Share | | | % Change 2010 – 2018 | % Change 2016-2018 |
| Hoke | 49.3% | 44.9% | 54.9% | 62.3% | 26.4% | 38.7% |
| Cumberland | 1.2% | 1.5% | 2.0% | 2.6% | 114.7% | 75.5% |
| Robeson | 3.6% | 1.4% | 1.6% | 1.8% | -50.0% | 25.0% |
| Scotland | 9.2% | 3.7% | 4.1% | 4.6% | -50.0% | 25.0% |
| Total | 6.0% | 4.7% | 5.8% | 6.8% | 13.3% | 44.1% |

*Source: Project I.D. # N-8690-11, pages 177-190, reflected in Attachment 2, Table 10*

As shown in the previous table, FirstHealth shifts thousands of ED visits from non-FirstHealth providers in Hoke and Cumberland Counties in each Project Year. This shift increase more than doubles FirstHealth market share of Cumberland County ED volume from FFY 2010 through FFY 2018 (1.2% to 2.6% = 114.7%). This shift also increases by 26.4% FirstHealth market share from FFY 2010 through FFY 2018 (49.3% to 62.3%). FirstHealth provides no reasonable basis on which to project that shift in volume.

ED volume projected to shift from non-FirstHealth providers in Hoke and Cumberland counties allows FirstHealth to overstate its ED volume by 6,444 ED visits in FFY 2018, as shown in the following table.

**FHCH**
**Projected Emergency Department Volume Shifted from non-FirstHealth Providers**
**October 1, 2015 – September 30, 2018**

| FFY | 2010 | 2016 | 2017 | 2018 | |
|---|---|---|---|---|---|
| | | FH-Hoke Projected "Shift" Rates of non-FH ED Visits | | | % Change 2016-2018 |
| Hoke | | 40% | 45% | 50% | 25.0% |
| Cumberland | | 1% | 1.5% | 2% | 100.0% |
| Robeson | | 0% | 0% | 0% | |
| Scotland | | 0% | 0% | 0% | |
| Total | | | | | |
| | | FH-Hoke Projected ED Visits of non-FH ED Visits | | | % Change 2016-2018 |
| Hoke | | 3,315 | 3,832 | 4,373 | 31.9% |
| Cumberland | | 1,016 | 1,539 | 2,071 | 103.9% |
| Robeson | | 0 | 0 | 0 | |
| Scotland | | 0 | 0 | 0 | |
| Total | | 4,330 | 5,372 | **6,444** | 48.8% |
| ED Spaces Needed at 1,333 Visits/Space | | 3 | 4 | 5 | |

*Source: Project I.D. # N-8690-11, pages 177-190, reflected in Attachment 2, Table 10*

To the extent that overstated ED volume is used by FirstHealth to determine observation days, inpatient utilization, surgical cases, imaging procedures, laboratory tests, and other ancillary volumes, those volumes also are overstated. An overstated shift of ED volume from HCMC is the best evidence that FirstHealth does not demonstrate the need in Hoke County for FirstHealth's 65-bed community hospital.

### Step 10. Allocation of ED Visits by Service Level using FMRH Emergency Department Data

Using inpatient ED admission data, as correctly done by Cape Fear Valley, alleviates the need for Steps 10 and 11 to project inpatient ED Admissions.

However, in Step 10 of the Emergency Department Need Methodology, FirstHealth projects the number of ED visits by Service Level using a "1-year rate" from a "sample data pull for FY 2008 through FY 2010 of 4-County Service Area residents treated at the FMRH Emergency Department." FirstHealth does not explain its choosing to use FFY 2010 (a "1-year rate") instead of a three-year average rate using data "it pulled" from FFY 2008-FFY 2010.

The "Sample data pull" provided on page 185 shows a significant decline in Levels I and II ED visits between FFY 2008 and FFY 2010, and a significant increase in Level V ED visits at FMRH in that period. FirstHealth does not discuss that change in Service Level utilization at

FMRH. This variation in the data is because the database utilized by FirstHealth is skewed and includes only two quarters of inpatient data. However, even just one quarter with inpatient ED admissions would reasonably include more Level V patients that are routinely admitted as reflected in the FirstHealth data. FirstHealth did not question or try to explain the variance in the annual data sets.

Furthermore, the data utilized by FirstHealth is not specific to each county but, instead, provides a combined total. As discussed earlier, significant differences are evident regarding who seeks care at the tertiary facility, bypassing community options. A review of inpatient ED admissions at FMRH from the 4-County Service Area shows that 30.2% of emergency room admissions from Cumberland County are for mental health diagnoses, and 18.9% are for cardiac and circulatory problems. Robeson County ED admissions at FMRH reflect 5.7% for mental health diagnoses, and 23.9% for cardiac and circulatory problems. Hoke County ED admissions at FMRH reflect 4.8% for mental health diagnoses, and 18.5% for cardiac and circulatory problems. Scotland County ED admissions at FMRH reflect 7.2% for mental health diagnoses, and 20.2% for cardiac and circulatory problems. Few of these patient care days could be provided by FHCH since inpatient psychiatric services will not be provided and FHCH will not provide tertiary cardiac services. These two types of ED visits alone made up over 27% of total ED admissions to FirstHealth in 2010 from the four county area.

FirstHealth did not distinguish between county utilization and acuity. Therefore, any variation between counties, which based upon the data presented herein should be expected, is undetermined.

### Steps 11 - 14. Allocation of ED Visits into Observation, Inpatient, and Discharges and Projected Ancillary Utilization using a "1-year rate" from a "Sample Data Pull for FY 2008 – FY 2010"

In Step 11 Emergency Department Need Methodology, FirstHealth "used the sample data pull for FY 2008 through FY 2010 of 4-County Service Area residents treated at the FMRH Emergency Department" to calculate "the percent of observation patients, inpatients, and discharged patients by Service Level to identify the 1-year experience to apply to future projections."

Columns in the "sample data pull" provided on page 188 appear to be mislabeled: 2007, 2008, and 2009, instead of 2008, 2009, and 2010. If, however, those columns are not mislabeled, then it is reasonable to assume that those columns contain data from 2007, 2008, and 2009.

Assuming that the columns are just mislabeled, the "sample data pull" provided on page 188 shows:

- a significant increase in Service Level V observation and inpatient volume at FMRH between FFY 2008 and FFY 2010.
- a significant decrease in Service Levels I, II, and IV discharge volume at FMRH between FFY 2008 and FFY 2010.

FirstHealth does not discuss those changes in Service Level utilization at FMRH.

Again, FirstHealth does not explain its choosing to use FFY 2010 (a "1-year rate") instead of a three-year average rate using data "it pulled" from FFY 2008-FFY 2010.

Projected utilization based on Emergency Department visits is shown in the following table.

**FHCH**
**Projected Utilization based on Emergency Department Visits**
**October 1, 2009 – September 30, 2018**

| FFY | 2010 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| FH-Moore | | FH-Hoke | | |
| Observation Patients | 1.7% | 188 | 235 | 276 |
| Inpatient Admissions | 17.4% | 1,913 | 2,390 | 2,811 |
| Patients Discharged from ED | **80.9%** | 8,871 | 11,083 | 13,034 |
| Total | 100.0% | 10,972 | 13,708 | 16,121 |

*Source: Attachment 2, Table 14*

The previous table shows that FirstHealth projects that 81% of ED patients will be discharged from the FHCH ED. FirstHealth projects that 17.4% of ED patients will be admitted to FHCH.

On page 194 (Step 2 of the Direct Inpatient Admission Need Methodology), FirstHealth calculates its patient origin for ED visits determined in the Emergency Department Need Methodology, as shown in the following table.

**FHCH**
**Projected ED Visits by County**
**October 1, 2015 – September 30, 2018**

| FFY | 2016 | | 2017 | | 2018 | | % Change |
|---|---|---|---|---|---|---|---|
| | Percent | Volume | Percent | Volume | Percent | Volume | 2016-2018 |
| Hoke | 66.8% | 7,332 | 67.1% | 9,201 | 66.6% | 10,734 | -0.3% |
| Cumberland | 13.6% | 1,496 | 15.2% | 2,085 | 16.6% | 2,683 | 22.1% |
| Robeson | 12.4% | 1,356 | 11.2% | 1,540 | 10.7% | 1,727 | -13.7% |
| Scotland | 7.2% | 788 | 6.4% | 882 | 6.1% | 976 | -15.3% |
| Total | 100.0% | 10,972 | 100.0% | 13,708 | 100.0% | 16,121 | |

*Source: Attachment 2, Table 13*

It is critical to note that despite increases in ED visit volume from all four counties, FirstHealth projects that FHCH will experience a 22.1% increase in its percentage of ED patients from Cumberland County in the three Project Years.

That increase in percentage of ED patients from Cumberland County is a direct consequence of FirstHealth's shifts of thousands of ED visits each Project Year from CFVMC in Cumberland County and HCMC in Hoke County. As discussed above, that shift increases more than doubles

FirstHealth market share of Cumberland County ED volume from FFY 2010 through FFY 2018 (1.2% to 2.6% = 114.7%).

Importantly, despite inclusion of overstated ED volume shifted from non-FirstHealth providers in Hoke and Cumberland counties (discussed above), inpatient admissions projected using the Emergency Department Need Methodology in Step 12 on page 190 do not support all of the proposed 65-bed FHCH, as shown in the following table.

**FHCH**
**Emergency Department Service Level - Projected Acute Care Bed Need**
**October 1, 2015 – September 30, 2018**

| FFY | 2016 | 2017 | 2018 |
|---|---|---|---|
| Inpatient Admissions | 1,913 | 2,390 | 2,811 |
| ALOS* | 3.5 | 3.5 | 3.5 |
| Inpatient Days | 6,696 | 8,365 | 9,839 |
| Beds Needed at 66.7% Occupancy Rate | 27.5 | 34.4 | 40.4 |

*Source: Attachment 2, Table 17*
ALOS is 3.5 days per admission for Medical/Surgical admissions including Pediatrics and GYN, excludes LDRP and ICU as reflected on page 201, total ALOS reflected on page 201 = 3.44 days per patient.

FirstHealth does not allocate inpatient admissions from the ED, as shown in the previous table, by medical/surgery, ICU, and LDRP admissions. In the absence of that allocation, an ALOS of 3.5 days was used to calculate inpatient days in the previous table. It is important to note that inpatient admissions are not acuity adjusted anywhere in the FirstHealth Application, nor are they acuity adjusted in the previous table. As a result, admissions are likely overstated by at least 30% to 35% as previously discussed. Furthermore, as a result of overstated projections and use of non acuity adjusted assumptions, all ancillary services as well as projected operating room hours are significantly overstated in the FHCH Application.

## C. Direct Inpatient Admission Need Methodology

In the Direct Inpatient Admission Need Methodology FirstHealth projects volume from Hoke and Cumberland counties only. FirstHealth must shift considerable volume from existing and approved providers in those counties in order to generate volume to support 65 acute care beds and 2 operating rooms as documented herein. The Direct Inpatient Admission Need Methodology relies solely on admissions from physician referrals identified in Exhibit U and "the experience of its administrative and outreach teams."

FirstHealth uses the Direct Inpatient Admission Need Methodology to project direct inpatient admissions to FHCH. Those projected direct inpatient admissions then generate inpatient days, inpatient surgical cases, imaging procedures, laboratory tests, and other ancillary volume.

### Step 1. FFY 2010 Inpatient Admissions for 4-County Service Area

On page 193 (Step 1 of the Direct Inpatient Admission Need Methodology), FirstHealth provides a table that "presents actual FY 2010 inpatient admissions for the 4-County Service Area with

projections that assume no growth into the future." There is no source for FirstHealth's inpatient admission data from FY 2010. Exhibit A does not appear to contain inpatient admission data on which FirstHealth relies. Furthermore, data included in Step 1, on page 193, is inconsistent with Thomson data provided by CFVHS in Attachment 2 as previously discussed.

The following table compares "FY 2010 inpatient admissions for the 4-County Service Area" on page 193 with FFY 2010 inpatient admissions for those counties from the Thomson Market Expert database.

**Comparison of Inpatient Admissions**
**Hoke, Cumberland, Robeson, and Scotland Counties**
**October 1, 2009 – September 30, 2010**

| County | FY 2010 | FFY 2010 | Difference | % Difference |
|---|---|---|---|---|
| Hoke | 3,981 | 3,331 | 650 | 19.5% |
| Cumberland | 30,629 | 26,185 | 4,444 | 17.0% |
| Robeson | 21,951 | 18,648 | 3,303 | 17.7% |
| Scotland | 5,949 | 5,201 | 748 | 14.4% |
| Total | 62,510 | 53,365 | 9,145 | 17.1% |

*Source: CON Application N-8690-11, page 193; Attachment 2, Table 21*

As documented in the previous table, there is a statistically significant difference between the base inpatient admission data used by FirstHealth and FFY 2010 inpatient admissions from the Thomson Market Expert database.

FFY 2010 data from the Thomson Market Expert database is acute care only. It excludes LTACH, Rehab, Psych, and Normal Newborn volume (days and admissions). Without supporting documentation being included in the CON application, it is possible that FirstHealth's "FY 2010 inpatient admissions for the 4-County Service Area" includes all or some LTACH, Rehab, Psych, and Normal Newborn admissions.

In Step 1 (page 193), FirstHealth holds constant and assumes no growth for FY 2010 inpatient admissions for the 4-County Service Area (shown in the previous table) for all three Project Years and calculates future FirstHealth market share using the previously projected inpatient ED admissions and adding 1,800 additional inpatient visits based upon physician referrals.

### Step 3. Physician-Generated Admission Letters

In Step 3 of the Direct Inpatient Admission Need Methodology, FirstHealth projects physician-generated admissions from two of its four-county service area: Hoke and Cumberland counties only, as shown in the following table.

**FHCH**
**Direct Inpatient Admissions**
**October 1, 2015 – September 30, 2018**

| FFY | | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Direct IP Admissions | | 1,000 | 1.400 | 1,800 |
| Hoke | 50% | 500 | 700 | 900 |
| Cumberland | 50% | 500 | 700 | 900 |
| Robeson | 0% | 0 | 0 | 0 |
| Scotland | 0% | 0 | 0 | 0 |
| Total | 100% | 1,000 | 1,400 | 1,800 |

*Source: CON Application N-8690-11, page 195*

As shown in the previous table, there are no physician-generated admissions from Robeson and Scotland counties. No explanation is provided.

Importantly, none of the letters included in Exhibit U includes specific text that a physician will admit patients from Cumberland County to FHCH.

Further, a majority of physician letters in Exhibit U were submitted by physicians in Moore County. There are only four letters from in Exhibit U from Cumberland County physicians, as shown in the following table. Two of the letters contain unintelligible names.

**Physician Admission Letters in Exhibit U**
**Cumberland County**

| Physician | Practice | Number of Admissions that Physician "Anticipates Referring" | Page Number in Exhibit U |
|---|---|---|---|
| Carol Wadon, MD | Carolina Neurosurgical Services | 20 admissions | 001707 |
| [name is unintelligible], MD | Duke/SRAHEC | 200 admissions | 001711 |
| J. Laz _____, MD [name is unintelligible] | | 0 admissions | 001756 |
| Bruce Jaufmann, MD | Carolina Neurosurgical Services | 0 admissions | 001757 |
| Total | | 220 admissions | |

Please note that Carolina Neurosurgical Services also has an office in Moore County and neither surgeon in this practice indicates an interest is joining the medical staff of FHCH.

Based on the four letters in the previous table, FirstHealth expects only 220 admissions from Cumberland County physicians. There is no indication in the two letters that contain admission "projections," when those admissions will occur – in Project Year 1, 2 or 3 or in more than one Project Year.

Letters from Cumberland County physicians provided in Exhibit U do not appear to support the number of direct inpatient admissions projected. Without documentation of physician-generated admissions to FHCH, it is reasonable to conclude that projected direct inpatient admissions of Cumberland County residents are overstated.

Furthermore, the letters in Exhibit U do not include any documentation of current volume of patients from Hoke or Cumberland County that have been admitted to FMRH by individual physicians and surgeons. There is no documentation to show that estimates are based upon historical data or any other methodology. Therefore, these estimates are unsubstantiated and unreliable. Therefore, projected utilization at FHCH is unsubstantiated and unreasonable and the proposed project should be denied.

### Step 4. Projected Patient Origin of Inpatients Admitted to FHCH

On page 196 (Step 4 of the Direct Inpatient Admission Need Methodology), FirstHealth calculates the "overall patient origin [of inpatients admitted to FHCH] by adding the ED patients by county identified in Step 2 to the direct inpatient admissions calculated in Step 3." That projected patient origin is shown in the following table.

**FHCH Patient Origin**
**Projected Total Inpatient Admissions**
**October 1, 2015 – September 30, 2018**

| FFY | 2016 | | 2017 | | 2018 | | % Change 2016-2018 |
|---|---|---|---|---|---|---|---|
| Hoke | 61.1% | 1,778 | 60.8% | 2,304 | 60.1% | 2,772 | 55.9% |
| Cumberland | 26.1% | 761 | 28.1% | 1,064 | 29.7% | 1,368 | 79.8% |
| Robeson | 8.1% | 236 | 7.1% | 268 | 6.5% | 301 | 27.5% |
| Scotland | 4.7% | 137 | 4.1% | 154 | 3.7% | 170 | 24.1% |
| Total | 100.0% | 2,913 | 100.0% | 3,790 | 100.0% | 4,611 | 58.3% |

*Source: Attachment 2, Table 23*

It is critical to note that FirstHealth projects that FHCH will experience an 80% increase in its inpatient volume from Cumberland County and a 56% increase in its inpatient volume from Hoke County during the three Project Years. Inpatient volume from Robeson and Scotland counties are projected to increase less substantially during that period.

As discussed in Subsection A above, increased inpatient admissions from Cumberland County is a direct consequence of FirstHealth's shifts of thousands of ED visits from CFVMC and HCMC, respectively, and projected direct inpatient admissions of Cumberland County residents (which admissions have not been documented in physician letters in Exhibit U) in each Project Year.

Furthermore, in comparing the projected FHCH patient origin to the "comparison" hospitals utilized by FirstHealth in Section III of the Application, patient origin from other counties is significantly overstated. The following table shows that for community hospitals with a like population base, patient origin from the hospital's home is well over the 60% projected in the FHCH Application.

**FHCH Projected Patient Origin Comparison County Facilities**

| County | 2010 Population | Number of Hospital(s) | Percent Inpatient PO from Home County | Additional Counties if Less than 60% | | | | Combined |
|---|---|---|---|---|---|---|---|---|
| Hoke | 47,298 | None | 60.1% (Projected PY3) | | | | | |
| Halifax | 54,627 | 1 + 1 CAH | 68.4% | | | | | |
| Pender | 52,504 | 1 | 73.9% | | | | | |
| Watauga | 51,326 | 1 + 1 CAH | 51.4% | Ashe - CAH | 17.3% | Avery - CAH | 5.7% | 74.4% |
| Beaufort | 47,929 | 1 + 1 CAH | 73.9% | | | | | |
| Stokes | 47,478 | 1 CAH | 87.8% | | | | | |
| Richmond* | 46,630 | 2 | 86.6% | | | | | |
| Vance | 45,477 | 1 | 58.3% | Warren - No | 21.4% | | | 78.8% |
| McDowell | 45,031 | 1 | 93.7% | | | | | |

*Source: LRAs; Attachment 2, Table 32*
**Reflects only FH Richmond*

The counties shown in the previous table were identified by FirstHealth as comparable in the Application. As shown in the previous table, patient origin from these existing hospital's home counties exceeded 68% for all but Watauga and Vance Counties. However, both Watauga and Vance counties are adjacent to counties with no hospital or counties with only Critical Access Hospitals. The combined patient origin for Watauga and Vance Counties, including these additional counties, exceeds 70%.

Hoke County is adjacent to four counties with either a tertiary care hospital or strong successful community hospitals. It is not reasonable to assume that Hoke County will experience almost 40% in-migration when compared to comparable counties which were identified by FirstHealth. Therefore, FirstHealth has overstated the population to be served and is non-conforming to Criterion 3 and should be denied.

### Step 5. Projected Market Share

In Step 5 (page 197), FirstHealth adds projected inpatient admissions generated by ED visits (Step 12 of the Emergency Department Need Methodology) to projected direct admissions calculated in Step 3 of the Direct Inpatient Admission Need Methodology, and determines an "overall IP Market Share" for FHCH, as shown in the following table.

**FHCH**
**Overall Inpatient County Market Share From FHCH Application**
**October 1, 2015 – September 30, 2018**

| | 2016 | 2017 | 2018 |
|---|---|---|---|
| Total IP Admissions | 2,913 | 3,790 | 4,611 |
| | | | |
| Hoke | 1,778 | 2,304 | 2,772 |
| Cumberland | 761 | 1,064 | 1,368 |
| Robeson | 236 | 268 | 301 |
| Scotland | 137 | 154 | 160 |
| Total | 2,913 | 3,790 | 4,611 |
| | | | |
| Projected IP Admissions* | 62,510 | 62,510 | 62,510 |
| | | | |
| Hoke* | 3,981 | 3,981 | 3,981 |
| Cumberland* | 30,629 | 30,629 | 30,629 |
| Robeson* | 21,951 | 21,951 | 21,951 |
| Scotland* | 5,949 | 5,949 | 5,949 |
| Total* | 62,510 | 62,510 | 62,510 |
| | | | |
| Overall IP Market Share | | | |
| | | | |
| Hoke | 44.7% | 57.9% | 69.6% |
| Cumberland | 2.5% | 3.5% | 4.5% |
| Robeson | 1.1% | 1.2% | 1.4% |
| Scotland | 2.3% | 2.6% | 2.9% |
| Total | 4.7% | 6.1% | 7.4% |

*Source: CON Application N-8690-11, page 197*
*This is the FY 2010 inpatient admissions from page 193.

On page 197, FirstHealth concludes that "even assuming no growth in demand, which is very conservative given the rapid population growth in the service area, FHCH projects to capture less than 70 percent market share in the home county, Hoke County, and less than 5 percent market share in each [of the] remaining counties in the service area."

For comparison purposes, the following table shows FMRH inpatient utilization and market of the 4-County Service Area using FFY 2010 Thomson Market Expert data.

**FMRH**
**Inpatient Utilization and Market Share**
**Hoke, Cumberland, Robeson, and Scotland Counties**
**October 1, 2009 – September 30, 2010**

| FFY 2010 | | | | | |
|---|---|---|---|---|---|
| All Providers | | FH-Moore | | FH-Moore Market Share | |
| Hoke | | | | | |
| Days | 15,015 | Days | 6,385 | Days | 42.5% |
| Cases | 3,331 | Cases | 1,580 | Cases | 47.4% |
| ALOS | 4.5 | ALOS | 4.0 | | |
| Cumberland | | | | | |
| Days | 142,348 | Days | 1,848 | Days | 1.3% |
| Cases | 26,185 | Cases | 533 | Cases | 2.0% |
| ALOS | 5.4 | ALOS | 3.5 | | |
| Robeson | | | | | |
| Days | 84,532 | Days | 4,802 | Days | 5.7% |
| Cases | 18,648 | Cases | 1,311 | Cases | 7.0% |
| ALOS | 4.5 | ALOS | 3.7 | | |
| Scotland | | | | | |
| Days | 21,782 | Days | 3,814 | Days | 17.5% |
| Cases | 5,201 | Cases | 887 | Cases | 17.1% |
| ALOS | 4.2 | ALOS | 4.3 | | |
| Total | | | | | |
| Days | 263,677 | Days | 16,849 | Days | 6.4% |
| Cases | 53,365 | Cases | 4,311 | Cases | 8.1% |
| ALOS | 4.9 | ALOS | 3.9 | | |

*Source: Attachment 2, Table 21*

The following table calculates market share increases between FFY 2010 and FFY 2018 and FFY 2016 and FFY 2018, respectively, in Hoke and Cumberland counties.

**FHCH**
**Projected Inpatient Utilization and Overall Market Share**
**Hoke, Cumberland, Robeson, and Scotland Counties**
**October 1, 2015 – September 30, 2018**

| FFY | 2016 | 2017 | 2018 | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|---|---|---|
| ED IP Admissions - based on ED Need Methodology | | | | | |
| Hoke | 1,278 | 1,604 | 1,872 | | 46.5% |
| Cumberland | 261 | 364 | 468 | | 79.3% |
| Robeson | 236 | 268 | 301 | | 27.5% |
| Scotland | 137 | 154 | 170 | | 24.1% |
| Total | 1,912 | 2,390 | 2,811 | | 47.0% |
| Direct IP Admissions - based on MD Referral Letters in Exhibit U | | | | | |
| Hoke | 500 | 700 | 900 | | 80.0% |
| Cumberland | 500 | 700 | 900 | | 80.0% |
| Robeson | 0 | 0 | 0 | | |
| Scotland | 0 | 0 | 0 | | |
| Total | 1,000 | 1,400 | 1,800 | | 80.0% |
| Total IP Admissions | | | | | |
| Hoke | 1,778 | 2,304 | 2,772 | 75.4% | 55.9% |
| Cumberland | 761 | 1,064 | 1,368 | 156.7% | 79.8% |
| Robeson | 236 | 268 | 301 | -77.0% | 27.5% |
| Scotland | 137 | 154 | 170 | -80.8% | 24.1% |
| Total | 2,912 | 3,790 | 4,611 | 7.0% | 58.3% |
| Projected IP Admissions | | | | | |
| Hoke | 3,331 | 3,331 | 3,331 | | |
| Cumberland | 26,185 | 26,185 | 26,185 | | |
| Robeson | 18,648 | 18,648 | 18,648 | | |
| Scotland | 5,201 | 5,201 | 5,201 | | |
| Total | 53,365 | 53,365 | 53,365 | | |
| Overall IP Market Share | | | | | |
| Hoke | 53.4% | 69.2% | 83.2% | 75.4% | 55.9% |
| Cumberland | 2.9% | 4.1% | 5.2% | 156.7% | 79.8% |
| Robeson | 1.3% | 1.4% | 1.6% | -77.0% | 27.5% |
| Scotland | 2.6% | 3.0% | 3.3% | -80.8% | 24.1% |
| Total | 5.5% | 7.1% | 8.6% | 7.0% | 58.3% |

*Source: Attachment 2, Table 22*

The previous table shows that use of FFY 2010 Thomson data results in a much higher market share in Hoke County (83.2% in FFY 2018), and a slightly greater than 5 percent market share of Cumberland County.

The market share calculation by FirstHealth and in the previous table, respectively, cannot be permitted to overshadow the huge increase in inpatient admissions projected to shift from CFVMC and the approved HCMC, which will be operational in October 2014. That increase is discussed in detail in the context of the Emergency Department Need Methodology above and the Direct Admission Need Methodology below.

The market share comparison provided by FirstHealth in Section III on page 136 does not support the 70% market share projected on page 197. Of the comparative counties listed on page 136, only one, Richmond County, has two full service community hospitals serving a population base comparable to Hoke County. The combined total of both hospitals reflect only a 57.4% market share of emergency services.

North Carolina has six counties with two full service community hospitals. As shown in the following table, NONE of these facilities enjoy a 70% market share of inpatient services. The largest market share enjoyed by any one hospital is 41% in Henderson County.

**North Carolina Two Hospital County Market Share - 2010**

| Hospital | County | Acute Bed Days | Cty Mkt Share |
|---|---|---|---|
| Lexington Memorial Hosp | Davidson County, NC | 10,093 | 16% |
| Thomasville Medical Ctr | Davidson County, NC | 8,103 | 12% |
| All Other | | 46,724 | 72% |
| Total | | | 64,920 |
| Margaret R Pardee Mem | Henderson County, NC | 18,398 | 41% |
| Park Ridge Hospital | Henderson County, NC | 7,674 | 17% |
| All Other | | 18,877 | 42% |
| Total | | | 44,949 |
| Iredell Memorial Hospital | Iredell County, NC | 30,864 | 40% |
| Lake Norman Reg Med Ctr | Iredell County, NC | 15,843 | 21% |
| Davis Medical Center | Iredell County, NC | 9,657 | 13% |
| All Other | | 20,761 | 27% |
| Total | | | 77,125 |
| Sandhills Regional M.C. | Richmond County, NC | 8,636 | 26% |
| First Health Richmond Mem | Richmond County, NC | 8,368 | 26% |
| All Other | | 15,798 | 48% |
| Total | | | 32,802 |
| Morehead Memorial Hosp | Rockingham County, NC | 15,261 | 28% |
| Annie Penn Hospital | Rockingham County, NC | 11,014 | 20% |
| All Other | | 28,335 | 52% |
| | | | 54,610 |
| Northern Hosp-Surry Cnty | Surry County, NC | 10,742 | 25% |
| Hugh Chatham Mem Hospital | Surry County, NC | 7,358 | 17% |
| All Other | | 24,324 | 57% |
| | | | 42,424 |

*Source: Thomson data*

In fact, as shown in the previous table, the hospitals in the above counties combined do not enjoy at 70% market share, except in Iredell County, where three hospitals combined represent just over 70% market share. Furthermore, all of the above counties are adjacent to at least one

county with a major tertiary care hospital, and in four of these six counties, the largest provider of inpatient services is the tertiary care hospital in the neighboring county. Therefore, the 70% market share resulting from the projected inpatient volumes for FHCH reflects unrealistic, unreasonable and unsupported assumptions.

### Step 5. FirstHealth Overstates Hoke County's FFY 2010 Days of Care Use Rate

On page 198 (Step 5 of the Direct Inpatient Admission Need Methodology), FirstHealth states that it:

> assumes no growth in the number of Hoke County inpatients from its FY 2010 total of 3,981 inpatients to determine IP Market Share. This converts to approximately 15,924 days of care, based on an average length of stay of 4.0 days and results in **a Hoke County rate of 33.7 days of care per 100 population** [15,925 days of care/(47,298/100) = 33.7.] [**Emphasis** added.]

FirstHealth uses a Hoke County rate of 33.7 days of care per 100 population to justify that Hoke County can support the projected volume in the its current Application and the approved HCMC.

FirstHealth neglects to mention that Hoke County has a use rate of 317.46 days of care per 1,000 (31.7 days of care per 100) in FFY 2010, as shown in the following table.

**Hoke County**
**Acute Care Inpatient Utilization**
**October 1, 2004 – September 30, 2010**

| Hoke County | Inpatient Cases | | | | | | Three |
|---|---|---|---|---|---|---|---|
| FFY | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Year Avg |
| Inpatient Cases | 2,787 | 2,914 | 2,849 | 3,175 | 3,270 | 3,331 | |
| Population | 39,891 | 41,530 | 42,796 | 44,432 | 45,591 | 47,298 | |
| Use Rate per 1,000 | 69.87 | 70.17 | 66.57 | 71.46 | 71.72 | 70.43 | 71.20 |
| Annual % Change | | 0.4% | -5.1% | 7.3% | 0.4% | -1.8% | |
| **Hoke County** | **Inpatient Days** | | | | | | **Three** |
| **FFY** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **Year Avg** |
| Inpatient Days | 13,091 | 14,141 | 13,865 | 14,355 | 14,729 | 15,015 | |
| Population | 39,891 | 41,530 | 42,796 | 44,432 | 45,591 | 47,298 | |
| Use Rate per 1,000 | 328.17 | 340.50 | 323.98 | 323.08 | 323.07 | 317.46 | 321.20 |
| Annual % Change | | 3.8% | -4.9% | -0.3% | 0.0% | -1.7% | |
| **Hoke County** | **Inpatient Days/Inpatient Cases** | | | | | | **Three** |
| **FFY** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **Year Avg** |
| ALOS | 4.70 | 4.85 | 4.87 | 4.52 | 4.50 | 4.51 | 4.51 |
| Annual % Change | | 3.3% | 0.3% | -7.1% | -0.4% | 0.1% | |

*Source: Attachment 2, Table 19*

As shown in the previous table, Hoke County's inpatient day use rate was flat in FFY 2009 and declined in FFY 2010, which makes FirstHealth's assumption of 33.7 inpatient days per 100 population in FFY 2010 even more unrealistic and overstated. As discussed in detail above and documented in the following table, Hoke County does not need a total of 106 acute care beds.

**Hoke County**
**Acute Care Projected Inpatient Utilization**
**October 1, 2009 – September 30, 2018**

| Data Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|
| Population | 47,298 | 48,873 | 50,451 | 52,025 | 53,599 | 55,172 | 56,749 | 58,325 | 59,898 |
| 3 Yr Avg Use Rate | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 |
| Estimated Inpatient Cases | 3,368 | 3,480 | 3,592 | 3,704 | 3,816 | 3,928 | 4,041 | 4,153 | 4,265 |
| 3 Yr Avg ALOS | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 |
| Estimated Inpatient Days | 15,192 | 15,698 | 16,205 | 16,710 | 17,216 | 17,721 | 18,228 | 18,734 | 19,239 |
| ADC | 42 | 43 | 44 | 46 | 47 | 49 | 50 | 51 | 53 |
| Planning Target Occupancy Rate | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% |
| **Acute Care Beds Needed** | **62.4** | **64.5** | **66.4** | **68.6** | **70.7** | **72.8** | **74.9** | **77.0** | **79.0** |
| Acuity Adjustment* | 65% | 65% | 65% | 65% | 65% | 65% | 65% | 65% | 65% |
| Acuity Adjusted Inpatient Days | 9,875 | 10,204 | 10,533 | 10,862 | 11,190 | 11,519 | 11,848 | 12,177 | 12,506 |
| ADC | 27 | 28 | 29 | 30 | 31 | 32 | 32 | 33 | 34 |
| Planning Target Occupancy Rate | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% |
| **Acute Care Beds Needed** | **40.6** | **41.9** | **43.1** | **44.6** | **46.0** | **47.3** | **48.7** | **50.0** | **51.4** |

*Source: Attachment 2, Table 20*
Planning target occupancy rate for acute care hospitals with 1-99 ADC
*Acuity adjustment of 65% is consistent with the CON Section's analysis in the FMC-Clemmons Community Hospital decision, Project ID.D. #G-8165-08.

## Step 7. No Data in Support of ICU Projections

In Step 7, FirstHealth assumes that approximately 10% of FHCH's patients will be ICU patients. That assumption is based solely on "FirstHealth's experience in providing th[at service] at three acute care hospitals."

FirstHealth's ICU "experience" at its three hospitals is shown in the following table.

**FirstHealth Acute Care Hospitals**
**Licensed Acute Care Bed Inventory and Utilization**
**October 1, 2009 – September 30, 2010**

| FFY 2010 | Beds | % of Total | Days | % of Total |
|---|---|---|---|---|
| FH-Moore | | | | |
| ICU | | | | |
| Cardiac | 12 | 4.0% | 3,016 | 3.6% |
| Cardiovascular Surgery | 10 | 3.4% | 2,221 | 2.7% |
| **Med/Surg** | **28** | **9.4%** | **6,890** | **8.2%** |
| Subtotal | 50 | 16.8% | 12,127 | 14.5% |
| Other Units | | | | |
| Med/Surg | 180 | 60.6% | 57,100 | 68.1% |
| Neonatal III | 16 | 5.4% | 2,859 | 3.4% |
| OB includes LDRP | 20 | 6.7% | 3,620 | 4.3% |
| Oncology | 23 | 7.7% | 7,203 | 8.6% |
| Peds | 8 | 2.7% | 898 | 1.1% |
| Subtotal | 247 | 83.2% | 71,680 | 85.5% |
| Total | 297 | 100.0% | 83,807 | 100.0% |
| FH-Montgomery | | | | |
| ICU | | | | |
| Total | 0 | | | |
| Other Units | | | | |
| Med/Surg | 37 | 100.0% | 893 | 100.0% |
| Total | 37 | 100.0% | 893 | 100.0% |
| FH-Richmond | | | | |
| ICU | | | | |
| **Med/Surg** | **12** | **12.1%** | **1,515** | **15.3%** |
| Subtotal | 12 | 12.1% | 1,515 | 15.3% |
| Other Units | | | | |
| Med/Surg | 55 | 55.6% | 6,158 | 62.2% |
| OB includes LDRP | 20 | 20.2% | 1,269 | 12.8% |
| Peds | 12 | 12.1% | 964 | 9.7% |
| Subtotal | 87 | 87.9% | 8,391 | 84.7% |
| Total | 99 | 100.0% | 9,906 | 100.0% |

*Source: Attachment 2, Table 25*

As shown in the previous table, only two of the three FirstHealth acute care hospitals have licensed ICU beds. Neither hospital has ICU days equal to approximately 10% of total days.

- FMRH's ICU days equal 14.5% of total days (12,127/83,807) and Med/surg ICU days equal 8.2% of total days (6,890/83,807).
- FirstHealth-Richmond's ICU days equal 15.3% of total days (1,515/9,906).

For comparison purposes, the approved 41-bed HCMC includes 4 ICU beds. Projected ICU beds at HCMC were determined based on an assumption that 8.5% of total acute inpatient days would be ICU days. That percent represents the average ICU days as a percent of total days for North Carolina hospitals in the lower 50% ranking of ICU days as a percent of total days in FFY 2008.

Projected ICU utilization at FHCH is summarized in the following table.

**FHCH**
**Projected Utilization ICU**
**October 1, 2015 – September 30, 2018**

| FFY | 2016 | 2017 | 2018 |
|---|---|---|---|
| Patients | 291 | 379 | 461 |
| ALOS | 4.0 | 4.0 | 4.0 |
| Days of Care | 1,165 | 1,516 | 1,844 |
| Beds | 8 | 8 | 8 |
| Occupancy Rate | 39.8% | 51.9% | 63.2% |

*Source: CON Application N-8690-11, page 201*

FirstHealth does not provide an ICU use rate analysis, an analysis of ICU patients at any of FirstHealth's three acute care hospitals or an analysis of Hoke County ICU patients at FMRH. No data is provided by FirstHealth to support the assumptions utilized to project ICU utilization. Therefore, projections are unsubstantiated and the project should be denied.

### Step 7. No Data Provided in Support of LDRP Projections

In Step 7, FirstHealth assumes that approximately 7% of FHCH's patients will be LDRP patients. That assumption is based solely on "FirstHealth's experience in providing th[at service] at three acute care hospitals." FirstHealth's LDRP "experience" at its three hospitals is shown in the following table.

**FirstHealth Acute Care Hospitals**
**Licensed Acute Care Bed Inventory and Utilization**
**October 1, 2009 – September 30, 2010**

| FFY 2010 | Beds | % of Total | Days | % of Total |
|---|---|---|---|---|
| FH-Moore | | | | |
| ICU | | | | |
| Cardiac | 12 | 4.0% | 3,016 | 3.6% |
| Cardiovascular Surgery | 10 | 3.4% | 2,221 | 2.7% |
| Med/Surg | 28 | 9.4% | 6,890 | 8.2% |
| Subtotal | 50 | 16.8% | 12,127 | 14.5% |
| Other Units | | | | |
| Med/Surg | 180 | 60.6% | 57,100 | 68.1% |
| Neonatal III | 16 | 5.4% | 2,859 | 3.4% |
| **OB includes LDRP** | **20** | **6.7%** | **3,620** | **4.3%** |
| Oncology | 23 | 7.7% | 7,203 | 8.6% |
| Peds | 8 | 2.7% | 898 | 1.1% |
| Subtotal | 247 | 83.2% | 71,680 | 85.5% |
| Total | 297 | 100.0% | 83,807 | 100.0% |
| FH-Montgomery | | | | |
| ICU | | | | |
| Total | 0 | | | |
| Other Units | | | | |
| Medical/Surgical | 37 | 100.0% | 893 | 100.0% |
| Total | 37 | 100.0% | 893 | 100.0% |
| FH-Richmond | | | | |
| ICU | | | | |
| Med/Surg | 12 | 12.1% | 1,515 | 15.3% |
| Subtotal | 12 | 12.1% | 1,515 | 15.3% |
| Other Units | | | | |
| Med/Surg | 55 | 55.6% | 6,158 | 62.2% |
| **OB includes LDRP** | **20** | **20.2%** | **1,269** | **12.8%** |
| Peds | 12 | 12.1% | 964 | 9.7% |
| Subtotal | 87 | 87.9% | 8,391 | 84.7% |
| Total | 99 | 100.0% | 9,906 | 100.0% |

*Source: Attachment 2, Table 25*

As shown in the previous table, only two of the three FirstHealth acute care hospitals have licensed LDRP beds. Neither hospital has LDRP days equal to approximately 7% of total days.

- FirstHealth's LDRP days equal 4.3% of total days (3,620/83,807).
- FirstHealth-Richmond's LDRP days equal 12.9% of total days (1,269/9,906).

For comparison purposes, the approved 41-bed HCMC includes an inpatient unit dedicated to Women's Services, which will include 16 obstetric post partum rooms, 4 LDR rooms, 2 triage observation rooms, and a Normal Newborn Nursery/Level I Neonatal Unit with 16 bassinets. HCMC used a 2.78 ALOS for its obstetric patients.

Projected LDRP utilization is summarized in the following table.

**FHCH**
**Projected Utilization LDRP**
**October 1, 2015 – September 30, 2018**

| FFY | 2016 | 2017 | 2018 |
|---|---|---|---|
| Patients | 188 | 258 | 326 |
| ALOS | 2.0 | 2.0 | 2.0 |
| Days of Care | 377 | 516 | 652 |
| Beds | 3 | 3 | 3 |
| Occupancy Rate | 34.3% | 47.1% | 59.6% |

*Source: CON Application N-8690-11, page 201*

FirstHealth does not provide a birth rate analysis, an analysis of LDRP patients at any of FirstHealth's three acute care hospitals or an analysis of Hoke County LDRP patients at FMRH. No data is provided by FirstHealth to support the assumptions utilized to project LDRP utilization. Therefore, projections are unsubstantiated and the project should be denied.

Further, FirstHealth does not reference C-section deliveries for LDRP patients in its inpatient surgical projections. Approximately one-third of deliveries should have been allocated to C-sections. FirstHealth also does not propose to include any Level I bassinets at FHCH, which would be expected for a 65-bed acute care hospital.

The only means by which FirstHealth can justify the proposed 65-bed FHCH -- in addition to the approved 41-bed HCMC -- is to overstate an inpatient day use rate.

### Step 7. Inpatient Surgical Case Projections are Unreasonable and Unsubstantiated

In Step 7, FirstHealth combines the inpatient surgical hours estimated in previous Step 11 of the ED Methodology and Step 6 of the Direct Admission Methodology. In both Steps FirstHealth based projections of FirstHealth surgical utilization, which was not acuity adjusted. Ratios developed therefore, were not reasonable and were overstated resulting in overstated inpatient surgical hour projections. This conclusion is substantiated by the final inpatient outpatient surgical split reflected on page 209, which reflects a total of 3,076 inpatient hours, which equates to 1,025 inpatient surgical cases based upon 3.0 hours per case, and 533 outpatient surgical cases. Total surgical case mix equals 65.8 percent inpatient and 34.2% outpatient which is totally inconsistent with existing community hospitals.

Comparing the projected FHCH surgical mix to the "comparison" hospitals utilized by FirstHealth in Section III of the Application, reflects significantly different surgical mixes. The following table shows that for community hospitals with a like population base, inpatient surgical volume was less than 38%.

**FHCH Projected Patient Origin Comparison**

| County | 2010 Population | Inpatient Surgical Percent | Outpatient Surgical Percent |
|---|---|---|---|
| Hoke | 47,298 | 65.8% (Projected PY3) | 34.2% (Projected PY3) |
| Halifax | 54,627 | 37.5% | 62.4% |
| Pender | 52,504 | 13.2% | 86.8% |
| Watauga | 51,326 | 26.0% | 74.0% |
| Beaufort | 47,929 | 25.2% | 74.8% |
| Stokes | 47,478 | 0.6% | 99.4% |
| Richmond* | 46,630 | 34.3% | 65.7% |
| Vance | 45,477 | 27.7% | 32.3% |
| McDowell | 45,031 | 24.9% | 75.1% |

*Source: LRAs; Attachment 2, Table 32*
**Reflects only FH Richmond*

As shown in the previous table, the surgical mix projected by FirstHealth for FHCH is seriously skewed. All of the comparative communities identified by FirstHealth have considerably more outpatient surgeries than inpatient, which is to be expected in any community hospital based upon historical data and well established trends in ambulatory care. FirstHealth's inpatient surgical hour projections are based upon unreasonable assumptions and are overstated. Therefore, the projected need for surgical operating rooms is unsubstantiated and unreasonable and the proposed project should be denied.

## D. Outpatient Department Need Methodology

Beginning on page 203 of the Application, FirstHealth uses its Outpatient Department Need Methodology to project outpatient surgical cases and imaging procedures at FHCH. Projected outpatient surgical cases generated by the Outpatient Department Need Methodology are in addition to outpatient surgical cases projected in its Emergency Department Need Methodology. As discussed in Subsection A. above, without outpatient surgical volume projected in the Outpatient Department Need Methodology, FirstHealth does not project sufficient volume to support two relocated operating rooms.

The following table shows the last two federal fiscal years of surgical volume at FMRH performed on Hoke County residents.

**FMRH**
**Operating Room Utilization - Hoke County Residents**
**October 1, 2008 – September 30, 2010**

| FFY | 2009 | 2010 |
|---|---|---|
| Inpatient Cases | 343 | 396 |
| Annual % Change | | 15.5% |
| Total Inpatient Cases | 798 | 929 |
| Market Share Inpatient Cases | 43.0% | 42.6% |
| Outpatient Cases | 276 | 275 |
| Annual % Change | | -0.4% |
| Total Outpatient Cases | 1,519 | 1,825 |
| Market Share Outpatient Cases | 18.2% | 15.1% |
| Weighted Cases | 1,443 | 1,601 |
| **Operating Rooms Needed at 1,872 Hrs/Year/Room** | **0.8** | **0.9** |

*Source: Attachment 2, Table 5*

The previous table shows that current Hoke County surgical volume at FMRH, which is not acuity adjusted, is sufficient to support only 1 operating room in Hoke County.

The previous table also shows that FMRH's market share of Hoke County inpatient surgical cases has declined slightly in FFY 2010. Market share decline of FirstHealth's Hoke County outpatient surgical cases in FFY 2010 is 3.1%.

### Step 1. Outpatient Surgical Cases Market Share Increase is Unreasonable

In Step 1 of the Outpatient Department Need Methodology, FirstHealth identifies by provider the number of outpatient surgical cases performed on Hoke County residents in FFY 2010. According to that information, surgeons at FMRH performed outpatient surgery on 275 Hoke County residents in FFY 2010. Please note that data reported in the 2011 LRAs shows a total of 1,825 outpatient surgical cases performed on Hoke County residents in FFY 2010, which calculates to a slightly lower market share for FMRH (15.1% v. 15.5%).

**FMRH**
**Outpatient Surgical Volume**
**October 1, 2009 – September 30, 2010**

| FFY 2010 | | | | | |
|---|---|---|---|---|---|
| All Providers | | FH-Moore | | FH-Moore Market Share | |
| Hoke | | | | | |
| IP | 929 | IP | 396 | IP | 42.6% |
| OP | 1,825 | OP | 275 | OP | 15.1% |
| Total | 2,754 | Total | 671 | Total | 24.4% |
| Cumberland | | | | | |
| IP | 8,083 | IP | 363 | IP | 4.5% |
| OP | 18,515 | OP | 183 | OP | 1.0% |
| Total | 26,598 | Total | 546 | Total | 2.1% |
| Robeson | | | | | |
| IP | 4,647 | IP | 551 | IP | 11.9% |
| OP | 8,433 | OP | 293 | OP | 3.5% |
| Total | 13,080 | Total | 844 | Total | 6.5% |
| Scotland | | | | | |
| IP | 1,395 | IP | 312 | IP | 22.4% |
| OP | 2,736 | OP | 218 | OP | 8.0% |
| Total | 4,131 | Total | 530 | Total | 12.8% |
| Total | | | | | |
| IP | 15,054 | IP | 1,622 | IP | 10.8% |
| OP | 31,509 | OP | 969 | OP | 3.1% |
| Total | 46,563 | Total | 2,591 | Total | 5.6% |

*Source: Attachment 2, Table 28*

FirstHealth assumes that the number of outpatient surgical cases performed on Hoke County residents in FFY 2010 will be constant through FFY 2018. FirstHealth then assumes that FHCH will achieve a market share of 20.2% of Hoke County outpatient surgical cases in FFY 2016, 23.6% in FFY 2017, and 27% in FFY 2018. FirstHealth also assumes that the remaining outpatient surgical cases at FHCH in FFY 2016 through FFY 2018 will be performed on Cumberland County residents.

The following table shows FirstHealth's projected outpatient surgical cases determined through its Outpatient Department Need Methodology. Please note that there are no outpatient surgical cases projected for Robeson and Scotland County residents under the Outpatient Department Need Methodology.

**FHCH**
**Outpatient Department Need Methodology**
**Projected Outpatient Surgical Cases**
**October 1, 2015 – September 30, 2018**

| FFY 2016 | | FFY 2017 | | FFY 2018 | |
|---|---|---|---|---|---|
| Hoke | | | | | |
| Mkt Share | 20.2% | Mkt Share | 23.6% | Mkt Share | 27.0% |
| OP | 360 | OP | 420 | OP | 480 |
| Total | 1,778 | Total | 1,778 | Total | 1,778 |
| Cumberland | | | | | |
| Mkt Share | 0.2% | Mkt Share | 0.3% | Mkt Share | 0.3% |
| OP | 40 | OP | 47 | OP | 53 |
| Total | 18,515 | Total | 18,515 | Total | 18,515 |
| Robeson | | | | | |
| Mkt Share | | Mkt Share | | Mkt Share | |
| OP | 0 | OP | 0 | OP | 0 |
| Total | | Total | | Total | |
| Scotland | | | | | |
| Mkt Share | | Mkt Share | | Mkt Share | |
| OP | 0 | OP | 0 | OP | 0 |
| Total | | Total | | Total | |
| Total | | | | | |
| Mkt Share | 2.0% | Mkt Share | 2.3% | Mkt Share | 2.6% |
| OP | 400 | OP | 467 | OP | 533 |
| Total | 20,293 | Total | 20,293 | Total | 20,293 |

*Source: Attachment 2, Table 29*

FirstHealth projects an unreasonable increase in market share of Hoke County outpatient surgical cases (15.5% in FFY 2010 to 27% in FFY 2018 = 11.5%), the actual magnitude of that increase is documented in the following table.

**FHCH**
**Outpatient Department Need Methodology**
**Projected Outpatient Surgical Case Market Share**
**October 1, 2009 – September 30, 2018**

| | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|
| Hoke | | |
| Market Share | 79.2% | 33.7% |
| OP Cases | 74.5% | 33.3% |
| Cumberland | | |
| Market Share | -71.0% | 32.5% |
| OP Cases | -71.0% | 32.5% |

*Source: Attachment 2, Table 29*

As shown in the previous table, FirstHealth projects that FirstHealth's market share of Hoke County will increase by 79.2% increase between FFY 2010 and FFY 2018, which is a 74.5% increase in outpatient surgical volume in Hoke County.

Projected outpatient surgical volume shift from Hoke County, shown in the previous table, is from the approved HCMC, which is projected to open in October 2014. Outpatient surgical volume projected to shift from Cumberland County comes from CFVMC, as well as Fayetteville Ambulatory Surgery Center.

A shift of outpatient surgical volume from HCMC demonstrates that FirstHealth does not support the need in Hoke County for FirstHealth's 65-bed community hospital in addition to Cape Fear Valley's approved 41-bed community hospital.

The proposed project would result in one additional operating room in Hoke County. Projected outpatient utilization is unreasonable and unsubstantiated. Combined with the unreasonable and unsubstantiated inpatient projected utilization it is impossible to determine the need for any additional operating rooms in Hoke County.

## G.S. 131E-183 (4)

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

As discussed in the context of Criterion (3) above, FirstHealth does not adequately demonstrate a need to develop a hospital with 65 acute care beds and 2 operating rooms in Hoke County. FirstHealth's choice to build an unsupported 65-bed hospital demonstrates that it has not proposed the least costly or most effective alternative.

As discussed in detail in the context of Criterion (5) below, FHCH is not a financially feasible project. FirstHealth's choice to build an unsupported 65-bed hospital demonstrates that it has not proposed the least costly alternative.

For all the reasons set forth above, the FHCH Application is non-conforming to Criterion (4).

## G.S. 131E-183 (5)

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

FirstHealth states in Section VIII and IX that the anticipated source for both the total project cost of $81.3 million and the total start up cost of $9.7 million are to be paid out of accumulated reserves shown on the audited balance sheet under the Assets Limited as to Use Section. Section VIII on page 275 also states that outstanding CON projects in the amount of $12 million will be paid out of the same accumulated reserves. FirstHealth included a Form A – Balance Sheet for

FHCH but did not include a Form A – Consolidated Balance Sheet for the full FirstHealth of the Carolinas, Inc. system. As such, it is not possible to discern the full financial impact of the funding of these projects without FirstHealth of the Carolinas, Inc. Form A –Consolidated Balance Sheet with the projected out year information The calculated impact to FirstHealth of the Carolinas, Inc. bottom line related to the reduction in Limited Use Assets in excess of $103 million is not shown within the CON application.

Per detailed information provided in Section VIII on page 271, the only contingency funds listed within the project are within the construction cost section. FirstHealth did not include any additional contingency funds under the Miscellaneous Section.

As discussed in Criterion 13, FirstHealth failed to adjust payer mix to account for the additional market share captured, assuming current payer mix would not change. This error negatively impacts the financial viability of the project as self pay patients and Medicaid patients would increase with additional market share.

In addition as discussed herein, FirstHealth did not document the need for the proposed 65 bed hospital. Therefore, the financial feasibility of the project is uncertain and the project is non-conforming to Criterion 5.

## G.S. 131E-183 (6)

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

As discussed in the context of Criterion (3) above, FirstHealth does not demonstrate a need to develop a hospital with 65 acute care beds and 2 operating rooms in Hoke County. That proposed hospital will result in an unnecessary duplication of approved health services capabilities and facilities in Hoke County. Consequently, the FHCH Application #3 is nonconforming to Criterion (6).

### A. Duplication of Acute Care Beds in Moore-Hoke Service Area

Table 5A of the *2011 SMFP* contains a surplus of 18 acute care beds projected for 2013 in the Moore-Hoke Service Area. That surplus is based on an adjusted planning inventory of 297 acute care beds, which inventory has been adjusted for the 23 CON-approved beds for FMRH's Heart Hospital (Project I.D. # H-7121-04), for a total of 302 beds.

That surplus is shown in the following table, which is extracted from Table 5A of the *2011 SMFP*.

**2011 SMFP Table 5A**

| Licensed Acute Care Beds | Adjustments for CON/Previous Need | Thomson 2009 Acute Care Days | County Growth Rate Multiplier | 4 Years Growth Using County Growth Rate | 2013 Projected Average Daily Census (ADC) | 2013 Beds Adjusted for Target Occupancy | Projected 2013 Deficit or Surplus ("-") |
|---|---|---|---|---|---|---|---|
| 297 | 23 | 78,996 | 1.0124 | 82,997 | 227 | 302 | **-18** |

*Source: Table 5A of the 2011 SMFP*

Unlike the FHCH Application #1 and FHCH Application #2, FirstHealth does not propose to relocate acute care beds from FMRH to FHCH in order to reduce its surplus of acute care beds. Instead, FirstHealth proposes to add 65 acute care beds in Hoke County, which further exacerbates a bed surplus in the Moore-Hoke Service Area.

## B. Duplication of Operating Rooms in Moore-Hoke Service Area

A proposed relocation of 2 operating rooms from FMRH does not eliminate its operating room surplus. As of January 1, 2011, FMRH has an inventory of 18 operating rooms, which even if reduced to 16 rooms, is projected by FirstHealth to have a projected surplus of 3 operating rooms in FFY 2018 (Project Year 3 of FHCH).

The following table shows projected surgical utilization of FMRH in Project Years 1 through 3.

**FMRH**
**Projected Surgical Utilization**
**October 1, 2015 – September 30, 2018**

| FFY | 2010 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Inpatient Cases | 6,360 | 6,311 | 6,247 | 6,189 |
| Annual % Change | | | -1.0% | -0.9% |
| Outpatient Cases | 4,183 | 4,058 | 4,036 | 4,014 |
| Annual % Change | | | -0.5% | -0.5% |
| Total Cases | 10,543 | 10,369 | 10,283 | 10,203 |
| Annual % Change | | | -0.8% | -0.8% |
| Weighted Cases | 25,355 | 25,020 | 24,795 | 24,588 |
| Total Licensed Operating Rooms | 18 | 16 | 16 | 16 |
| **Operating Rooms Needed at 1,872 Hrs/Year/Room** | **13.5** | **13.4** | **13.2** | **13.1** |
| Surplus/Deficit | 4.5 | 2.6 | 2.8 | 2.9 |

*Source: Attachment 2, Tables 3, 4*

It is noteworthy that FMRH expects that its inpatient and outpatient surgical case volume will decrease from the volume reported in its 2011 LRA for FFY 2010, as shown in the following table.

**FMRH**
**Projected Surgical Volume Change**
**October 1, 2009 – September 30, 2018**

| FFY | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|
| Inpatient Cases | -2.7% | -1.9% |
| Outpatient Cases | -4.0% | -1.1% |
| Total Cases | -3.2% | -1.6% |
| Weighted Cases | -3.0% | -1.7% |

*Source: Attachment 2, Table 4*

An existing facility that projects declining surgical volume and a continued underutilization of existing licensed operating room capacity demonstrates that the proposed relocation of two operating rooms to FHCH is duplicative of existing health services capabilities and facilities in the Moore-Hoke Service Area.

Additionally, FirstHealth does not disclose that the Surgical Center of Pinehurst is a "related entity." FirstHealth is the parent company and 100% owner of Surgery Center of Pinehurst, LLC.[2]

The Surgical Center of Pinehurst has underutilized operating room capacity at its facility in the Moore-Hoke Service Area, as shown in the following table.

**Surgical Center of Pinehurst**
**Operating Room Utilization**
**October 1, 2008 – September 30, 2010**

| FFY | 2009 | 2010 |
|---|---|---|
| Outpatient Cases | 4,803 | 4,874 |
| Annual % Change | | 1.5% |
| Weighted Cases | 7,205 | 7,311 |
| Licensed Operating Rooms | 6 | 6 |
| **Operating Rooms Needed at 1,872 Hrs/Year/Room** | **3.8** | **3.9** |
| Surplus/Deficit | 2.2 | 2.1 |

*Source: Attachment 2, Table 6*

As shown in the previous table, there are 2 surplus operating rooms at the Surgical Center of Pinehurst. It should be noted that the CON Section twice denied CON applications from the Surgical Center of Pinehurst to relocate excess operating rooms from Moore to Hoke County (Surgical Center of Hoke Application #1 and Surgical Center of Hoke Application #2). Those CON applications were denied, and those decisions were not appealed.

[2] Agency Findings for N-8393-09 / Surgery Center of Hoke, LLC; FirstHealth of the Carolinas, Inc.; Surgery Center of Pinehurst, LLC; Surgery Center of Pinehurst Properties, LLC / Relocate two existing licensed operating rooms from Surgery Center of Pinehurst in Moore County to Surgery Center of Hoke, LLC and develop an ambulatory surgery center in Raeford / Hoke County, dated February 4, 2010.

Lastly, Table 6B of the *2011 SMFP* contains a surplus of 2.56 operating rooms projected for 2013 in the Moore-Hoke Service Area. Table 6B of the *Proposed 2012 SMFP* contains a surplus of 1.38 operating rooms projected for 2014 in the Moore-Hoke Service Area.

## C. Duplication of Approved Acute Care Beds in Hoke County

In September 2010, the CON Section approved two hospitals in Hoke County.

Hoke Community Medical Center will be part of Cape Fear Valley Health System. It will have 41 acute care beds, 9 observation beds, and 2 operating rooms. It will offer obstetrical, surgical and 24-hour emergency, laboratory and pharmaceutical services, as well as diagnostic imaging. The projected cost is $92 million with construction projected to be finished by October 2013, which is two years before the projected opening of the proposed FHCH 65-bed hospital.

The CON Section also approved an 8-bed acute care hospital in Hoke County (FirstHealth Hoke Application #2) – which Cape Fear Valley is currently appealing. If the FHCH Application #3 is approved, FirstHealth will not develop the approved 8-bed acute care hospital.

Together, those previously-approved Applications total 49 beds (8+41 = 49) in Hoke County (if unchanged during the appeals process). If this FHCH Application is approved, then together, there will be a total of 106 beds (41+65 = 106) in Hoke County.

As previously discussed in these Comments, there is no need for an additional 65 acute care beds in Hoke County. Therefore, the proposed 65-bed FHCH Application results in a duplication of existing services and therefore should be denied.

## G.S. 131E-183 (13)

*The applicant shall demonstrate the contribution of the proposed service in meeting the health-related needs of the elderly and of members of medically underserved groups, such as medically indigent or low income persons, Medicaid and Medicare recipients, racial and ethnic minorities, women, and handicapped persons, which have traditionally experienced difficulties in obtaining equal access to the proposed services, particularly those needs identified in the State Health Plan as deserving of priority. For the purpose of determining the extent to which the proposed service will be accessible, the applicant shall show:*

> *c. That the elderly and the medically underserved groups identified in this subdivision will be served by the applicant's proposed services and the extent to which each of these groups is expected to utilize the proposed services; and*

**Payer Mix Comparison**

| | FHCH | HCMC |
|---|---|---|
| Self Pay | 3.90% | 7.80% |
| Medicare | 56.80% | 50.00% |
| Medicaid | 11.60% | 17.40% |
| Commercial | 23.70% | 1.80% |
| Mged Care | 0.00% | 6.40% |
| Blue Cross | 0.00% | 10.20% |
| Other | 4.00% | 6.40% |
| | 100.00% | 100.00% |

*Source: FHCH #3; HCMC April 2010 CON Application*

On page 253 of the Application, FirstHealth states that projected payer mix is consistent with current 2010 payer mix and no changes are anticipated. However, FirstHealth projects significant increases in market share, capturing volumes previously provided by CFVMC. As shown in the previous table, in its Application in 2010, HCMC reflected significantly higher levels of self pay and Medicaid which was approved by CON. This data was available to FirstHealth in preparation of the current Application.

If FHCH is to capture additional Hoke County market share from HCMC and CFVMC, as proposed, it is reasonable to assume a resulting shift in payer mix. Therefore, the payer mix upon which the FHCH financials is based is unreasonable. Additional self pay and Medicaid patients should have been projected, both of which would negatively impact the financial viability of the proposed project.

## G.S. 131E-183 (18a)

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

As discussed in the context of Criterion (3) above, FirstHealth does not demonstrate a need to develop a hospital with 65 acute care beds and 2 operating rooms in Hoke County. As discussed in the context of Criterion (4) above, FirstHealth's choice to build an unsupported 65-bed hospital demonstrates that it has not proposed the least costly or most effective alternative. As discussed in detail in the context of Criterion (5) above, FHCH is not a financially feasible project. FirstHealth's choice to build an unsupported 65-bed hospital demonstrates that it has not proposed the least costly alternative. As discussed in the context of Criterion (6) above, the proposed hospital will result in an unnecessary duplication of approved health services capabilities and facilities in Hoke County.

An application that does not conform to Criteria (3), (4), (5), and (6) cannot demonstrate the expected effects of the proposed services on competition in the Cumberland-Hoke will have a negative impact upon the cost effectiveness, quality, and access to the services proposed as required by Criterion (18a).

# VII. CON Criteria and Standards

## A. Criteria and Standards for Neonatal Care Services – 10A NCAC 14C .1400

FHCH will provide neonatal Level I care for newborns. Therefore, the following rules are applicable to the proposed project and FirstHealth failed to provide necessary responses and therefore is non-conforming to these regulations and should be denied.

**10A NCAC 14C .1402 INFORMATION REQUIRED OF APPLICANT**

(b) An applicant **proposing to develop a Level I nursery in the facility for the first time** or new or additional Level II, III or IV neonatal beds shall provide the following additional information:

(1) the current number of Level I nursery bassinets, Level II beds, Level III beds and Level IV beds operated by the applicant;
(2) the proposed number of Level I nursery bassinets, Level II beds, Level III beds and Level IV beds to be operated following completion of the proposed project;
(4) the projected number of neonatal patients to be served identified by Level I, Level II, Level III and Level IV neonatal services for each of the first three years of operation following the completion of the project, including the methodology and assumptions used for the projections;
(5) the projected number of patient days of care to be provided in Level I bassinets, Level II beds, Level III beds, and Level IV beds, respectively, for each of the first three years of operation following completion of the project, including the methodology and assumptions used for the projections;
(6) if proposing to provide Level I or Level II neonatal services in the facility for the first time, documentation that at least 90 percent of the anticipated patient population is within 30 minutes driving time one-way from the facility;
(7) if proposing to provide Level I or Level II neonatal services in the facility for the first time, documentation of a written plan to transport infants to Level III or Level IV neonatal services as the infant's care requires;
(8) evidence that the applicant shall have access to a transport service with at least the following components:
    (A) trained personnel;
    (B) transport incubator;
    (C) emergency resuscitation equipment;
    (D) oxygen supply, monitoring equipment and the means of administration;
    (E) portable cardiac and temperature monitors; and

(F) a mechanical ventilator;

(9) documentation that the proposed service shall be operated in an area organized as a physically and functionally distinct entity with controlled access;
(10) documentation to show that the new or additional Level I, Level II, Level III or Level IV neonatal services shall be offered in a physical environment that conforms to the requirements of federal, state, and local regulatory bodies;
(11) a detailed floor plan of the proposed area drawn to scale;
(12) documentation of direct or indirect visual observation by unit staff of all patients from one or more vantage points; and
(13) documentation that the floor space allocated to each bed and bassinet shall accommodate equipment and personnel to meet anticipated contingencies.

None of the above information was provided in the FHCH Application.

**10A NCAC 14C .1404 SUPPORT SERVICES**

(a) An applicant **proposing to provide new Level I**, Level II, Level III or Level IV services shall document that the following items shall be available, unless an item shall not be available, then documentation shall be provided obviating the need for that item:

(1) competence to manage uncomplicated labor and delivery of normal term newborn;
(2) capability for continuous fetal monitoring;
(3) a continuing education program on resuscitation to enhance competence among all delivery room personnel in the immediate evaluation and resuscitation of the newborn and of the mother;
(4) obstetric services;
(5) anesthesia services;
(6) capability of cesarean section within 30 minutes at any hour of the day; and
(7) twenty-four hour on-call blood bank, radiology, and clinical laboratory services.

None of the above information was provided in the FHCH Application.

**10A NCAC 14C .1405 STAFFING AND STAFF TRAINING**

An applicant shall demonstrate that the following staffing requirements for hospital care of newborn infants shall be met:

(1) If **proposing to provide new Level I** or II services the applicant shall provide documentation to demonstrate that:
(a) the nursing care shall be supervised by a registered nurse in charge of perinatal facilities;
(b) a physician is designated to be responsible for neonatal care; and
(c) the medical staff will provide physician coverage to meet the specific needs of patients on a 24 hour basis.

(4) **All applicants** shall submit documentation which demonstrates the availability of appropriate inservice training or continuing education programs for neonatal staff.

(5) **All applicants** shall submit documentation which demonstrates the proficiency and ability of the nursing staff in teaching parents how to care for neonatal patients following discharge to home.

(6) **All applicants** shall submit documentation to show that the proposed neonatal services will be provided in conformance with the requirements of federal, state and local regulatory bodies.

None of the above information was provided in the FHCH Application.

## B. Criteria and Standards for Intensive Care Services – 10A NCAC 14C .1200

FirstHealth proposes to develop 8 ICU beds at FHCH. ICU utilization is projected in Step 7 of the Direct Inpatient Admission Need Methodology. FirstHealth assumes that ICU admissions will be 10% of total admissions to FHCH. Using an ALOS of 4.0 days of care per ICU admission, FirstHealth projects ICU days of care at FHCH. ICU admissions are based solely on "FirstHealth's experience in providing these services at three acute care hospitals." However, it is not clear if this represents four days in the ICU per patient or a total length of stay of four days for patients that were admitted to the ICU during some point in their stay. No data or assumptions are provided to document days of care by service level on page 201 of FHCH Application #3. Therefore, projected utilization is based upon unreasonable assumptions.

Furthermore, as discussed in the context of Criterion (3) above, the Direct Inpatient Admission Need Methodology relies on unreasonable and unsupported assumptions and results in overstated inpatient utilization. Consequently, ICU utilization is overstated and unreliable and responses to the Criteria and Standards for ICU are overstated and therefore, non-conforming.

## C. Criteria and Standards for Surgical Services and Operating Rooms – 10A NCAC 14C .2100

FirstHealth proposes to relocate two operating rooms from FMRH in the Moore-Hoke Service Area to FHCH in the Cumberland-Hoke Service Area.

Surgical utilization of FMRH is projected on pages 84 – 86 of the FHCH Application #3. On those pages, FirstHealth projects surgical utilization at FMRH will increase at a rate of 50% of the annual population growth of its 5-County Primary Service Area, which includes Hoke County.

Surgical utilization of FHCH is projected in Steps 13 and 14 of the Emergency Department Need Methodology, Steps 6 and 8 of the Direct Inpatient Admission Need Methodology, and Step 1 of the Outpatient Department Need Methodology.

As discussed in the context of Criterion (3) above, each Need Methodology used by FirstHealth relies on unreasonable and unsupported assumptions, and results in overstated volume. Consequently, surgical volume generated by those Need Methodologies is overstated and

unreliable and responses to the Criteria and Standards for Surgical Service are overstated and therefore, non-conforming.

### 10A NCAC 14C .2102(b) and (c)

Contrary to the statements of FirstHealth on page 81 in response to these Rules, the proposed relocation of operating rooms is not within the same service area. The Cumberland-Hoke Service Area is not the same service area as the Moore-Hoke Service Area.

FirstHealth proposes to increase the number of operating rooms in the Cumberland-Hoke Service Area, which is the Service Area in which FirstHealth proposes to develop a new 65-bed acute care hospital, by relocating two operating rooms from FMRH in the Moore-Hoke Service Area.

FirstHealth should have responded to 10A NCAC 14C .2102(b), which includes information about "related entities" and approved projects. The Surgical Center of Pinehurst is a "related entity" of FMRH and the proposed FHCH. FirstHealth is the parent company and 100% owner of Surgery Center of Pinehurst, LLC.[3] The FHCH Application #2 is a previously-approved project of FirstHealth.

FirstHealth also should have provided projected utilization of the Surgical Center of Pinehurst, as a "related entity" of FMRH and the proposed FHCH.

### 10A NCAC 14C .2103(b) and (c)

Contrary to the statements of FirstHealth on pages 91 and 92 in response to these Rules, the proposed relocation of operating rooms is not within the same service area. The Cumberland-Hoke Service Area is not the same service area as the Moore-Hoke Service Area.

FirstHealth proposes to increase the number of operating rooms in the Cumberland-Hoke Service Area, which is the Service Area in which FirstHealth proposes to develop a new 65-bed acute care hospital, by relocating two operating rooms from FMRH in the Moore-Hoke Service Area.

Consequently, FirstHealth should have responded to 10A NCAC 14C .2103(c)(1) for FMRH and the Surgical Center of Pinehurst in the Moore-Hoke Service Area, respectively, and 10A NCAC 14C .2103(c)(3) for FHCH in the Cumberland-Hoke Service Area.

Had FirstHealth responded to 10A NCAC 14C .2103(c)(1) for FMRH and the Surgical Center of Pinehurst in the Moore-Hoke Service Area, it would have documented that there will be an operating room surplus in the Moore-Hoke Service Area as discussed in the contexts of Criterion (3) and Criterion (6) above.

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[3] Agency Findings for N-8393-09 / Surgery Center of Hoke, LLC; FirstHealth of the Carolinas, Inc.; Surgery Center of Pinehurst, LLC; Surgery Center of Pinehurst Properties, LLC / Relocate two existing licensed operating rooms from Surgery Center of Pinehurst in Moore County to Surgery Center of Hoke, LLC and develop an ambulatory surgery center in Raeford / Hoke County, dated February 4, 2010.

## D. Criteria and Standards for Computed Tomography Scanner – 10A NCAC 14C .2300

FirstHealth proposes to install one CT scanner at FHCH. CT utilization is projected in Step 13 of the Emergency Department Need Methodology and in Step 6 of the Direct Inpatient Admission Need Methodology.

As discussed in the context of Criterion (3) above, each Need Methodology used by FirstHealth relies on unreasonable assumptions and results in overstated volume. Consequently, CT volume generated by those Need Methodologies is overstated and unreliable and responses to the Criteria and Standards for CT are overstated and therefore, non-conforming. .

## E. Criteria and Standards for Acute Care Beds – 10A NCAC 14C .3800

FirstHealth proposes to develop 65 acute care beds at FHCH. Inpatient utilization is projected in Step 11 of the Emergency Department Need Methodology and in Step 3 of the Direct Inpatient Admission Need Methodology.

Furthermore, on page 117 in response to 10A NCAC 14C .3802 (c)(1), FirstHealth reports 657 newborn and other neonatal (perinatal) patient days for MDC 15. Since newborn days are not days in acute care beds, these days should be in addition to the total projected 15,879 patient days projected for Project Year 3 at FHCH or they would represent Level II, III, or IV neonatal bed days. Since FHCH is not proposing Level II, III, IV neonatal beds, it must be assumed that these are newborn days. If these newborn days are subtracted from the total 15,879 projected patient days, total projected days equal 15,222 days which in turn reflects an ADC of 41.7 patients per day and a projected occupancy rate for the 65 beds of 64.2%.

As a result of the above analysis, projected occupancy is only 64.2% and therefore the proposed project is nonconforming to 10A NCAC 14C .3803 (a). This simple analysis raises enough questions to deny the proposed project. Considering this and the other comments submitted herein, the FHCH Application must be denied.

As discussed here and in the context of Criterion (3) above, each Need Methodology used by FirstHealth relies on unreasonable assumptions and results in overstated inpatient volume.

# VIII. Conclusion

FirstHealth has not justified the need for a 65 bed hospital in Hoke County and has indicated publically that the Application would be withdrawn if allowed to pursue the previously approved 8-bed acute care hospital.

In order to justify the 65 additional beds in Hoke County, FirstHealth had to use three separate methodologies, none of which alone could justify the need for the proposed project. All three methodologies are fraught with unreasonable assumptions as discussed above. As a result, the proposed project is nonconforming to applicable review criteria and must be denied.

# *Attachment 1*

*Comments in Opposition from*
*Cumberland County Hospital System, Inc.*
*d/b/a Cape Fear Valley Health System*
*Regarding FirstHealth of the Carolinas, Inc.*
*Certificate of Need Application (Project I.D. # N-8690-11)*
*Submitted June 15, 2011 for July 1, 2011 Review Cycle*

fayobserver.com



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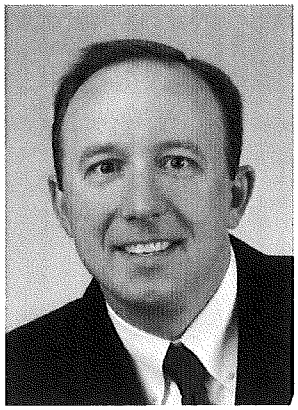
# Cape Fear Valley, FirstHealth continue battle over hospitals in Hoke County



By Jennifer Calhoun
**Staff writer**



[+] click to enlarge

Nagowski

**RAEFORD** - FirstHealth of the Carolinas on Monday night again asked Cape Fear Valley Health System to drop legal appeals and get on with the business of building hospitals in Hoke County.

The request was made during the county's regular Board of Commissioners meeting.

FirstHealth Chief Executive Officer Charles Frock said he would be willing to drop plans for a 65-bed hospital and build an eight-bed hospital in the county, if Cape Fear Valley would drop appeals and start building its proposed 41-bed hospital.

Otherwise, Frock said, the legal battles and construction could eventually delay a hospital in the county for 10 years.

But Cape Fear Valley Chief Executive Officer Mike Nagowski didn't seem intereste in FirstHealth's proposal.

Nagowski said that Cape Fear Valley's proposed 41-bed hospital would be better for the county than FirstHealth's proposed eight-bed hospital.

In addition, he said, an eight-bed hospital isn't financially sustainable, and that - wi so few beds - it was meant to be a stop-off for patients who would ultimately be taken to FirstHealth Moore Regional Hospital in Pinehurst.

Chairman Tony Hunt said he asked the health systems to attend the meeting

two companies.

"All of the commissioners have been getting phone calls and people stopping us o the streets, asking us, 'When are we going to get a hospital?'" Hunt said after the meeting.

**Pointed questions**

Hunt grilled the CEOs during the meeting, with Nagowski getting the brunt of the questions.

Hunt noted that the state's Department of Health and Human Services had advise the county could support two hospitals, and questioned why Nagowski would be against it.

"Why wouldn't we do that?" Hunt said. "What are you protecting Hoke County from?"

Nagowski said he was concerned that an eight-bed hospital wasn't sufficient for a growing county the size of Hoke.

"If someone shows up, and there are only eight beds, where do they go if they're full?" Nagowski said.

Hunt fired back.

"They go down the road," he said, "to your 41-bed hospital."

Hunt later added: "I understand your concern for FirstHealth ... but that liability is o them. Why would you care? Why would that be a problem?"

Hunt asked Frock, who is retiring at the end of the year, whether FirstHealth would still be committed to the project after he left.

Frock said the health system's board of directors was fully committed to the projec and would continue it in his absence.

Hunt asked Frock why the health system hadn't purchased land, yet, while Cape Fear Valley Health System had already purchased land on U.S. 401.

Frock said that the health system had a purchase option, but was still working to resolve some infrastructure issues.

It had nothing to do with lack of commitment to the county, he said.

Hunt said the board may end up drafting a formal resolution to let the state and the two health systems know where they stand.

The meeting was a way to ask some questions the residents have been asking hin and other board members, he said.

"We're just sick and tired of all the legal maneuvering," Hunt said.

Hunt said he didn't want to drive down the road in five years and still see no hospital.

Or worse, he said, sick patients who had to be driven 30 to 40 minutes for emergency services "with their life hanging in the balance."

"That's what the board is concerned about, and that's what the citizens are concerned about," he said. "That's what we want to convey to you tonight."

**Legal battle**

The two health systems have been locked in legal battles since 2009, when both companies submitted requests to build hospitals in the county.

Both hospitals have been approved - FirstHealth for an eight-bed facility and Cape Fear Valley for a 41-bed facility.

On June 15, FirstHealth submitted an additional request with the state to build a 6[illegible] bed hospital in the county.

The measure was taken after the state said the Cumberland-Hoke medical service needed 65 additional beds.

*Staff writer Jennifer Calhoun can be reached at calhounj@fayobserver.com or 486 3595.*

# Hoke Board Weighs in on Hospital Battle

By Ted M. Natt Jr.

Friday, July 8, 2011

The Hoke County Board of Commissioners has apparently taken sides in the continuing battle between two health care providers over whose hospital plan best meets the need of it residents.

On Tuesday, the five-member board unanimously approved a resolution asking Fayetteville-based Cape Fear Valley Health System to drop its legal appeals against Pinehurst-based FirstHealth of the Carolinas.

The state has approved plans by each health system to build hospitals near Raeford, and both have used legal appeals to block the other from starting construction.

FirstHealth CEO Charles T. Frock applauded Hoke commissioners for adopting the resolution.

"FirstHealth has directly and consistently recommended a solution that both hospitals drop all appeals so both can begin building with the state's support," Frock said Thursday in a statement. "Hoke citizens shouldn't have to wait any longer for a hospital to be built in their county."

Frock said FirstHealth is ready to build, even if Cape Fear Valley also begins construction.

"We support the availability of choice and competition in health care services," he said. "The ball is in Cape Fear's art and has been for months."

Cape Fear Valley is "not necessarily opposed" to a two-hospital solution, CEO Mike Nagowski said.

"However, we do not feel that FirstHealth's eight-bed hospital is the right solution for Hoke County," Nagowski said Thursday in a statement. "There are just too many questions that need answering."

According to Nagowski, those questions include:

- What is the rationale behind an eight-bed hospital with a helipad?
- Is FirstHealth only going to accept certain patients?
- Is FirstHealth prepared to lose 38 beds from Moore Regional (Hospital) to build eight beds in Hoke County?
- Why is FirstHealth afraid of the appeals process?

"There is an appeals process for a reason, and we are going to work through that process," Nagowski said. "We are confident that our application meets the needs of Hoke County residents."

On June 15, FirstHealth submitted a new application for a certificate of need that would allow it to build a 65-bed hospital, a $100 million project that would supersede previous plans. FirstHealth initially proposed building an eight-bed hospital at a projected cost of $34.1 million.

Either project would be constructed on a 30-acre site on U.S. 401 about halfway between Raeford and the Cumberland County line.

Cape Fear Valley has proposed a $92 million, 41-bed hospital on U.S. 401 closer to the Hoke-Cumberland line.

Frock and Nagowski appeared before the Hoke board last month to answer questions.

that time, Frock told the board that FirstHealth would drop its appeals and begin building its eight-bed hospital if Cape Fear Valley would do the same and start building its hospital.

"Endorsement of this recommendation by the Hoke County Board of Commissioners will help tremendously to make hospital services in Hoke County a reality in the near future," Frock said then.

Cape Fear Valley officials refused, however, claiming the FirstHealth hospital would not fit the needs of Hoke County residents.

Frock told the board last month that continued appeals will likely delay completion of any hospital for at least a decade.

Contact Ted M. Natt at tnatt@thepilot.com.

# *Attachment 2*

*Comments in Opposition from*
*Cumberland County Hospital System, Inc.*
*d/b/a Cape Fear Valley Health System*
*Regarding FirstHealth of the Carolinas, Inc.*
*Certificate of Need Application (Project I.D. # N-8690-11)*
*Submitted June 15, 2011 for July 1, 2011 Review Cycle*

**Table 1. FirstHealth-Moore Acute Care Bed Utilization**

| FFY | 2009 | 2010 |
|---|---|---|
| *SMFP* Inpatient Days | 78,996 | not available |
| Annual % Change | | |
| LRA Inpatient Days | 81,454 | 83,807 |
| Annual % Change | | 2.9% |
| Difference: SMFP Inpatient Days and LRA Inpatient Days | -3.0% | |
| Licensed Acute Care Beds | 297 | 297 |
| *SMFP* Inpatient Days | | |
| ADC | 216 | |
| Occupancy | 72.9% | |
| *LRA* Inpatient Days | | |
| ADC | 223 | 230 |
| Occupancy | 75.1% | 77.3% |

*Source: 2010-2011 SMFPs; 2010-2011 LRAs*

**Table 2. FirstHealth-Moore Acute Care Bed Utilization - Hoke County Patients**

| FFY | 2009 | 2010 | 2011 Q1 |
|---|---|---|---|
| Inpatient Days | 5,984 | 6,385 | 1,841 |
| Annual % Change | | 6.7% | |
| Total Days | 14,729 | 15,015 | 4,093 |
| Market Share Days | 40.6% | 42.5% | 45.0% |
| Inpatient Cases | 1,465 | 1,508 | 416 |
| Annual % Change | | 2.9% | |
| Total Cases | 3,270 | 3,331 | 915 |
| Market Share Cases | 44.8% | 45.3% | 45.5% |
| ALOS | 4.1 | 4.2 | 4.4 |
| **Beds Needed in Hoke County using Planning Target Occupancy Rate of 66.7%** | **24.6** | **26.2** | |
| Acuity Adjustment* | 65% | 65% | 65% |
| Acuity Adjusted Inpatient Days | 3,890 | 4,150 | 1,197 |
| **Beds Needed in Hoke County using Planning Target Occupancy Rate of 66.7%** | **16.0** | **17.0** | |

*Source: Thomson Market Expert*

Acute Care Only: Excludes LTACH, Rehab, Psych, and Normal Newborn

FFY 2011 Q1 = October 2011 - December 2011

*Acuity adjustment of 65% is consistent with the CON Section's analysis in the FMC-Clemmons Community Hospital decision, Project ID.D. #G-8165-08.

**Table 3. FirstHealth-Moore Operating Room Utilization**

| FFY | 2009 | 2010 |
|---|---|---|
| Inpatient Cases | 6,057 | 6,360 |
| Annual % Change | | 5.0% |
| Outpatient Cases | 4,270 | 4,183 |
| Annual % Change | | -2.0% |
| Total Cases | 10,327 | 10,543 |
| Annual % Change | | 2.1% |
| Weighted Cases | 24,576 | 25,355 |
| Total Licensed and Approved Operating Rooms | 18 | 18 |
| **Operating Rooms Needed at 1,872 Hrs/Year/Room** | **13.1** | **13.5** |
| Surplus/Deficit | 4.9 | 4.5 |

*Source: 2010-2011 LRAs; Project I.D. # N-8690-11, pages 81-82*

**Table 4. FirstHealth-Moore Operating Room Projected Utilization**

| FFY | 2016 | 2017 | 2018 | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|---|---|---|
| Inpatient Cases | 6,311 | 6,247 | 6,189 | -2.7% | -1.9% |
| Annual % Change | | -1.0% | -0.9% | | |
| Outpatient Cases | 4,058 | 4,036 | 4,014 | -4.0% | -1.1% |
| Annual % Change | | -0.5% | -0.5% | | |
| Total Cases | 10,369 | 10,283 | 10,203 | -3.2% | -1.6% |
| Annual % Change | | -0.8% | -0.8% | | |
| Weighted Cases | 25,020 | 24,795 | 24,588 | -3.0% | -1.7% |
| Total Licensed Operating Rooms | 16 | 16 | 16 | | |
| **Operating Rooms Needed at 1,872 Hrs/Year/Room** | **13.4** | **13.2** | **13.1** | | |
| Surplus/Deficit | 2.6 | 2.8 | 2.9 | | |

*Source: Project I.D. # N-8690-11, page 83*

**Table 5. FirstHealth-Moore Operating Room Utilization - Hoke County**

| FFY | 2009 | 2010 |
|---|---|---|
| Inpatient Cases | 343 | 396 |
| Annual % Change | | 15.5% |
| Total Hoke County Intpatient Cases | 798 | 929 |
| Market Share Inpatient Cases | 43.0% | 42.6% |
| Outpatient Cases | 276 | 275 |
| Annual % Change | | -0.4% |
| Total Hoke County Outpatient Cases | 1,519 | 1,825 |
| Market Share Outpatient Cases | 18.2% | 15.1% |
| Weighted Cases | 1,443 | 1,601 |
| **Operating Rooms Needed in Hoke County at 1,872 Hrs/Year/Room** | **0.8** | **0.9** |

*Source: 2010-2011 LRAs*

**Table 6. Surgical Center of Pinehurst Operating Room Utilization**

| FFY | 2009 | 2010 |
|---|---|---|
| Outpatient Cases | 4,803 | 4,874 |
| Annual % Change | | 1.5% |
| Weighted Cases | 7,205 | 7,311 |
| Licensed Operating Rooms | 6 | 6 |
| **Operating Rooms Needed at 1,872 Hrs/Year/Room** | **3.8** | **3.9** |
| Surplus/Deficit | 2.2 | 2.1 |

*Source: 2010-2011 LRAs*

**Table 7. FirstHealth-Moore Emergency Room Utilization**

| FFY | 2009 | 2010 |
|---|---|---|
| Total ED Visits | 65,186 | 64,860 |
| Annual % Change | | -0.5% |
| Total Admissions from ED | 11,926 | 13,590 |
| Total Admissions from ED: Total ED Visits | 18.3% | 21.0% |
| Total Admissions | 23,064 | 23,882 |
| ED Admissions: Total Admissions | 51.7% | 56.9% |

*Source: 2010-2011 LRAs*

**Table 8. FirstHealth-Moore Emergency Department Volume, Market Share**

| FFY | 2010 | 2011 Q1 | 011 Estimated |
|---|---|---|---|
| Hoke | | | |
| FH-Moore ED Visits | 6,696 | 1,591 | 6,364 |
| Total ED Visits | 13,633 | 3,444 | 13,776 |
| FH-Moore Market Share | 49.1% | 46.2% | 46.2% |
| Cumberland | | | |
| FH-Moore ED Visits | 931 | 220 | 880 |
| Total ED Visits | 88,290 | 23,979 | 95,916 |
| FH-Moore Market Share | 1.1% | 0.9% | 0.9% |
| Robeson | | | |
| FH-Moore ED Visits | 3,145 | 740 | 2,960 |
| Total ED Visits | 88,904 | 21,455 | 85,820 |
| FH-Moore Market Share | 3.5% | 3.4% | 3.4% |
| Scotland | | | |
| FH-Moore ED Visits | 1,618 | 398 | 1,592 |
| Total ED Visits | 21,893 | 5,476 | 21,904 |
| FH-Moore Market Share | 7.4% | 7.3% | 7.3% |

*Source: Thomson Market Expert; NCOSBM website accessed 6.22.11*

2011 Estimated ED Visits = 2011 Q1 /3 *12

**Table 9. Emergency Department Use Rate**

| FFY | 2010 |
|---|---|
| Hoke | |
| Total ED Visits | 13,633 |
| Population | 47,298 |
| Use Rate per 1000 | 288.24 |
| Cumberland | |
| Total ED Visits | 88,290 |
| Population | 321,018 |
| Use Rate per 1000 | 275.03 |
| Robeson | |
| Total ED Visits | 88,904 |
| Population | 134,502 |
| Use Rate per 1000 | 660.99 |
| Scotland | |
| Total ED Visits | 21,893 |
| Population | 36,098 |
| Use Rate per 1000 | 606.49 |

*Source: Thomson Market Expert; NCOSBM website accessed 6.22.11*

**Table 10. Emergency Department Projected Visits**

| FFY | 2010 | 2016 | 2017 | 2018 | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|---|---|---|---|
| | | Population | | | % Change 2010-2018 | % Change 2016-2018 |
| Hoke | 47,298 | 56,749 | 58,325 | 59,898 | 26.6% | 5.5% |
| Cumberland | 321,018 | 350,949 | 354,494 | 357,722 | 11.4% | 1.9% |
| Robeson | 134,704 | 142,662 | 144,021 | 145,381 | 7.9% | 1.9% |
| Scotland | 36,098 | 35,224 | 35,075 | 34,930 | -3.2% | -0.8% |
| Total | 539,118 | 585,584 | 591,915 | 597,931 | 10.9% | 2.1% |
| | | ED Use Rate per 100 | | | | |
| Hoke | 28.8 | 28.8 | 28.8 | 28.8 | | |
| Cumberland | 29.3 | 29.3 | 29.3 | 29.3 | | |
| Robeson | 66.0 | 66.0 | 66.0 | 66.0 | | |
| Scotland | 60.6 | 60.6 | 60.6 | 60.6 | | |
| Total | | | | | | |
| Actual ED Visits | | Estimated ED Visits = 28.8 x Population / 100 | | | % Change 2010-2018 | % Change 2016-2018 |
| Hoke | 13,602 | 16,344 | 16,798 | 17,251 | 26.8% | 5.5% |
| Cumberland | 94,052 | 102,828 | 103,867 | 104,813 | 11.4% | 1.9% |
| Robeson | 88,710 | 94,157 | 95,054 | 95,951 | 8.2% | 1.9% |
| Scotland | 21,868 | 21,346 | 21,255 | 21,168 | -3.2% | -0.8% |
| Total | 218,232 | 234,674 | 236,974 | 239,182 | 9.6% | 1.9% |
| FH-Moore Market Share | | FH-Moore Projected Market Share | | | | |
| Hoke | 49.3% | 49.3% | 49.3% | 49.3% | | |
| Cumberland | 1.2% | 1.2% | 1.2% | 1.2% | | |
| Robeson | 3.6% | 3.6% | 3.6% | 3.6% | | |
| Scotland | 9.2% | 9.2% | 9.2% | 9.2% | | |
| Total | | | | | | |
| FH-Moore Actual ED Visits | | FH-Moore Projected ED Visits = Estimated ED Visits x Market Share | | | % Change 2010-2018 | % Change 2016-2018 |
| Hoke | 6,701 | 8,057 | 8,281 | 8,505 | 26.9% | 5.5% |
| Cumberland | 1,098 | 1,234 | 1,246 | 1,258 | 14.5% | 1.9% |
| Robeson | 3,195 | 3,390 | 3,422 | 3,454 | 8.1% | 1.9% |
| Scotland | 2,018 | 1,964 | 1,956 | 1,947 | -3.5% | -0.8% |
| Total | 13,012 | 14,645 | 14,905 | 15,164 | 16.5% | 3.5% |
| | | Projected "Shift" Rates = ED Visits from FH-Moore to FH-Hoke | | | | % Change 2016-2018 |
| Hoke | | 50% | 65% | 75% | | 50.0% |
| Cumberland | | 40% | 45% | 50% | | 25.0% |
| Robeson | | 40% | 45% | 50% | | 25.0% |
| Scotland | | 40% | 45% | 50% | | 25.0% |
| Total | | | | | | |
| | | FH-Hoke Projected ED Visits | | | | % Change 2016-2018 |
| Hoke | | 4,029 | 5,383 | 6,378 | | 58.3% |
| Cumberland | | 494 | 561 | 629 | | 27.4% |
| Robeson | | 1,356 | 1,540 | 1,727 | | 27.4% |
| Scotland | | 786 | 880 | 974 | | 24.0% |
| Total | | 6,664 | 8,364 | 9,708 | | 45.7% |
| ED Spaces Needed at 1,333 Visits/Space | | 5 | 6 | 7 | | |
| Non-FH ED Visits = Actual ED Visits - FH-Moore ED Visits | | Non-FH Projected ED Visits | | | % Change 2010-2018 | % Change 2016-2018 |
| Hoke | 6,901 | 8,286 | 8,516 | 8,746 | 26.7% | 5.5% |
| Cumberland | 92,954 | 101,594 | 102,620 | 103,555 | 11.4% | 1.9% |
| Robeson | 85,515 | 90,767 | 91,632 | 92,497 | 8.2% | 1.9% |
| Scotland | 19,850 | 19,382 | 19,300 | 19,220 | -3.2% | -0.8% |
| Total | 205,220 | 220,030 | 222,069 | 224,018 | 9.2% | 1.8% |
| | | FH-Hoke Projected "Shift" Rates of non-FH ED Visits | | | | % Change 2016-2018 |
| Hoke | | 40% | 45% | 50% | | 25.0% |
| Cumberland | | 1% | 1.5% | 2% | | 100.0% |
| Robeson | | 0% | 0% | 0% | | |
| Scotland | | 0% | 0% | 0% | | |
| Total | | | | | | |
| | | FH-Hoke Projected ED Visits of non-FH ED Visits | | | | % Change 2016-2018 |
| Hoke | | 3,315 | 3,832 | 4,373 | | 31.9% |
| Cumberland | | 1,016 | 1,539 | 2,071 | | 103.9% |
| Robeson | | 0 | 0 | 0 | | |
| Scotland | | 0 | 0 | 0 | | |
| Total | | 4,330 | 5,372 | 6,444 | | 48.8% |
| ED Spaces Needed at 1,333 Visits/Space | | 3 | 4 | 5 | | |
| FH-Moore Actual ED Visits | | FH-Hoke Total Projected ED Visits | | | % Change 2010-2018 | % Change 2016-2018 |
| Hoke | 6,701 | 7,343 | 9,215 | 10,751 | 60.4% | 46.4% |
| Cumberland | 1,098 | 1,510 | 2,100 | 2,700 | 145.9% | 78.9% |
| Robeson | 3,195 | 1,356 | 1,540 | 1,727 | -45.9% | 27.4% |
| Scotland | 2,018 | 786 | 880 | 974 | -51.7% | 24.0% |
| Total | 13,012 | 10,994 | 13,735 | 16,152 | 24.1% | 46.9% |
| FH Market Share | | FH-Hoke Total Projected Market Share | | | % Change 2010-2018 | % Change 2016-2018 |
| Hoke | 49.3% | 44.9% | 54.9% | 62.3% | 26.4% | 38.7% |
| Cumberland | 1.2% | 1.5% | 2.0% | 2.6% | 114.7% | 75.5% |
| Robeson | 3.6% | 1.4% | 1.6% | 1.8% | -50.0% | 25.0% |
| Scotland | 9.2% | 3.7% | 4.1% | 4.6% | -50.0% | 25.0% |
| Total | 6.0% | 4.7% | 5.8% | 6.8% | 13.3% | 44.1% |

*Source: Project I.D. # N-8690-11, pages 177-190*

Note: Slightly different projections on pages 177-190

**Table 11. FH-Hoke Emergency Department Projected Utilization**

| FFY | 2016 | 2017 | 2018 |
|---|---|---|---|
| Projected ED Visits | 10,972 | 13,708 | 16,121 |
| Proposed Spaces | 12 | 12 | 12 |
| ED Visits per Space | 914 | 1,142 | 1,343 |

*Source: Project I.D. # N-8690-11, page 189*

**Table 12. FH-Hoke Emergency Department Projected Utilization by Service Level**

| FFY | 2010 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Level I | 0.9% | 99 | 123 | 145 |
| Level II | 2.9% | 318 | 398 | 468 |
| Level III | 35.9% | 3,939 | 4,921 | 5,787 |
| Level IV | 40.8% | 4,477 | 5,593 | 6,577 |
| Level V | 19.4% | 2,129 | 2,659 | 3,127 |
| Total | 100.0% | 10,972 | 13,708 | 16,121 |

*Source: Project I.D. # N-8690-11, page 186*

**Table 13. FH-Hoke Emergency Department Projected Utilization by County**

| FFY | 2016 | | 2017 | | 2018 | | % Change 2016-2018 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Hoke | 66.8% | 7,332 | 67.1% | 9,201 | 66.6% | 10,734 | -0.3% |
| Cumberland | 13.6% | 1,496 | 15.2% | 2,085 | 16.6% | 2,683 | 22.1% |
| Robeson | 12.4% | 1,356 | 11.2% | 1,540 | 10.7% | 1,727 | -13.7% |
| Scotland | 7.2% | 788 | 6.4% | 882 | 6.1% | 976 | -15.3% |
| Total | 100.0% | 10,972 | 100.0% | 13,708 | 100.0% | 16,121 | |

*Source: Project I.D. # N-8690-11, page 194*

**Table 14. FH-Hoke Projected Utilization based on Emergency Department Visits**

| FFY | 2010 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| FH-Moore | | FH-Hoke | | |
| Observation Patients | 1.7% | 188 | 235 | 276 |
| Inpatient Admissions | 17.4% | 1,913 | 2,390 | 2,811 |
| Patients Discharged from ED | 80.9% | 8,871 | 11,083 | 13,034 |
| Total | 100.0% | 10,972 | 13,708 | 16,121 |

*Source: Project I.D. # N-8690-11, page 190*

**Table 15. FH-Hoke Emergency Department Service Level - Projected Inpatient Admissions**

| FFY | 2010 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Level I | 0.0% | 0 | 0 | 0 |
| Level II | 0.3% | 1 | 1 | 1 |
| Level III | 0.3% | 12 | 15 | 17 |
| Level IV | 4.0% | 179 | 224 | 263 |
| Level V | 80.8% | 1,720 | 2,149 | 2,527 |
| Total | | 1,913 | 2,390 | 2,811 |

*Source: Table 14 ; Project I.D. # N-8690-11, page 189*

FirstHealth does not provide a break-down by county of each Service Level that generated Projected Inpatient Admissions

**Table 16. FH-Hoke Projected Inpatient Admissions based on Emergency Department Visits**

| FFY | 2016 | | 2017 | | 2018 | |
|---|---|---|---|---|---|---|
| Hoke | 66.8% | 1,278 | 67.1% | 1,604 | 66.6% | 1,872 |
| Cumberland | 13.6% | 261 | 15.2% | 364 | 16.6% | 468 |
| Robeson | 12.4% | 236 | 11.2% | 268 | 10.7% | 301 |
| Scotland | 7.2% | 137 | 6.4% | 154 | 6.1% | 170 |
| Total | 100.0% | 1,913 | 100.0% | 2,390 | 100.0% | 2,811 |

*Source: Project I.D. # N-8690-11, page 194*

**Table 17. FH-Hoke Emergency Department Service Level - Projected Inpatient Admissions - Acute Care Bed Need**

| FFY | 2016 | 2017 | 2018 |
|---|---|---|---|
| Inpatient Admissions | 1,913 | 2,390 | 2,811 |
| ALOS* | 3.5 | 3.5 | 3.5 |
| Inpatient Days** | 6,696 | 8,365 | 9,839 |
| **Beds Needed at 66.7% Occ** | **27.5** | **34.4** | **40.4** |

*Source: Table 16 ; Project I.D. # N-8690-11, pages 189, 201*

*ALOS is 3.5 for Medical/Surgical Patients including Pediatrics and GYN.

Inpatient admissions from ED are not broken-down by med/surg, ICU, and LDRP

Planning target occupancy rate for acute care hospitals with 1-99 ADC

**These are not acuity adjusted days

**Table 18. FH-Hoke Emergency Department Service Level - Projected Inpatient Admissions - Acute Care Bed Need - Acuity Adjusted**

| FFY | 2016 | 2017 | 2018 |
|---|---|---|---|
| Inpatient Admissions | 1,913 | 2,390 | 2,811 |
| ALOS* | 3.5 | 3.5 | 3.5 |
| Inpatient Days | 6,696 | 8,365 | 9,839 |
| Acuity Adjustment* | 65% | 65% | 65% |
| Acuity Adjusted Inpatient D | 4,352 | 5,437 | 6,395 |
| **Beds Needed at 66.7% Occ** | **17.9** | **22.3** | **26.3** |

*Source: Table 17*

*ALOS is 3.5 for Medical/Surgical Patients including Pediatrics and GYN.

Inpatient admissions from ED are not broken-down by med/surg, ICU, and LDRP

Planning target occupancy rate for acute care hospitals with 1-99 ADC

*Acuity adjustment of 65% is consistent with the CON Section's analysis in the FMC-Clemmons Community Hospital decision, Project ID.D. #G-8165-08.

Table 19. **Hoke County Acute Care Inpatient Utilization**

| Hoke County | Inpatient Cases | | | | | | Three Year |
|---|---|---|---|---|---|---|---|
| FFY | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Avg |
| Inpatient Cases | 2,787 | 2,914 | 2,849 | 3,175 | 3,270 | 3,331 | |
| Population | 39,891 | 41,530 | 42,796 | 44,432 | 45,591 | 47,298 | |
| Use Rate per 1,000 | 69.87 | 70.17 | 66.57 | 71.46 | 71.72 | 70.43 | 71.20 |
| Annual % Change | | 0.4% | -5.1% | 7.3% | 0.4% | -1.8% | |
| **Hoke County** | **Inpatient Days** | | | | | | **Three Year** |
| **FFY** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **Avg** |
| Inpatient Days | 13,091 | 14,141 | 13,865 | 14,355 | 14,729 | 15,015 | |
| Population | 39,891 | 41,530 | 42,796 | 44,432 | 45,591 | 47,298 | |
| Use Rate per 1,000 | 328.17 | 340.50 | 323.98 | 323.08 | 323.07 | 317.46 | 321.20 |
| Annual % Change | | 3.8% | -4.9% | -0.3% | 0.0% | -1.7% | |
| **Hoke County** | **Inpatient Days/Inpatient Cases** | | | | | | **Three Year** |
| **FFY** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **Avg** |
| ALOS | 4.70 | 4.85 | 4.87 | 4.52 | 4.50 | 4.51 | 4.51 |
| Annual % Change | | 3.3% | 0.3% | -7.1% | -0.4% | 0.1% | |

*Source: Thomson Market Expert; NCOSBM website accessed 6.22.11*

Acute Care Only: Excludes LTACH, Rehab, Psych, and Normal Newborn

Table 20. **Hoke County Acute Care Bed Need - Acuity Adjusted**

| Data Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|
| Population | 47,298 | 48,873 | 50,451 | 52,025 | 53,599 | 55,172 | 56,749 | 58,325 | 59,898 |
| 3 Yr Avg Use Rate | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 | 71.20 |
| Estimated Inpatient Cases | 3,368 | 3,480 | 3,592 | 3,704 | 3,816 | 3,928 | 4,041 | 4,153 | 4,265 |
| 3 Yr Avg ALOS | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 |
| Estimated Inpatient Days | 15,192 | 15,698 | 16,205 | 16,710 | 17,216 | 17,721 | 18,228 | 18,734 | 19,239 |
| ADC | 42 | 43 | 44 | 46 | 47 | 49 | 50 | 51 | 53 |
| Planning Target Occupancy Rate | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% |
| **Acute Care Beds Needed** | **62.4** | **64.5** | **66.4** | **68.6** | **70.7** | **72.8** | **74.9** | **77.0** | **79.0** |
| Acuity Adjustment* | 65% | 65% | 65% | 65% | 65% | 65% | 65% | 65% | 65% |
| Acuity Adjusted Inpatient Days | 9,875 | 10,204 | 10,533 | 10,862 | 11,190 | 11,519 | 11,848 | 12,177 | 12,506 |
| ADC | 27 | 28 | 29 | 30 | 31 | 32 | 32 | 33 | 34 |
| Planning Target Occupancy Rate | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% | 66.7% |
| **Acute Care Beds Needed** | **40.6** | **41.9** | **43.1** | **44.6** | **46.0** | **47.3** | **48.7** | **50.0** | **51.4** |

*Source: Table 19*

Planning target occupancy rate for acute care hospitals with 1-99 ADC

*Acuity adjustment of 65% is consistent with the CON Section's analysis in the FMC-Clemmons Community Hospital decision, Project ID.D. #G-8165-08.

Table 21. **FH-Moore Inpatient Utilization**

| FFY 2010 | | | | | |
|---|---|---|---|---|---|
| All Providers | | FH-Moore | | FH-Moore Market Share | |
| Hoke | | Hoke | | Hoke | |
| Days | 15,015 | Days | 6,385 | Days | 42.5% |
| Cases | 3,331 | Cases | 1,580 | Cases | 47.4% |
| ALOS | 4.5 | ALOS | 4.0 | | |
| Cumberland | | Cumberland | | Cumberland | |
| Days | 142,348 | Days | 1,848 | Days | 1.3% |
| Cases | 26,185 | Cases | 533 | Cases | 2.0% |
| ALOS | 5.4 | ALOS | 3.5 | | |
| Robeson | | Robeson | | Robeson | |
| Days | 84,532 | Days | 4,802 | Days | 5.7% |
| Cases | 18,648 | Cases | 1,311 | Cases | 7.0% |
| ALOS | 4.5 | ALOS | 3.7 | | |
| Scotland | | Scotland | | Scotland | |
| Days | 21,782 | Days | 3,814 | Days | 17.5% |
| Cases | 5,201 | Cases | 887 | Cases | 17.1% |
| ALOS | 4.2 | ALOS | 4.3 | | |
| Total | | Total | | Total | |
| Days | 263,677 | Days | 16,849 | Days | 6.4% |
| Cases | 53,365 | Cases | 4,311 | Cases | 8.1% |
| ALOS | 4.9 | ALOS | 3.9 | | |

*Source: Thomson Market Expert*

Acute Care Only

Excludes LTACHs, Rehab, Psych, and Normal Newborns

**Table 22. FH-Hoke Projected Inpatient Admissions**

| FFY | 2016 | 2017 | 2018 | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|---|---|---|
| ED IP Admissions - based on ED Need Methodology | | | | | |
| Hoke | 1,278 | 1,604 | 1,872 | | 46.5% |
| Cumberland | 261 | 364 | 468 | | 79.3% |
| Robeson | 236 | 268 | 301 | | 27.5% |
| Scotland | 137 | 154 | 170 | | 24.1% |
| Total | 1,912 | 2,390 | 2,811 | | 47.0% |
| Direct IP Admissions - based on MD Referral Letters in Exhibit U | | | | | |
| Hoke | 500 | 700 | 900 | | 80.0% |
| Cumberland | 500 | 700 | 900 | | 80.0% |
| Robeson | 0 | 0 | 0 | | |
| Scotland | 0 | 0 | 0 | | |
| Total | 1,000 | 1,400 | 1,800 | | 80.0% |
| Total IP Admissions | | | | | |
| Hoke | 1,778 | 2,304 | 2,772 | 75.4% | 55.9% |
| Cumberland | 761 | 1,064 | 1,368 | 156.7% | 79.8% |
| Robeson | 236 | 268 | 301 | -77.0% | 27.5% |
| Scotland | 137 | 154 | 170 | -80.8% | 24.1% |
| Total | 2,912 | 3,790 | 4,611 | 7.0% | 58.3% |
| Projected IP Admissions | | | | | |
| Hoke | 3,331 | 3,331 | 3,331 | | |
| Cumberland | 26,185 | 26,185 | 26,185 | | |
| Robeson | 18,648 | 18,648 | 18,648 | | |
| Scotland | 5,201 | 5,201 | 5,201 | | |
| Total | 53,365 | 53,365 | 53,365 | | |
| Overall IP Market Share | | | | | |
| Hoke | 53.4% | 69.2% | 83.2% | 75.4% | 55.9% |
| Cumberland | 2.9% | 4.1% | 5.2% | 156.7% | 79.8% |
| Robeson | 1.3% | 1.4% | 1.6% | -77.0% | 27.5% |
| Scotland | 2.6% | 3.0% | 3.3% | -80.8% | 24.1% |
| Total | 5.5% | 7.1% | 8.6% | 7.0% | 58.3% |

*Source: Table 21 ; Project I.D. # N-8690-11, pages 194-195*

**Table 23. FH-Hoke Projected Inpatient Admissions by County**

| FFY | 2016 | | 2017 | | 2018 | | % Change 2016-2018 |
|---|---|---|---|---|---|---|---|
| Hoke | 61.1% | 1,778 | 60.8% | 2,304 | 60.1% | 2,772 | 55.9% |
| Cumberland | 26.1% | 761 | 28.1% | 1,064 | 29.7% | 1,368 | 79.8% |
| Robeson | 8.1% | 236 | 7.1% | 268 | 6.5% | 301 | 27.5% |
| Scotland | 4.7% | 137 | 4.1% | 154 | 3.7% | 170 | 24.1% |
| Total | 100.0% | 2,913 | 100.0% | 3,790 | 100.0% | 4,611 | 58.3% |

*Source: Table 22 ; Project I.D. # N-8690-11, page 196*

Table 24. Fr...noke Projected Inpatient Utilization

| FFY | FH Experience % | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Inpatients | | | | |
| Med/Surg (includes Peds and GYN) | 83% | 2,418 | 3,146 | 3,827 |
| LDRP | 7% | 204 | 265 | 323 |
| ICU | 10% | 291 | 379 | 461 |
| Total | 100% | 2,913 | 3,790 | 4,611 |
| ALOS | | | | |
| Med/Surg (includes Peds and GYN) | 3.5 | 3.5 | 3.5 | 3.5 |
| LDRP | 2.0 | 2.0 | 2.0 | 2.0 |
| ICU | 4.0 | 4.0 | 4.0 | 4.0 |
| Total | | | | |
| Inpatient Days | | | | |
| Med/Surg (includes Peds and GYN) | | 8,462 | 11,010 | 13,395 |
| LDRP | | 408 | 531 | 646 |
| ICU | | 1,165 | 1,516 | 1,844 |
| Total | | 10,035 | 13,057 | 15,885 |
| Inpatient Beds | | | | |
| Med/Surg (includes Peds and GYN) | | 54 | 54 | 54 |
| LDRP | | 3 | 3 | 3 |
| ICU | | 8 | 8 | 8 |
| Total | | 65 | 65 | 65 |
| Occupancy | | | | |
| Med/Surg (includes Peds and GYN) | | 42.9% | 55.9% | 68.0% |
| LDRP | | 37.2% | 48.5% | 59.0% |
| ICU | | 39.9% | 51.9% | 63.2% |
| Total | | 42.3% | 55.0% | 67.0% |

*Source: Project I.D. # N-8690-11, page 201*

Data in table does not match exactly to data on page 201

Table 25. **FirstHealth Acute Care Hospitals Licensed Acute Care Bed Inventory and Utilization**

| FFY 2010 | Beds | % of Total | Days | % of Total |
|---|---|---|---|---|
| FH-Moore | | | | |
| ICU | | | | |
| Cardiac | 12 | 4.0% | 3,016 | 3.6% |
| Cardiovascular Surgery | 10 | 3.4% | 2,221 | 2.7% |
| Med/Surg | 28 | 9.4% | 6,890 | 8.2% |
| Subtotal | 50 | 16.8% | 12,127 | 14.5% |
| Other Units | | | | |
| Med/Surg | 180 | 60.6% | 57,100 | 68.1% |
| Neonatal III | 16 | 5.4% | 2,859 | 3.4% |
| OB includes LDRP | 20 | 6.7% | 3,620 | 4.3% |
| Oncology | 23 | 7.7% | 7,203 | 8.6% |
| Peds | 8 | 2.7% | 898 | 1.1% |
| Subtotal | 247 | 83.2% | 71,680 | 85.5% |
| Total | 297 | 100.0% | 83,807 | 100.0% |
| FH-Montgomery | | | | |
| ICU | | | | |
| Total | 0 | | | |
| Other Units | | | | |
| Med/Surg | 37 | 100.0% | 893 | 100.0% |
| Total | 37 | 100.0% | 893 | 100.0% |
| FH-Richmond | | | | |
| ICU | | | | |
| Med/Surg | 12 | 12.1% | 1,515 | 15.3% |
| Subtotal | 12 | 12.1% | 1,515 | 15.3% |
| Other Units | | | | |
| Med/Surg | 55 | 55.6% | 6,158 | 62.2% |
| OB includes LDRP | 20 | 20.2% | 1,269 | 12.8% |
| Peds | 12 | 12.1% | 964 | 9.7% |
| Subtotal | 87 | 87.9% | 8,391 | 84.7% |
| Total | 99 | 100.0% | 9,906 | 100.0% |

*Source: 2011 LRAs*

There is no data in LRAs breaking down admissions by bed type

**Table 26. Hoke County Surgical Utilization**

| Hoke County | Inpatient Cases | | | Three Year |
|---|---|---|---|---|
| FFY | 2008 | 2009 | 2010 | Avg |
| Inpatient Cases | 854 | 798 | 929 | |
| Population | 44,432 | 45,591 | 47,298 | |
| Use Rate | 19.22 | 17.50 | 19.64 | 18.79 |
| Annual % Change | | -8.9% | 12.2% | |
| **Hoke County** | **Outpatient Cases** | | | **Three Year** |
| **FFY** | **2008** | **2009** | **2010** | **Avg** |
| Outpatient Cases | 2,140 | 1,519 | 1,825 | |
| Population | 44,432 | 45,591 | 47,298 | |
| Use Rate | 48.16 | 33.32 | 38.59 | 40.02 |
| Annual % Change | | -30.8% | 15.8% | |
| **Hoke County** | **Total Cases** | | | **Three Year** |
| **FFY** | **2008** | **2009** | **2010** | **Avg** |
| Total Cases | 2,994 | 2,317 | 2,754 | |
| Population | 44,432 | 45,591 | 47,298 | |
| Use Rate | 67.38 | 50.82 | 58.23 | 58.81 |
| Annual % Change | | -24.6% | 14.6% | |

*Source: 2009-2011 LRAs; NCOSBM website accessed 6.22.11*

**Table 27. Hoke County Operating Room Need**

| Data Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|
| Population | 47,298 | 48,873 | 50,451 | 52,025 | 53,599 | 55,172 | 56,749 | 58,325 | 59,898 |
| 3 Yr Avg Use Rate | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 | 18.79 |
| Estimated Inpatient Cases | 889 | 918 | 948 | 977 | 1,007 | 1,037 | 1,066 | 1,096 | 1,125 |
| Weighted Inpatient Cases | 2,666 | 2,755 | 2,844 | 2,932 | 3,021 | 3,110 | 3,199 | 3,288 | 3,376 |
| Population | 47,298 | 48,873 | 50,451 | 52,025 | 53,599 | 55,172 | 56,749 | 58,325 | 59,898 |
| 3 Yr Avg Use Rate | 40.02 | 40.02 | 40.02 | 40.02 | 40.02 | 40.02 | 40.02 | 40.02 | 40.02 |
| Estimated Outpatient Cases | 1,893 | 1,956 | 2,019 | 2,082 | 2,145 | 2,208 | 2,271 | 2,334 | 2,397 |
| Weighted Outpatient Cases | 2,839 | 2,934 | 3,029 | 3,123 | 3,218 | 3,312 | 3,407 | 3,501 | 3,596 |
| Total Weighted Cases | 5,505 | 5,689 | 5,872 | 6,056 | 6,239 | 6,422 | 6,606 | 6,789 | 6,972 |
| **Operating Rooms Needed** | **2.9** | **3.0** | **3.1** | **3.2** | **3.3** | **3.4** | **3.5** | **3.6** | **3.7** |

*Source: Table 26*

**Table 28. FH-Moore Surgical Utilization**

| FFY 2010 | | | | | |
|---|---|---|---|---|---|
| All Providers | | FH-Moore | | FH-Moore Market Share | |
| Hoke | | Hoke | | Hoke | |
| IP | 929 | IP | 396 | IP | 42.6% |
| OP | 1,825 | OP | 275 | OP | 15.1% |
| Total | 2,754 | Total | 671 | Total | 24.4% |
| Cumberland | | Cumberland | | Cumberland | |
| IP | 8,083 | IP | 363 | IP | 4.5% |
| OP | 18,515 | OP | 183 | OP | 1.0% |
| Total | 26,598 | Total | 546 | Total | 2.1% |
| Robeson | | Robeson | | Robeson | |
| IP | 4,647 | IP | 551 | IP | 11.9% |
| OP | 8,433 | OP | 293 | OP | 3.5% |
| Total | 13,080 | Total | 844 | Total | 6.5% |
| Scotland | | Scotland | | Scotland | |
| IP | 1,395 | IP | 312 | IP | 22.4% |
| OP | 2,736 | OP | 218 | OP | 8.0% |
| Total | 4,131 | Total | 530 | Total | 12.8% |
| Total | | Total | | Total | |
| IP | 15,054 | IP | 1,622 | IP | 10.8% |
| OP | 31,509 | OP | 969 | OP | 3.1% |
| Total | 46,563 | Total | 2,591 | Total | 5.6% |

*Source: 2011 LRAs*

Table 29. ‹e Projected Outpatient Surgical Utilization

| FFY 2016 | | FFY 2017 | | FFY 2018 | | % Change 2010-2018 | % Change 2016-2018 |
|---|---|---|---|---|---|---|---|
| Hoke | | | | | | | |
| Mkt Share | 20.2% | Mkt Share | 23.6% | Mkt Share | 27.0% | 79.2% | 33.7% |
| OP | 360 | OP | 420 | OP | 480 | 74.5% | 33.3% |
| Total | 1,778 | Total | 1,778 | Total | 1,778 | | |
| Cumberland | | | | | | | |
| Mkt Share | 0.2% | Mkt Share | 0.3% | Mkt Share | 0.3% | -71.0% | 32.5% |
| OP | 40 | OP | 47 | OP | 53 | -71.0% | 32.5% |
| Total | 18,515 | Total | 18,515 | Total | 18,515 | | |
| Robeson | | | | | | | |
| Mkt Share | | Mkt Share | | Mkt Share | | | |
| OP | 0 | OP | 0 | OP | 0 | | |
| Total | | Total | | Total | | | |
| Scotland | | | | | | | |
| Mkt Share | | Mkt Share | | Mkt Share | | | |
| OP | 0 | OP | 0 | OP | 0 | | |
| Total | | Total | | Total | | | |
| Total | | | | | | | |
| Mkt Share | 2.0% | Mkt Share | 2.3% | Mkt Share | 2.6% | | |
| OP | 400 | OP | 467 | OP | 533 | | |
| Total | 20,293 | Total | 20,293 | Total | 20,293 | | |

*Source: Table XX; Project I.D. # N-8690-11, pages 203-209*

Table 30. FH-Hoke Projected Surgical Utilization - Hours

| FFY | 2016 | 2017 | 2018 | |
|---|---|---|---|---|
| Ancillary Volume - based on ED Visit Need Methodology | | | | |
| Discharge Patient | 4 | 5 | 6 | |
| Observation Patient | 11 | 14 | 16 | |
| Outpatient | 15 | 19 | 22 | There is no detail by county |
| Inpatient | 319 | 398 | 468 | There is no detail by county |
| Total | 334 | 417 | 490 | |
| Ancillary Volume - from Direct IP Admissions Need Methodology | | | | |
| Inpatient | 1,449 | 2,028 | 2,608 | |
| Ancillary Volume - from Outpatient Department Need Methodology | | | | |
| Outpatient | 600 | 701 | 800 | |
| Total | | | | |
| Inpatient | 1,768 | 2,426 | 3,076 | |
| Outpatient | 615 | 720 | 822 | |
| Total | 2,383 | 3,146 | 3,898 | |

*Source: Table XX; Project I.D. # N-8690-11, pages 191, 192, 200, 202, 204, 209*
FirstHealth did not provide a break down by county for inpatient and outpatient surgeries in ED Visit Need Methodology
Inpatient surgeries in the Direct Inpatient Admission Need Methodology are for Hoke and Cumberland County residents

Table 31. FH-Hoke Projected Surgical Utilization - Cases

| FFY | 2016 | 2017 | 2018 |
|---|---|---|---|
| Ancillary Volume - based on ED Need Methodology | | | |
| Discharge Patient | 3 | 3 | 4 |
| Observation Patient | 7 | 9 | 11 |
| Outpatient | 10 | 13 | 15 |
| Inpatient | 106 | 133 | 156 |
| Total | 116 | 145 | 171 |
| Ancillary Volume - from Direct IP Admissions Need Methodology | | | |
| Inpatient | 483 | 676 | 869 |
| Ancillary Volume - from Outpatient Department Need Methodology | | | |
| Outpatient | 400 | 467 | 533 |
| Total | | | |
| Inpatient | 589 | 809 | 1,025 |
| Outpatient | 410 | 480 | 548 |
| Total | 999 | 1,288 | 1,573 |

*Source: Table 30*
FirstHealth did not provide a break down by county for inpatient and outpatient surgeries in ED Visit Need Methodology
Inpatient surgeries in the Direct Inpatient Admission Need Methodology are for Hoke and Cumberland County residents

Table 32. **2010 Patient Origin Hospital Admissions**

| County | 2010 Population | Hospital(s) | Percent Inpatient PO from Home County | Additional Counties if Less than 60% | | | | | | Combined |
|---|---|---|---|---|---|---|---|---|---|---|
| Hoke | 47,298 | None | 60.1% - Projected PY3 | | | | | | | |
| Lenoir | 59,493 | 1 | 75.6% | | | | | | | |
| Haywood | 59,148 | 1 | 82.5% | | | | | | | |
| Duplin | 58,729 | 1 | 78.1% | | | | | | | |
| Columbus | 58,204 | 1 | 82.4% | | | | | | | |
| Lee | 58,059 | 1 | 75.4% | | | | | | | |
| Edgecombe | 56,681 | 1 | 71.9% | | | | | | | |
| Halifax | 54,627 | 1 + 1 CAH | 68.4% | | | | | | | |
| Pender | 52,504 | 1 | 73.9% | | | | | | | |
| Watauga | 51,326 | 1 + 1 CAH | 51.4% | Ashe - CAH | 17.3% | Avery - CAH | 5.7% | | | 74.4% |
| Beaufort | 47,929 | 1 + 1 CAH | 73.9% | | | | | | | |
| Stokes | 47,478 | 1 CAH | 87.8% | | | | | | | |
| Richmond | 46,630 | 1 | 86.6% | | | | | | | |
| Vance | 45,477 | 1 | 58.3% | Warren - No | 21.4% | Granville | 7.8% | | | 87.5% |
| McDowell | 45,031 | 1 | 93.7% | | | | | | | |
| Davie | 41,378 | 1 CAH | 87.2% | New Hosp CON | 59% | Yadkin - CAH | 13 | Forsyth | 28 | |
| Pasquotank | 40,664 | 1 | 51.7% | Camden - No | 7.5% | Currituck - No | 10.0% | Dare | 7.6% | 76.7% |
| Jackson | 40,480 | 1 | 45.3% | Graham - No | 7.8% | Macon - CAH | 11.7% | Swain - CAH | 23.0% | 87.7% |
| Person | 39,585 | 1 | 84.6% | | | | | | | |
| Yadkin | 38,451 | 1 CAH | 96.0% | | | | | | | |
| Alexander | 37,254 | | | | | | | | | |
| **Scotland** | **36,098** | **1** | **53.4%** | **Robeson** | **29.4%** | | | | | **82.9%** |
| Bladen | 35,243 | 1 CAH | 91.7% | | | | | | | |
| Macon | 33,946 | 1 CAH | 90.7% | | | | | | | |
| Dare | 33,886 | 1 | 72.5% | | | | | | | |
| Transylvania | 33,189 | 1 | 88.7% | | | | | | | |
| Montgomery | 27,796 | 1 CAH | 92.3% | | | | | | | |
| Cherokee | 27,527 | 1 | 63.8% | | | | | | | |
| Ashe | 27,378 | 1 CAH | 93.9% | | | | | | | |
| Anson | 26,973 | 1 CAH | 96.6% | | | | | | | |
| Hertford | 24,711 | 1 | 47.3% | Northampton - No | 17.1% | Bertie - CAH | 26.7% | | | 91.2% |
| Martin | 24,498 | 1 | 84.7% | | | | | | | |
| Caswell | 23,676 | None | | | | | | | | |
| Currituck | 23,559 | None | | | | | | | | |
| Northampton | 22,102 | None | | | | | | | | |
| Greene | 21,382 | None | | | | | | | | |
| Bertie | 21,313 | 1 CAH | 89.2% | | | | | | | |
| Warren | 21,022 | None | | | | | | | | |
| Madison | 20,795 | None | | | | | | | | |
| Polk | 20,588 | 1 | 63.2% | | | | | | | |
| Avery | 17,812 | 1 CAH | 82.5% | | | | | | | |
| Yancey | 17,802 | | | | | | | | | |
| Mitchell | 15,588 | 1 | 53.7% | Yancey - No | 39.6% | | | | | 93.3% |
| Chowan | 14,761 | 1 | 48.2% | Washington - CAH | 12.9% | Perquimmans - No | 13.5% | Tyrrell - No | 9.6% | 84.2% |
| Swain | 14,020 | 1 CAH | 66.2% | Graham | 17.9% | | | | | |
| Perquimans | 13,486 | None | | | | | | | | |
| Washington | 13,224 | 1 CAH | 79.7% | | | | | | | |
| Pamlico | 13,152 | None | | | | | | | | |
| Gates | 12,214 | None | | | | | | | | |
| Alleghany | 11,171 | 1 CAH | 74.1% | | | | | | | |
| Clay | 10,622 | None | | | | | | | | |
| Jones | 10,159 | None | | | | | | | | |
| Camden | 10,000 | None | | | | | | | | |
| Graham | 8,888 | None | | | | | | | | |
| Hyde | 5,813 | None | | | | | | | | |
| Tyrrell | 4,403 | None | | | | | | | | |

*Source: 2011 LRA*

*Blue: PO from home county less than 60%* *Purple: No Hospital* *Yellow: FH Hoke Comparative Hospitals*

Table 33. **April - December 2010 Inpatient ED Admissions**

| County | Hospital | Inpt ED Adm | Mkt Share | MH Admts | Cardiac Admits | Trauma | Percent MH | Percent Cardiac |
|---|---|---|---|---|---|---|---|---|
| Cumberland | CFVMC | 3,979 | 92.8% | | | | | |
| | FH Moore | 53 | 1.2% | 16 | 10 | 7 | 30.2% | 18.9% |
| | All Other | 255 | 5.9% | | | | | |
| | Total | 4,287 | | | | | | |
| Robeson | CFVMC | 298 | 8.7% | | | | | |
| | FH Moore | 159 | 4.7% | 9 | 38 | 14 | 5.7% | 23.9% |
| | Scotland Memorial | 287 | 8.4% | | | | | |
| | Southeastern Regional | 2,537 | 74.4% | | | | | |
| | All Other | 129 | 3.8% | | | | | |
| | Total | 3,410 | | | | | | |
| Hoke | CFVMC | 225 | 36.8% | | | | | |
| | FH Moore | 352 | 57.5% | 17 | 65 | 28 | 4.8% | 18.5% |
| | All Other | 35 | 5.7% | | | | | |
| | Total | 612 | | | | | | |
| Scotland | Scotland Memorial | 483 | 68.5% | | | | | |
| | FH Moore | 99 | 14.0% | 6 | 21 | 7 | 6.1% | 21.2% |
| | All Other | 123 | 17.4% | | | | | |
| | Total | 705 | | | | | | |
| Total FH Moore Admits | | 663 | 7.4% | 48 | 134 | 56 | 7.2% | 20.2% |
| Total Admits | | 9,014 | | | | | | |

*Source: Thomson Reuters NCHA Emergency Department Data inlcuded in Attachment 4*

Table 34. **Estimated Calendar 2010 Inpatient ED Admission Rate and 2018 Projected ED Inpt Admissions**

| County | Estimated 2010 Admissions | Population | Inpt ED Admission Use Rate Per 100 Population | 2018 Population | 2018 Projected Inpt ED Admissions | FH Mkt Share | 2018 FH Projected Inpt ED Volume | Volume Shift | FH Hoke Projected Inpt ED Volume | 2018 ED Inpt Admit Less FH | Percent Shift | Projected Inpt ED Admits | Total FH Hoke Projected Inpt ED Admits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A = County Specific Total from Table 33 / 3 x 4 | B | C = A /B x 100 | D | E = D x C | F = Mkt Share for FH Moore in Table 33 | G = F x E | H = FH Assumption pg 180 | I = G x H | J = E - G (FH Assumption pg 181) | K = FH Assumption pg 182 | L = J x K | M = I + L |
| Cumberland | 5,716 | 321,018 | 1.78 | 357,722 | 6,370 | 1.2% | 79 | 50% | 39 | 6,291 | 2% | 126 | |
| Hoke | 816 | 47,298 | 1.73 | 59,898 | 1,033 | 57.5% | 594 | 75% | 446 | 439 | 50% | 220 | |
| Robeson | 4,547 | 134,502 | 3.38 | 145,381 | 4,914 | 4.7% | 229 | 50% | 115 | | | | |
| Scotland | 940 | 36,098 | 2.60 | 34,930 | 910 | 14.0% | 128 | 50% | 64 | | | | |
| Total Projected Inpatient ED Admissions | | | | | | | 1,030 | | 664 | | | 345 | 1,009 |

*Source: Thomson Reuters NCHA Emergency Department Data in Table 31; FHCH Application*

Table 35. **Projected Hoke County Bed Need from 2011 Licensure Renewal Applications**

| | Hoke Inpt | Total Inpt | Total Day | ALOS | Hoke Days | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CFVMC | 1,355 | 29,287 | 155,926 | 5.32 | 7,214 | | | | | | | | |
| FHMRH | 1,832 | 23,895 | 83,807 | 3.51 | 6,425 | | | | | | | | |
| Projected Growth = 3.15 % per 2011 SMFP for Cumberland County | | | | | 13,639 | 14,069 | 14,512 | 14,969 | 15,441 | 15,927 | 16,429 | 16,947 | 17,480 |
| ADC | | | | | 37.4 | | | | | | | | 47.9 |
| Bed Need @ 66.7 % | | | | | 56.0 | | | | | | | | 71.8 |
| Acuity Adjusted Bed Needn 65% | | | | | 36.4 | | | | | | | | 46.7 |

*Source: 2011 LRA; 2011 SMFP*

Table 36. **Thomson Inpatient Data - Two Hospital Counties**
**FFY2010 (10/01/2009 - 09/30/2010)**
**Acute Bed Days Market Share**
**All NC Counties**

**Medical Surgical Exclusions:**
**Mental Health and Substance Abuse (880-887 and 894-897),**
**Rehab (945-946),**
**Normal Newborns (795)**

**FFY2010**

| Hospital | County | Acute Bed Days | Cty Mkt Share |
|---|---|---|---|
| Forsyth Memorial Hospital | Davidson County, NC | 14,479 | |
| The NC Baptist Hospitals | Davidson County, NC | 14,430 | |
| High Point Regional Hosp | Davidson County, NC | 10,733 | |
| Lexington Memorial Hosp | Davidson County, NC | 10,093 | 16% |
| Thomasville Medical Ctr | Davidson County, NC | 8,103 | 12% |
| Rowan Regional Med Center | Davidson County, NC | 1,412 | |
| Select Specialty Hospital | Davidson County, NC | 1,234 | |
| Moses H Cone Mem Hospital | Davidson County, NC | 1,216 | |
| All Other | | 3,220 | |
| | | | 64,920 |
| Margaret R Pardee Mem | Henderson County, NC | 18,398 | 41% |
| Mission Hospital | Henderson County, NC | 15,385 | |
| Park Ridge Hospital | Henderson County, NC | 7,674 | 17% |
| All Other | | 3,492 | |
| | | | 44,949 |
| Iredell Memorial Hospital | Iredell County, NC | 30,864 | 40% |
| Lake Norman Reg Med Ctr | Iredell County, NC | 15,843 | 21% |
| Davis Medical Center | Iredell County, NC | 9,657 | 13% |
| The NC Baptist Hospitals | Iredell County, NC | 6,159 | |
| Carolinas Medical Center | Iredell County, NC | 4,535 | |
| Forsyth Memorial Hospital | Iredell County, NC | 2,479 | |
| Presbyterian Hospital | Iredell County, NC | 1,806 | |
| Presbyterian/Huntersville | Iredell County, NC | 1,635 | |
| All Other | | 4,147 | |
| | | | 77,125 |
| First Health Moore Rgnl | Richmond County, NC | 9,708 | |
| Sandhills Regional M.C. | Richmond County, NC | 8,636 | 26% |
| First Health Richmond Mem | Richmond County, NC | 8,368 | 26% |
| All Other | | 6,090 | |
| | | | 32,802 |
| Moses H Cone Mem Hospital | Rockingham County, NC | 18,546 | |
| Morehead Memorial Hosp | Rockingham County, NC | 15,261 | 28% |
| Annie Penn Hospital | Rockingham County, NC | 11,014 | 20% |
| The NC Baptist Hospitals | Rockingham County, NC | 5,389 | |
| All Other | | 4,400 | |
| | | | 54,610 |
| Forsyth Memorial Hospital | Surry County, NC | 12,456 | |
| Northern Hosp-Surry Cnty | Surry County, NC | 10,742 | 25% |
| The NC Baptist Hospitals | Surry County, NC | 9,279 | |
| Hugh Chatham Mem Hospital | Surry County, NC | 7,358 | 17% |
| All Other | | 2,589 | |
| | | | 42,424 |

Source: Thomson

# *Attachment 3*

*Comments in Opposition from*
*Cumberland County Hospital System, Inc.*
*d/b/a Cape Fear Valley Health System*
*Regarding FirstHealth of the Carolinas, Inc.*
*Certificate of Need Application (Project I.D. # N-8690-11)*
*Submitted June 15, 2011 for July 1, 2011 Review Cycle*

## Nancy Bres Martin

**From:** jamey.motter@thomsonreuters.com
**Sent:** Thursday, July 14, 2011 3:16 PM
**To:** bresmartin@nc.rr.com
**Subject:** RE: ED data

That is what I am told...does it not appear that way? Jamey

---

**From:** Nancy Bres Martin [mailto:bresmartin@nc.rr.com]
**Sent:** Thursday, July 14, 2011 2:57 PM
**To:** Motter, Jamey (Professional)
**Subject:** RE: ED data

So FFY 2010 includes only half a year of inpatient data? Correct?

---

**From:** jamey.motter@thomsonreuters.com [mailto:jamey.motter@thomsonreuters.com]
**Sent:** Thursday, July 14, 2011 2:52 PM
**To:** bresmartin@nc.rr.com
**Subject:** RE: ED data

Sorry, forgot to answer that part of your question. Was added in Q3 of 2010 (that is the fiscal year, so April – June quarter). Jamey

---

**From:** Nancy Bres Martin [mailto:bresmartin@nc.rr.com]
**Sent:** Thursday, July 14, 2011 2:48 PM
**To:** Motter, Jamey (Professional)
**Subject:** RE: ED data

Thanks....when did inpt first appear in the ED database?

---

**From:** jamey.motter@thomsonreuters.com [mailto:jamey.motter@thomsonreuters.com]
**Sent:** Thursday, July 14, 2011 2:19 PM
**To:** bresmartin@nc.rr.com
**Subject:** RE: ED data

Hi Nancy – the inpatient records now in the ED database can be identified through the billtype table that is now included in the patientregistration.txt file in the database. You can query based on the inpatient billtypes to identify the inpatient records. Let me know if you need anything further. Thanks, Jamey

| Field | Start | Length | Field Name | Data Type | Description |
|---|---|---|---|---|---|
| 38 | 257 | 4 | Billtype | char | Bill type (submitted) |

---

Bill Type Values include:

111 - Hospital Inpatient, Including Medicare Part A, original bill
117 - Hospital Inpatient, Including Medicare Part A,

replacement bill
121 - Hospital Inpatient, Medicare Part B only, original bill
127 - Hospital Inpatient, Medicare Part B only, replacement bill
131 - Hospital Outpatient, original bill
137 - Hospital Outpatient, replacement bill
831 - Ambulatory Surgery Center, original bill
837 - Ambulatory Surgery Center, replacement bill
851 - Critical Access Hospital, original bill
857 - Critical Access Hospital, replacement bill

---

**From:** Nancy Bres Martin [mailto:bresmartin@nc.rr.com]
**Sent:** Thursday, July 14, 2011 11:07 AM
**To:** Motter, Jamey (Professional)
**Subject:** FW: ED data

Hi Jamey –

Jim answered my question about the ED database but can you tell me when the inpt data was included.... FFY 2010?? Also how do you flag to separate only inpt.

Thanks,

Nancy

---

**From:** Jim Hauge [mailto:jhauge@ncha.org]
**Sent:** Thursday, July 14, 2011 10:36 AM
**To:** Nancy Bres Martin
**Subject:** ED data

Nancy,
Am on a 10:30 call. The ED database now includes those admitted as inpatients from the ED. There is a way to separate them out but not sure what it is and cannot look it up right now. It's a flag. Jamey could also tell you. It should be in the layout and explanation. Let me know if still have question. (The inpatient records are also included in the inpatient database.)
Hope you are well.
/Jim

James E. Hauge
Vice President/COO-Foundation
North Carolina Hospital Association
PO Box 4449
Cary, NC 27519-4449
919-677-4235 (phone)
919-677-4200 (fax)
jhauge@ncha.org
http://www.ncha.org

# *Attachment 4*

*Comments in Opposition from*
*Cumberland County Hospital System, Inc.*
*d/b/a Cape Fear Valley Health System*
*Regarding FirstHealth of the Carolinas, Inc.*
*Certificate of Need Application (Project I.D. # N-8690-11)*
*Submitted June 15, 2011 for July 1, 2011 Review Cycle*

State Outpatients PivotTable Report
Database: NC Emergency Dept. 10/01/2010 - 12/31/2010
Area Selection: Primary Market
Selected Facility: Cape Fear Valley Health System

| BillType | Description |
|---|---|
| 111 | Hospital Inpatient, Including Medicare Part A Original Bill |
| 117 | Hospital Inpatient, Including Medicare Part A Replacement Bill |
| 121 | Hospital Inpatient, Medicare Part B only, Original Bill |
| 127 | Hospital Inpatient, Medicare Part B only, Replacement Bill |

State Data Analyst 2.13
SDAT2017.SQP


| | |
|---|---|
| DX3ProdLine | (All) |
| ZIPCode | (All) |
| ZIPCity | (All) |
| BillType | (All) |

| | | Data | | | |
|---|---|---|---|---|---|
| County | HospitalName | Patients | %Down | Total Charges | Avg. Charges |
| Cumberland | Betsy Johnson Memorial Hospital | 47 | 1.1% | $752,419 | $16,009 |
| | Brunswick Hospital | 2 | 0.0% | $20,049 | $10,024 |
| | Cape Fear Valley Health System | 3,979 | 92.8% | $137,351,388 | $34,519 |
| | CarolinaEast Medical Center | 1 | 0.0% | $7,644 | $7,644 |
| | Carolinas HealthCare System Carolinas Me | 4 | 0.1% | $92,255 | $23,064 |
| | Carteret County General Hospital | 1 | 0.0% | $11,132 | $11,132 |
| | Central Carolina Hospital | 1 | 0.0% | $8,711 | $8,711 |
| | Duke Raleigh Hospital | 1 | 0.0% | $30,935 | $30,935 |
| | Duke University Medical Center | 34 | 0.8% | $1,259,675 | $37,049 |
| | Durham Regional Hospital | 2 | 0.0% | $61,804 | $30,902 |
| | First Health Moore Regional Hospital | 53 | 1.2% | $1,062,564 | $20,048 |
| | Forsyth Memorial Hospital | 1 | 0.0% | $14,843 | $14,843 |
| | Gaston Memorial Hospital | 1 | 0.0% | $10,931 | $10,931 |
| | High Point Regional Hospital | 1 | 0.0% | $20,830 | $20,830 |
| | Johnston Memorial Hospital | 2 | 0.0% | $54,597 | $27,299 |
| | Lenoir Memorial Hospital | 1 | 0.0% | $4,914 | $4,914 |
| | Moses Cone H. Memorial Hospital - Moses | 4 | 0.1% | $85,322 | $21,330 |
| | Nash Health Care System | 3 | 0.1% | $45,207 | $15,069 |
| | New Hanover Regional Medical Center | 4 | 0.1% | $376,204 | $94,051 |
| | Pitt County Memorial Hospital | 6 | 0.1% | $574,905 | $95,818 |
| | Presbyterian Hospital | 1 | 0.0% | $12,716 | $12,716 |
| | Rex Healthcare | 4 | 0.1% | $89,290 | $22,322 |
| | Sampson County Memorial Hospital | 8 | 0.2% | $152,585 | $19,073 |
| | Scotland Memorial Hospital | 4 | 0.1% | $105,202 | $26,300 |
| | Southeastern Regional Medical Center | 15 | 0.3% | $327,135 | $21,809 |
| | The North Carolina Baptist Hospital | 1 | 0.0% | $19,213 | $19,213 |
| | University of North Carolina Hospitals | 95 | 2.2% | $4,192,559 | $44,132 |
| | WakeMed | 10 | 0.2% | $351,130 | $35,113 |
| | Wayne Memorial Hospital | 1 | 0.0% | $19,989 | $19,989 |
| Cumberland Total | | 4,287 | 100.0% | $147,116,149 | $34,317 |
| Grand Total | | 4,287 | 100.0% | $147,116,149 | $34,317 |

State Outpatients PivotTable Report
Database: NC Emergency Dept. 10/01/2010 - 12/31/2010
Area Selection: Secondary Service Area
Selected Facility: Cape Fear Valley Health System

| BillType | Description |
|---|---|
| 111 | Hospital Inpatient, Including Medicare Part A Original Bill |
| 117 | Hospital Inpatient, Including Medicare Part A Replacement Bill |
| 121 | Hospital Inpatient, Medicare Part B only, Original Bill |
| 127 | Hospital Inpatient, Medicare Part B only, Replacement Bill |



| | |
|---|---|
| DX3ProdLine | (All) |
| ZIPCode | (All) |
| ZIPCity | (All) |
| BillType | (All) |

| | | Data | | | |
|---|---|---|---|---|---|
| County | HospitalName | Patients | %Down | Total Charges | Avg. Charges |
| Robeson | Bladen County Hospital | 1 | 0.0% | $5,889 | $5,889 |
| | Brunswick Hospital | 1 | 0.0% | $4,391 | $4,391 |
| | Cape Fear Valley Health System | 298 | 7.4% | $10,294,854 | $34,546 |
| | Carolinas HealthCare System Carolinas Me | 13 | 0.3% | $728,766 | $56,059 |
| | Columbus Regional Healthcare System | 4 | 0.1% | $177,426 | $44,356 |
| | Duke Raleigh Hospital | 1 | 0.0% | $14,566 | $14,566 |
| | Duke University Medical Center | 32 | 0.8% | $1,457,604 | $45,550 |
| | Durham Regional Hospital | 1 | 0.0% | $9,423 | $9,423 |
| | First Health Moore Regional Hospital | 159 | 4.0% | $4,230,729 | $26,608 |
| | First Health Richmond Memorial Hospital | 1 | 0.0% | $5,137 | $5,137 |
| | Granville Medical Center | 1 | 0.0% | $8,126 | $8,126 |
| | High Point Regional Hospital | 1 | 0.0% | $30,264 | $30,264 |
| | Moses Cone H. Memorial Hospital - Moses | 1 | 0.0% | $7,001 | $7,001 |
| | New Hanover Regional Medical Center | 2 | 0.0% | $223,605 | $111,802 |
| | Pitt County Memorial Hospital | 3 | 0.1% | $38,043 | $12,681 |
| | Presbyterian Hospital Huntersville | 1 | 0.0% | $9,032 | $9,032 |
| | Rex Healthcare | 3 | 0.1% | $136,380 | $45,460 |
| | Scotland Memorial Hospital | 287 | 7.1% | $5,533,354 | $19,280 |
| | Southeastern Regional Medical Center | 2,537 | 63.1% | $60,232,098 | $23,741 |
| | The North Carolina Baptist Hospital | 4 | 0.1% | $91,627 | $22,907 |
| | Union Regional Medical Center | 1 | 0.0% | $25,197 | $25,197 |
| | University of North Carolina Hospitals | 57 | 1.4% | $2,484,718 | $43,592 |
| | WakeMed | 1 | 0.0% | $25,517 | $25,517 |
| Robeson Total | | 3,410 | 84.8% | $85,773,748 | $25,154 |
| Hoke | Cape Fear Valley Health System | 225 | 5.6% | $6,732,412 | $29,922 |
| | Carolinas HealthCare System Carolinas Me | 1 | 0.0% | $127,601 | $127,601 |
| | Duke University Medical Center | 3 | 0.1% | $100,051 | $33,350 |
| | First Health Moore Regional Hospital | 352 | 8.8% | $8,360,002 | $23,750 |
| | First Health Richmond Memorial Hospital | 1 | 0.0% | $9,336 | $9,336 |
| | Iredell Memorial Hospital | 3 | 0.1% | $244,564 | $81,521 |
| | Mission Hospital | 1 | 0.0% | $43,376 | $43,376 |
| | Moses Cone H. Memorial Hospital - Moses | 1 | 0.0% | $6,250 | $6,250 |
| | Presbyterian Hospital | 1 | 0.0% | $13,464 | $13,464 |
| | Scotland Memorial Hospital | 10 | 0.2% | $326,707 | $32,671 |
| | Southeastern Regional Medical Center | 2 | 0.0% | $40,181 | $20,091 |
| | University of North Carolina Hospitals | 11 | 0.3% | $286,317 | $26,029 |
| | WakeMed Cary | 1 | 0.0% | $13,581 | $13,581 |
| Hoke Total | | 612 | 15.2% | $16,303,842 | $26,640 |
| Grand Total | | 4,022 | 100.0% | $102,077,590 | $25,380 |

State Outpatients PivotTable Report
Database: NC Emergency Dept. 10/01/2010 - 12/31/2010
Area Selection: Scotland County
Selected Facility: Cape Fear Valley Health System

| BillType | Description |
|---|---|
| 111 | Hospital Inpatient, Including Medicare Part A Original Bill |
| 117 | Hospital Inpatient, Including Medicare Part A Replacement Bill |
| 121 | Hospital Inpatient, Medicare Part B only, Original Bill |
| 127 | Hospital Inpatient, Medicare Part B only, Replacement Bill |

State Data Analyst 2.13
SDAT2017.SQP


| | |
|---|---|
| DX3ProdLine | (All) |
| ZIPCode | (All) |
| ZIPCity | (All) |
| BillType | (All) |

| | | Data | | | |
|---|---|---|---|---|---|
| County | HospitalName | Patients | %Down | Total Charges | Avg. Charges |
| Scotland | Cape Fear Valley Health System | 12 | 1.7% | $585,542 | $48,795 |
| | Carolinas HealthCare System Carolinas Me | 16 | 2.3% | $996,999 | $62,312 |
| | Duke University Medical Center | 3 | 0.4% | $82,210 | $27,403 |
| | First Health Moore Regional Hospital | 99 | 14.0% | $2,865,295 | $28,942 |
| | First Health Richmond Memorial Hospital | 4 | 0.6% | $35,855 | $8,964 |
| | New Hanover Regional Medical Center | 1 | 0.1% | $67,189 | $67,189 |
| | Presbyterian Hospital | 3 | 0.4% | $103,583 | $34,528 |
| | Sandhills Regional Medical Center | 49 | 7.0% | $872,174 | $17,799 |
| | Scotland Memorial Hospital | 483 | 68.5% | $9,748,838 | $20,184 |
| | Southeastern Regional Medical Center | 15 | 2.1% | $265,089 | $17,673 |
| | The North Carolina Baptist Hospital | 1 | 0.1% | $98,461 | $98,461 |
| | University of North Carolina Hospitals | 19 | 2.7% | $845,485 | $44,499 |
| Scotland Total | | 705 | 100.0% | $16,566,720 | $23,499 |
| Grand Total | | 705 | 100.0% | $16,566,720 | $23,499 |