

**May 31, 2011 Comments from Novant Health, Inc.  
Regarding WakeMed Raleigh Hospital, Inc.  
Acute Care Bed Addition (79 New Acute Beds)  
Certificate of Need Application (J-8660-11)  
Submitted April 15, 2011 for May 1, 2011 Review**

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In accordance with N.C.G.S. Section 131E-185(a1)(1), Novant Health, Inc. submits the following comments regarding the CON Application of WakeMed Raleigh Hospital, Inc. (J-8660-11).

## **I. Introduction**

The following applications were submitted in response to the need determination identified in the *2011 State Medical Facilities Plan (2011 SMFP)* for 101 new acute care beds in Wake County:

- J-8660-11: WakeMed to spend \$57.5 Million to add 79 beds at its main Raleigh campus
- J-8661-11: WakeMed Cary to spend \$2.1 Million to add 22 new acute beds
- J-8667-11: Rex Healthcare to spend \$278.8 Million to add 11 beds, replace 115 acute care beds, and change in scope for Project ID J-8532-10 (cardiovascular renovation expansion project)
- J-8669-11: Rex Healthcare to spend \$136.6 Million to build a separately licensed 50-bed hospital in Holly Springs
- J-8670-11: Rex Healthcare to spend \$102.2 Million on a separately licensed 40-bed hospital in Wakefield
- J-8673-11: Holly Springs Hospital, LLC to build a 50-bed \$77.7 Million hospital in Holly Springs

WakeMed Raleigh Hospital (WMR) proposes to add 79 medical/surgical acute care beds at its existing facility in Raleigh (referred to herein as "WMR Application" or "this Application" or the "Application"). The proposed project involves the addition of two new patient floors to the E Tower, and a fifth floor to be used as a mechanical interstitial space to enclose the roof of E Tower. In addition to the mechanical interstitial space, a sixth and seventh floors will be built to accommodate the 79 additional beds. The sixth and seventh floors will contain 40 and 39 acute care beds, respectively. The sixth floor of the E Tower will be dedicated to neuroscience patients, including stroke patients. The seventh floor will have medical/surgical acute care beds. If approved, WMR will have an inventory of 646 licensed acute care beds on its Raleigh campus. See CON Application at pages 3-4 and 14.

## II. CON Review Criteria

### N.C.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.*

The WMR Application is non-conforming to Criterion (3) because it overstates the need for the proposed new 79 acute care beds. The WMR Application also contains some inconsistencies, which are noted below.

#### A. Acute Care Utilization is Declining at WakeMed Raleigh

##### 1. License Renewal Application Data for the Last Six Fiscal Years

The following table shows acute care utilization reported by WMR in its annual Hospital License Renewal Applications (LRAs) over the last six federal fiscal years.

**WakeMed Raleigh Acute Care Bed Utilization  
October 2004 – September 2010**

Oct-Sept	2005	2006	2007	2008	2009	2010	CAGR 2005- 2010	CAGR 2007- 2010	CAGR 2008- 2010
Days of Care	154,054	163,947	172,630	177,004	174,046	167,614	1.7%	-1.0%	-2.7%
% Change		6.4%	5.3%	2.5%	-1.7%	-3.7%			
Licensed Beds	515	515	515	515	515	575			
ADC	422.1	449.2	473.0	484.9	476.8	459.2			
Occupancy	82.0%	87.2%	91.8%	94.2%	92.6%	79.9%			

Source: Attachment 1, Table 1

The previous table shows that days of care at WMR have declined during the last two fiscal years, with the most recent decline in FFY 2010 of nearly 4% from the prior year. Those declines results in a negative CAGR for WakeMed acute patient days for FFY 2007-FFY 2010 and FFY 2008-FFY 2010, respectively. WMR added 60 acute care beds on June 3, 2010 at its Raleigh campus, based on CON Applications filed in 2004 and 2007 for new acute beds in Wake County. In addition, WakeMed has CON approval to add 41 new acute beds at WakeMed North (based on new acute beds identified in the 2008 SMFP for Wake County), but those bed are not yet in operation. In view of declining volume and a sizeable inventory addition in FFY 2010, it is unreasonable for

WMR to request an increase of 79 new acute care beds with a capital expenditure of \$57.5 million.

Furthermore, WMR does not provide any new data in its April 15, 2011 CON Application to show that trends in the first six months of FFY 2011 have changed. WakeMed does not provide any updated calendar year comparisons to show that 2011 has resulted in the reversed acute patient day trends as projected in Sections III and IV of the Application. The only updated data provided by WakeMed is on page 68 regarding ED patients that have left without being seen.

## 2. Inconsistent Historic Data Reported in WMR Application

It is important to recognize inconsistencies in the historic data reported on pages 53 and 96 of the Application, which inconsistencies are highlighted in the following table.

**WakeMed Raleigh Acute Care Bed Utilization  
October 2007 – September 2010**

<b>Oct-Sept Data Years</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>CAGR 2008-2010</b>
Discharges	34,983	36,277	35,541	0.8%
% Change		3.7%	-2.0%	
Days of Care	178,132	176,654	168,495	-2.7%
% Change		-0.8%	-4.6%	
ALOS	5.09	4.87	4.74	
ADC	488.0	484.0	461.6	
Licensed Beds	515	515	575	
Occupancy	94.8%	94.0%	80.3%	

Source: CON Application J-8660-11, pages 53, 96

Note: Data in this table highlighted in orange not match data reported in 2009-2011 LRAs

The data highlighted in the previous table are inconsistent with data reported to the state by WMR on its 2009-2011 LRAs. There is no acknowledgement or explanation by WMR regarding this inconsistency in WMR's historical acute patient days. It is noteworthy that the acute days of care in the previous table show a larger decline at WMR between FFY 2009 and FFY 2010 (-4.6%) than in the data reported in the 2010-2011 LRAs which show a (-3.7%) decline from FFY 2009 and FFY 2010. Additionally, the previous table documents a loss of 2% in inpatient discharges from WMR in FFY 2010.

### B. Projected WakeMed Growth Rates Are Unreasonable

As discussed in the previous section and shown in the following table, the historical inpatient day CAGR for WMR was negative from FFY 2007 through FFY 2010 and from FFY 2008 through FFY 2010.

### WakeMed – Inpatient Day CAGR – All Inpatient Facilities

Historical Inpatient Day Growth Rates									
Oct-Sept Years	2005	2006	2007	2008	2009	2010	CAGR 2005- 2010	CAGR 2007- 2010	CAGR 2008- 2010
WMRaleigh	154,054	163,947	172,630	177,004	174,046	167,614	1.7%	-1.0%	-2.7%
Annual Growth Rate		6.4%	5.3%	2.5%	-1.7%	-3.7%			
WMCary	31,765	33,482	35,815	38,496	40,927	44,469	7.0%	7.5%	7.5%
Annual Growth Rate		5.4%	7.0%	7.5%	6.3%	8.7%			
Combined	185,819	197,429	208,445	215,500	214,973	212,083	2.7%	0.6%	-0.8%
Annual Growth Rate		6.2%	5.6%	3.4%	-0.2%	-1.3%			
Projected Inpatient Day Growth Rates									
Oct-Sept	2011	2012	2013	2014	2015	2016	CAGR 2010- 2016		
WMRaleigh	178,831	185,191	191,542	186,239	189,727	194,453	2.5%		
Annual Growth Rate	<b>6.7%</b>	3.6%	3.4%	-2.8%	1.9%	2.5%			
WMCary	44,857	46,633	48,105	49,465	51,203	52,963	3.0%		
Annual Growth Rate	0.87%	4.0%	3.2%	2.8%	3.5%	3.4%			
WMNorth				11,537	14,409	16,087			
Annual Growth Rate					24.9%	11.6%			
Combined				247,241	255,339	263,503	<b>3.7%</b>		

Source: Annual LRAs and pages 54 and 55 in Application

Projected compound annual growth (CAGR) in inpatient days in the Application for all WakeMed inpatient facilities exceeds 3.7% as shown in the previous table. However, historical CAGR for acute inpatient days at all WakeMed inpatient facilities was negative from FFY2008 to FFY2010, and was only 0.6% for FFY2007 to FFY2010. Even with the addition of 60 additional acute care beds in June 2010, total patient days decreased from FFY 2009 to FFY 2010.

In addition, from FFY 2010 to FFY 2011 WakeMed has projected a 6.7% increase in patient days at WakeMed Raleigh as shown in the previous table. This Application was submitted April 15, 2010, more than six months into FFY 2011, however **WakeMed provided no updated FFY 2011 data to substantiate or explain this level of growth at WakeMed Raleigh from October 2010 through March 2011.**

Thus, WMR has used an unexplained and unsupported acute patient day growth rate in its methodology to demonstrate the need for 79 new acute beds at WakeMed Raleigh. WakeMed's Application contains unreasonable and unsubstantiated projections, as discussed below, and significantly overstated projected growth rates for future inpatient utilization and should be found non-conforming denied.

Furthermore, the WakeMed FFY 2010 Thomson Reuters data in the first draft of Table 5A for the SMFP 2012<sup>1</sup>, takes into account the drop in acute inpatient days at WMR from FFY 2009 to FFY 2010, and shows a need for only 2 new acute beds at WakeMed in Raleigh in FFY 2014. The variance between the FFY 2010 WakeMed acute inpatient days reported on WakeMed's 2011 LRA and the Thomson Data in Table 5A is 0.1%. Thus, it appears that Table 5A is a valid benchmark for future bed need at WakeMed based on more current data.

### **C. Age Specific Use Rate Projections Overstate Future Acute Inpatient Days Utilization**

WMR chose to use a methodology that relies on age group-specific discharges, population, and use rates. Age groups are: 0-17, 18-44, 45-64, and 65+. See WRM CON Application at Section II, pages 42-55.

Furthermore, despite having used age group-specific population and age group-specific inpatient discharge data to calculate age group-specific discharge use rates by County, WMR uses non-age specific market share which also could impact projected utilization. There is no acknowledgement or explanation of that assumption (or inconsistency) in the WMR methodology.

It is reasonable to assume that the sum of projected utilization for the four age groups equals total projected utilization for all age groups. Consequently, the sum of projected discharges for the four age groups shown in Table 4 (page 47) will equal total projected discharges for the total population in a given year.

As shown in the following table, utilizing age-specific inpatient discharge use rates to project future inpatient discharges results in an unprecedented increase in total population inpatient discharge use rates for every county in the defined service area. See the table below.

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<sup>1</sup>Draft SMFP 2012 Table 5A presented at the SHCC Meeting on May 25, 2011.

**WakeMed Raleigh County Specific Expected Inpatient Discharges  
Sum of Four Age Groups and Total Calculated Discharge Use Rate  
October 2010 – September 2016**

WakeMed Base Data: Thomson Reuters Discharge Data* - Sum of Age Groups	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Wake	73,940	76,883	79,805	82,674	85,595	88,548
Population	947,459	974,978	1,002,495	1,030,015	1,057,534	1,085,054
Total Use Rate	78.0	78.9	79.6	80.3	80.9	81.6
Johnston	16,682	17,305	17,947	18,580	19,220	19,854
Population	178,933	184,266	189,599	194,933	200,269	205,601
Total Use Rate	93.2	93.9	94.7	95.3	96.0	96.6
Harnett	12,110	12,522	12,928	13,337	13,757	14,185
Population	119,459	122,761	126,085	129,398	132,717	136,032
Total Use Rate	101.4	102.0	102.5	103.1	103.7	104.3
Franklin	5,503	5,646	5,794	5,939	6,087	6,234
Population	61,393	62,492	63,588	64,683	65,779	66,873
Total Use Rate	89.6	90.3	91.1	91.8	92.5	93.2
Sampson	7,496	7,576	7,670	7,753	7,842	7,933
Population	66,451	66,974	67,498	68,020	68,543	69,065
Total Use Rate	112.8	113.1	113.6	114.0	114.4	114.9
Nash	12,466	12,726	12,984	13,233	13,494	13,736
Population	98,304	99,580	100,857	102,133	103,408	104,684
Total Use Rate	126.8	127.8	128.7	129.6	130.5	131.2
Wayne	15,095	15,211	15,318	15,420	15,525	15,643
Population	117,359	117,758	118,162	118,566	118,969	119,370
Total Use Rate	128.6	129.2	129.6	130.1	130.5	131.0
Wilson	10,502	10,647	10,807	10,950	11,111	11,255
Population	81,311	82,043	82,772	83,501	84,233	84,963
Total Use Rate	129.2	129.8	130.6	131.1	131.9	132.5
Total Eight Counties	153,794	158,516	163,253	167,886	172,631	177,388
Population	1,670,669	1,710,852	1,751,056	1,791,249	1,831,452	1,871,642
Total Use Rate	92.1	92.7	93.2	93.7	94.3	94.8

Source: Attachment 1, Table 13 \* Exclusions: Normal Newborns (795) and Rehab (945-946)

Please note that the previous table shows the inpatient discharge use rate increases in every county in the defined service area each fiscal year through FFY 2016. **This is an unreasonable assumption since total county specific inpatient discharge use rates have decreased continually since FFY 2007 for every county in the defined service area as shown in the following table.**

**WakeMed Raleigh County Specific Historical Discharges  
Sum of Four Age Groups and Total Calculated Discharge Use Rate  
October 2006 – September 2010**

<b>WakeMed Base Data: Thomson Reuters Discharge Data* - Sum of Age Groups</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>
Wake	67,593	69,966	71,940	71,286
Population	823,616	856,927	882,344	907,314
Total Use Rate	82.1	81.6	81.5	78.6
Johnston	16,335	16,607	15,991	16,104
Population	154,635	160,062	165,111	170,151
Total Use Rate	105.6	103.8	96.8	94.6
Harnett	11,318	11,331	11,613	11,721
Population	105,310	108,490	112,003	115,579
Total Use Rate	107.5	104.4	103.7	101.4
Franklin	5,927	5,976	5,703	5,372
Population	56,762	58,463	59,502	60,978
Total Use Rate	104.4	102.2	95.8	88.1
Sampson	8,069	6,858	7,569	7,420
Population	62,525	63,191	63,316	63,481
Total Use Rate	129.1	108.5	119.5	116.9
Nash	12,574	12,904	12,687	12,244
Population	92,282	93,432	94,745	107,222
Total Use Rate	136.3	138.1	133.9	114.2
Wayne	15,091	15,035	15,083	15,006
Population	118,778	120,000	121,852	130,381
Total Use Rate	127.1	125.3	123.8	115.1
Wilson	10,214	10,038	10,110	10,381
Population	78,325	79,626	80,677	88,225
Total Use Rate	130.4	126.1	125.3	117.7
Total	147,121	148,715	150,696	149,534
Population	1,492,233	1,540,191	1,579,550	1,643,331
Total Use Rate	98.6	96.6	95.4	91.0

Source: **Attachment 1, Table 18**; CON Application J-8660-11, page 47

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

As shown in the above table six of the eight counties in the WMR service area experienced annual decreases in total inpatient discharge use rates from 2007 through 2010. Two counties had use rates that fluctuated during this timeframe but ultimately resulted in decreased inpatient discharge use rates across the four year time frame.

Age and population growth are two factors which impact the inpatient use rates on page 63 of the Application. WakeMed assumes that the aging population and the higher use rates by age equals increased total utilization. However, as reflected in the previous table the opposite is in fact true. From 2007 to 2010 even as the baby boomer generation began entering the 65+ age cohort, total inpatient discharge use rates went down. On

page 68, WakeMed blames the economy for changes in utilization, however, the 65+ population, which utilizes more services, has health coverage through Medicare, so the 65+ age group “that experience[s] high inpatient use rates,” as stated on page 63, has health insurance and is not as impacted by changes in the economy. While the economy has had an impact on inpatient utilization, it is not the only factor which has, as evidenced by the decreases in inpatient use rates prior to 2009 and 2010.

In addition to the economy and age, technology, prevention, pharmaceuticals, health status and many other variables impact inpatient utilization. As shown in Attachment 2, many of Wake County’s key health indicators, including Age-Adjusted Stroke Death Rates, have improved, which also supports continued decreases in inpatient utilization rates. WakeMed did not address the impact of these factors on its projected increases in the acute inpatient use rates.

In addition, ongoing change in the provision of health care services results in shifts from inpatient to outpatient care. The Affordable Care Act of 2010 includes many provisions for improved preventive care and end of life care, as well as significant penalties for readmissions. All of these factors will also impact future inpatient volumes and were not addressed by WMR as part of its 9-Step acute bed need method at pages 42-56 of the WMR CON Application.

Based upon historical trends the expectation, is for either no growth in annual inpatient discharge use rates or potential decreases in annual inpatient discharge use rates. WakeMed Raleigh did not address these factors in the assumptions in its need method. Therefore, the use of increasing inpatient use rates in the WMR methodology is unreasonable and unsupported with the result that it overstates projected inpatient hospital discharges which leads to overstated patient days for WMR and WMC.

#### **D. WMR Acute Care Volume in Project Years 2 and 3 Increases Despite Volume Shift to WakeMed North**

According to the Application, WakeMed North is expected to open in FY 2014. At which time, 20 acute care beds will shift from WMR to WakeMed North, and acute care volume will shift from WMR to WakeMed North.

The following table shows projected utilization of WMR through FY 2016.



**WakeMed Raleigh Projected Utilization  
October 2010 – September 2016**

<b>Oct-Sept</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Discharges	36,721	38,027	39,331	37,243	37,866	38,768
% Change		3.6%	3.4%	-5.3%	1.7%	2.4%
Days of Care	178,831	185,191	191,542	186,239	189,727	194,453
% Change		3.6%	3.4%	-2.8%	1.9%	2.5%
ALOS	4.87	4.87	4.87	5.00	5.01	5.02
Licensed Beds	575	575	587	646	646	646
ADC	489.9	507.4	524.8	510.2	519.8	531.3
Occupancy	85.2%	88.2%	89.4%	79.0%	80.5%	82.2%

Source: Attachment 1, **Table 3**

The previous table shows that WMR will experience only a one year decline in volume when WakeMed North opens in FY 2014. WMR projects its utilization in FYs 2015 and 2016 (Project Years 2 and 3) will increase. In its April 2011 CON Application, WMR's use rate methodology ensures that volume continues to grow despite a volume shift to WakeMed North beginning in FY 2014 and continuing each subsequent fiscal year.

As will be discussed in more detail below, WMR's projections are actually overstated due to its use of Thomson Acute Care patient days data that inappropriately includes mental health and substance abuse discharges, as part of the base year acute patient days.

**E. Thomson Acute Care Data Set Used by WakeMed Raleigh includes Substance Abuse and Mental Health Inpatient Discharges**

**1. Over-inclusive Thomson Acute Care Discharge Data Set**

WMR opts to use county inpatient discharge data from the Thomson Reuters database as the basis for its methodology. That data is used by WMR to:

- Determine acute care discharge volume
- Calculate use rates
- Determine historical market share and patient origin
- Project market share and patient origin.

It is important to recognize that the Thomson Reuters database used by WMR includes mental health and substance abuse (DRG Numbers 880-887 and 894-897) discharge records.<sup>2</sup>

<sup>2</sup>CON Application J-8660-11, pages 44 - 45, note (a)

Page 46 of the 2011 SMFP states that “[r]ecords that are coded as **substance abuse, psychiatric** or rehabilitation **discharges are excluded**” from the days of care used in the Acute Care Bed Need Methodology. [**Emphasis added.**]

WMR defines an eight-county service area. The following table shows a comparison of county discharge data used by WMR as the basis for its methodology, and the Thomson data with substance abuse and mental health discharges excluded.

**WakeMed Raleigh Comparison of Service Area Discharge Data  
October 2009 – September 2010**

County	WakeMed Base Data: Thomson Reuters Discharge Data*	Acute Care Need Methodology: Thomson Reuters Discharge Data**	Numerical Difference	Percent Difference
Wake	71,286	67,971	3,315	4.9%
Johnston	16,104	15,345	759	4.9%
Harnett	11,721	11,349	372	3.3%
Franklin	5,372	5,182	190	3.7%
Sampson	7,420	7,258	162	2.2%
Nash	12,244	11,639	605	5.2%
Wayne	15,006	14,391	615	4.3%
Wilson	10,381	9,978	403	4.0%
Total	149,534	143,113	6,421	4.5%

Source: Attachment 1, Table 9

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

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

The previous table shows that there is nearly a 5% difference between base data used by WMR and the Thomson data that excludes substance abuse and mental health discharges. That is a statistically significant difference. This difference causes the WakeMed future acute patient days volume projections to be unreasonable and unreliable from Step 2 through Step 9 of WakeMed’s 9-Step need method, set forth at pages 42-56 of the WMR CON Application. Thus, WakeMed fails to demonstrate the need for 79 new acute beds.

**2. Higher County Discharge Use Rate per 1,000**

Each of the eight counties in the defined WakeMed Raleigh Service Area is similarly affected: over-inclusive acute care discharge volume (that incorrectly includes substance abuse and mental health inpatient days) results in a higher use rate per 1,000 for each county, as shown in the following table.

**WakeMed Raleigh Comparison of Service Area Discharge Use Rate per 1,000  
October 2009 – September 2010**

<b>County</b>	<b>WakeMed Base Data: Thomson Reuters Discharge Data*</b>	<b>Acute Care Need Methodology: Thomson Reuters Discharge Data**</b>	<b>Numeric Difference</b>	<b>Percent Difference</b>
<b>Wake County</b>				
Discharges	71,286	67,971	3,315	4.9%
Total Population	919,938	919,938		
Use Rate per 1,000	77.5	73.9		4.9%
<b>Johnston County</b>				
Discharges	16,104	15,345	759	4.9%
Total Population	173,600	173,600		
Use Rate per 1,000	92.8	88.4		5.0%
<b>Harnett County</b>				
Discharges	11,721	11,349	372	3.3%
Total Population	116,118	116,118		
Use Rate per 1,000	100.9	97.7		3.2%
<b>Franklin County</b>				
Discharges	5,372	5,182	190	3.7%
Total Population	60,293	60,293		
Use Rate per 1,000	89.1	85.9		3.7%
<b>Sampson County</b>				
Discharges	7,420	7,258	162	2.2%
Total Population	65,930	65,930		
Use Rate per 1,000	112.5	110.1		2.2%
<b>Nash County</b>				
Discharges	12,244	11,639	605	5.2%
Total Population	97,030	97,030		
Use Rate per 1,000	126.2	120.0		5.2%
<b>Wayne County</b>				
Discharges	15,006	14,391	615	4.3%
Total Population	116,955	116,955		
Use Rate per 1,000	128.3	123.0		4.3%
<b>Wilson County</b>				
Discharges	10,381	9,978	403	4.0%
Total Population	80,582	80,582		
Use Rate per 1,000	128.8	123.8		4.0%
<b>Total Service Area</b>				
Discharges	149,534	143,113	6,421	4.5%
Total Population	1,630,446	1,630,446		
Use Rate per 1,000	91.7	87.8		4.5%

Source: **Attachment 1, Table 10**

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

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

The previous table shows that use rates used by WMR are nearly 5% higher than the use rates calculated using Thomson data that excludes substance abuse and mental health discharges from the standard acute patient days database. That is a statistically significant difference. This difference causes the WakeMed future acute patient days volume projections to be unreasonable and unreliable from Step 2 through Step 9 of WakeMed's 9-Step need method, set forth at pages 42-56 of the WMR CON Application. Thus, WakeMed fails to demonstrate the need for 79 new acute beds.

#### **N.C.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.*

Each applicant has a burden of presenting, evaluating, and demonstrating that the least costly or most effective alternative has been proposed. Since this application shows that the project is not needed under Criterion 3, it is not the least costly or most effective alternative under Criterion 4.

In addition, WMR has at least one alternative method of meeting the needs of patients at WMR, which method is less costly and more effective than the proposed addition of 79 new acute care beds. One alternative is to add fewer than 79 new acute care beds – an alternative that requires a lower capital expenditure.

For the reasons discussed, the WMR Application does not conform 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.*

As discussed above, WakeMed fails to satisfy Criterion 3 because its projections are unreasonable and unsupported. Since the volume projections are integral to the financial projections, WakeMed's unreasonable volumes cause the project to be financially infeasible, and therefore non-conforming with 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, WMR uses a dataset that is over-inclusive (by incorrectly including substance abuse and mental health days) and results in overstated acute patient day projections. Overstated projections are evidence of an unnecessary duplication of existing health service capabilities and facilities.

As discussed in the context of Criterion (4) above, WMR has at least one alternative method of meeting the needs of patients at WMR, which method is less costly and more effective than the proposed addition of 79 new acute care beds. Having a less costly and more effective alternative method for meeting the needs of patients at WMR is evidence that the proposed project results in unnecessary duplication of existing health service capabilities and facilities.

For the reasons discussed, the WMR Application does not conform to Criterion (6).

### **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.*

The proposed WakeMed project is not needed, is not the least costly or most effective alternative, is not financially feasible, and unnecessarily duplicates existing services. Based on these multiple failures, the WakeMed 79-bed project is non-conforming with Criterion 18a.

The proposed Novant Holly Springs Hospital is the only project which will introduce a new health care competitor into the Wake County market. Novant Health, the parent organization of Holly Springs Hospital has a long history of providing accessible care, cost efficient operations and high quality care.

The enhanced competition offered by the Novant Holly Springs Hospital brings a new approach in community hospital design that will be less costly to construct initially, less expensive to operate and maintain, and less costly to expand or renovate, and less disruptive to the ongoing provision of hospital-based services during expansion or renovation. The design incorporates the state of the art AIA recommendations for infection control (includes biohazard control, hand washing, infection control risk assessments, construction materials), electronic medical records, therapeutic environments (environment of care, green design and sustainability), IT/Healthcare technology and communications (includes patient documentation, imaging), safety and security, dimensional consideration (includes space planning), energy and cost-effectiveness.

In addition, Novant's continued commitment to increasing efficiencies has made Novant a leader in the field. Novant will bring this experience and disciplined approach to the operation of the proposed Holly Springs Hospital to provide a competitive alternative

which will have a positive impact upon the cost effectiveness, quality, and access to the services proposed.

In addition, Novant Medical Group has a long successful history of providing high quality, cost effective services to residents of Triad, Coastal, and Triangle Regions of North Carolina, the Greater Charlotte Region (including North & South Carolina), and in northern Virginia . This experience and dedication to accessible community-based patient care is critical to expanding choice in the Wake County market.

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

##### **10A NCAC 14C .3803(a)**

As discussed in detail in the context of Criterion (3) above, WMR relies on age-specific discharge use rates, which result in overstated volume projections. WMR also incorrectly includes substance abuse and mental health inpatient days in its acute inpatient days database that is integral to the need method used in WakeMed's CON Application to demonstrate the need for 79 new acute beds. As a result of this acute days database error, there is nearly a 5% difference between base data used by WMR and the Thomson data that excludes substance abuse and mental health discharges. That is a statistically significant difference. This difference causes the WakeMed future acute patient day volume projections to be unreasonable and unreliable from Step 2 through Step 9 of WakeMed's 9-Step need method, set forth at pages 42-56 of the WMR CON Application. Thus, WakeMed fails to demonstrate the need for 79 new acute beds.

The projected utilization is unreasonable and overstated and the Application is therefore non-conforming to this rule.

#### **VII. Comparative Factors**

The Agency Findings in the competitive review in 2007 for Medical Park Hospital-Clemmons and NCBH Davie County Hospital Replacement facility provide comparative factors that should be considered in the review of the WakeMed, WakeMed Cary, and Rex Hospital, Rex Wakefield Hospital, the Rex Holly Springs Hospital, and the Novant Holly Springs Hospital CON Applications all filed on April 15, 2011 in response to a need determination in the 2011 SMFP for 101 New Acute Beds in Wake County. These factors include: Geographic Access, Facility Design, Scope of Services, Staffing, Charges/Revenues, Operating Costs, Access by Underserved Groups, Coordination with Existing Healthcare System, and Community Support. In addition, the Agency Findings for the eight competing CON Applications filed on August 15, 2008 to seek approval for the 41 new acute beds and the 4 new ORs identified in the 2008 SMFP for Wake County. That application included one set of comparative factors for the operating rooms and a separate set of comparative factors for the new acute beds. The Agency used the following comparative factors for the new Wake County ORs: Geographic Accessibility,

Demonstration of Need, Financial Feasibility, Coordination with Existing Health Care System, Access by Underserved Groups, Revenue, Operating Expenses, and Documentation of Physician Support. The comparative factors used by the Agency for the new Wake County acute beds were the same eight factors used by the Agency for the operating room comparison in 2008.

### **GEOGRAPHIC ACCESS**

The WakeMed proposes to expand capacity and services in Raleigh in central Wake County, where the majority of the existing acute beds in Wake County are already concentrated and plentiful. In contrast, the Novant Holly Springs Hospital is seeking approval for a 50-bed community hospital in southern Wake County, where currently there are no acute inpatient beds and no operating rooms. Currently, about 12% of the Wake County population resides in southern Wake County and 0% of the Wake County acute beds are located there today. Thus, the Novant Holly Springs Hospital project is superior in terms of creating enhanced geographic access for the proposed new acute beds in Wake County.

### **DEMONSTRATION OF NEED**

As discussed above in these comments the WakeMed acute patient day projected utilization for 79 new acute beds is unreasonable, unsupported, and unreliable under Criterion (3). Thus, WakeMed did not adequately demonstrate the need for the 79 new acute beds at the WakeMed location in central Wake County.

The Novant Holly Springs Hospital has adequately demonstrated that the patient days and surgical cases projected to be performed at Novant's HSH are reasonable and has adequately demonstrated that the population it proposes to serve has the need for the 50 new acute beds and 3 ORs in southern Wake County in the HSH service area. Thus, Novant's HSH is comparatively superior in terms of demonstration of need.

### **FINANCIAL FEASIBILITY**

As discussed above in the Criterion (3) section of these comments, WakeMed fails to satisfy Criterion (3) because its projections are unreasonable, unreliable and unsupported as discussed above in these comments. Since volume projections are integral to the financial projections, WakeMed's unreasonable volumes cause the project to be financially infeasible.

### **ACCESS BY UNDERSERVED GROUPS**

The Project Year 2 percentages of each applicant's projected percentage of entire hospital services to be provided to Medicare and Medicaid recipients, as stated in the applicants' responses to Question VI.14 are set forth in the table below.

<b>Applicant</b>	<b>Projected % of Hospital Services to Medicare Recipients in Year 2</b>	<b>Projected % of Hospital Services to Medicaid Recipients in Year 2</b>
WakeMed	32.06%	27.74%
Novant Holly Springs Hospital	31.15%	11.61%

With regard to Medicare recipients, Novant HSH and WakeMed project a similar Medicare payor mix percentage, with a difference between the two of less than one percentage point. WakeMed projects a higher percentage of hospital services to be provided to Medicaid recipients.

In Form B of the WakeMed System CON ProForma Revenue and Expense Statement projection, WakeMed Projects that its Charity Care Dollars (as deductions from Gross Patient Revenue) will drop from about \$243-\$278 Million annually during FFY 2010-FFY 2012 to \$156-\$180 Million annually during the first three project years (FFY 2014-FFY 2016). WakeMed attributes this to a “shift of patients from self-pay to Medicaid as a result of healthcare reform.” See the WakeMed CON Application at pages 175-176.

In addition, the WakeMed Charity Care policy which is found in Exhibit 40, pages 580-583. It specifies 100% discount off of charges for qualified individuals with annual household incomes less than 200% of the annual federal poverty level. It appears that the WakeMed Charity Care policy may take into consideration certain assets, beyond household income, in determining eligibility, since the policy asks for information about tax value of property, address listed on car registration, and rent receipts. The WakeMed Charity Care policy covers qualified individuals with annual household incomes greater than 200% FPL and up to 300% FPL with a sliding scale of discounts for hospital charges. For example, if household income is 250% of FPL, the patient may be eligible for a 60% discount of charges and if the annual household income is 300% of FPL the patient may be eligible for a 20% discount of charges. Annual household income for a family of four at 300% FPL is \$67,050 in 2011.

By comparison, Novant’s policies on Charity Care, Uninsured Discount, Catastrophic Discount & Payment Plan provide services for patients with limited financial resources, commensurate with community standards, as well as the availability of capacity to provide those services. Those four Charity Care-related are found in Novant HSH CON Application Exhibit 12 and will apply when HSH opens. For example, based on the government’s 2011 Federal Poverty Level (FPL) definitions, a family of four with annual income of \$67,050 is eligible for a full Charity Care write-off of all charges with the completion of a simple one-page form that is attached to the Novant Charity Care policy. Novant’s Charity Care policy does not include an assets test beyond annual household income. Recently, the Health Access Coalition of North Carolina at the North Carolina Justice Center ([www.ncjustice.org](http://www.ncjustice.org)) authored a study analyzing the charity care policies of North



Carolina's hospitals. The study shows that not all hospital charity care policies are alike; some are significantly more generous than others. Novant's charity care policy was specifically acknowledged for both its generosity (100% discount for a family of four living on annual household income at or below 300% of the FPL; and the policy also exceeds the Living Income Standard in all counties where Novant operates) and its transparency (i.e., Novant's Charity care policy is one of only a few healthcare systems in North Carolina that posts its Charity Care policy online).

These charity policies are the framework or portal by which access to services is enhanced for medically underserved populations. Based on the features of the WakeMed and Novant Charity Care policies, it appears that Novant has the more generous charity care policy, which will serve to enhance access for the populations that it proposes to serve in the Holly Springs market.

### **GROSS REVENUE**

Below is a comparison of Year 3 Inpatient Gross Revenue per Inpatient Day using the information provided by the applicants' responses to Question X.3:

- WakeMed Cary's Inpatient Gross Revenue Per Inpatient Day is \$8,134 in Year 3
- Novant HSH's Inpatient Gross Revenue Per Inpatient Day is \$6,516 in Year 3

Novant HSH projects the lowest Year 3 Inpatient Gross Revenue per Inpatient Day compared to WakeMed Cary and the other four applicants in the third year of operation. Thus, Novant HSH is comparatively superior to WakeMed Cary and the other applicants on this factor.

### **GROSS REVENUE**

Below is a comparison of Year 3 Inpatient Gross Revenue per Inpatient Day using the information provided by the applicants' responses to Question X.3:

- WakeMed's Inpatient Gross Revenue Per Inpatient Day is \$11,377 in Year 3
- Novant HSH's Inpatient Gross Revenue Per Inpatient Day is \$6,516 in Year 3

Novant HSH projects the lowest Year 3 Inpatient Gross Revenue per Inpatient Day compared to WakeMed and the other four applicants in the third year of operation. Thus, Novant HSH is comparatively superior to WakeMed and the other applicants on this factor.

### **NET REVENUE**

Below is a comparison of Year 3 Net Revenue per adjusted patient day using the information provided by the applicants' responses to Question X.3:

- WakeMed's net revenue per adjusted patient day is \$2,466 in Year 3

- Novant HSH's net revenue per adjusted patient day is \$2,728 in Year 3

WakeMed's net revenue per adjusted patient day is lower than that of Novant Holly Springs Hospital.

## **OPERATING EXPENSES**

Below is a comparison of Year 3 operating costs per adjusted patient day using the information provided by the applicants' responses to Question X.3:

- WakeMed's operating costs per adjusted patient day are \$2,397 in Year 3
- Novant Holly Springs Hospital's operating costs per adjusted patient day are \$2,464 in Year 3

Novant's HSH, as a proposed new hospital, projects a slightly higher operating expense per adjusted patient day than WakeMed, which is an existing Wake County provider. Of the three competing applications for new community hospitals (Novant HSH, Rex Hospital Holly Springs, and Rex Wakefield Hospital), Novant Holly Springs Hospital projects the lowest operating expense per adjusted patient day.

## **COMMUNITY SUPPORT**

At the time the WakeMed CON Application was filed on April 15, 2011, there appear to be about 61 community letters of support included in Exhibit 49. See WakeMed Application at pages 854-916, Exhibit 49. These letters include expressions of support from WakeMed employees, the Mayor of Raleigh, business and public sector leaders in Wake County, and others.

At the time the Novant Holly Springs Hospital CON Application was filed on April 15, 2011, there were about 375 letters of support from Novant Medical Group-Triangle patients and residents of southern Wake County and surrounding communities including Holly Springs, Fuquay-Varina, Apex, Cary, New Hill, Garner, Willow Springs, Lillington (Harnett County), and Angier (Harnett County). In addition, Novant HSH Exhibit 16 includes letters and resolutions of support from the Mayor of Holly Springs (page 1781), the Town Council of Holly Springs (page 1603), the Fuquay-Varina Board of Commissioners (page 1604), and Senator Richard Y. Stevens of the North Carolina General Assembly (page 1606). Also, during the comment period approximately two thousand additional community letters of support for the Novant Holly Springs Hospital were submitted to the CON Agency. These 2,001 letters of support are from residents of Holly Springs, Angier, Apex, Raleigh, Cary, Fuquay-Varina, Garner, New Hill, and Willow Springs. In total, the Novant Holly Springs Hospital project has demonstrated support with 2,376 community members support letters (375 +2001) and physician support letters representing 100 individual physicians, for a total of 2,476 expressions of support. It is clear that the Novant Holly Springs Hospital proposal has broad, deep, and sustained support from the communities that it proposes to serve.

## **DOCUMENTATION OF PHYSICIAN SUPPORT**

Based on the physician letters of support in the WakeMed CON Application at Exhibit 49, it appears there are about 200-250 letters of support from primary care, medical specialist, and surgical physicians, practicing in Wake, Orange, Johnston, Franklin, Harnett, and other surrounding counties. See the WakeMed CON Application at pages 651-841.

The Novant Holly Springs Hospital CON Application includes a HSH Chief of the Medical Staff letter, Medical Director/physician letters of support for services at HSH including Normal Newborn Nursery/Neonatal Level I, GI Endoscopy, Radiology, CT Scans, Emergency Medicine, Anesthesiology, Surgical Services, Inpatient Care Specialists/Hospitalists, Intensive Care Unit, Pathology, and Obstetrics, as well as physician support letters from primary care, medical specialist, and surgical physicians. Of the eleven Medical Director/Chief of Service letters for HSH, seven are from physicians practicing in the Triangle area today (Neonatal, GI Endoscopy, Radiology, Pathology, Anesthesia, Surgery, and CT Scans). These are found in Exhibit 14 of the Novant HSH CON Application. This exhibit also includes physician letters of support representing 42 individual primary care physicians (family practice, internal medicine, pediatrics) practicing in Wake, Durham, and Franklin counties, including three physician practices with offices in Holly Springs today. Novant HSH Exhibit #14 also includes physician letters of support representing 15 individual medical specialists including cardiology, gastroenterology, hepatology, medical oncology, neurology, pathology, pulmonology, and radiology. These physicians or their groups have offices in Wake, Durham, Franklin, Harnett, Moore, Orange, and Alamance Counties, including four practices with offices in Cary, NC. Finally, Exhibit 14 in the Novant HSH CON Application includes surgeon letters of support representing 32 individual surgeons, including ENT, general surgery, orthopedics, obstetrics and gynecology, and vascular surgery. These surgeons have offices in Wake, Durham, Franklin, and Orange counties, including three practices with offices in Apex or Cary.

Together these Novant HSH physician and medical director letters of support represent 100 individual physicians, the majority of whom practice in the Triangle area today, including Wake County. Each of their signed letters express a plan to seek medical staff privileges at Novant HSH, a commitment to admit patients to Novant HSH, an intent to refer appropriate patients to the Novant HSH, an intent to perform surgery a Novant HSH, a commitment to refer appropriate patients to other physicians and specialists on the Novant HSH medical staff for imaging studies, surgery, or emergency department care, or to perform the duties of medical director/chief of service for certain clinical service lines at HSH. See pages 1454-1594 in Exhibit 14 of the Novant HSH CON. The Novant HSH physician support letters demonstrate sufficient and necessary support for the proposed 50-bed community hospital.

## **DOCUMENTATION OF PHYSICIAN SUPPORT**

Based on the physician letters of support in the WakeMed CON Application at Exhibit 49, it appears there are about 200-250 letters of support from primary care, medical specialist, and surgical physicians, practicing in Wake, Orange, Johnston, Franklin, Harnett, and other surrounding counties. See the WakeMed CON Application at pages 651-841.

The Novant Holly Springs Hospital CON Application includes a HSH Chief of the Medical Staff letter, Medical Director/physician letters of support for services at HSH including Normal Newborn Nursery/Neonatal Level I, GI Endoscopy, Radiology, CT Scans, Emergency Medicine, Anesthesiology, Surgical Services, Inpatient Care Specialists/Hospitalists, Intensive Care Unit, Pathology, and Obstetrics, as well as physician support letters from primary care, medical specialist, and surgical physicians. Of the eleven Medical Director/Chief of Service letters for HSH, seven are from physicians practicing in the Triangle area today (Neonatal, GI Endoscopy, Radiology, Pathology, Anesthesia, Surgery, and CT Scans). These are found in Exhibit 14 of the Novant HSH CON Application. This exhibit also includes physician letters of support representing 42 individual primary care physicians (family practice, internal medicine, pediatrics) practicing in Wake, Durham, and Franklin counties, including three physician practices with offices in Holly Springs today. Novant HSH Exhibit #14 also includes physician letters of support representing 15 individual medical specialists including cardiology, gastroenterology, hepatology, medical oncology, neurology, pathology, pulmonology, and radiology. These physicians or their groups have offices in Wake, Durham, Franklin, Harnett, Moore, Orange, and Alamance Counties, including four practices with offices in Cary, NC. Finally, Exhibit 14 in the Novant HSH CON Application includes surgeon letters of support representing 32 individual surgeons, including ENT, general surgery, orthopedics, obstetrics and gynecology, and vascular surgery. These surgeons have offices in Wake, Durham, Franklin, and Orange counties, including three practices with offices in Apex or Cary.

Together these Novant HSH physician and medical director letters of support represent 100 individual physicians, the majority of whom practice in the Triangle area today, including Wake County. Each of their signed letters express a plan to seek medical staff privileges at Novant HSH, a commitment to admit patients to Novant HSH, an intent to refer appropriate patients to the Novant HSH, an intent to perform surgery a Novant HSH, a commitment to refer appropriate patients to other physicians and specialists on the Novant HSH medical staff for imaging studies, surgery, or emergency department care, or to perform the duties of medical director/chief of service for certain clinical service lines at HSH. See pages 1454-1594 in Exhibit 14 of the Novant HSH CON. The Novant HSH physician support letters demonstrate sufficient and necessary support for the proposed 50-bed community hospital.

*File: CommentsNovantOnWakeMedRaleighFINAL.05.30.11.doc*

# ATTACHMENT 1

**Table 1. WakeMed Raleigh Acute Care Bed Utilization**

Oct-Sept	2005	2006	2007	2008	2009	2010	CAGR 2005-2010	CAGR 2007-2010	CAGR 2008-2010
Days of Care	154,054	163,947	172,630	177,004	174,046	167,614	1.7%	-1.0%	-2.7%
% Change		6.4%	5.3%	2.5%	-1.7%	-3.7%			
Discharges	31,173	32,098	35,082	35,883	37,133	35,542	2.7%	0.4%	-0.5%
% Change		3.0%	9.3%	2.3%	3.5%	-4.3%			
ALOS	4.94	5.11	4.92	4.93	4.69	4.72			
Licensed Beds	515	515	515	515	515	575			
ADC	422.1	449.2	473.0	484.9	476.8	459.2			
Occupancy	82.0%	87.2%	91.8%	94.2%	92.6%	79.9%			

Source: WakeMed Raleigh License Renewal Applications 2006-2011

Note 1: 2010 LRA reports 618 licensed acute care beds - 515 at WakeMed Raleigh

Note 2: 2011 LRA reports 678 licensed acute care beds - 575 at WakeMed Raleigh

**Table 2. WakeMed Raleigh Acute Care Bed Utilization**

Oct-Sept	2008	2009	2010	CAGR 2008-2010
Discharges	34,983	36,277	35,541	0.8%
% Change		3.7%	-2.0%	
Days of Care	178,132	176,654	168,495	-2.7%
% Change		-0.8%	-4.6%	
ALOS	5.09	4.87	4.74	
ADC	488.0	484.0	461.6	
Licensed Beds	515	515	575	
Occupancy	94.8%	94.0%	80.3%	

Source: CON Application J-8660-11, pages 53, 96

Note: Data in this table highlighted in orange not match data reported in 2009-2011 LRAs

**Table 3. WakeMed Raleigh Acute Care Bed Projected Utilization**

Oct-Sept	2011	2012	2013	2014	2015	2016	CAGR
Discharges	36,721	38,027	39,331	37,243	37,866	38,768	1.1%
% Change		3.6%	3.4%	-5.3%	1.7%	2.4%	
Days of Care	178,831	185,191	191,542	186,239	189,727	194,453	1.7%
% Change		3.6%	3.4%	-2.8%	1.9%	2.5%	
ALOS	4.87	4.87	4.87	5.00	5.01	5.02	0.6%
Licensed Beds	575	575	587	646	646	646	
ADC	489.9	507.4	524.8	510.2	519.8	531.3	
Occupancy	85.2%	88.2%	89.4%	79.0%	80.5%	82.2%	

Source: CON Application J-8660-11, pages 54, 55, 96

Note 1: 12 NICU Level IV beds become operational in FY 2013 (Project ID # J-8328-09)

Note 2: WakeMed North is projected to open in FY 2014, at which time,

20 licensed acute care beds will shift to WakeMed North (Project ID # J-8180-08)

**Table 4. WakeMed Raleigh Projected Utilization - Project ID #J-7189-04**

Oct-Sept	2005	2006	2007	2008	2009	2010
Days of Care	155,164	159,389	163,829	165,124	169,417	173,887
% Change		2.70%	2.80%	0.80%	2.60%	2.60%
Licensed Beds	515	515	515	575	575	575
Occupancy	82.50%	84.80%	87.20%	78.50%	80.70%	82.90%

Source: Project ID #J-7189-04, pages 99-101

**Table 5. Comparison of WakeMed Raleigh Actual Utilization & Projected Utilization in Projected ID #J-7189-04**

Oct-Sept	2005	2006	2007	2008	2009	2010
2006-2011 LRAs - Actual Utilization						
Days of Care	154,054	163,947	172,630	177,004	174,046	167,614
Project ID #J-7189-04, pages 99-101 - Projected Utilization						
Days of Care	155,164	159,389	163,829	165,124	169,417	173,887
Numeric Difference						
Days of Care	-1,110	4,558	8,801	11,880	4,629	-6,273
Percent Difference						
Days of Care	-0.7%	2.9%	5.4%	7.2%	2.7%	-3.6%

Source: Tables 1, 4

**Table 6. WakeMed Raleigh Acute Care Bed Projected Utilization - WakeMed North CON Application J-8180-08**

Oct-Sept	2011	2012	2013	2014	CAGR	2015	2016
Days of Care	176,284	178,884	180,875	182,891	1.2%	185,148	187,433
% Change		1.5%	1.1%	1.1%		1.2%	1.2%
Licensed Beds			646	646		646	646
ADC			496	501		507	514
Occupancy			76.7%	77.6%		78.5%	79.5%

Source: CON Application J-8180-08, page 112

**Table 7. WakeMed Raleigh Acute Care Bed Projected Utilization - Comparison**

Oct-Sept	2011	2012	2013	2014	2015	2016
CON Application J-8660-11, pages 54, 55, 96						
Days of Care	178,831	185,191	191,542	186,239	189,727	194,453
CON Application J-8180-08 page 112						
Days of Care	176,284	178,884	180,875	182,891	185,148	187,433
Numeric Difference						
Days of Care	2,547	6,307	10,667	3,348	4,579	7,020
Percent Difference						
Days of Care	1.4%	3.5%	5.9%	1.8%	2.5%	3.7%

Source: Tables 2, 6

**le 8. Projected Population (Total) for WakeMed Service Area**

County	2010	2011	2012	2013	2014	2015	2016
Wake	919,938	947,459	974,978	1,002,495	1,030,015	1,057,534	1,085,054
Johnston	173,600	178,933	184,266	189,599	194,933	200,269	205,601
Harnett	116,118	119,459	122,761	126,085	129,398	132,717	136,032
Franklin	60,293	61,393	62,492	63,588	64,683	65,779	66,873
Sampson	65,930	66,451	66,974	67,498	68,020	68,543	69,065
Nash	97,030	98,304	99,580	100,857	102,133	103,408	104,684
Wayne	116,955	117,359	117,758	118,162	118,566	118,969	119,370
Wilson	80,582	81,311	82,043	82,772	83,501	84,233	84,963
Total	1,630,446	1,670,669	1,710,852	1,751,056	1,791,249	1,831,452	1,871,642

Source: CON Application J-8660-11, page 42

**Table 9. Comparison of Service Area Inpatient Discharge Data October 2009 – September 2010**

County	WakeMed Base Data: Thomson Reuters Discharge Data*	Acute Care Need Methodology: Thomson Reuters Discharge Data**	Numeric Difference	Percent Difference
Wake	71,286	67,971	3,315	4.9%
Johnston	16,104	15,345	759	4.9%
Harnett	11,721	11,349	372	3.3%
Franklin	5,372	5,182	190	3.7%
Sampson	7,420	7,258	162	2.2%
Nash	12,244	11,639	605	5.2%
Wayne	15,006	14,391	615	4.3%
Wilson	10,381	9,978	403	4.0%
Total	149,534	143,113	6,421	4.5%

Source: CON Application J-8660-11, page 47; Thomson Reuters Inpatient Acute Care Database

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

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

**Table 10. Comparison of WakeMed Raleigh Service Area Discharge Data October 2009 – September 2010**

County	WakeMed Base Data: Thomson Reuters Discharge Data*	Acute Care Need Methodology: Thomson Reuters Discharge Data**	Numeric Difference	Percent Difference
Wake County				
Discharges	71,286	67,971	3,315	4.9%
Total Population	919,938	919,938		
Use Rate per 1,000	77.5	73.9		4.9%
Johnston County				
Discharges	16,104	15,345	759	4.9%
Total Population	173,600	173,600		
Use Rate per 1,000	92.8	88.4		5.0%
Harnett County				
Discharges	11,721	11,349	372	3.3%
Total Population	116,118	116,118		
Use Rate per 1,000	100.9	97.7		3.2%
Franklin County				
Discharges	5,372	5,182	190	3.7%
Total Population	60,293	60,293		
Use Rate per 1,000	89.1	85.9		3.7%
Sampson County				
Discharges	7,420	7,258	162	2.2%
Total Population	65,930	65,930		
Use Rate per 1,000	112.5	110.1		2.2%
Nash County				
Discharges	12,244	11,639	605	5.2%
Total Population	97,030	97,030		
Use Rate per 1,000	126.2	120.0		5.2%
Wayne County				
Discharges	15,006	14,391	615	4.3%
Total Population	116,955	116,955		
Use Rate per 1,000	128.3	123.0		4.3%
Wilson County				
Discharges	10,381	9,978	403	4.0%
Total Population	80,582	80,582		
Use Rate per 1,000	128.8	123.8		4.0%
Total Service Area				
Discharges	149,534	143,113	6,421	4.5%
Total Population	1,630,446	1,630,446		
Use Rate per 1,000	91.7	87.8		4.5%

Source: CON Application J-8661-10, page 63; Thomson Reuters Inpatient Acute Care Database

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

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

**Table 11. Comparison of WakeMed Raleigh Market Share October 2009 – September 2010**

County	WakeMed Base Data: Thomson Reuters Discharge Data*	Acute Care Need Methodology: Thomson Reuters Discharge Data**	Numeric Difference	Percent Difference
Wake County				
Total Discharges	71,286	67,971		
WakeMed Raleigh Discharges	21,961	22,376	-415	-1.9%
Market Share	30.8%	32.9%		-6.4%
Johnston County				
Total Discharges	16,104	15,345		
WakeMed Raleigh Discharges	3,401	3,405	-4	-0.1%
Market Share	21.1%	22.2%		-4.8%
Harnett County				
Total Discharges	11,721	11,349		
WakeMed Raleigh Discharges	1,903	1,891	12	0.6%
Market Share	16.2%	16.7%		-2.6%
Franklin County				
Total Discharges	5,372	5,182		
WakeMed Raleigh Discharges	1,483	1,493	-10	-0.7%
Market Share	27.6%	28.8%		-4.2%
Sampson County				
Total Discharges	7,420	7,258		
WakeMed Raleigh Discharges	1,213	1,207	6	0.5%
Market Share	16.3%	16.6%		-1.7%
Nash County				
Total Discharges	12,244	11,639		
WakeMed Raleigh Discharges	1,053	1,050	3	0.3%
Market Share	8.6%	9.0%		-4.7%
Wayne County				
Total Discharges	15,006	14,391		
WakeMed Raleigh Discharges	901	897	4	0.4%
Market Share	6.0%	6.2%		-3.7%
Wilson County				
Total Discharges	10,381	9,978		
WakeMed Raleigh Discharges	697	699	-2	-0.3%
Market Share	6.7%	7.0%		-4.2%
Total				
Total Discharges	149,534	143,113		
WakeMed Raleigh Discharges	32,612	33,018	-406	-1.2%
Market Share	21.8%	23.1%		-5.5%

Source: CON Application J-8660-11, page 48; Thomson Reuters Inpatient Acute Care Database

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

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

**Table 12. Comparison of WakeMed Raleigh Average Length of Stay October 2009 - September 2010**

	WakeMed Base Data: Thomson Reuters Discharge Data*	LRA Data	Numeric Difference	Percent Difference
Discharges	35,541	35,542	-1	0.0%
Inpatient Days	168,495	167,614	881	0.5%
ALOS	4.74	4.72	0.0	0.5%

Source: CON Application J-8660-11, page 53; 2011 LRA



**Table 13. Expected Discharges - Service Area - Sum of All Four Age Groups**

WakeMed Base Data: Thomson Reuters Discharge Data* - Sum of Age Groups	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Wake	73,940	76,883	79,805	82,674	85,595	88,548
Population	947,459	974,978	1,002,495	1,030,015	1,057,534	1,085,054
Total Use Rate	78.0	78.9	79.6	80.3	80.9	81.6
Johnston	16,682	17,305	17,947	18,580	19,220	19,854
Population	178,933	184,266	189,599	194,933	200,269	205,601
Total Use Rate	93.2	93.9	94.7	95.3	96.0	96.6
Harnett	12,110	12,522	12,928	13,337	13,757	14,185
Population	119,459	122,761	126,085	129,398	132,717	136,032
Total Use Rate	101.4	102.0	102.5	103.1	103.7	104.3
Franklin	5,503	5,646	5,794	5,939	6,087	6,234
Population	61,393	62,492	63,588	64,683	65,779	66,873
Total Use Rate	89.6	90.3	91.1	91.8	92.5	93.2
Sampson	7,496	7,576	7,670	7,753	7,842	7,933
Population	66,451	66,974	67,498	68,020	68,543	69,065
Total Use Rate	112.8	113.1	113.6	114.0	114.4	114.9
Nash	12,466	12,726	12,984	13,233	13,494	13,736
Population	98,304	99,580	100,857	102,133	103,408	104,684
Total Use Rate	126.8	127.8	128.7	129.6	130.5	131.2
Wayne	15,095	15,211	15,318	15,420	15,525	15,643
Population	117,359	117,758	118,162	118,566	118,969	119,370
Total Use Rate	128.6	129.2	129.6	130.1	130.5	131.0
Wilson	10,502	10,647	10,807	10,950	11,111	11,255
Population	81,311	82,043	82,772	83,501	84,233	84,963
Total Use Rate	129.2	129.8	130.6	131.1	131.9	132.5
<b>Total</b>	<b>153,794</b>	<b>158,516</b>	<b>163,253</b>	<b>167,886</b>	<b>172,631</b>	<b>177,388</b>
Population	1,670,669	1,710,852	1,751,056	1,791,249	1,831,452	1,871,642
Total Use Rate	92.1	92.7	93.2	93.7	94.3	94.8

Source: CON Application J-8660-11, page 47

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

**Table 14. WakeMed Raleigh Projected Discharges - Service Area - Sum of All Four Age Groups**

WakeMed Base Data: Thomson Reuters Discharge Data* - Sum of Age Groups	2011	2012	2013	2014	2015	2016
Wake	22,779	23,685	24,585	22,538	22,836	23,382
Johnston	3,523	3,655	3,790	3,890	4,018	4,148
Harnett	1,966	2,033	2,099	2,152	2,218	2,285
Franklin	1,519	1,559	1,640	1,372	1,365	1,377
Sampson	1,225	1,239	1,267	1,267	1,282	1,297
Nash	1,072	1,094	1,138	1,121	1,141	1,159
Wayne	906	913	926	926	932	939
Wilson	705	715	735	729	738	748
<b>Total</b>	<b>33,695</b>	<b>34,893</b>	<b>36,090</b>	<b>33,995</b>	<b>34,530</b>	<b>35,335</b>

Source: CON Application J-8660-11, page 51

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

Note: Table contains discharges post-shift to WakeMed North

**Table 15. WakeMed Raleigh Projected Utilization - Service Area - Total**

WakeMed Base Data: Thomson Reuters Discharge Data* - Total	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Wake County						
Population	947,459	974,978	1,002,495	1,030,015	1,057,534	1,085,054
Use Rate per 1,000	77.5	77.5	77.5	77.5	77.5	77.5
Expected Discharges	73,428	75,561	77,693	79,826	81,959	84,092
Market Share	30.8%	30.8%	30.8%	30.8%	30.8%	30.8%
Projected Discharges	22,616	23,273	23,930	21,655	21,710	21,436
Johnston County						
Population	178,933	184,266	189,599	194,933	200,269	205,601
Use Rate per 1,000	92.8	92.8	92.8	92.8	92.8	92.8
Expected Discharges	16,605	17,100	17,595	18,090	18,585	19,080
Market Share	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%
Projected Discharges	3,504	3,608	3,713	3,783	3,880	3,981
Harnett County						
Population	119,459	122,761	126,085	129,398	132,717	136,032
Use Rate per 1,000	100.9	100.9	100.9	100.9	100.9	100.9
Expected Discharges	12,053	12,387	12,722	13,056	13,391	13,726
Market Share	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%
Projected Discharges	1,953	2,007	2,061	2,102	2,153	2,206
Franklin County						
Population	61,393	62,492	63,588	64,683	65,779	66,873
Use Rate per 1,000	89.1	89.1	89.1	89.1	89.1	89.1
Expected Discharges	5,470	5,568	5,666	5,763	5,861	5,958
Market Share	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%
Projected Discharges	1,351	1,375	1,399	1,156	1,133	1,128
Sampson County						
Population	66,451	66,974	67,498	68,020	68,543	69,065
Use Rate per 1,000	112.5	112.5	112.5	112.5	112.5	112.5
Expected Discharges	7,476	7,535	7,594	7,652	7,711	7,770
Market Share	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%
Projected Discharges	1,114	1,123	1,131	1,140	1,149	1,158
Nash County						
Population	98,304	99,580	100,857	102,133	103,408	104,684
Use Rate per 1,000	126.2	126.2	126.2	126.2	126.2	126.2
Expected Discharges	12,406	12,567	12,728	12,889	13,050	13,211
Market Share	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%
Projected Discharges	1,017	1,030	1,044	1,040	1,050	1,061
Wayne County						
Population	117,359	117,758	118,162	118,566	118,969	119,370
Use Rate per 1,000	128.3	128.3	128.3	128.3	128.3	128.3
Expected Discharges	15,057	15,108	15,160	15,212	15,264	15,315
Market Share	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%
Projected Discharges	873	876	879	882	885	888
Wilson County						
Population	81,311	82,043	82,772	83,501	84,233	84,963
Use Rate per 1,000	128.8	128.8	128.8	128.8	128.8	128.8
Expected Discharges	10,473	10,567	10,661	10,755	10,849	10,943
Market Share	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%
Projected Discharges	723	729	736	736	741	747
Total Service Area						
Expected Discharges	152,968	156,392	159,819	163,244	166,670	170,095
Projected Discharges	33,150	34,021	34,892	32,495	32,702	32,605

Source: Tables 8, 10, 11 Note: Table contains discharges post-shift to WakeMed North

**Table 16. WakeMed Raleigh Projected Utilization - Service Area - Total**

Acute Care Need Methodology: Thomson Reuters Discharge Data**	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
<b>Wake County</b>						
Population	947,459	974,978	1,002,495	1,030,015	1,057,534	1,085,054
Use Rate per 1,000	73.9	73.9	73.9	73.9	73.9	73.9
Expected Discharges	70,017	72,051	74,084	76,118	78,152	80,185
Market Share	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%
Projected Discharges	23,036	23,705	24,374	22,112	22,179	22,484
<b>Johnston County</b>						
Population	178,933	184,266	189,599	194,933	200,269	205,601
Use Rate per 1,000	88.4	88.4	88.4	88.4	88.4	88.4
Expected Discharges	15,818	16,289	16,761	17,232	17,704	18,175
Market Share	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%
Projected Discharges	3,338	3,437	3,536	3,602	3,694	3,790
<b>Harnett County</b>						
Population	119,459	122,761	126,085	129,398	132,717	136,032
Use Rate per 1,000	97.7	97.7	97.7	97.7	97.7	97.7
Expected Discharges	11,671	11,994	12,319	12,642	12,966	13,290
Market Share	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%
Projected Discharges	1,949	2,003	2,057	2,098	2,149	2,201
<b>Franklin County</b>						
Population	61,393	62,492	63,588	64,683	65,779	66,873
Use Rate per 1,000	85.9	85.9	85.9	85.9	85.9	85.9
Expected Discharges	5,274	5,368	5,462	5,556	5,650	5,744
Market Share	28.8%	28.8%	28.8%	28.8%	28.8%	28.8%
Projected Discharges	1,519	1,546	1,573	1,332	1,312	1,310
<b>Sampson County</b>						
Population	66,451	66,974	67,498	68,020	68,543	69,065
Use Rate per 1,000	110.1	110.1	110.1	110.1	110.1	110.1
Expected Discharges	7,316	7,374	7,432	7,489	7,547	7,604
Market Share	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%
Projected Discharges	1,214	1,224	1,234	1,243	1,253	1,262
<b>Nash County</b>						
Population	98,304	99,580	100,857	102,133	103,408	104,684
Use Rate per 1,000	120.0	120.0	120.0	120.0	120.0	120.0
Expected Discharges	11,796	11,950	12,103	12,256	12,409	12,562
Market Share	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
Projected Discharges	1,062	1,075	1,089	1,086	1,097	1,109
<b>Wayne County</b>						
Population	117,359	117,758	118,162	118,566	118,969	119,370
Use Rate per 1,000	123.0	123.0	123.0	123.0	123.0	123.0
Expected Discharges	14,435	14,484	14,534	14,584	14,633	14,683
Market Share	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
Projected Discharges	895	898	901	904	907	910
<b>Wilson County</b>						
Population	81,311	82,043	82,772	83,501	84,233	84,963
Use Rate per 1,000	123.8	123.8	123.8	123.8	123.8	123.8
Expected Discharges	10,066	10,157	10,247	10,337	10,428	10,518
Market Share	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Projected Discharges	705	711	717	718	722	728
<b>Total Service Area</b>						
Expected Discharges	146,394	149,666	152,941	156,215	159,489	162,762
Projected Discharges	33,717	34,599	35,482	33,095	33,314	33,795

Source: Tables 8, 10, 11

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

Note: Table contains discharges post-shift to WakeMed North

**Table 17. Comparison of WakeMed Raleigh Projected Inpatient Discharges from Service Area**

<b>WakeMed Base Data: Thomson Reuters Discharge Data*</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
Wake	22,779	23,685	24,585	22,538	22,836	23,382
Johnston	3,523	3,655	3,790	3,890	4,018	4,148
Harnett	1,966	2,033	2,099	2,152	2,218	2,285
Franklin	1,519	1,559	1,640	1,372	1,365	1,377
Sampson	1,225	1,239	1,267	1,267	1,282	1,297
Nash	1,072	1,094	1,138	1,121	1,141	1,159
Wayne	906	913	926	926	932	939
Wilson	705	715	735	729	738	748
<b>Total</b>	<b>33,695</b>	<b>34,893</b>	<b>36,090</b>	<b>33,995</b>	<b>34,530</b>	<b>35,335</b>
<b>Acute Care Need Methodology: Thomson Reuters Discharge Data**</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
Wake	23,036	23,705	24,374	22,112	22,179	22,484
Johnston	3,338	3,437	3,536	3,602	3,694	3,790
Harnett	1,949	2,003	2,057	2,098	2,149	2,201
Franklin	1,519	1,546	1,573	1,332	1,312	1,310
Sampson	1,214	1,224	1,234	1,243	1,253	1,262
Nash	1,062	1,075	1,089	1,086	1,097	1,109
Wayne	895	898	901	904	907	910
Wilson	705	711	717	718	722	728
<b>Total</b>	<b>33,717</b>	<b>34,599</b>	<b>35,482</b>	<b>33,095</b>	<b>33,314</b>	<b>33,795</b>
<b>Americ Difference</b>	<b>-22</b>	<b>294</b>	<b>608</b>	<b>900</b>	<b>1,216</b>	<b>1,540</b>
<b>Percent Difference</b>	<b>-0.1%</b>	<b>0.8%</b>	<b>1.7%</b>	<b>2.7%</b>	<b>3.7%</b>	<b>4.6%</b>

Source: Tables 14, 16

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

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

Note: Table contains discharges post-shift to WakeMed North

**Table 18. Historical Discharges - Service Area - Sum of All Four Age Groups**

<b>WakeMed Base Data: Thomson Reuters Discharge Data* - Sum of Age Groups</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>
Wake	67,593	69,966	71,940	71,286
Population	823,616	856,927	882,344	907,314
Total Use Rate	82.1	81.6	81.5	78.6
Johnston	16,335	16,607	15,991	16,104
Population	154,635	160,062	165,111	170,151
Total Use Rate	105.6	103.8	96.8	94.6
Harnett	11,318	11,331	11,613	11,721
Population	105,310	108,490	112,003	115,579
Total Use Rate	107.5	104.4	103.7	101.4
Franklin	5,927	5,976	5,703	5,372
Population	56,762	58,463	59,502	60,978
Total Use Rate	104.4	102.2	95.8	88.1
Sampson	8,069	6,858	7,569	7,420
Population	62,525	63,191	63,316	63,481
Total Use Rate	129.1	108.5	119.5	116.9
Nash	12,574	12,904	12,687	12,244
Population	92,282	93,432	94,745	107,222
Total Use Rate	136.3	138.1	133.9	114.2
Wayne	15,091	15,035	15,083	15,006
Population	118,778	120,000	121,852	130,381
Total Use Rate	127.1	125.3	123.8	115.1
Wilson	10,214	10,038	10,110	10,381
Population	78,325	79,626	80,677	88,225
Total Use Rate	130.4	126.1	125.3	117.7
<b>Total</b>	<b>147,121</b>	<b>148,715</b>	<b>150,696</b>	<b>149,534</b>
<b>Population</b>	<b>1,492,233</b>	<b>1,540,191</b>	<b>1,579,550</b>	<b>1,643,331</b>
<b>Total Use Rate</b>	<b>98.6</b>	<b>96.6</b>	<b>95.4</b>	<b>91.0</b>

Source: CON Application J-8660-11, page 47

\* Exclusions: Normal Newborns (795) and Rehab (945-946)

**Table 19. WakeMed Raleigh and Cary Acute Care Bed Utilization**

Oct-Sept	2005	2006	2007	2008	2009	2010	CAGR 2005-2010	CAGR 2007-2010	CAGR 2008-2010
WMR	154,054	163,947	172,630	177,004	174,046	167,614	1.7%	-1.0%	-2.7%
		6.4%	5.3%	2.5%	-1.7%	-3.7%			
WMC	31,765	33,482	35,815	38,496	40,927	44,469	7.0%	7.5%	7.5%
		5.4%	7.0%	7.5%	6.3%	8.7%			
Combined	185,819	197,429	208,445	215,500	214,973	212,083	2.7%	0.6%	-0.8%
		6.2%	5.6%	3.4%	-0.2%	-1.3%			

**Table 20. WakeMed Raleigh and Cary and North Projected Acute Care Bed Utilization**

Oct-Sept	2011	2012	2013	2014	2015	2016	CAGR 2010-2016
WMR	178831	185191	191542	186,239	189,727	194,453	2.5%
		3.6%	3.4%	-2.8%	1.9%	2.5%	
WMC	44857	46633	48105	49,465	51,203	52,963	3.0%
		4.0%	3.2%	2.8%	3.5%	3.4%	
WMN				11,537	14,409	16,087	
					24.9%	11.6%	
Combined				247,241	255,339	263,503	3.7%

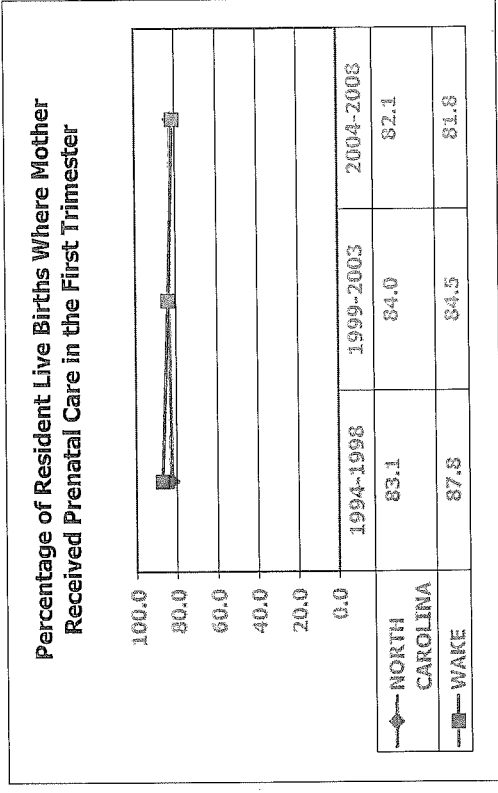
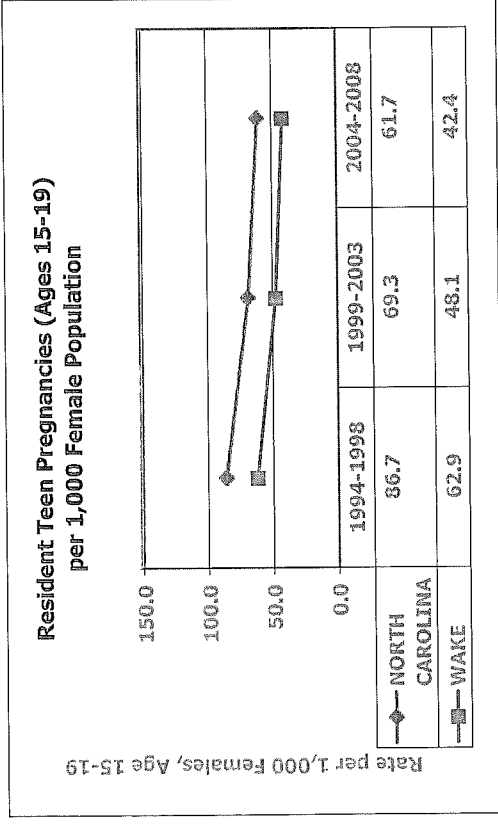
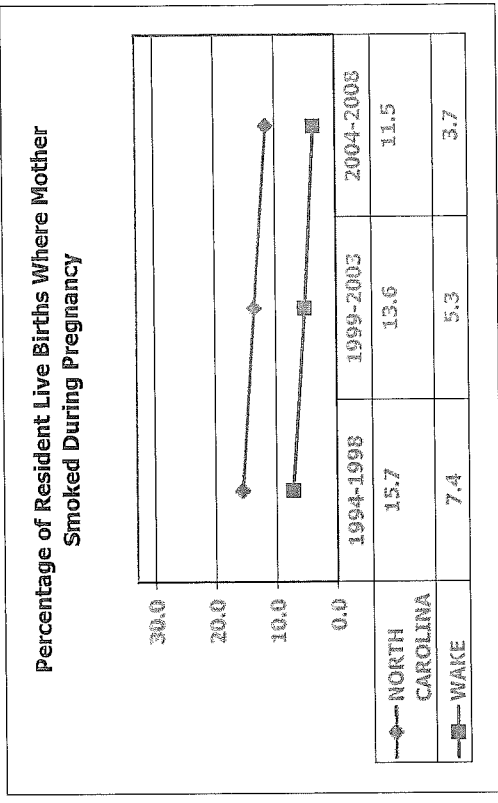
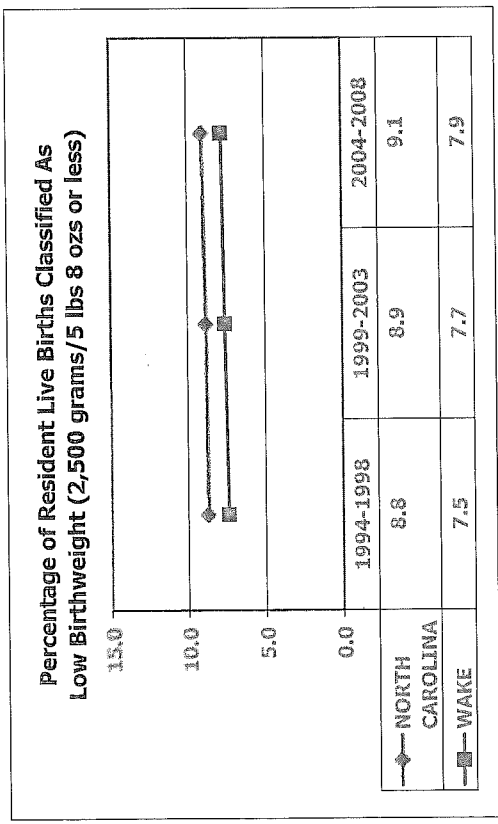
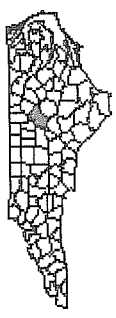
**Table 19. WakeMed Raleigh and Cary Acute Care Bed Utilization**

Oct-Sept	2005	2006	2007	2008	2009	2010	CAGR 2005-2010	CAGR 2007-2010	CAGR 2008-2010
WMR	154,054	163,947	172,630	177,004	174,046	167,614	1.7%	-1.0%	-2.7%
		6.4%	5.3%	2.5%	-1.7%	-3.7%			
WMC	31,765	33,482	35,815	38,496	40,927	44,469	7.0%	7.5%	7.5%
		5.4%	7.0%	7.5%	6.3%	8.7%			
Combined	185,819	197,429	208,445	215,500	214,973	212,083	2.7%	0.6%	-0.8%
		6.2%	5.6%	3.4%	-0.2%	-1.3%			

**Table 20. WakeMed Raleigh and Cary and North Projected Acute Care Bed Utilization**

Oct-Sept	2011	2012	2013	2014	2015	2016	CAGR 2010-2016
WMR	178831	185191	191542	186,239	189,727	194,453	2.5%
		3.6%	3.4%	-2.8%	1.9%	2.5%	
WMC	44857	46633	48105	49,465	51,203	52,963	3.0%
		4.0%	3.2%	2.8%	3.5%	3.4%	
WMN				11,537	14,409	16,087	
					24.9%	11.6%	
Combined				247,241	255,339	263,503	3.7%

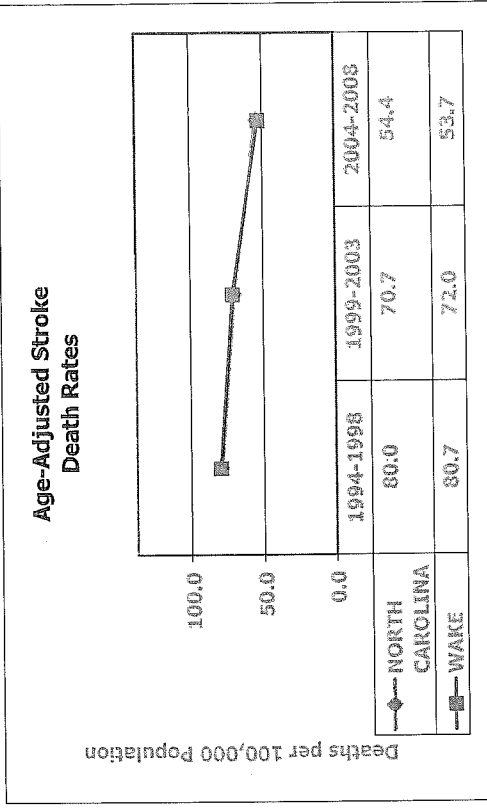
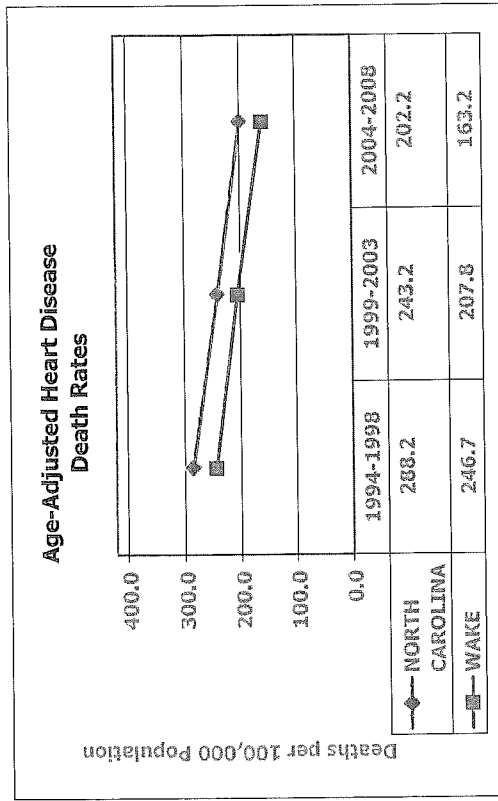
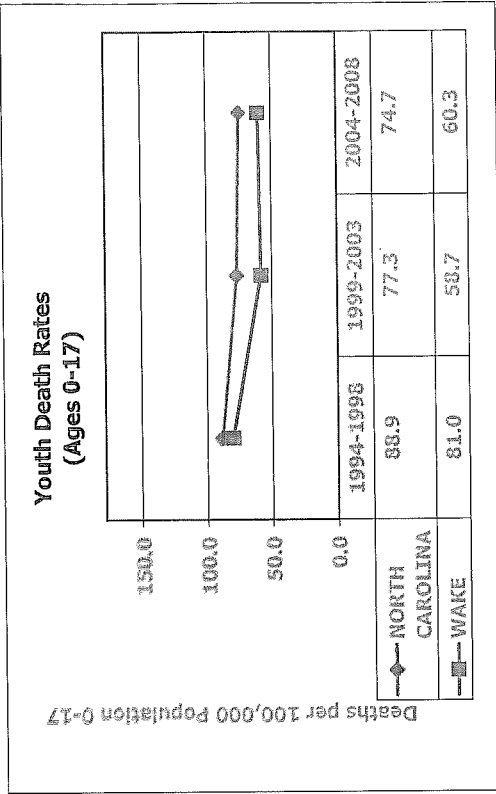
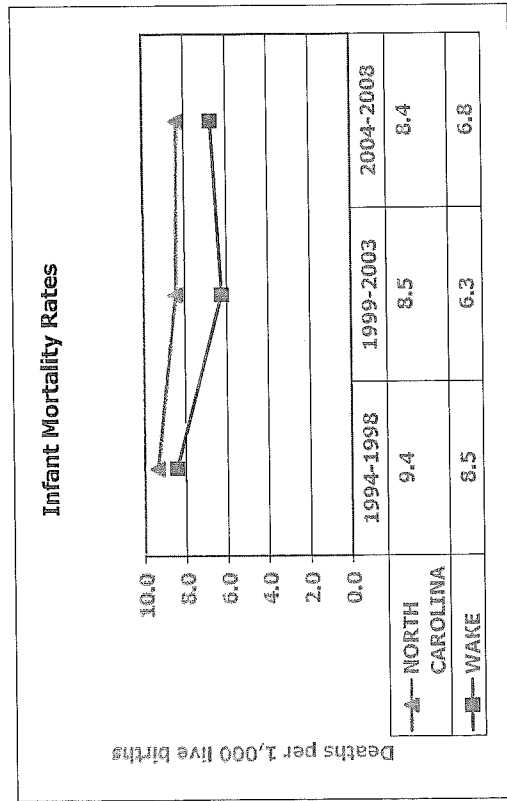
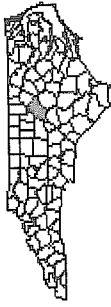
**NORTH CAROLINA STATEWIDE AND COUNTY TRENDS IN KEY HEALTH INDICATORS:  
WAKE COUNTY**

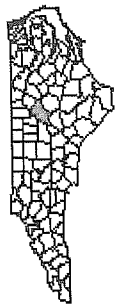


2008 Total Population: 864,429      Percentage Population Ages 65+: 8.5      Percentage Population Minority: 25.0

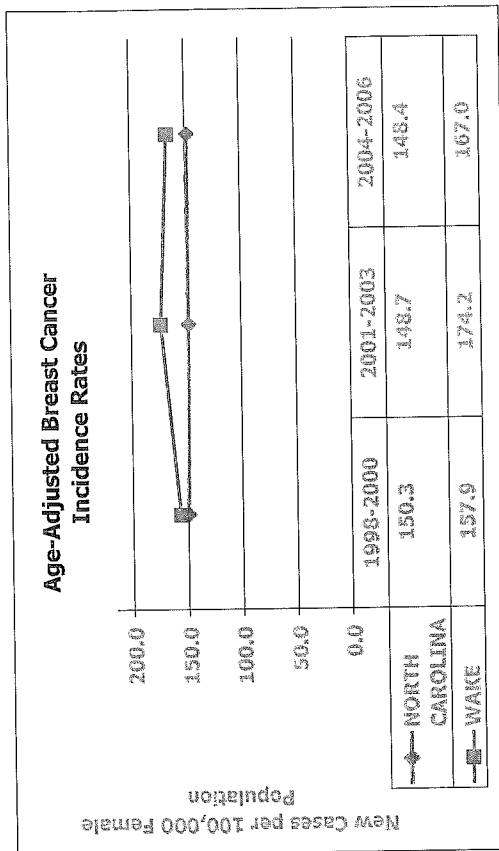
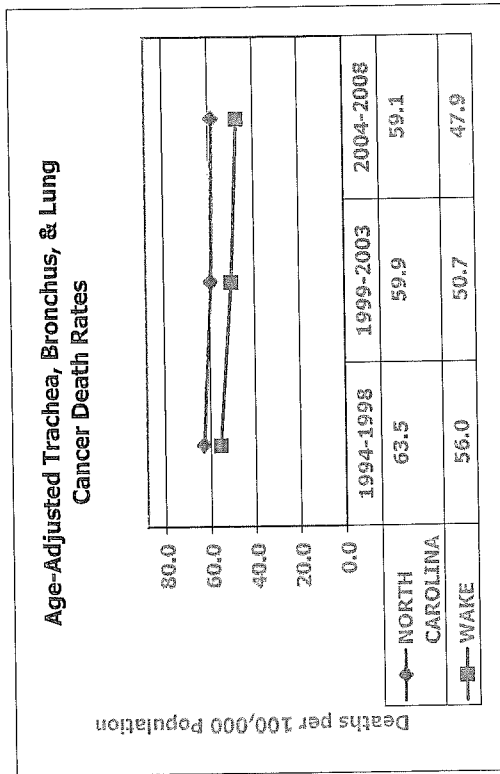
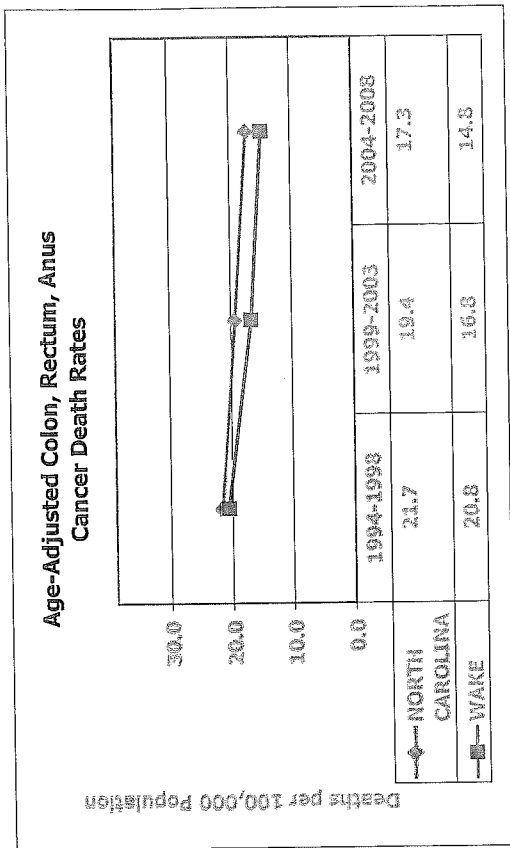
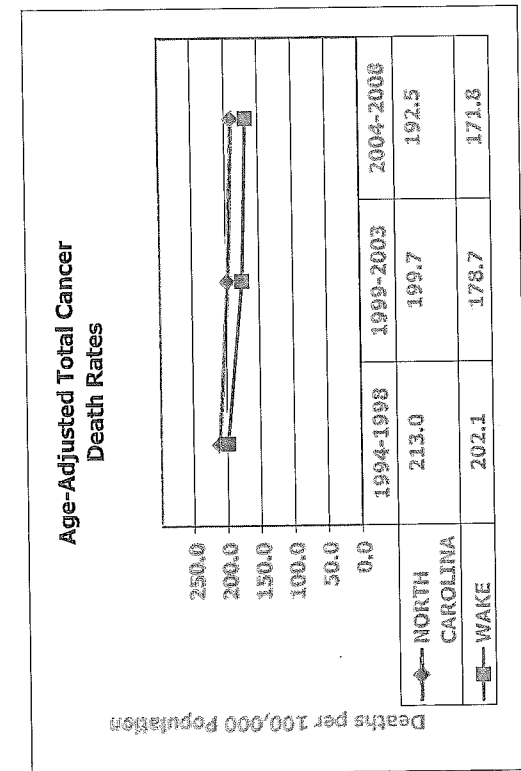


# NORTH CAROLINA STATEWIDE AND COUNTY TRENDS IN KEY HEALTH INDICATORS: WAKE COUNTY

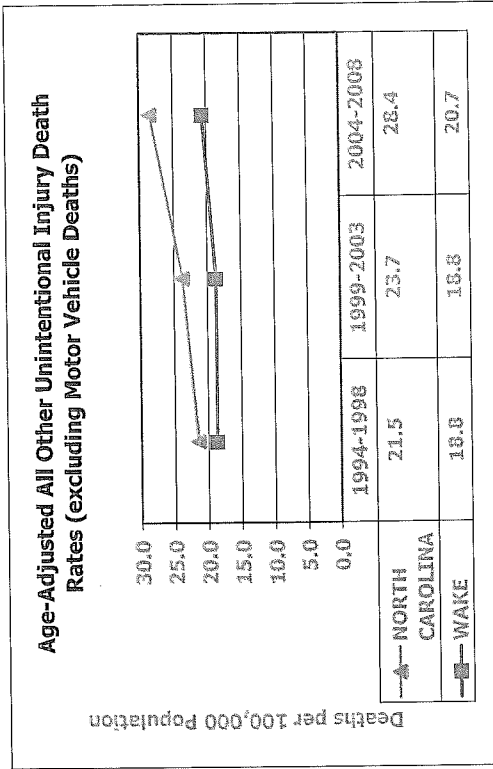
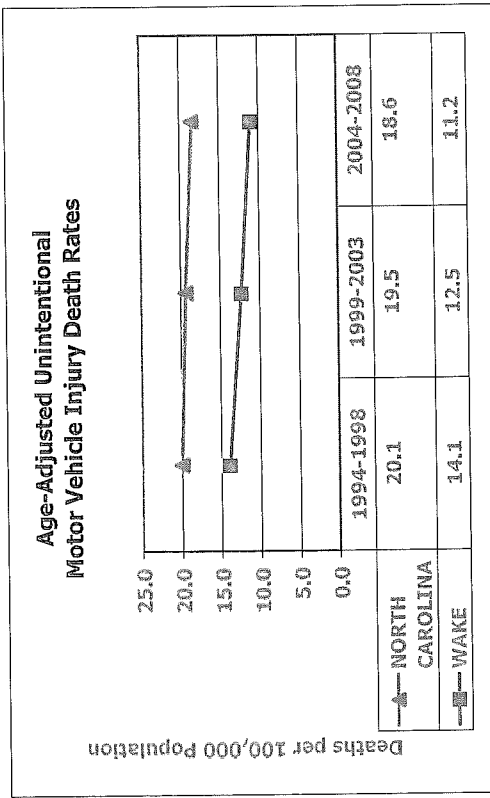
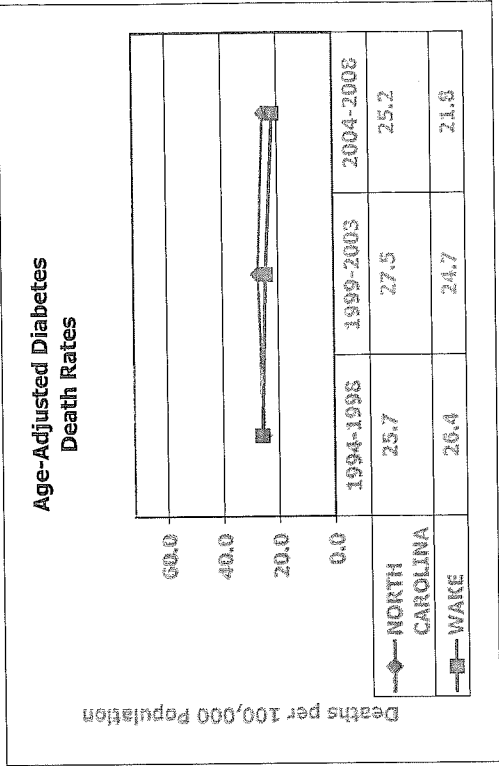
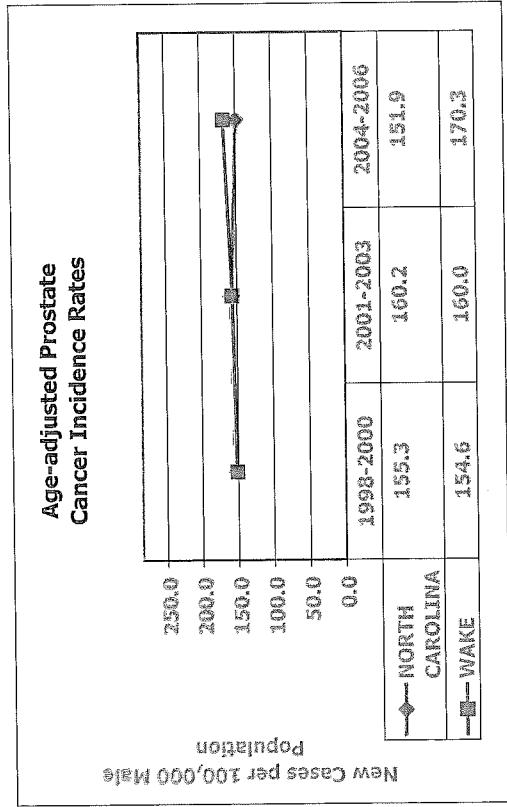
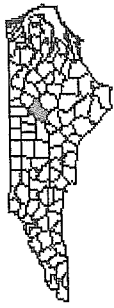




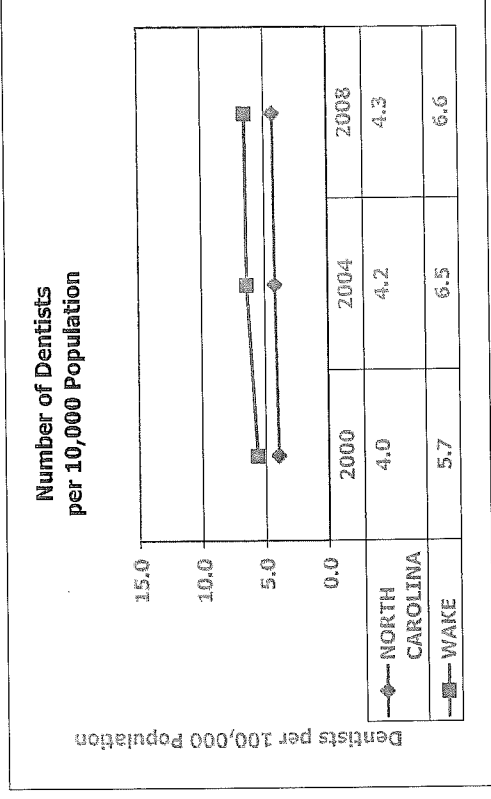
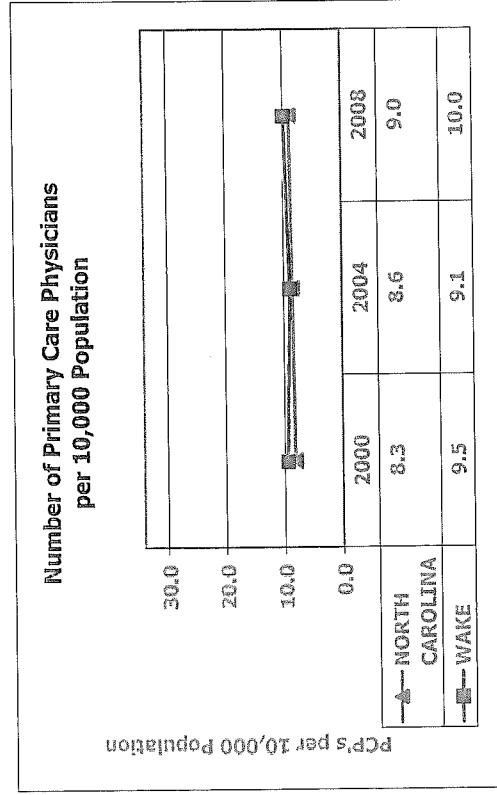
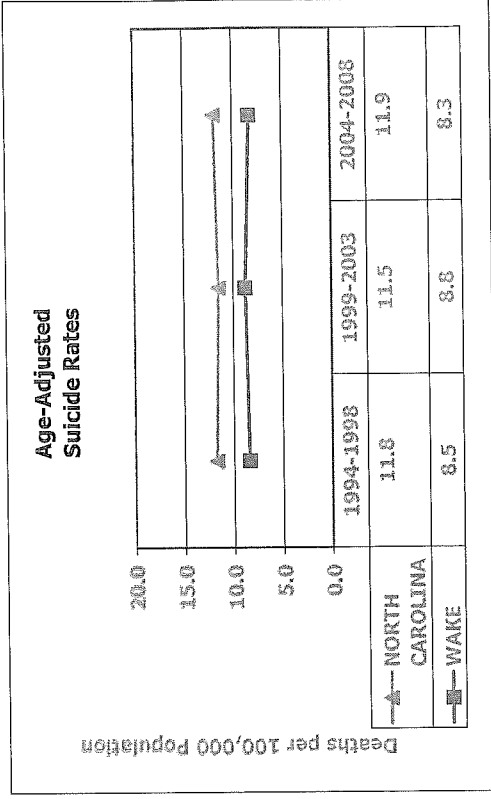
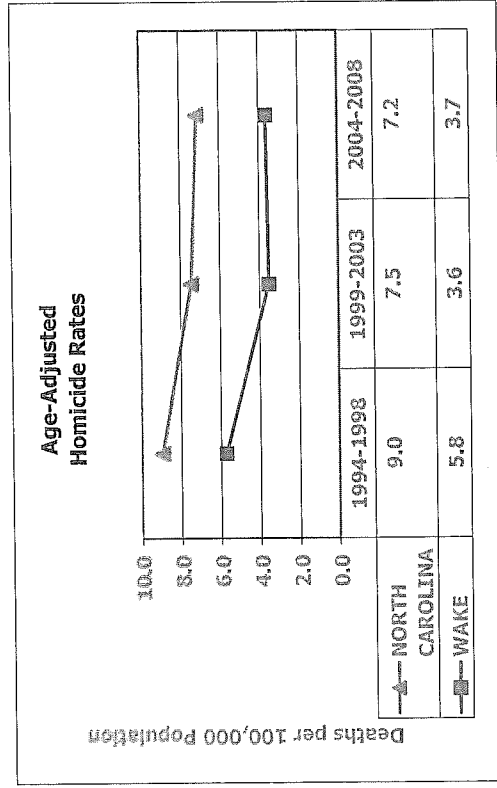
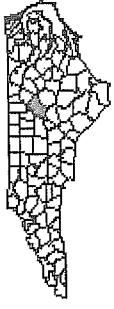
# NORTH CAROLINA STATEWIDE AND COUNTY TRENDS IN KEY HEALTH INDICATORS: WAKE COUNTY

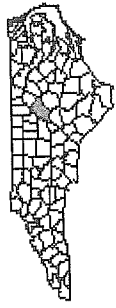


# NORTH CAROLINA STATEWIDE AND COUNTY TRENDS IN KEY HEALTH INDICATORS: WAKE COUNTY



# NORTH CAROLINA STATEWIDE AND COUNTY TRENDS IN KEY HEALTH INDICATORS: WAKE COUNTY





**NORTH CAROLINA STATEWIDE AND COUNTY TRENDS IN KEY HEALTH INDICATORS:  
WAKE COUNTY**

