## CHAPTER 10

NURSING CARE FACILITIES

## Summary of Bed Supply and Utilization

In the spring of 2016, the nursing care bed inventory included XX,XXX licensed beds in nursing homes and X,XXX licensed beds in hospitals for a total of XX,XXX licensed nursing care beds. An additional XXX nursing care beds had received approval from the Certificate of Need (CON) Section but were not yet licensed. In addition, $\mathrm{X}, \mathrm{XXX}$ nursing care beds from currently licensed facilities will be transferred to CON-approved projects once completed; previous need determination for which certificates of need have not been issued were anticipated to add XXX more nursing care beds. The "total inventory" of nursing care beds (licensed + CON-approved - CON bed transfers + previously allocated) was XX,XXX.

Exclusions from the inventory and occupancy rate have been retained for specialty care units (beds in units designated exclusively for people with head injuries or ventilator dependency), state operated facilities, for out-of-area placements in non-profit religious or fraternal facilities, for one-half one hundred percent of the qualified nursing care beds in continuing care retirement communities (Policy NH-2 beds) and for beds transferred from State Psychiatric Hospitals (Policy NH-5 beds). For the North Carolina Proposed 2017 State Medical Facilities Plan, the excluded beds total X,XXX, resulting in an adjusted "planning inventory" of $\mathrm{XX}, \mathrm{XXX}$ nursing care beds.

## Changes from the Previous Plan

There have been no substantial changes in application of the nursing care bed need methodology from that used in the North Carolina 2016 State Medical Facilities Plan. References to dates in the methodology and in the policies have been advanced by one year, as appropriate.

## Basic Assumptions of the Method

1. The principal determinant of nursing home use is the age of the population; the higher the age, the higher the use. Need should be projected three years beyond the plan year because that is the least amount of time required to bring a needed facility or expansion into service.
2. Any advantages to patients that may arise from competition will be fostered by policies which lead to the establishment of new provider institutions. Consequently, whenever feasible allocations of 90 additional beds or more should be made. It is recognized, however, that such allocations do not always result in new entities.
3. Counties whose deficits represent a high proportion (10 percent or greater) of their total needs (deficit index) and who have an occupancy of licensed beds in the county, excluding continuing care retirement communities, that is 90 percent or greater based on utilization data reported on 2015 Licensed Renewal Applications, should receive need determinations even though such increments may be of insufficient size to encourage establishment of new facilities.
4. To the extent that out-of-area patients are served by facilities operated by religious or fraternal organizations, beds so occupied will be excluded from a county's inventory and the associated days of care will be removed from the occupancy rate calculation.
5. When substantial blocks of nursing care beds have been converted to care for head injury or ventilator-dependent patients, the beds will be removed from the inventory and the associated days of care will be removed from the occupancy rate calculation.
6. One half One hundred percent of the qualified nursing care beds developed as part of acontinuing eare retirement community (under pursuant to Policy NH-2) will be excluded from the inventory and the associated days of care will be removed from the occupancy rate calculation.
7. Nursing care beds transferred from state psychiatric hospitals to the community pursuant to Policy NH-5 shall be excluded from the inventory and the associated days of care will be removed from the occupancy rate calculation.
8. Any beds developed pursuant to former Policy NH-1 will be included in the inventory.
9. A goal of the planning process is a reasonable level of parity among citizens in their geographic access to nursing home facilities.
10. The following bed to population ratios were derived from combined patient utilization data as reported on 2015 Nursing Home License Renewal Applications and on Nursing Care Supplements to the 2015 Hospital License Renewal Applications, projected forward 30 months based on trend lines reflecting the previous five years' data by age group.

| Age Group | Beds Per 1,000 Population |
| :---: | :---: |
| Under 65 | 0.62 |
| $65-74$ | 7.38 |
| $75-84$ | 23.76 |
| 85 and Over | 82.52 |

10. A county rate provides a more accurate utilization measure in determining needs. Bed rates are calculated per 1,000 population per county. Each county bed rate is calculated using a five year average annual change projected forward 36 months. For any county with an average annual change rate that is one-half a standard deviation above or below the average change rate of all counties, the state change rate is substituted in the bed rate calculation.
11. Occupancy rates can be calculated using different techniques. The methodology chooses to use the higher of two different occupancy rate calculations such that the need determination in each county is calculated with the greatest advantage. The adjusted occupancy rate for each county is calculated using the higher of the median of all facilities' occupancy rates in a county or a county wide occupancy, whichever is higher. The equivalent days of care for the initial occupancy will be removed from calculations for beds that have been excluded from the inventory.
12. Fluctuations in admissions and growth must be considered in the projection of beds needed for each service area. Therefore, projected bed utilization should not assume $100 \%$ occupancy and/or utilization. In order to project an accurate number, the projected bed utilization is divided by a vacancy factor of $95 \%$.

## Sources of Data

## Population Data:

Projected numbers of residents, by county and age group, for 2020 were obtained from the North Carolina Office of State Budget and Management.

Estimated active duty military population numbers were excluded from the "Under 65 age group" county's population for any county with more than 500 active duty military personnel. These estimates were obtained from the category of "Employment Status - Armed Forces" in the "Selected Economic Characteristics" portion of the American Community Survey 2013 5-year Estimates.

## Utilization Data

Data on utilization of nursing facilities by age groups were compiled from the "2016 Renewal Applications for License to Operate a Nursing Home," combined with data from the "Nursing Care Facility/Unit Beds 2016 Annual Data Supplement to Hospital License Applications," as submitted to the North Carolina Department of Health and Human Services, Division of Health Service Regulation.

## Application of the Method

The steps in applying the projection method are as follows:
Step 1: Multiply the adopted age-specific-county bed use rates (see "Assumptions") by each county's corresponding projected age-specifie civilian population (in thousands) for the target year (2020) to calculate the projected bed utilization.

Step 2: For each county, add the products of the age-specific projections of beds in Step 1. The sum is the county's projected bed utilization. For each county, divide the projected bed utilization by a $95 \%$ vacancy factor.

Step 3: For each county, the planning inventory is determined based on licensed beds adjusted for: CON-Approved/License Pending beds, beds available in prior Plans that have not been CON-approved, and exclusions from the county's inventory, if any. For each county, the projected bed utilization with applied vacancy factor derived in Step 2 is subtracted from the planning inventory. The result is the county's surplus or deficit.

Step 4: a. For a county with a deficit of 71 to 90 beds, if the average adjusted occupancy of licensed beds in the county, exeluding continuing care retirement communities, is 90 percent or greater based on utilization data reported on 2016 Renewal Applications, the need determination is 90 beds.
b. For a county with a deficit of 91 or more beds, if the average adjusted occupancy of licensed beds in the county, exeluding continuing eare retirement commmities, is 90 percent or greater based on utilization data reported on 2016 Renewal Applications, the need determination is the amount of the deficit rounded to $10^{*}$. The maximum need determination for each county is 150 beds.
c. If any other county's deficit is 10 percent or more of its total projected bed need, and the average adjusted occupancy of licensed beds in the county, excluding continting care retirement commmities, is 90 percent or greater based on utilization data reported on 2016 Renewal Applications, the need determination is the amount of the deficit rounded to $10^{*}$. The maximum need determination for each county is 150 beds.

* For purposes of rounding need determinations, numbers greater than 10 and ending in one to four would round to the next lower number divisible by 10 , and numbers ending in five to nine would round to the next higher number divisible by 10 .

A nursing care bed's service area is the nursing bed care planning area in which the bed is located. Each of the 100 counties in the state is a separate nursing care bed planning area.

