Long Term & Behavioral Health Committee
Agency Report
Petition to
Review Nursing Home Need Methodology and Policies
Proposed 2015 State Medical Facilities Plan

Petitioner:
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Request:
The petitioner requests a review of the State Medical Facilities Plan's nursing home bed need methodology and related policies in coordination with stakeholder representatives, in order to assess whether changes need to be made to the methodology and/or policies to better address current patterns in nursing home bed utilization.

Background Information:
Chapter 2 of the State Medical Facilities Plan (SMFP) describes the purpose and process for submitting petitions to amend the SMFP during its development. Petitions may be sent to the Medical Facilities Planning Branch twice during the course of plan development. Early in the planning year petitions related to basic SMFP policies and methodologies that have a statewide impact may be submitted. The SMFP defines changes with the potential for a statewide impact as *"the addition, deletion, and revision of policies and revision of the projection methodologies."* The review requested by this petitioner could affect a methodology and/or policies in the SMFP and should be considered before publication of the Proposed 2015 SMFP.

Later in the planning cycle when need projections are identified in the Proposed SMFP, petitions may be submitted seeking adjustments to the projected need determination in any service area if the petitioner believes the needs of a service area are not fully addressed by the standard methodology.

Need for nursing home beds is determined by calculating the statewide five-year average use rate per 1,000 population for each of four age groups based on data from annual license renewal applications. The utilization per county is then calculated into a five-year average annual rate of change statewide utilization rate, establishing a trend line per age group, projected forward for 30 months, which is then applied to the projected population going forward three years, for each county. The amount of need per county is then established based on the size of the county's projected surplus or deficit when the projected utilization is compared to the inventory of existing and approved beds. In the 2014 SMFP, a detailed description of this methodology can be found on pages 189-191.

The current methodology was developed in 1988 at the direction of the State Health Coordinating Council's (SHCC) Long Term Care Committee (LTCC). The LTCC cited the following reasons for the new methodology (1988 SMFP, p. 79):

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1. For the past two years the Department of Human Resources
   committed itself to an objective of achieving parity among the
   six health service areas in the State.  Continued use of the
   previous methodology would have resulted in a longer time
   period for achieving parity.

2. Methodologies used in the past to project nursing home bed need
   were based on current use rates. These use rates were projected
   in the future without taking into account the utilization of
   approved non-operational beds. Due to the length of time beds
   were held up in the appeals process in the Certificate of Need
   Program, inventory and use of beds remained fairly constant
   while the aged population continued to increase, possibly
   resulting in depressed use rates.

3. Previous methodologies did not reflect specifically the extent
   to which the 85 and older age group used nursing home beds.
   Utilization data related to the 85 and older age group became
   available for the first time in 1987. Based on a sample survey
   of Nursing Home Licensure Applications from 28% of the nursing
   homes in the State, 8 percent of the under 65 year old age
   group use nursing home care; approximately 15% of the users are
   between the ages of 65-74; 37 percent are in the 75-84 age
   group and a little more than 40% of the users of nursing home
   care are 85 years old and older.

4. Legislative actions exempting beds from the State Medical
   Facilities Plan (i.e., continuing community retirement centers)
   coupled with departmental provisions allowing exemptions in
   some cases where acute care beds were converted to nursing home
   beds made it difficult to categorize beds for purposes of
   determining the existing inventory of' beds.
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Changes have been made over the intervening years to individual assumptions, (i.e. increasing the projection from two to three years) and to specific application steps, but the methodology as a whole has remained intact since it first appeared in the SMFP in 1989. However, the policies specific to nursing homes have undergone substantial revision and additions since the late 1980s.

In September 2010, a Long Term Care Nursing Home Beds Work Group was convened under a charge from the SHCC Chairperson to "review and recommend changes to the nursing home bed need methodology." The work group's final recommendation to the SHCC was that no changes be made to the current methodology. However, the work group recommended that discussions about potential changes be continued as appropriate.

Analysis/Implications:
The petition raises three primary issues related to the current nursing home bed methodology's effectiveness at predicting nursing home bed need in today's healthcare environment: (1) The use of statewide data to project need for individual counties without fully accounting for each county's bed ratio, utilization and population growth patterns; (2) the impact of the methodology's Step 4 on large metropolitan areas deficit size before the service area reaches the 90% occupancy threshold required to generate a determination of bed need; and (3) whether the variables used within the current methodology are the best predictors of future utilization in today's healthcare market.

Bed-to-population ratios, stratified by age group, are used to predict utilization three years forward and are reported in the SMFP as a statewide ratio. These age-based use rates are then applied to each county's population by age group to determine each county's surplus or deficit of beds. The Agency's analysis of utilization across counties and the large differences between county-based use rates and the state-wide rate used in the current methodology is consistent with the data presented in the petition. As the petition points out, using statewide data assumes that populations are distributed equally across the state by age group and results in over-projections of need in some counties. In addition to the issues described in the petition, because the statewide rate does not control for outliers and is a mean rather than a median, the need assessments tend toward over-projection. The impact of this tendency is magnified in the largest metropolitan areas as illustrated in Table 1 below.

Table 1: Nursing Bed Surpluses/Deficits Published in Previous SMFPs

County	SMFP							
	2007	2008	2009	2010	2011	2012	2013	2014
Mecklenburg	-176 *	-37	+12	-103	+217	+165	-31	+6
New Hanover	-132 **	0	+39	+116	+149	+129	+50	+76
Wake	-436	-499	-524	-819	-976 ***	-253	-565	-544

* 180 bed need determination issued
** 130 bed need determination issued
*** Adjusted need determination issued for 240 beds due to high deficit

In 2011, the SHCC approved an adjusted need determination for 240 nursing home beds in Wake County due to the county's projected deficit of 976 beds. Although Wake County's deficit was comparatively high, the county did not meet the 90% bed occupancy threshold to generate a determination of need according to the standard methodology. As shown in Table 1 above, Wake County consistently shows high deficits of beds although the occupancy rate for the county's beds has not exceeded 89% in the last eight years. However, as the petition states, if

the occupancy rate were to meet the threshold, all of these beds would be available in the SMFP. Releasing such a large number of beds at once taxes the labor and land resources of even large counties like Wake.

The petition suggests that factors beyond the scope of the current methodology may need to be considered when projecting need for nursing care beds. The current methodology uses the county's existing population to project bed need, assuming that residents of a given county will seek long-term care in the county in which they currently reside. However, data drawn from 2013 nursing home license renewal applications show that 20% of nursing home residents from North Carolina occupied beds in facilities outside their county of residence. Seventeen counties draw more than 40% of their patients from other counties. Despite the significant amount of cross-county migration of nursing care patients, the current methodology does not account for this pattern. The Agency finds merit in exploring whether factors such as cross-county migration should be accounted for in the nursing home bed methodology.

Agency Recommendation:
The petitioner requests a review of the nursing home bed methodology and policies. Given the available information and comments submitted by the March 5, 2014 deadline and in consideration of factors discussed above, the agency recommends proceeding with a review in order to access the whether the current methodology and policies are responsive to the current long-term care environment to include participation from subject matter experts for consideration for the 2016 Plan.