Long-Term Behavioral Health Committee
Agency Report
Adjusted Need Petition
For 12 Skilled Nursing Care Beds in Davie County
Proposed 2015 State Medical Facilities Plan

Petitioner:
Bermuda Village Retirement Community
142 Bermuda Village Drive
Bermuda Run, NC 27006

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Request:
The petition requests a special need adjustment to the Proposed 2015 State Medical Facilities Plan (SMFP) to add 12 nursing home beds in Davie County.

Background Information:
Chapter Two of the SMFP allows “[p]eople who believe that unique or special attributes of a particular geographic area or institution give rise to resource requirements that differ from those provided by application of the standard planning procedures and policies may submit a written petition requesting an adjustment be made to the need determination given in the North Carolina Proposed State Medical Facilities Plan.”

Nursing bed need is calculated by: (1) multiplying the adopted age-specific use rates by each county’s corresponding projected age-specific civilian population (in thousands) for the target year (2018); and then (2) adding the products of the age-specific projections of beds in Step 1, for each county. The total from Step 2 is the county’s projected bed utilization. For each county, the planning inventory is determined based on the number of licensed beds, adjusted for: Certificate of Need (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 derived in Step 2, above, is subtracted from the planning inventory. The result is the county’s bed surplus or deficit. For the Proposed 2015 SMFP, the above methodology uses the following bed-to-population ratios, which come from combined patient utilization data as reported on the 2014 Nursing Home License Renewal Applications and
on Nursing Care Supplements to the 2014 Hospital License Renewal Applications, projected forward 30 months based on trend lines reflecting the previous 5 years of data by age group:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Beds per 1,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 65</td>
<td>0.62</td>
</tr>
<tr>
<td>65-74</td>
<td>7.02</td>
</tr>
<tr>
<td>75-84</td>
<td>24.12</td>
</tr>
<tr>
<td>85 and Over</td>
<td>86.60</td>
</tr>
</tbody>
</table>

Source: NC Proposed 2015 SMFP

Using this method, the Proposed 2015 SMFP shows that Davie County has a surplus of 3 beds for 2018.

**Analysis/Implications:**
The petition presents three primary reasons to support the licensing of 12 additional nursing home beds in Davie County:

1. Davie County’s median population is older than the state population.
2. Facilities draw patients from other counties, but the bed need calculations assume that all patients come from Davie County.
3. Davie County’s nursing home bed use rate is higher than the state average.

All of these reasons relate to the applicability of the SMFP methodology to Davie County.

**Population, Bed Use Rate, and Patient Origin**
As pointed out in the petition, the 2014 median population of Davie County is several years older than that of the state as a whole (43.7 years compared to 38.1 years). More important, the over-65 population is over-represented in Davie County compared to the state as a whole (see Figure 1). The population projections through 2018 show a similar pattern to that presented in Figure 1 (NC Office of State Budget and Management, Population Estimates and Projections).

**Figure 1. 2014 Population Breakdown**

Source: NC Office of State Budget and Management, Population Estimates and Projections
The second reason given to support the petition is patient origin. The methodology assumes that all nursing care facility patients in a county will be residents of that county, but the petition points out that many patients in nursing care facilities in Davie County are not residents of Davie County. The petition notes that “two facilities, Bermuda Village and Bermuda Commons, are very near the Forsyth County line, and one, Autumn Care, is near the Iredell County line. Patients of all facilities come from Davie and other counties.” Based on information from the 2014 License Renewal Applications, out of all of the 676 residents living in the three nursing care facilities in Davie County, 53% were Davie County residents (see Figure 2). In contrast, an average of 74% of the nursing care facility residents throughout the state received services in a nursing care facility in their county of residence. Most of the non-Davie County residents in Davie County nursing care facilities were residents of Forsyth County.

**Figure 2. County of Residence for All Residents in Nursing Care Facilities in Davie County (n=676)**

![Pie chart showing county of residence](image)

*Source: 2014 License Renewal Applications*

Review of patient origin data from the 2014 Nursing Home License Renewal Applications revealed that 66% of the 548 Davie County residents receiving nursing home care were living in Davie County nursing care facilities, and 34% (186) were residing in nursing care facilities in another county (see Figure 3), primarily Forsyth County.

The third reason given to support the petition is that Davie County has a rate of 1.47 nursing facility days for each county resident, compared to a rate of 1.09 statewide (North Carolina DMA Cost Report Summary 2012). This may reflect Davie County’s older population, but may also partially reflect the occupancy of nursing home beds by individuals who are not residents of Davie County.
Applicability of the Methodology
Table 1 shows the calculation of bed need in Davie County during the past several years. Davie County had a constant inventory of 216 beds throughout this period. The bed-to-population ratio has been generally declining in the past several years for the 75-84 and 85+ age groups. If the 75- and older population were stable, this trend would yield an increase in the bed surplus, because fewer people in these age groups would be determined to need nursing home beds. Since Davie County’s older population is increasing, however, the bed surplus has been declining.

Table 1 Nursing Home Age-Specific Bed Rates and Bed Surplus/Deficit, Davie County

<table>
<thead>
<tr>
<th>SMFP Year</th>
<th>Under 65</th>
<th>65-74</th>
<th>75-84</th>
<th>85+</th>
<th>Davie County Bed Surplus or Deficit (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>.58</td>
<td>7.70</td>
<td>26.82</td>
<td>90.16</td>
<td>14</td>
</tr>
<tr>
<td>2012</td>
<td>.59</td>
<td>7.72</td>
<td>25.69</td>
<td>90.39</td>
<td>12</td>
</tr>
<tr>
<td>2013</td>
<td>.61</td>
<td>7.76</td>
<td>26.12</td>
<td>92.88</td>
<td>-9</td>
</tr>
<tr>
<td>2014</td>
<td>.63</td>
<td>7.19</td>
<td>23.95</td>
<td>88.99</td>
<td>8</td>
</tr>
<tr>
<td>2015 (Proposed)</td>
<td>.62</td>
<td>7.02</td>
<td>24.12</td>
<td>86.60</td>
<td>3</td>
</tr>
</tbody>
</table>

Total bed inventory = 216 for all years  


Local Characteristics
The petition states that “all available nursing home beds stay occupied” (see Table 2). On initial review of the data, it appears that this statement may not be accurate. However, the petition indicates the occupancy rate may be somewhat suppressed partially based on the use of some licensed semi-private rooms as private rooms at Bermuda Commons. While this practice is acceptable in the nursing home industry, the methodology does not have a mechanism to make adjustments for this common practice.
For the past several years, the year-end occupancy rate at Bermuda Commons has remained relatively constant at 90-95 patients (77-81%). If the methodology allowed for the analysis to reflect the actual beds in use at Bermuda Commons (90-95 beds versus the 117 total licensed beds), then the projected bed utilization for 2018 would yield a deficit in Davie County of at least 14 beds.

**Table 2. Davie County Nursing Homes – 2013 Data - Occupancy Rates**

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Total NH Licensed Beds</th>
<th>9/30/2013 NH Bed Occupancy</th>
<th>NH Facility Occupancy Rate on 9/30/2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn Care of Mocksville</td>
<td>96</td>
<td>89</td>
<td>92%</td>
</tr>
<tr>
<td>Bermuda Commons</td>
<td>117</td>
<td>90</td>
<td>77%</td>
</tr>
<tr>
<td>Bermuda Village</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>216</strong></td>
<td><strong>182</strong></td>
<td><strong>84%</strong></td>
</tr>
</tbody>
</table>

*Source: NC Proposed 2015 SMFP: NH 2014 LRAs*

**Agency Recommendation:**
The petition requests an adjusted need determination for 12 nursing home beds in Davie County in the Proposed 2015 SMFP. The agency supports the state health planning process identified in the Proposed 2015 SMFP and approved by the Governor. The standard methodology has identified that there is no need for new nursing home beds in Davie County for three of the four past planning cycles (2011-2014), and in the Proposed 2015 SMFP. A review of data and utilization specific to Davie County, however, shows that applying the standard methodology may over-estimate the number of beds available in the county, and hence, underestimate need.

Given available information and comments submitted by the August 15, 2014 deadline, and in consideration of factors discussed above, the agency recommends approval of Bermuda Village’s petition to add 12 nursing home beds to Davie County. Increasing the number of beds will enhance the ability of Davie County to meet the need for skilled nursing care.