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January 27, 2009

Dear Mr. Cogley:

In response to the recommendation made by the Long-Term and Behavioral Health Committee, the State Health Coordinating Council (SHCC) appointed a task force charged with the responsibility to fully evaluate the hospice home care and hospice inpatient need determination methodologies for the Proposed 2010 State Medical Facilities Plan (SMFP).

At the August 1, 2008 SHCC meeting, Hospice of Davidson County (HDC) submitted a petition for an adjustment to the 2009 SMFP to remove the need determination for one additional hospice home care office in Davidson County. In the petition, HDC indicated our plans to submit this letter to the task force in order to provide both constructive criticisms of the current hospice home care need methodology and to offer suggestions for revisions.

HDC recommends that the Hospice Methodologies Task Force consider the following three modifications while evaluating the hospice home care need methodology:

1. Consideration of variability of county death data, and identification of the most reliable source.
2. Application of the individual county percentage of deaths served by hospice instead of the state-wide median to project potential patients, and,
3. Utilization of the three-year compound annual growth rate (CAGR) of percentage of deaths served by hospice for each county.

The detailed rationale for these recommendations is provided on the following pages.



## County Death Data

The first step of the current hospice home care methodology is determining the total number of deaths for each county. The number of deaths used in the SMFP is published by the North Carolina Department of Health and Human Services, State Center for Health Statistics. However, a comparison of historical data from three separate sources shows a significant discrepancy in the total deaths from Davidson County, as exhibited in the table below.

### Davidson County Total Deaths

Source	2005	2006	2007
Death Certificates Issued	1,035	1,028	1,047
Davidson County Vital Records	1,036	1,024	946
NC Vital Statistics	1,376	1,500	1,511

Sources: Register of Deeds, Davidson County Health Department, 2007, 2008 and Proposed 2009 SMFP

Data from the Davidson County Health Department, Davidson County Register of Deeds and North Carolina Vital Statistics show the number of deaths that occurred in 2007 range from 946 to 1,511; a 60% variance. This greatly affects the percentage of deaths served by hospice in Davidson County for each given year. The wide variance in the data from these three sources raises the question as to which source most accurately reflects the total deaths in Davidson County. Notably, the data from Davidson County Vital Records shows a decrease of 78 deaths from 2006 to 2007; however, the data from NC Vital Statistics indicate an increase of 11 from 2006 to 2007. This further highlights the variability of the data, and raises uncertainties as to which source most accurately reflects the number of deaths in Davidson County.

If this variability exists in the Davidson County data, it may exist for other counties in North Carolina. Thus, HDC recommends that the Hospice Methodology Task Force review the variability of data for each county, and consider which is likely to represent the most accurate data for use in developing the SMFP Hospice Home Care Office need methodology.

## **Percentage of Deaths Served by Hospice**

### *County-Based Data*

The 2009 SMFP included one change to the Basic Assumptions of the Hospice Home Care Office need methodology. Specifically, total potential patients are projected by applying a state-wide median percent of deaths served by hospice, instead of a state-wide average percent of deaths served by hospice. The 2007 North Carolina median percent of deaths served by hospice was 29.5%. However, HDC is concerned that state-wide trends in hospice utilization do not provide an accurate representation of hospice use in each individual county. HDC recommends that the Basic Assumptions of the Hospice Home Care Office need methodology use county-based percent of deaths served by hospice instead of the state-wide median.

The Proposed 2009 SMFP identified the need for an additional Hospice Home Care Office in five counties (Cherokee, Davidson, Johnston, Union and Wilkes counties). Providers in three of the five counties (Davidson, Johnston and Union counties) petitioned the State Health Coordinating Council for an adjustment to remove the identified need, all of which were subsequently approved, and thus excluded from the 2009 SMFP.

It is evident by the approval of each petition that the Basic Assumption of the Standard Methodology to utilize the State-wide median percentage of deaths served by hospice did not apply to (at least) three counties. Thus, there is need for an alternative measurement to project potential hospice patients.

The table on the following page provides a comparison for several counties of the percentage of deaths served by hospice during 2007 versus the state-wide median.

### 2007 Percentage of Deaths Served by Hospice

	% of Deaths Served by Hospice	North Carolina Median % Deaths Served by Hospice*
Davidson County	23.90%	29.40%
Anson County	14.77%	
Lenoir County	17.29%	
Halifax County	16.54%	
Henderson County	56.69%	
Orange	51.08%	

\*Source: State-wide median percentage of deaths served by hospice, per the 2009 SMFP methodology

As demonstrated in the previous table, the percentage of deaths served by hospice in Davidson County is nearly 20% below the North Carolina median. This difference varies widely for many other counties. In fact, in 2007, 50 counties experienced a lower percentage of deaths served by hospice compared to the state-wide median. This data further supports an adjustment to the Basic Assumptions of the Method for projecting Hospice Home Care Offices, because an individual county may utilize hospice services at a rate that is much lower or higher than the state-wide median.

#### *Three-Year Average*

In order to account for trends and variability in the number of deaths served by hospice in individual counties, HDC also recommends utilizing the three-year average of each county's percent of deaths served by hospice, to project future year hospice deaths.

The need determination for one additional Hospice Home Care Office in Davidson County in the Proposed 2009 SMFP was the result of a one-year data point which was inconsistent with the historical experience for percentage of deaths served by hospice in Davidson County. The following table provides historical hospice data for Davidson County.



Davidson	1511	361	<b>26.0%</b>	9.5	160,114	1,521	396	(35)	0
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Source: Utilizes the 3-year CAGR as proposed by HDC. All other data from the 2007, 2008 and 2009 SMFPs

HDC recommends an adjustment to the Basic Assumptions of the Method for projecting Hospice Home Care Offices to include the following:

**“Total potential patients are projected applying a county-based percent of deaths served by hospice based on the three-year average (for each county) to projected deaths in each county.”**

In summary, given the evidence supplied in this letter, HDC recommends that the Hospice Methodologies Task Force consider the following suggestions as it reviews the Hospice Home Care Office need methodology:

1. Consideration of variability in county death data, and identification of the most reliable source.
2. Application of the individual county-based percentage of deaths served by hospice instead of the state-wide median to project potential patients, and,
3. Utilization of the three-year CAGR of percentage of deaths served by hospice for each county.

Please contact me at 1-800-768-4677 if you have any questions, or if I may be of further assistance.

Sincerely,



Lisa Hathaway, MBA

Chief Executive Officer

Hospice of Davidson County