



**PETITION FOR AN ADJUSTED NEED DETERMINATION FOR FOUR
HOSPICE INPATIENT BEDS FOR DAVIDSON COUNTY**

Petitioner:

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Requested Change:

Hospice of Davidson County (HDC) seeks to expand access to hospice inpatient services in Davidson County and *petitions for an adjusted need determination for four hospice inpatient beds in Davidson County in the 2016 SMFP.*

Reasons Supporting Requested Change:

Proposed 2016 State Medical Facilities Plan/Identified Need:

The standard methodology for projecting hospice inpatient beds in the Proposed 2016 SMFP shows there is no need determination for additional hospice inpatient beds for Davidson County. However, HDC believes there are numerous reasons that justify the development of additional hospice inpatient beds in Davidson County. As described in the Proposed 2016 SMFP,

“People 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.”

Additionally, Chapter 13 of the Proposed 2016 SMFP states,

“The Long-Term and Behavioral Health Committee and the State Health Coordinating Council will consider petitions for adjusted need determinations that are filed in accordance with provisions outlined in Chapter 2 of the State Medical Facilities Plan.”

HDC recognizes the long-standing support of the Long-Term and Behavioral Health Committee and the State Health Coordinating Council with respect to petitions for adjusted need determinations. After careful evaluation, HDC has determined that there are special and unique circumstances in Davidson County that justify the request for four additional hospice inpatient beds. Approval of this petition will provide HDC the opportunity to submit a Certificate of Need (CON) application during 2016 to develop four additional hospice inpatient beds in Davidson County.

HDC justifies the proposed adjusted need determination based on several factors, including:

- The SMFP standard methodology unrealistically projects Davidson County hospice inpatient days to decrease from FY14 to FY19.
- During CY2014, 27 patients died before admission to HDC’s Hinkle Hospice House because an inpatient bed was not available.
- Davidson County’s two-year trailing inpatient utilization rate is 6.41 percent compared to the 3.93 percent rate used by the standard methodology.
- Davidson County hospice admissions are increasing considerably faster compared to overall statewide hospice admissions.
- Davidson County ranks in the top one-third of counties in North Carolina with respect to percent of deaths served by hospice.
- The Davidson County hospice inpatient days of care and occupancy rate included in Table 13D(2) do not include/reflect respite days of care.
- The population in Davidson County is aging and has need for expanded hospice inpatient services.
- Davidson County has comparatively higher cancer incidence rates and mortality rates than statewide statistics.

- Davidson County residents typically have less access to financial resources, and thus may have limited ability to travel long distances for hospice care.
- HDC's petition request will promote the three Basic Principles of the State Medical Facilities Plan.

Background

HDC was created in 1985 as a non-profit, community-based agency focusing on providing care for the terminally ill. HDC's mission is to affirm the significance of human life and recognize dying as a natural process. HDC's services are provided to enrich the quality of life for persons in Davidson County with limited life expectancies and their loved ones. The Hospice professional and dedicated team carries out this mission by providing health, social, emotional, and spiritual services to enhance the quality of life with peace and dignity for patients and support for families.

In 2009, HDC opened the county's only inpatient hospice program at The Henry Etta & Bruce Hinkle Hospice House. Today, the agency cares for more than 100 patients every day in a variety of locations, including private homes, in long-term care and skilled nursing facilities, and at the Hinkle Hospice House.

HDC's primary service area is Davidson County. HDC serves over 75% of all hospice admissions in Davidson County. As the need arises, HDC also cares for patients in adjacent counties.

HDC currently owns and operates one hospice inpatient facility with eight (8) hospice inpatient beds in Davidson County. Regularly throughout the year, there is a waiting list for patients to be admitted to the facility. During CY2014, 27 patients died before admission to HDC's Hinkle Hospice House because a hospice inpatient bed was not available. For this reason, and the many others described in this petition, HDC requests an adjusted need determination for four additional hospice inpatient beds be included in the 2016 SMFP.

Should this petition be granted, during 2016 HDC would submit a CON application to develop an additional four hospice inpatient beds at its existing Hinkle Hospice House. The detailed rationale for the requested adjustment to the need determination is described in the following pages.

Hospice Inpatient Bed Need Methodology

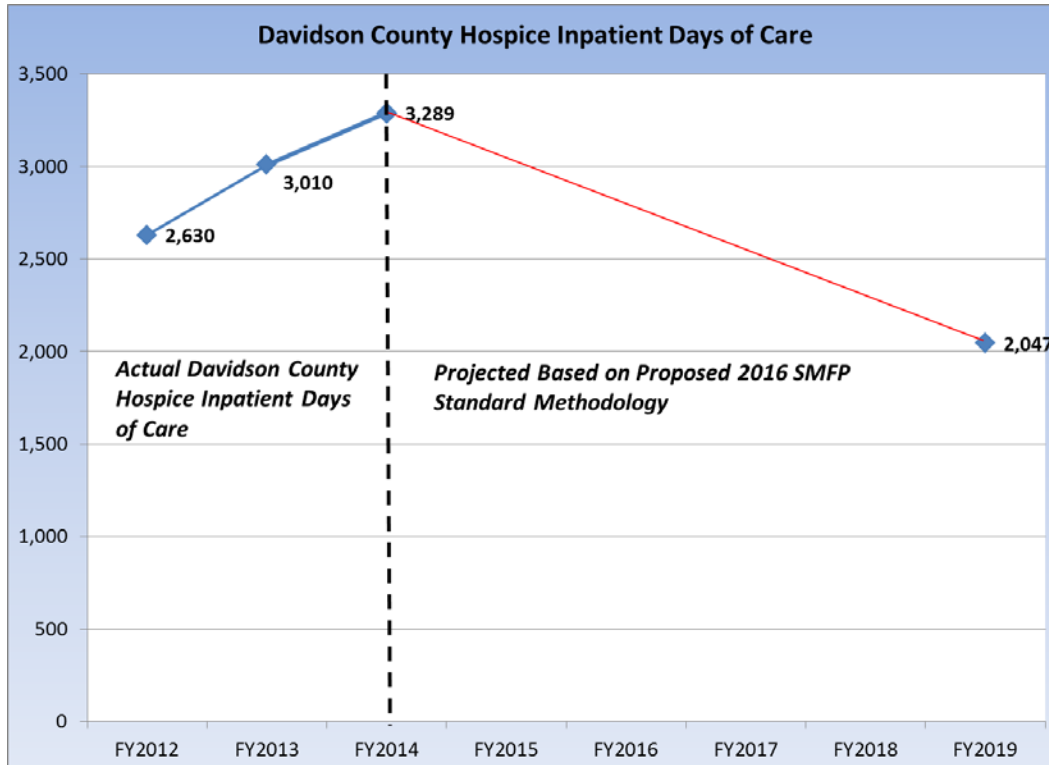
HDC recognizes and supports the state health planning process and policies as identified in the SMFP and approved by the SHCC and the governor. HDC also acknowledges that on June 3, 2015, based on the recommendation of the Long-Term and Behavioral Health Committee, the State Health Coordinating Council revised the hospice inpatient bed need methodology by modifying Step 7 to reflect a two-year trailing average statewide inpatient utilization rate. Despite this update to reflect actual, statewide hospice inpatient utilization, HDC notes that unique circumstances continue to exist in Davidson County that differ from those provided by application of the standard hospice inpatient bed need methodology.

Perhaps this is most clearly evident by examining the total projected hospice inpatient days in Davidson County in Table 13C of the Proposed 2016 SMFP. Specifically, the application of the standard methodology results in 2,047 hospice inpatient days in Davidson County during FY2019 (Column I). This is inconsistent with the actual utilization of hospice inpatient services during in Davidson County during recent years. For example, based on data from Hospice License Renewal Data Supplements included in the DHSR Health Planning Access Database, 3,239 hospice inpatient days of care (also referred to as “GIP” days) were provided in Davidson County during FY2014 (see attachment A). Therefore, the application of the standard methodology actually projects hospice inpatient days of care to decrease in Davidson County. The state-wide assumptions that created this projection are not consistent with historical utilization in Davidson County and are therefore not realistic for Davidson County from a health planning perspective. The graph on the following page illustrates this point.

Comparison of Actual Davidson County Hospice Inpatient Days of Care

vs

FY2019 Davidson County Hospice Inpatient Days of Care in Table 13C: Proposed 2016 SMFP



Source: Table 13C, Proposed 2016 SMFP; data from Hospice License Renewal Data Supplements included in the DHSR Health Planning Access Databases for FY2012 - FY2014 hospice data.

Note: Davidson County GIP days of care includes all GIP days of care in Davidson County as reported by hospice providers in their respective hospice data supplements, regardless of whether the care was provided in a hospice inpatient facility, acute care hospital, or skilled nursing facility.

While HDC supports the state health planning process, it is evident that Davidson County is unique with respect to hospice inpatient services, and that the standard methodology does not accurately project hospice inpatient utilization for Davidson County in the Proposed 2016 SMFP. Therefore, in the case of this request for an adjusted need determination, it is appropriate to consider actual Davidson County hospice data in place of broad, statewide data and assumptions.

Upon careful review of the standard methodology, HDC has identified the following basic assumptions which should be considered when projecting need for hospice inpatient beds in Davidson County.

Hospice Admissions (Step 5)

In Step 5 of the standard methodology, the Proposed 2016 SMFP projects FY2019 hospice admissions by applying the statewide two-year trailing average growth rate for hospice admissions. HDC notes that in the case of Davidson County, the county-based two-year trailing average growth rate for hospice admissions is much higher compared the statewide two-year trailing average growth rate for hospice admissions, as seen in the following table.

Hospice Admissions, FY2012-FY2014

	Davidson County Hospice Admissions	North Carolina Hospice Admissions
FY2012	735	39,215
FY2013	734	41,067
FY2014	812	40,787
<i>2-Yr Trailing Avg Growth Rate</i>	<i>5.1%</i>	<i>2.0%</i>

Source: 2014 SMFP – Proposed 2016 SMFP

The two-year trailing average growth rate for total hospice admissions in Davidson County was 5.1 percent from FY12-FY14. This is more than two and a half times greater than the statewide two-year trailing average growth rate for hospice admissions which was 2.0 percent during the same time period. Based on a review of historical data, it is evident that Davidson County’s most recent two-year trailing hospice admission growth rate is not an anomaly. As shown in the table on the following page, the three-year trailing average growth rate for hospice admissions in Davidson County was 5.8 percent from FY11-FY14, and the four-year trailing average growth rate was 7.1 percent from FY10-FY14.

Davidson County Hospice Admissions

	Hospice Admissions
FY2010	618
FY2011	685
FY2012	735
FY2013	734
FY2014	812
<i>2-Yr Trailing Avg Growth Rate</i>	<i>5.1%</i>
<i>3-Yr Trailing Avg Growth Rate</i>	<i>5.8%</i>
<i>4-Yr Trailing Avg Growth Rate</i>	<i>7.1%</i>

Source: 2012 SMFP – Proposed 2016 SMFP

Therefore, to project hospice admissions that are consistent with historical growth trends, HDC recommends that, in the case of this petition for an adjusted need determination, the Davidson County two-year trailing average growth rate for total hospice admissions (5.1%) is more relevant and appropriate than the broader statewide growth rate (2.0%).

Hospice Inpatient Utilization (Step 7)

As described previously, in 2009 HDC opened Davidson County's only inpatient hospice program at The Henry Etta & Bruce Hinkle Hospice House. The facility is licensed for eight hospice inpatient beds and four residential beds. Having offered hospice services for 30 years and hospice inpatient services for six years, hospice inpatient services are an important component of the continuum of care in the local community. This is evidenced by the hospice inpatient utilization rate for Davidson County. Please refer to the table on the following page.

Hospice Inpatient Utilization Rate

	Davidson Co. GIP Days of Care*	Davidson Co. Hospice Days of Care	% of Total Hospice Days
FY2013	3,010	51,026	5.9%
FY2014	3,289	47,170	7.0%
2-Yr Trailing Avg Inpatient Utilization Rate			6.4%

Source: 2015 SMFP, Proposed 2016 SMFP, data from Hospice License Renewal Data Supplements included in the DHSR Health Planning Access Databases for FY2013 & FY2014 hospice data.

*Please note that Davidson County GIP days of care include all GIP days of care in Davidson County as reported by hospice providers in their respective hospice data supplements, regardless of whether the care was provided in a hospice inpatient facility, acute care hospital, or skilled nursing facility; thus, Davidson County GIP days of care are higher compared to the hospice inpatient days of care reported in Table 13D (2) of the SMFP, which reflects only hospice inpatient days of care provided in hospice inpatient facilities. For information purposes, GIP care can be provided in more than one setting as appropriate to patient need. GIP care is for pain control or symptom management provided in an inpatient facility that cannot be managed in other settings.

The two-year trailing average statewide inpatient utilization rate in Proposed 2016 SMFP standard methodology is 3.9 percent. However, Davidson County’s actual experience indicates that 6.4 percent of total hospice days of care are inpatient days. This is a clear indication that inpatient hospice services are an important and highly utilized service for residents of Davidson County.

For information purposes, Davidson County’s hospice inpatient ALOS is comparable to the FY2013 Statewide ALOS of 9.2 days (105,902 days of care/11,452 deaths). As shown on HDC’s 2015 data supplement, the inpatient ALOS at Hinkle Hospice House during FY2014 was 7.1 days (2,426 patient days/344 deaths). Thus, Davidson County’s comparatively higher inpatient utilization rate is not driven by an atypical or excessive inpatient average length of stay¹.

¹ Statewide FY2014 data prepared by The Carolinas Center for Hospice and End of Life Care was not available to HDC at the time of submission for this adjusted need petition.

Therefore, to project Davidson County hospice inpatient days of care that are consistent with actual historical utilization, HDC recommends that, in the case of this petition for an adjusted need determination, the Davidson County two-year trailing average inpatient utilization rate (6.4%) is more relevant and appropriate than the broader statewide two-year trailing average inpatient utilization rate (3.9%).

Davidson County Projected Bed Need

The following table applies Davidson County’s two-year trailing average growth rate for total hospice admissions (5.1%) to Step 5 (Column E) and the Davidson County two-year trailing average inpatient utilization rate (6.4%) to Step 7 (Column I) of the Proposed 2016 SMFP standard methodology.

Table 13C Adjusted Hospice Inpatient Bed Need Methodology for Davidson County

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K	Column M
County	Total Admissions (2014 Data)	Total Days of Care (2014 Data)	ALOS per Admission	Total 2019 Admissions (County-Based 2-yr Growth Rate, 5.1%)	2019 DOC at County ALOS	2019 DOC at Statewide ALOS	Projected 2019 DOC for Inpatient Estimates	Projected IP Days (6.4%)	Total Projected IP Beds	Currently Licensed	Adjusted Projected Beds (Col J - Col K)
Davidson	812	47,170	58.09	1,042	60,511	79,375	60,511	3,882	13	8	5

As demonstrated in the previous table, if the Davidson County two-year trailing average growth rate for total hospice admissions and two-year trailing average inpatient utilization rate are used, as HDC recommends, the resulting total projected inpatient bed need is five (5) beds. This adjusted methodology is reasonable because it utilizes historical data specific to Davidson County hospice use.

HDC conservatively requests an adjusted need determination of four (4) hospice inpatient beds. HDC believes this is a reasonable and prudent method to expand access to hospice inpatient services in Davidson County in a manner that utilizes existing resources and infrastructure and, therefore, is most cost effective.

Existing Facility Occupancy Rate (Step 11)

Step 11 of the hospice inpatient methodology indicates existing hospice inpatient facilities must have an occupancy of at least 85 percent before the Adjusted Projected Beds in Step 9 (Column M of Table 13C) are considered for possible need determinations.

It is important to note that Hinkle Hospice House's FY2014 occupancy rate reported in Table 13D(2) of the Proposed 2016 SMFP does not completely represent utilization of HDC's eight hospice inpatient beds. Specifically, the occupancy rate is based on hospice inpatient (GIP) days only and does not reflect respite days of care which must be provided in a hospice inpatient bed.

Respite care is short-term inpatient care provided to a hospice patient only when necessary to relieve the family members or other persons caring for the individual at home. At times throughout the year, HDC must delay admissions to the inpatient unit because a portion of the inpatient beds are occupied by respite patients; however the occupancy rate in Table 13D(2) does not reflect respite days. In other words, HDC's hospice inpatient beds are utilized at a greater rate than reflected in Table 13D(2).

During FY2014, Hinkle Hospice House provided 131 respite days of care. Therefore, when HDC's inpatient bed occupancy rate is calculated based on hospice inpatient days of care (2,426) and respite days of care (131), the actual FY2014 occupancy for Hinkle Hospice House's eight hospice inpatient beds was 87.6 percent $[(2,426 + 131) = 2,557 \text{ total days of care in GIP bed} \div 365 \text{ days} \div 8 \text{ GIP beds} = 87.6\%]$. This exceeds the 85 percent occupancy threshold in Step 11 of the hospice inpatient methodology.

The previous narrative provides the specific quantitative methodology that supports the proposed adjustment of four hospice inpatient beds. As described in the following narrative, there are numerous additional quantitative and qualitative rationales that support HDC's petition for adjusted need determination. Hospice services are highly utilized in Davidson County. The historical use of hospice services, combined with the need for additional capacity at HDC's existing hospice inpatient facility ensure the proposed additional four hospice inpatient beds will be well utilized.

Hospice Utilization

% of Deaths Served by Hospice

A key indicator of the growing acceptance of hospice is the percent of all deaths that are served by hospice. During the past 14 years, the number of North Carolina deaths served by hospice has increased dramatically. According to the Carolinas Center for Hospice and End of Life Care, in 2004 only 14.6 percent of deaths in North Carolina were served by hospice. In 2013 (the most recent data available), the percent of North Carolina deaths served by hospice nearly tripled to 42.4 percent.

During recent years, the percentage of total Davidson County deaths served by hospice has consistently increased, as shown in the following table.

2008-2012 Percent of Deaths Served by Hospice, Davidson County

	2007	2008	2009	2010	2012	2013
Davidson Co. Total Deaths	1,471	1,455	1,516	1,548	1,654	1,695
Hospice Patient Deaths	361	393	480	600	662	728
% of Total Deaths Served by Hospice	24.54%	27.01%	31.66%	38.76%	40.02%	42.95%
Statewide Median %	28.29%	26.95%	30.91%	32.00%	40.42%	42.44%

Source: The Carolinas Center for Hospice and End of Life Care

Based on 2013 data, almost one-half of all deaths in Davidson County are served by hospice (42.95%). Davidson County ranks in the top one third of North Carolina counties with respect to deaths served by hospice. This higher than average percentage of deaths served by hospice in Davidson County is further evidence of the local demand for hospice inpatient services, and supports the requested adjustment for an additional four hospice inpatient beds in Davidson County.

According to FY2014 data provided in the Proposed 2016 SMFP, HDC serves nearly 76 percent of all hospice deaths in Davidson County (576 HDC hospice deaths ÷ 760 total hospice deaths in Davidson = 75.8%). In fact, many of these deaths occur in HDC’s own hospice inpatient beds. Therefore, HDC is intimately aware of the growing number of hospice deaths in Davidson County and the need for additional hospice inpatient beds.

Hospice Inpatient Beds

As described previously, HDC owns Hinkle Hospice House, a hospice inpatient and residential facility with eight (8) hospice inpatient beds. Based on hospice inpatient and respite utilization, the actual FY2014 occupancy for Hinkle Hospice House’s eight hospice inpatient beds was 87.6 percent. The following table summarizes monthly occupancy rates during the FY2014.

**Hinkle Hospice House
Hospice Inpatient Bed Utilization, FY2014**

	Inpatient Days	Respite Days	Total Days in GIP Beds	GIP Bed Occupancy	GIP Bed Average Daily Census
October	192	10	202	81.5%	6.5
November	184	19	203	84.6%	6.8
December	216	15	231	93.1%	7.5
January	225	13	238	96.0%	7.7
February	179	5	184	82.1%	6.6
March	216	8	224	90.3%	7.2
April	219	13	232	96.7%	7.7
May	181	10	191	77.0%	6.2
June	169	9	178	74.2%	5.9
July	217	10	227	91.5%	7.3
August	215	7	222	89.5%	7.2
September	213	12	225	93.8%	7.5
Total FY14	2,426	131	2,557	87.6%	7.0

Source: Hospice of Davidson County

The hospice inpatient average daily census (ADC) during FY2014 shows an obvious trend related to an increase in use of inpatient care at Hinkle Hospice House. While the monthly data illustrates months when the ADC reaches peak occupancy, HDC must constantly navigate capacity constraints on a daily and weekly basis. Hospice inpatient care is not a service that you can schedule; rather HDC must be responsive when the need for inpatient care arises. What the annual and monthly utilization data do not depict are the multiple times throughout the year at which HDC’s hospice inpatient beds are fully utilized.

During CY2014, 85 new hospice referrals were placed on a waitlist for admission to an HDC hospice inpatient bed. Unfortunately, 27 of these patients died before

they could be admitted to Hinkle Hospice House because no hospice inpatient beds were available. In addition to these patients, there were also 11 patients who were admitted to another facility, or stayed at home because an inpatient bed was not available. Attachment B provides a summary of waitlist, delay, and deaths before admission to Hinkle Hospice House during CY2014. Without additional inpatient bed capacity, patients will continue to be placed on a waitlist for admission to Hinkle Hospice House; many more patients may not be able to benefit from HDC's inpatient services. As HDC's overall hospice admissions continue to increase, the need for additional capacity will only be exacerbated.

Factors Impacting HDC Hospice Utilization

HDC's hospice referrals have recently increased due, in part, to the strategic efforts of HDC to establish contracts with local long term care facilities/programs, develop relationships with many new referral sources, and an increased investment in staffing resources. The following narrative summarizes these efforts and success.

New Contracts

In late 2014, HDC re-established a contract with Spring Arbor, an assisted living facility in Thomasville licensed for 62 beds. Early in 2015, HDC was also successful in securing a contract with Grayson Creek located in Welcome, a facility licensed for 55 beds.

In 2015, HDC established a contract with Carolina Senior Care, a designated Program of All-Inclusive Care for the Elderly (PACE). Located in nearby Lexington, the program is currently serving 150 clients. In 2016 they plan to expand services to an established cap of 230. HDC is also finalizing a contract with Abbotts Creek Center, a 64-bed skilled nursing facility located just north of Lexington.

New Referral Sources/Increased Access to Referring Providers

HDC has been successful in securing access to several discharge planning conferences in area hospitals. HDS has daily nurse liaison coverage and participates in care conferences at Novant Health – Forsyth & Thomasville Medical Center, Wake Forest Baptist Health (WFBH) and WFBH – Lexington. Please see Attachment C for letters of support from these acute care hospitals.

HDC's nurse liaisons also round regularly at High Point Regional Medical Center, and twice weekly with referring hospitalists, case managers, discharge planners at Rowan Regional Medical Center. HDC is also expanding coverage in Rowan County to include physician practices.

Increased Investment in Staffing Resources

In July 2013, a full-time, weekend liaison position was added to support weekend admissions and round at area hospitals. In January 2015, HDC expanded the Nurse Liaison Department to include an additional liaison dedicated to referring physician practices. Prior to hiring the additional liaison, HDC marketed to 148 physician providers. HDC is now marketing to 225 referring physicians, an increase of 52 percent.

With the addition of the full-time, weekend liaison, HDC is also able to introduce a Hospice In Place (HIP) program at WFBH. Although the number of HIP patients has been fairly small, referrals at WFBH have increased by 21 percent since implementation.

Changes in Marketing Strategies

Part of HDC's competitive advantage is the strong and collaborative local healthcare network. In addition to working closely with area SNFs and home health agencies, HDC is now partnering with FaithHealth, NC, a partnership between WFBH, the local faith community and healthcare providers. HDC is also working closely with the Davidson County Access to Care effort and United Way affiliates to provide education and increase access to hospice services.

Each of these efforts has successfully contributed to the marked growth in hospice admissions in Davidson County. The use of HDC's hospice inpatient beds is primarily driven by agency admissions. Therefore, there will be a continued growing demand for hospice inpatient services in Davidson County.

HDC requests an adjustment of four additional hospice inpatient beds in the 2016 SMFP to expand access to hospice inpatient services in Davidson County and ensure patients have sufficient access to inpatient services. As previously described, circumstances exist in Davidson County regarding the high utilization of hospice inpatient services that justify the development of additional hospice inpatient beds. Additionally, based on local demographic and epidemiologic

data, the utilization of hospice services is likely to continue to increase in Davidson County.

Demographics

Aging

The continued increase in hospice admissions in Davidson County can be partially attributed to its rapidly aging population. As shown in the table below, Davidson County has a significantly older population compared to the State and this demographic is projected to increase substantively by 2019.

2015-2019 Projected Population Age 65+

County/State	2015		2019	
	65+	% of Total	65+	% of Total
Davidson Co.	27,586	16.7%	30,281	18.2%
North Carolina	1,507,231	15.0%	1,721,885	16.5%

Source: NC Office of State Budget & Management

The population age 65 and older makes up a substantial portion of Davidson County’s total population as compared to the State overall, and this population group is projected to increase from 16.7% of the total Davidson County population in 2015 to 18.2% of the total Davidson County population in 2019. The Davidson County population age 65 and older is projected to increase 9.8 percent during the next four years.

It is important to recognize this aging population in Davidson County, due to the correlation of age and hospice use. Since hospice is designed to provide end-of-life care, the vast majority of hospice patients are typically age 65 and older. According to the National Hospice and Palliative Care Organization (NHPCO), 83.9 percent of hospice patients are aged 65 and older². Additionally, NHPCO expects the number of hospice patients within this age cohort to increase in the future. During FY2014, 82 percent of HDC hospice patients served were aged 65+. Thus, this population represents the most significant demographic in need of hospice inpatient services.

² NHPCO Hospice Facts and Figures: Hospice Care in America, 2014 Edition

Median Household Income

Davidson County citizens typically also have less access to financial resources to travel long distances for hospice services. According to the US Census Bureau, the 2009-2013 median household income for Davidson County was \$43,083. This is comparatively lower than the North Carolina state median household income of \$46,334. The comparatively less financial resources available to most residents in Davidson County make locally accessible hospice services especially important to the local community.

Health Status

Davidson County exhibits disproportionate health data compared to the State overall. For example, Davidson County has a higher death rate per 1,000 population compared to the statewide death rate, as shown in the following table.

2009-2013 Death Rate per 100,000 Population

Area	2009-2013 Death Rate/ 1,000 Population
Davidson County	986.3
North Carolina	830.0

PREPARED BY NC-DHHS STATE CENTER FOR HEALTH STATISTICS

According to the North Carolina State Center for Health Statistics, cancer was the leading cause of death in North Carolina during 2013. According to the Carolinas Center for Hospice and End of Life Care, cancer was also the leading diagnosis for hospice admissions during 2013. Dementia/Alzheimer’s disease is the second leading diagnosis for hospice patients. Heart disease is the second most common cause of death in North Carolina and the third leading diagnosis for hospice patients. The death rates for cancer, Alzheimer’s disease and heart disease are high in Davidson County, as shown in the table on the following page.

2009-2013 Age-Adjusted Death Rate per 100,000 Population

Area	Cancer (All Sites)	Heart Disease	Alzheimer's Disease
Davidson County	178.1	197.7	37.3
North Carolina	173.5	170.0	28.9

Source: North Carolina Vital Statistics

The comparatively higher death rates are obvious contributing factors to the high use of hospice services in Davidson County. Based on this information and the growing population age 65 and older, hospice services will continue to be in high demand in Davidson County.

Community Support

Community support for additional hospice inpatient beds in Davidson County is extremely positive. HDC has received letters of support from both Davidson County acute care hospitals, the Davidson County Health Department, the Davidson County Department of Social Services, many referring physicians and from members of the community. These individuals understand the great local demand for end-of-life services, and recognize the need for increased access to hospice inpatient services in Davidson County. These support letters are included with this request in Attachment C.

Historical SHCC Need Determinations

The State Health Coordinating Council has a recent history of issuing need determinations for fewer than the six hospice bed threshold when improvements to local access, quality, and costs are apparent and SMFP provisions are upheld. The table on the following page summarizes recent SHCC need determinations for less than six beds.

Recent Hospice Bed Need Determinations < 6 Inpatient Beds

<i>SMFP</i>	<i>County</i>	<i>Need Determination</i>
2015	Burke	3
2015	Caldwell	3
2014	Surry	3
2013	Yadkin	4
2012	Rockingham	2
2012	Iredell	3
2012	Duplin	3
2011	Iredell	3
2011	Guilford	4
2011	Cleveland	1
2010	Buncombe	5
2010	Alexander	3
2009	Scotland	2

As the table above shows, there is a precedent for approving adjusted need determinations of less than six hospice beds when expanded capacity of hospice services is necessary and benefits to access, quality, and costs are available. As described below, HDC is confident the proposed adjusted need determination for Davidson County is consistent with the Basic Principles of the State health planning process.

Quality, Access & Value

If this petition is approved, **access** will be greatly improved as expanded hospice inpatient services will be more readily available to patients in Davidson County. HDC has a long history of providing hospice care to all terminally ill patients, regardless of income, racial/ethnic origin, gender, physical or mental conditions, age, ability to pay, or any other factor that would classify a patient as underserved.

Approval of this petition will also enhance the **quality** of hospice services available to Davidson County patients. Patients will have increased access to hospice inpatient services structured to provide the quality end-of-life services hospice patients require. According to the NHPCO, hospice is considered to be

the model for quality, compassionate care at the end-of-life. The NHPCO estimates about one in five hospice agencies also operate a dedicated inpatient unit or facility. If this petition is successful in determining an adjusted need to develop additional hospice inpatient beds, local patients will greatly benefit from the highest growing and most viable option for quality end-of-life care. Thus, Davidson County hospice patients will be less likely to be admitted to a hospital or have to travel long distances to a regional hospice inpatient facility because additional hospice inpatient beds will be available locally.

The rising cost of healthcare services continues to cause concern among many constituencies in North Carolina. When an inpatient bed is not available at HDC's hospice inpatient facility, local hospice patients requiring hospice inpatient care are often admitted to a local hospital or skilled nursing facility. This can result in costs far greater than those incurred if admitted to a more appropriate and less expensive hospice facility setting.

Additionally, research published in the March 2013 issue of *Health Affairs* found that hospice enrollment saves money for Medicare and improves care quality for Medicare beneficiaries with a number of different lengths of services. Led by Amy S. Kelley, MD, MSHS, from the Brookdale Department of Geriatrics and Palliative Medicine at the Icahn School of Medicine at Mt. Sinai, researchers looked at the most common hospice enrollment periods: 1 to 7 days, 8 to 14 days, 15 to 30 days, and 53 to 105 days. Within all enrollment periods studied, hospice patients had significantly lower rates of hospital and intensive care use, hospital readmissions, and in-hospital death when compared to the matched non-hospice patients. The study reveals that savings to Medicare are present for both cancer patients and non-cancer patients. Moreover, these savings appear to grow as the period of hospice enrollment lengthens with the observed study period of one to 105 days.

This study builds on the valuable work of the 2007 Duke University study by providing further proof that hospice care saves the federal Medicare system money. Researchers found that hospice reduced Medicare costs by an average of \$2,309 per hospice patient. Medicare costs would also be reduced if hospice was used for a longer period of time. To know hospice services will indefinitely provide cost savings to Medicare is an additional benefit as the aging population in Davidson County faces the hardships of end-of-life situations. Approval of this petition will greatly benefit patients in terms of healthcare costs and value.

Adverse Effects of No Adjustment to the Need Determination

The adverse effects of no adjustment to the need determination are already occurring in Davidson County. As described previously, during CY2014 85 new hospice referrals were placed on a waitlist for admission to an HDC hospice inpatient bed. Unfortunately, 27 of these patients died before they could be admitted to Hinkle Hospice House because no hospice inpatient beds were available. In addition to these patients, another 11 patients were admitted to another facility, or stayed at home because an inpatient bed was not available. During the first six months of CY2015, 28 new referrals have been placed on a waitlist for an HDC inpatient bed and six patients died waiting for an inpatient bed to become available. If this petition is not approved, local patients will continue to be placed on a waitlist for admission to an inpatient hospice bed or placed in a less desirable, more costly setting when an inpatient bed is not available at Hinkle Hospice House.

HDC cannot address the need for additional inpatient beds via its four existing residential beds in Davidson County because licensure requirements prohibit hospice agencies from providing an inpatient level of care in a residential bed. In other words, a hospice inpatient cannot be admitted to or served in a residential bed. Therefore, regardless of the amount of available capacity in its residential beds, HDC cannot use that capacity to serve hospice inpatients. Thus, if approved to develop four additional hospice inpatient beds, HDC would most likely convert its four residential beds to inpatient beds. This would require no capital cost and would be the most cost effective use of resources.

The additional four hospice inpatient beds would enable HDC to continue to pursue its mission of providing high quality care to hospice patients in Davidson County, and in accommodating the rapidly aging population and increasing local demand for hospice services in Davidson County.

Conclusion

In summary, Hospice of Davidson County requests an adjusted need determination to include four (4) additional hospice inpatient beds in the 2016 SMFP. This petition has identified various special and unique circumstances in Davidson County that necessitate the development of additional hospice inpatient beds. Furthermore, HDC has demonstrated that the request and proposed project are consistent with the Basic Principles of the State health planning process. For these reasons, HDC respectfully requests the Long-Term and Behavioral Health Committee and the State Health Coordinating Council include a need determination for four hospice inpatient beds in Davidson County in the 2016 SMFP.

Attachment A

FY2014 Hospice Admissions, Deaths, And Days of Care By County

FY2014 Hospice Admissions, Deaths, And Days of Care By County

COUNTY	ADMISSIONS	DEATHS	NON DEATH	ROUTINE HOME CARE DAYS	INPATIENT CARE DAYS	RESPIRE CARE DAYS	CONTINUOUS CARE DAYS	TOTAL DAYS OF CARE
Alamance	959	794	176	83,690	2,236	135	0	86,061
Alexander	172	130	37	17,643	254	10	10	17,923
Alleghany	78	57	17	8,505	137	62	0	8,702
Anson	89	69	12	7,449	85	30	1	7,565
Ashe	155	119	29	12,455	96	12	0	12,619
Avery	86	57	18	8,623	47	37	4	8,755
Beaufort	236	215	45	24,731	302	107	0	25,140
Bertie	82	69	10	3,628	104	13	0	3,745
Bladen	125	95	42	17,821	446	87	2	18,356
Brunswick	687	561	116	50,722	1,974	337	1	53,034
Buncombe	1,318	1,133	213	103,288	5,059	621	147	109,115
Burke	580	497	55	47,105	1,685	291	0	49,081
Cabarrus	831	723	109	52,181	2,824	674	0	55,179
Caldwell	539	478	75	44,583	2,983	235	0	47,801
Camden	14	12	3	824	0	5	0	829
Carteret	230	184	35	14,472	30	22	0	14,524
Caswell	99	80	21	9,125	115	15	0	9,255
Catawba	932	945	83	68,907	5,056	795	10	74,768
Chatham	264	230	53	24,136	124	38	0	24,298
Cherokee	107	97	19	6,410	49	34	1	6,494
Chowan	41	36	7	3,888	2	0	0	3,890
Clay	43	29	11	1,828	0	29	0	1,857
Cleveland	697	626	94	54,371	3,406	162	95	58,034
Columbus	363	311	76	38,649	1,829	186	1	40,663
Craven	173	170	38	20,744	129	10	1	20,889
Cumberland	740	608	192	55,225	902	128	2	56,257
Currituck	86	73	14	5,555	0	0	0	5,555
Dare	122	105	24	8,500	16	14	0	8,530
Davidson	812	760	56	43,686	3,289	185	10	47,170
Davie	230	226	34	20,700	908	124	42	21,764
Duplin	273	192	69	18,731	529	47	0	19,307
Durham	977	911	136	44,607	3,223	145	0	47,975
Edgecombe	190	176	35	10,767	283	10	0	11,082
Forsyth	1,565	1,436	222	100,765	6,131	574	359	107,829
Franklin	134	90	25	8,698	41	23	0	8,792
Gaston	1,189	1,051	145	68,841	2,952	214	15	72,022
Gates	21	22	1	1,325	0	5	0	1,330
Graham	32	34	5	1,120	7	0	0	1,127
Granville	146	126	27	9,517	78	22	0	9,617
Greene	81	69	9	6,930	91	50	0	7,028
Guilford	1,935	1,720	253	150,514	4,851	553	3	155,901
Halifax	244	191	75	17,498	146	27	0	17,670
Harnett	424	325	111	34,231	350	132	0	34,713
Haywood	427	339	55	24,792	1,290	526	125	26,475
Henderson	888	843	106	51,637	3,782	345	16	55,780
Hertford	64	64	10	2,953	59	15	1	3,028
Hoke	91	68	34	7,561	230	30	0	7,821
Hyde	25	18	5	3,419	34	10	0	3,463
Iredell	764	707	95	54,801	3,374	204	2	58,381

Source: 2015 Hospice Data Supplements

Data provided to petitioner by the Carolinas Center for Hospice and End of Life Care and was accessed from DHSR Healthcare Planning and Certificate of Need Access Database

FY2014 Hospice Admissions, Deaths, And Days of Care By County

COUNTY	ADMISSIONS	DEATHS	NON DEATH	ROUTINE HOME CARE DAYS	INPATIENT CARE DAYS	RESPIRE CARE DAYS	CONTINUOUS CARE DAYS	TOTAL DAYS OF CARE
Jackson	174	137	32	12,597	453	49	0	13,099
Johnston	554	454	153	27,739	1,282	304	0	29,325
Jones	39	28	4	2,225	8	4	0	2,237
Lee	285	234	78	26,296	258	68	0	26,632
Lenoir	258	203	39	20,636	235	90	5	23,686
Lincoln	307	273	38	29,849	597	56	0	30,502
McDowell	265	234	71	39,882	408	240	39	40,569
Macon	173	152	24	11,832	296	54	0	12,182
Madison	114	99	23	9,460	339	51	15	9,865
Martin	99	83	8	7,395	147	6	0	7,548
Mecklenburg	3,101	2,817	308	203,164	9,119	556	0	212,839
Mitchell	114	97	23	15,066	158	44	1	15,269
Montgomery	110	107	27	12,251	259	39	0	12,549
Moore	643	577	82	52,907	1,820	159	0	54,886
Nash	338	285	53	23,519	112	31	0	23,664
New Hanover	978	923	148	85,589	3,573	583	0	89,745
Northampton	107	73	31	9,853	28	20	0	9,902
Onslow	353	313	73	24,436	402	67	3	24,957
Orange	382	354	74	22,276	276	86	0	28,638
Pamlico	59	47	7	2,954	15	10	0	2,979
Pasquotank	136	126	16	5,404	9	20	0	5,433
Pender	248	220	39	19,997	885	162	0	21,046
Perquimans	42	38	4	1,773	16	4	0	1,793
Person	151	138	16	9,685	82	44	0	9,811
Pitt	544	510	83	24,409	1,363	133	1	34,044
Polk	143	158	30	13,817	528	37	5	14,387
Randolph	745	688	85	42,612	2,823	270	0	46,896
Richmond	424	324	100	44,621	1,812	207	1	46,762
Robeson	347	266	92	40,850	472	61	4	41,420
Rockingham	508	459	46	17,591	1,048	67	2	18,708
Rowan	685	622	69	32,804	1,793	256	127	35,062
Rutherford	496	478	73	42,690	2,036	173	133	45,032
Sampson	219	170	59	19,744	189	41	0	19,829
Scotland	263	232	44	17,735	1,091	153	2	18,687
Stanly	328	305	37	22,392	229	101	0	22,722
Stokes	215	206	28	15,370	932	90	18	16,410
Surry	530	479	85	44,717	2,849	94	2	47,662
Swain	49	49	11	2,626	118	5	0	2,749
Transylvania	176	138	27	8,724	204	15	0	8,943
Tyrrell	4	4	0	76	0	0	0	76
Union	779	760	79	49,769	2,077	90	0	51,936
Vance	104	94	20	6,351	112	12	0	4,553
Wake	2,876	2,566	329	183,389	5,487	924	63	183,765
Warren	65	49	24	5,786	7	27	0	5,820
Washington	31	28	2	1,149	23	0	0	1,172
Watauga	141	105	33	11,379	100	75	0	11,554
Wayne	638	608	76	29,836	2,558	225	0	32,235
Wilkes	313	253	50	11,440	1,003	40	2	12,485
Wilson	299	253	56	17,379	454	30	0	17,891
Yadkin	161	160	27	13,543	718	72	10	14,343
Yancey	151	124	17	15,248	257	71	1	15,577

Source: 2015 Hospice Data Supplements

Data provided to petitioner by the Carolinas Center for Hospice and End of Life Care and was accessed from DHSR Healthcare Planning and Certificate of Need Access Database

Attachment B

Hinkle Hospice House Triage Log, CY2014

**Hospice of Davidson County
Hinkle Hospice House
Waitlist And GIP Delay Data, CY2014**

Dates No GIP beds available and referrals placed on triage list	Number of NEW referrals on waiting list	Admitted <u>Routine</u> because no GIP beds available switched to GIP when available # of days before switched to switched to GIP in ()	Patient died before admission due No GIP beds	Admitted to another facility--HODC homecare, another Hospice or SNF	Stayed at home or at SNF due to no GIP beds
Jan. 1, 2014	1	0	1	0	0
Jan. 2, 2014	1	0	0	0	0
Jan. 18, 2014	1	0	0	0	0
Jan. 21, 2014	1	0	0	0	0
Jan. 22, 2014	1	1 (later in day)	0	0	0
Jan. 27, 2014	3	0	2	0	0
Jan. 28, 2014	2	0	0	1(HC)	0
Jan. 29, 2014	1	0	0	0	0
Feb. 3, 2014	1	0	0	0	0
Feb. 4, 2014	3	0	0	2 (Hosp. Pied.)	0
Feb. 5, 2014	2	0	2	0	0
Feb. 6, 2014	4	0	2	2	0
Feb. 7, 2014	1	0	0	0	0
Feb. 8, 2014	1	0	1	0	0
Feb. 27, 2014	1	0	0	0	0
Mar. 8, 2014	1	1 (1)	0	0	0
Mar. 19, 2014	3	0	2	1 (Hosp. GSB)	0
Apr. 14, 2014	1	0	0	0	0
Apr. 16, 2014	1	0	1	0	0
Apr. 17, 2014	1	0	0	0	0
Apr. 21, 2014	1	0	1	0	0
Apr. 28, 2014	1	0	0	0	0
May 1, 2014	2	0	0	0	1
Jun. 25, 2014	3	0	0	0	0
June 27, 2014	1	0	0	0	0
Jul. 1, 2014	1	0	0	0	0
Jul. 2, 2014	1	0	1	0	0
Jul. 3, 2014	1	0	0	1 (Hosp. Rowan)	0
Jul. 4, 2014	1	0	1	0	0
Jul. 7, 2014	1	0	0	0	0
Jul. 8, 2014	1	0	0	1 (Sailsbury)	0
Jul. 9, 2014	1	1 (1)0	0	0	0
Jul. 10, 2014	1	0	1	0	0
Jul. 17, 2014	3	0	1	0	0
Jul. 21, 2014	3	1(2)	1	0	0
Jul. 22, 2014	1	1 (4)	0	0	0
Jul. 23, 2014	3	0	2	0	0
Jul. 24, 2014	1	0	0	0	0
Jul. 25, 2014	1	0	0	0	0
Aug. 8, 2014	1	0	0	0	0
Aug. 11, 2014	2	0	0	0	0
Aug. 22, 2014	1	0	1	0	0
Sept. 11, 2014	1	0	0	0	0
Sept. 17, 2014	1	0	0	1 (SNF)	0
Sept. 18, 2014	1	1 (1)	0	0	0
Sept. 24, 2014	1	0	1	0	0
Oct. 5, 2014	2	0	1	0	0
Oct. 6, 2014	1	0	1	0	0
Oct. 7, 2014	2	0	0	0	1
Oct. 15, 2014	1	0	0	0	1
Oct. 16, 2014	2	1 (2)	1	0	0
Oct. 17, 2014	4	1 (2) 1(3)	1	0	0
Oct. 19, 2014	1	0	0	0	0
Oct. 21, 2014	1	0	0	1 (Hosp. Pied.)	0
Oct. 23, 2014	1	0	0	0	0
Nov. 13, 2014	1	0	1	0	0
Dec. 22, 2014	2	1 (later in day)	1	0	0
2014 Total	85	10	27	8	3