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## **Hospice Methodologies Task Force**

### **Background Information for January 23, 2009 Task Force Meeting**

(The following may be supplemented prior to or during the Task Force's discussion.)

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The 2009 State Medical Facilities Plan contains a methodology for determining need for new hospice home care programs and a methodology for determining need for new hospice inpatient beds.

#### Evolution of the Methodologies since 2002

The basic approaches utilized in the 2009 Plan methodologies were introduced in the 2002 Plan. The following modifications have been made since 2002.

The modifications for the 2003 Plan increased the placeholder adjustment for a new hospice program, modified how the placeholder is applied and removed provisions related to the contiguous county inpatient methodology.

For the 2005 Plan, Step 10 of the inpatient bed methodology was revised to remove language regarding adjustments being made for "approved but not yet operational facilities."

Modifications were made for the 2006 Plan based on recommendations of a Hospice Methodologies Task Force. The modifications: revised Step 8 of the hospice home care methodology to clarify when the placeholder is applied; revised the home care assumptions and methodology to introduce a deficit index of 10% as a factor in making need determinations; revised the inpatient bed assumptions and methodology to base total estimated inpatient days of care on eight percent of total estimated days of care, project inpatient beds based on 85 percent occupancy and adjust projected beds for occupancy rates of existing facilities that are not at 85% occupancy.

For the 2009 Plan, the home care methodology was modified to utilize the statewide median rather than the statewide average to project the number of hospice deaths for each county and the inpatient methodology was modified to adjust need determinations for counties that have 300 percent or greater days of care per 1000 population than the State average and also have an inpatient facility that has been licensed since January 1, 2006, or Certificate of Need approved beds, or need determinations in prior plans.

#### Hospice Home Care Need Determinations

As indicated in the following Table, there have been need determinations for new hospice home care programs/offices in several counties since 2002. Prior to the 2006 Plan, need determinations were identified for home care programs. Beginning in 2006, the determinations were for offices. Until the 2002 Plan, no plan since 1994 identified a need for a new hospice program based on application of the standard methodology. There was one need determination in the 2001 Plan that was identified in response to a petition.

<b>Plan Year</b>	<b># Counties with Need Determinations for New Hospice Home Care Programs/Offices</b>
2002	6
2003	1
2004	2
2005	1 (One need determination was removed via petition)
2006	0 (Two need determinations were removed via petitions)
2007	0 (See discussion in following paragraph)
2008	0 (See discussion in following paragraph)
2009	2 (Three need determinations were removed via petitions)

There would have been need determinations in the 2007 and 2008 Plans for some counties based on the standard methodology. However, there were adjusted determinations of no need for additional hospice home care offices in the 2007 and 2008 Plans. The adjustments were made as a result of numerous new hospice home care offices established in 2005 preceding the effective date of changes in the hospice home care Certificate of Need legislation of 2005. Limited or no data was available regarding many of these new offices. The growth in the number of hospice facilities was substantial. For example, in the Fall of 2004, there were 141 separately licensed facilities while in the Fall of 2005, there were 230.

As indicated in the following Table, there have been need determinations for new hospice inpatient beds in several counties since 2002. Noted for each year is the number of need determinations made as a result of petitions filed requesting that there be a need determination. The modifications for the 2002 Plan represented the first time the basic inpatient methodology had been modified since the 1995 Plan. Until the 2002 Plan, no plan since 1995 identified a need for new hospice inpatient beds.

<b>Plan Year</b>	<b># Counties with Need Determinations for New Hospice Inpatient Beds</b>
2002	5 (2 counties via petitions)
2003	7 (5 counties via petitions)
2004	7 (3 counties via petitions)
2005	7 (4 counties via petitions)
2006	18 (3 counties via petitions)
2007	9 (6 via petitions)
2008	10 (4 via petitions – need in 3 counties removed via adjustments)
2009	13 (3 via petitions – need in 1 county removed via petition)

The Proposed 2009 Plan, published in the summer of 2008, contained need determinations for hospice home care programs in five counties and need determinations for hospice inpatient facilities in eight counties. Following publication of the Proposed Plan, there were some changes in the inpatient bed need determinations based on revised utilization data and other changes based on dismissal of a Certificate of Need appeal and no CON applications being filed for need determinations in two counties.

### Residential Beds

While the Certificate of Need Statute requires that a Certificate of Need (CON) be received prior to development of new residential hospice beds, the State Medical Facilities Plan has not included a methodology for determining need for residential beds. It is noted that there have been relatively few new residential beds proposed for development.

### Recent Petitions/Comments

Prior to publication of the Proposed 2009 Plan, a petition was filed by The Carolinas Center for Hospice and End of Life Care requesting modification of the home care methodology and the convening of a task force to evaluate the methodologies for the 2010 Plan. Attached is the Agency Report prepared in response to the petition and the petition.

Eight petitions and related comments were received during the public comment period on the Proposed Plan. Three of the petitions requested removal of need determinations that had been identified in the Proposed Plan, four requested need determinations for hospice inpatient beds and one requested removal of a need determination for inpatient beds. Attached are the Agency Reports prepared in response to the petitions, the petitions and other comments received.

A comment was received in February 2008 regarding need determinations that were listed in the 2008 Plan for Cumberland, Harnett, Lee and Sampson counties. These need determinations were identified based on the 2006 Plan and were reallocated using the 2007 Plan methodology. The reallocation was the result of the dismissal of four appeals of four denied applications received for scheduled 2006 reviews. The reallocation occurred per application of Plan POLICY GEN-1: REALLOCATIONS. Attached is the Policy and comment. The Long-Term and Behavioral Health Committee of the State Health Coordinating Council indicated that the comment could be considered by the Task Force.

The petitions and comments are being provided as a possible source of issues that may be addressed by the Task Force.

### Other Background Information

Attached is a Table indicating Percent of Deaths Served by Hospice by County as Shown in the 2005 Through 2009 North Carolina State Medical Facilities Plans.

Attached is a Table indicating the Hospice Facilities Approved for Development by County and Percent Occupancy as Shown in the 2005 through 2009 North Carolina State Medical Facilities Plans.

Staff contacted contiguous States for information on methodologies or criteria used for hospice home care or inpatient services. Based on this search, attached are Criteria and Standards for Certificate of Need for Hospice Services from the State of Tennessee.

Attached is the N.C. 2009 License Application for Home Care, Nursing Pool, and Hospice and the Hospice Agency 2009 Annual Data Supplement to License Application. The application is being provided to indicate the type of data that may be available via license applications for use in planning methodologies.

## **AGENCY REPORT:**

### **Proposed 2009 Plan**

Notes related to Petition from The Carolinas Center for Hospice and End of Life Care

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### **Request**

The Carolinas Center for Hospice and End of Life Care submitted a petition requesting a modification of the existing hospice home care methodology for the 2009 State Medical Facilities Plan and that a task force be convened to fully evaluate the hospice home care and hospice inpatient bed need methodologies for the 2010 Plan.

### **Background Information**

The hospice home care office methodology projects future need using a statewide average percent of deaths served by hospices to project deaths in each county. County mortality statistics and mortality rates for a five year period are used as the basis for projections.

Utilization data used in the Plan is compiled from Annual Data Supplements to License Applications as submitted to the Division of Health Service Regulation. A need determination is made for a county if: the deficit is 50 or more and the county projected population is 50,000 or fewer persons and the deficit index is 10% or more; or, the deficit is 75 or more and the county projected population is more than 50,000 persons and the deficit index is 10% or more.

A Hospice Methodology Task Force was appointed to consider issues for the 2006 Plan. Task Force recommendations with regard to the Hospice Home Care Methodology were to clarify when the placeholder is applied and to introduce a deficit index of 10% as a factor in making need determinations.

Application of the standard methodology would have resulted in need determinations in several counties in the 2008 Plan. However, there was an adjusted determination of no need for additional hospice home care offices. The adjustment was made as a result of numerous new hospice home care offices established in 2005 preceding the effective date of changes in the hospice home care Certificate of Need legislation of 2005. The Plan noted that limited or no data is available regarding these new offices. The same type of adjustment was made for the 2007 Plan.

### **Analysis of Petition**

The petitioner proposes changes to the hospice home care methodology for use in the Proposed 2009 Plan and that a Task Force be convened for the 2010 Plan to evaluate the hospice home care and inpatient bed methodologies.

The hospice home care methodology projects the number of patients in need (deficit or surplus) by subtracting the projected number of hospice deaths for each county from the reported number of hospice deaths plus any adjustments for new hospice offices. Therefore, there are two components to the equation for projecting need.

The petitioner proposes that the component for projecting the number of hospice deaths for each county be modified to use the statewide median rather than the statewide average to calculate the projected number of hospice deaths for each county. The statewide average used in the 2008 Plan was 30.46%. In comparison, the statewide median would have been 27.02%. Therefore, use of the median rather than the average would have resulted in a reduction in the number of projected hospice deaths.

With regard to the other component for projecting need, the petitioner proposes to apply a three-year compound annual growth rate to the number of deaths served by existing hospices. Given the growth in the number of hospice deaths served in the state over the past several years, this would increase the number of projected deaths to be served by hospice agencies. If this methodology were applied to the 2008 Plan, the three year compounding would have used data for 2003 and 2006 which are reflected in the 2005 and 2008 Plans. In the 2005 Plan, the number of hospice deaths was 16,889 compared to 22,653 in the 2008 Plan. This represents a growth of 34.13% in the number of hospice deaths reported.

In summary, application of the proposed methodology would introduce compounded growth over a three year period to one component of the methodology but not to the other. The component of the methodology which projects the number of hospice deaths would not be adjusted to reflect the growth in the percent of deaths served by hospice which has been substantial. The statewide average used in the 2005 Plan was 23.53% compared to 30.46% in the 2008 Plan which represents a growth of 29.45%. The statewide median in the 2005 Plan would have been 20.86% compared to 27.02% in the 2008 Plan which represents a growth of 29.53%.

With regard to the methodology to project need for new Medicare-Certified Home Health Agencies or Offices, it is noted that average annual rate of change over the previous three years is a factor in projecting both potential total people served and projected utilization.

#### Agency Recommendation

The Agency recommends that the Petition be approved in part. The Agency recommends that a Hospice Methodology Task Force be convened to fully evaluate the hospice home care and hospice inpatient bed need methodologies for the 2010 Plan. The Agency also recommends, as proposed by the petitioner, that the statewide median be used to project the number of hospice deaths for each county. The use of the median is viewed as a reasonable alternative to the use of the average. The Agency recommends that the proposed modification of the hospice home care methodology regarding application of a three-year compound annual growth rate to the number of deaths served by existing hospices be denied. The Agency views its recommendations to be reasonable in light of the Task Force to fully evaluate the methodologies. Attached is a modified "Table 13B: Year 2010 Hospice Home Care Office Need Projections for Proposed 2009 Plan," reflecting use of the median rather than the average.

Table 13B: Year 2010 Hospice Home Care Office Need Projections for Proposed 2009 Plan (Draft for May 16, 2008 Meeting Using Median %)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K	Column L
Source or Formula	2006 NC/Vital Statistics	2007 Reported # of Hospice Patient Deaths	% Deaths Served By Hospice Median %	2002-2006 Death Rate/1000 Population	2010 Population (excluding military)	Projected 2010 Deaths	Projected Average Hospice Deaths	Place holder for New Hospice Office	Projected Number of Additional Patients in Need Surplus (Deficit)	Deficit Index	Additional Hospice Office Need
	2006 NC/Vital Statistics	2008 Lic Data Supplements	Median %	Deaths in NC/Vital Statistics	Offices of State Budget and Management	Col. C x Col. F/1000	Col. G x 29.41%		Col. C + Col. I - Col. H	Shown if Col. J => 50 and pop. <= 50,000 or Col. J => 75 and pop. > 50,000 and deficit index => 10%	
North Carolina	74,419	24,823	29.41%	8.5	9,399,781	79,898	23,498	316	1,841		
Alamance	1,343	566	42.14%	9.6	146,568	1,407	414		152		
Alexander	335	119	35.52%	8.5	37,931	322	95		24		
Alleghany	126	28	22.22%	12.6	11,335	143	42		(14)		
Anson	298	44	14.77%	11.1	24,719	274	81		(37)		
Ashe	276	67	24.28%	11.8	26,850	317	93		(26)		
Avery	181	64	35.36%	11	18,381	202	59		5		
Beaufort	566	147	25.97%	11.8	47,555	561	165		(18)		
Bertie	239	50	20.92%	12.4	18,871	234	69		(19)		
Bladen	382	111	30.66%	12	33,360	400	118		(7)		
Brunswick	917	302	32.93%	9.6	111,076	1,066	314		(12)		
Buncombe	2,190	944	43.11%	10.1	235,401	2,378	699		245		
Burke	849	267	31.45%	9.6	90,204	866	255		12		
Cabarrus	1,270	512	40.31%	8.3	177,879	1,476	434		78		
Caldwell	866	382	44.11%	10.1	81,127	819	241		141		
Camden	78	18	23.08%	7.9	10,560	83	25		(7)		
Carteret*	677	187	27.82%	11.3	65,646	742	218		(31)		
Caswell	221	47	21.27%	10.4	23,633	246	72		(25)		
Catawba	1,361	730	54.03%	8.9	158,930	1,414	416		314		
Chatham	497	167	33.60%	9	63,088	568	167		0		
Cherokee	318	45	14.15%	12.3	28,566	352	103		(58)		1
Chowan	172	30	17.44%	12.8	15,207	195	57		(27)		
Clay	120	16	13.33%	12.1	10,968	133	39		(23)		
Cleveland	1064	467	43.89%	10.4	97,253	1,011	297		170		
Columbus	684	221	32.31%	11.6	55,816	645	190		31		
Craven*	905	200	22.10%	9.5	92,200	876	258		(58)		
Cumberland*	2094	638	30.47%	6.7	275,685	1,847	543		95		
Currituck	187	52	27.81%	8	26,493	212	62		(10)		
Dare	231	54	23.38%	7.8	36,619	286	84		(30)		
Davidson	1511	361	23.89%	9.5	160,876	1,528	449		(88)		1
Davie	378	112	29.63%	9	43,354	390	115		(3)		
Duplin	512	109	21.29%	9.9	55,863	553	163		(54)		
Durham	1731	566	32.70%	7.1	263,177	1,869	550		16		
Edgecombe	573	143	24.96%	11.1	51,184	568	167		(24)		

Table 13B: Year 2010 Hospice Home Care Office Need Projections for Proposed 2009 Plan (Draft for May 16, 2008 Meeting Using Median %)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K	Column L
Source or Formula	2006 Number of Deaths	2007: Reported # of Hospice Patient Deaths	% Deaths Served by Hospice	2002-2006 Death Rate/1000 Population	2010 Population (excluding military)	Projected 2010 Deaths	Projected Average Hospice Deaths	Places for New Hospice Office	Projected Number of Additional Patients in Need (Surplus/Deficit)	Deficit/Index	Additional Hospice Office Need
Source or Formula	2006: NC Vital Statistics	2008: Local Data Supplementals	Median %	Deaths: NC Vital Statistics	Office of State Budget and Management	Col: F (Col: E * 100)	Col: G * 20.4%	Col: C - Col: I - Col: H	Shown if Col: J => 50,000 or pop: <=> 50,000 or Col: J => 75 and pop: > 50,000 and deficit index => 10%		
Forsyth	2824	1018	36.05%	8.7	351,864	3,061	900	118			
Franklin	444	125	28.15%	8.3	60,271	500	147	(22)			
Gaston	1929	688	35.67%	10	205,760	2,058	605	83			
Gates	113	17	15.04%	10.6	12,553	133	39	(22)			
Graham	104	16	15.38%	12.3	8,265	102	30	(14)			
Granville	498	99	19.88%	8.7	56,856	495	145	(46)			
Greene	170	48	28.24%	9.3	21,645	201	59	(11)			
Guilford	3532	1147	32.47%	8.1	476,055	3,856	1,134	13			
Hallfax	635	110	17.32%	11.6	54,560	633	186	34			
Harnett*	809	250	30.90%	7.8	109,832	857	252	(2)			
Haywood	658	222	33.74%	11.9	56,256	693	204	18			
Henderson	1300	737	56.69%	12.5	108,136	1,352	398	339			
Hertford	251	76	31.09%	12.1	24,090	291	86	(8)			
Hoke*	251	57	22.71%	6.7	47,046	315	93	(36)			
Hyde	53	29	54.72%	11.7	5,409	63	19	10			
Iredell	1284	437	34.03%	8.7	162,470	1,413	416	21			
Jackson	327	121	37.00%	9	38,163	343	101	20			
Johnston	1023	287	26.10%	7.3	171,639	1,253	368	(101)		28%	1
Jones	103	32	31.07%	10.7	10,529	113	33	(1)			
Lee	469	153	32.62%	9.1	59,421	541	159	(6)			
Lenoir	665	115	17.29%	11.9	56,007	690	203	22			
Lincoln	622	222	35.69%	8.8	77,277	680	200	22			
McDowell	471	116	24.63%	10.3	45,233	466	137	(21)			
Macon	420	135	32.14%	12.8	35,591	456	134	1			
Madison	209	75	35.89%	11	21,183	233	69	6			
Martin	307	84	27.36%	13.1	23,997	314	92	(8)			
Mecklenburg	4817	1866	38.74%	6.1	930,663	5,677	1,670	196			
Mitchell	219	72	32.88%	12.7	16,004	203	60	12			
Montgomery	249	59	23.69%	10.4	28,273	294	86	(27)			
Moore*	914	358	39.17%	11.7	87,588	1,025	301	57			
Nash	908	180	19.82%	10	95,712	957	281	(5)			
New Hanover	1517	675	44.50%	8.3	201,313	1,671	491	184			
Northampton	260	59	22.69%	13.2	21,517	284	84	(25)			
Onslow*	819	177	21.61%	5.1	134,415	686	202	(25)			
Orange	650	331	50.92%	5.7	129,689	739	217	114			
Pamlico	122	28	22.95%	11.2	13,292	149	44	(16)			
Pasquotank	345	91	26.38%	9.5	43,519	413	122	(31)			

Table 13B: Year 2010 Hospice Home Care Office Need Projections for Proposed 2009 Plan (Draft for May 16, 2008 Meeting Using Median %)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K	Column L
2006 NC Vital Statistics	2006 Number of Deaths	2007 Reported # of Hospice Patient Deaths	% Deaths Served By Hospice	2002-2006 Death Rate/1000 Population	2010 Population (excluding military)	Projected 2010 Deaths	Projected Average Hospice Deaths	Place-holder for New Hospice Office	Projected Number of Additional Patients in Need Surplus (Deficit)	Deficit Index	Additional Hospice Office Need
Source: NC Vital Statistics	2006 Lic. Date Supplements	2006 Lic. Date Supplements	Median %	Deaths - NC Vital Statistics	Office of State Budget and Management	Col. E/(Col.F/1000)	Col. G/29.4%		Col. C + Col. I - Col. H	Shown if Col. J => 50,000 or Col. J => 50,000 or Col. J => 75 and pop. > 50,000 and deficit index => 10%	
Pender	451	179	39.69%	8.7	55,185	480	141		38		
Perquimans	147	34	23.13%	12.4	13,365	166	49		(15)		
Person	389	111	28.53%	10.3	38,775	399	117		(6)		
Pitt	1081	320	29.60%	7.6	156,531	1,190	350		(30)		
Polk	272	144	52.94%	14.6	19,776	289	85		59		
Randolph	1223	455	37.20%	8.6	145,072	1,248	367		88		
Richmond	538	164	30.46%	11.3	47,047	532	156		8		
Robeson	1208	306	25.33%	9.2	134,281	1,235	312		(57)		
Rockingham	1122	241	21.48%	11.5	92,256	1,061	312		(71)		
Rowan	1342	334	24.89%	9.9	139,253	1,379	405		(71)		
Rutherford	819	395	48.23%	12.2	63,660	777	228		167		
Sampson	570	159	27.89%	9.7	67,447	654	192		(33)		
Scotland	374	185	49.47%	9.9	37,574	372	109		76		
Stanly	655	230	35.11%	10.3	60,216	620	182		48		
Stokes	435	162	37.24%	9.4	47,608	448	132		30		
Surry	845	342	40.47%	11	74,749	822	242		100		
Swain	182	57	31.32%	12.7	14,805	188	55		2		
Transylvania	309	128	41.42%	12.1	31,617	383	113		15		
Tyrrell	25	6	24.00%	9.5	4,343	41	12		(6)		
Union	1044	286	27.39%	6.2	205,253	1,273	374		(88)	24%	1
Vance	422	93	22.04%	10.8	44,953	485	143		(50)	35%	1
Wake*	3735	1468	39.30%	4.9	906,136	4,440	1,306		162		
Warren	220	38	17.27%	11.4	19,996	228	67		(29)		
Washington	130	23	17.69%	11	13,185	145	43		(20)		
Watauga	321	78	24.30%	7	44,474	311	92		(14)		
Wayne*	1061	310	29.22%	9.2	113,951	1,043	307		3		
Wilkes	671	115	17.14%	10	67,949	678	200		(85)	42%	1
Wilson	822	193	23.48%	10.1	80,220	810	238		(45)		
Yadkin	377	107	28.38%	10.2	39,435	402	118		(11)		
Yancey	216	100	46.30%	10.8	19,061	206	61		39		

\*population projections were adjusted to exclude active duty military personnel.