Harnessing the Power of Data for Hospice Leaders, Part 2

In Partnership with: the carolinas CENTER FOR HOSPICE AND END OF LIFE CARE

Cordt T. Kassner, PhD, Principal, Hospice Analytics
Janet Bull, MD, Chief Medical Director, Four Seasons

2011 Carolina's Center for Hospice & End-of-Life Care Annual Meeting
September 26, 2011

Introduction & Background

HOSPICE ANALYTICS MARKET REPORT

FOUR SEASONS Compassion for Life www.FourSeasonsCFL.org Serving Buncombe, Henderson, Jackson, Macon & Transylvania Counties

Cordt T. Kassner, PhD

Principal
Hospice Analytics
2355 Rossmere Street
Colorado Springs, CO 80919
P: 719.209.1237
E: CKassner@HospiceAnalytics.com
W: www.HospiceAnalytics.com

Janet Bull, MD

Chief Medical Director
Four Seasons
571 South Allen Road
Flat Rock, NC 28731
P: 828-233-0302
E: JBull@FourSeasonsCFL.org
W: www.FourSeasonsCFL.org

2

Presentation Outline

Part 1:

1. In the Beginning… Early Questions & Answers
2. Data Available
3. Data Applications for Hospice Administrators

Part II:

1. **Death Service Ratio**
2. Length of Service
3. Hospice in Nursing Facilities
4. Hospice Caps
5. Data Driven Advocacy
6. U-Shaped Curves
7. Disaster Preparedness & Misc.

3

Disclosures

- Janet Bull, MD

  Scientific Advisory Board – Archimedes, Salix

  Speakers Bureau – Salix, Pfizer, Meda

4

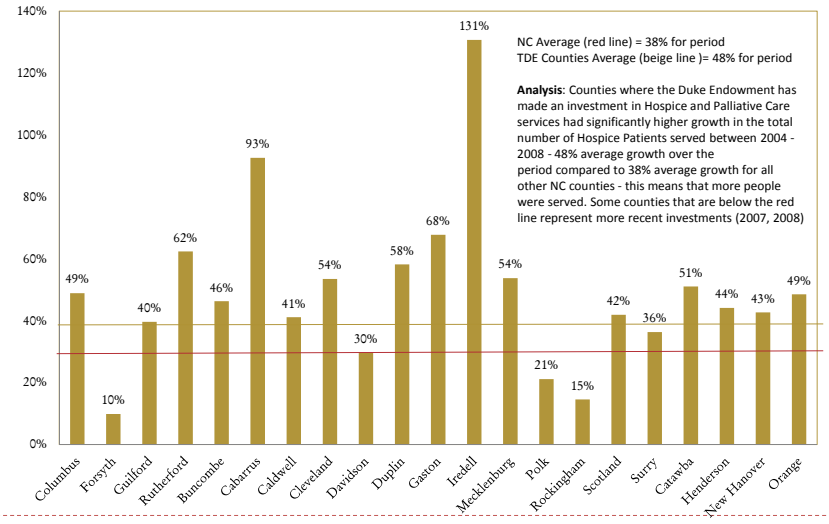
4

The Duke Endowment

- Have invested over 9 million to hospice/palliative care in the Carolinas in the past 10 years
  - ✓ 3.9 million hospice inpatient units
  - ✓ 5.4 million in palliative care services
- Committed to quality and improving EOL care
- In NC IPU beds increased from 165 (2000) to 331 (2006)
- Invested in both inpatient and outpatient programs

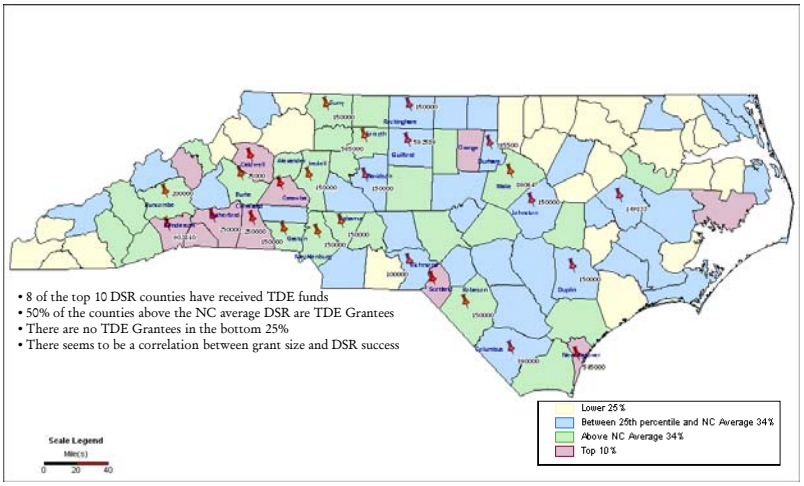
5

Analysis of the % Increase in Deaths Served by Hospice 2004-2008 for Counties with Duke Endowment Investments



6

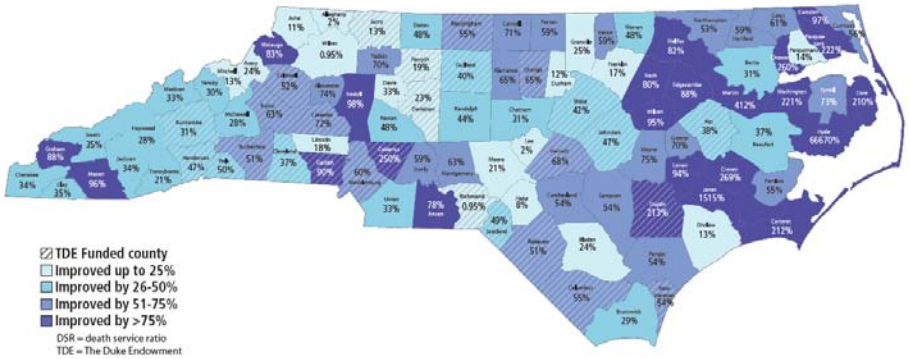
TDE Grants Comparison to NC Counties



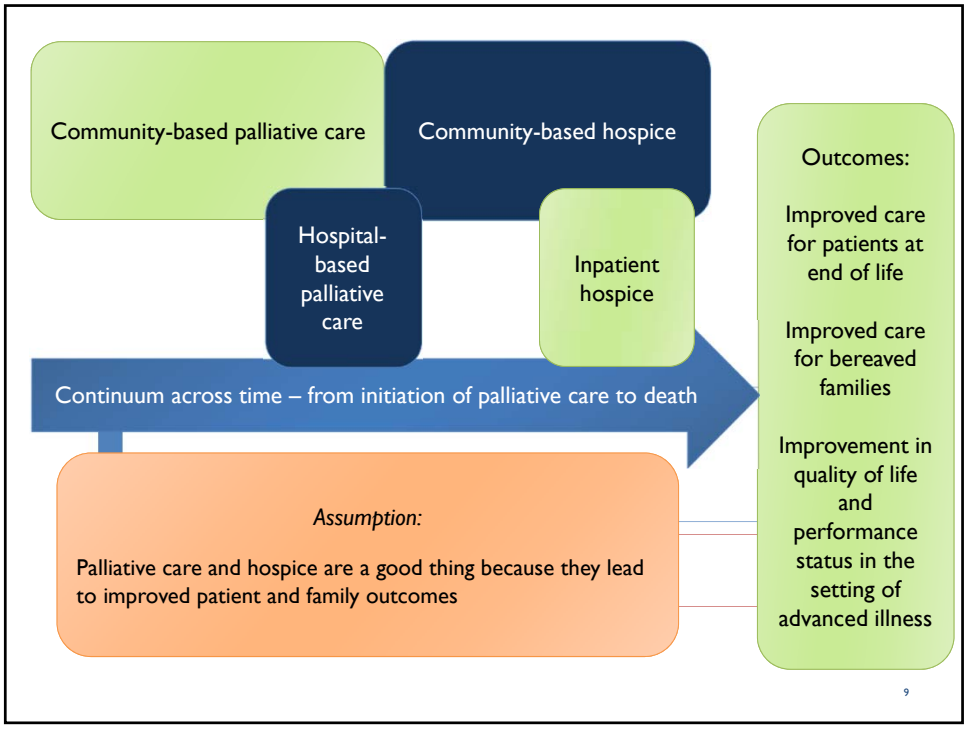
- 8 of the top 10 DSR counties have received TDE funds
- 50% of the counties above the NC average DSR are TDE Grantees
- There are no TDE Grantees in the bottom 25%
- There seems to be a correlation between grant size and DSR success

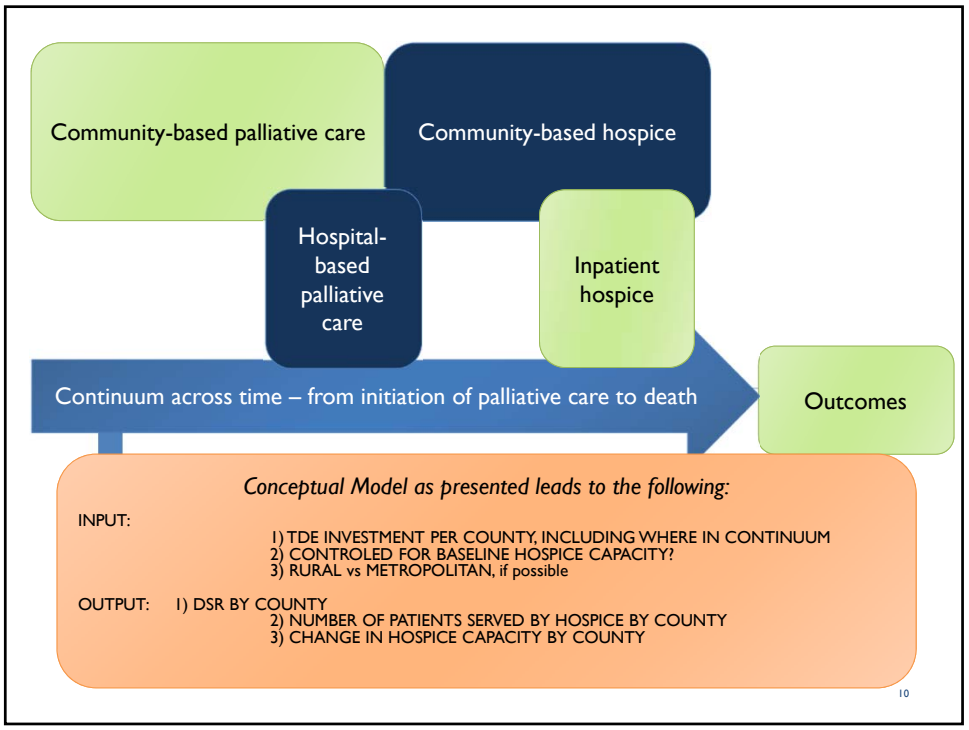
7

Figure 2C: Association of philanthropic investment with change in death service ratio, 2003-2008



8


Community-based palliative care
Community-based hospice
Hospital-based palliative care
Inpatient hospice
Continuum across time – from initiation of palliative care to death
Outcomes:
Improved care for patients at end of life
Improved care for bereaved families
Improvement in quality of life and performance status in the setting of advanced illness
Assumption:
Palliative care and hospice are a good thing because they lead to improved patient and family outcomes
9


Community-based palliative care
Community-based hospice
Hospital-based palliative care
Inpatient hospice
Continuum across time – from initiation of palliative care to death
Outcomes
Conceptual Model as presented leads to the following:
INPUT:
1) TDE INVESTMENT PER COUNTY, INCLUDING WHERE IN CONTINUUM
2) CONTROLED FOR BASELINE HOSPICE CAPACITY?
3) RURAL vs METROPOLITAN, if possible
OUTPUT: 1) DSR BY COUNTY
2) NUMBER OF PATIENTS SERVED BY HOSPICE BY COUNTY
3) CHANGE IN HOSPICE CAPACITY BY COUNTY
10

LOS = length of stay
* = confirm

	Community-based palliative care	Hospital-based palliative care	Community-based hospice	Inpatient hospice
Characteristics	Biopsychosocial whole person care; LOS generally > 60 days*; any disease; residing in the outpatient setting (nursing home, ALF, residential home or home) with caregiver or alone; primary care model requiring a lot of MD input	Focused on acute management of medical illness requiring hospilization LOS generally 3-10 days*; any disease; hospitalized/inpatient; consult service model with evidence of reduced LOS and cost to hospital	Biopsychosocial whole person care; LOS generally <20 days*; any disease; at home with caregiver; primary care model in conjunction with hospice medical director but with minimal MD input	Focused on acute management of symptoms or dying; LOS generally <5 days*; any disease; free-standing inpatient hospice unit; inpatient model with hospice medical director input as main MD (but generally midlevel provider run)
Reimbursement Model	Fee for service	Cross-subsidize from hospital revenues	Hospice Medicare-type per diem payment	Hospice Medicare-type per diem payment
Revenue model	Cost of providing care >>> reimbursement. These programs usually lose the most money	In hospitals' best interest to have pal care	If keep costs in control, revenue positive	If keep costs in control, can be revenue positive
Availability for patients	Few programs available; fewer in rural areas	Increasing rapidly across US; limited by workforce	Generally available throughout US	Expensive to establish and staff; 21% of hospice agencies operate an IPU (2008)
TDE Investment Strategy	Major investment in programs, education, and quality	Major investment in programs, education, and quality	No investment	Major investment in building and education

11

Papers

- Policy issue: Does targeted investment in the missing parts of the palliative care and hospice chain improve outcomes?
- NC Issue: Can organizations like TDE make a regional difference in the state in terms of palliative care and hospice?

12

Letter to the Editor

JPSM, published 6/11
Abernethy AP, Kassner CT, Whitten E, Bull J, Taylor DH

- **Systemic Cost:** From a policy standpoint, it is most important to consider hospice expenditures in the context of the "systemic cost" of end-of-life care, that is, the total cost of care from all care settings for the patient who dies on a specific service (especially important given the cross-over of patients from one setting to another, making clear distinctions of hospice and non-hospice problematic).
- **Hospice Cost Savings:** Aggregate cost analyses support continued and substantial Medicare spending on hospice care, both to enhance end-of-life experiences for patients and their loved ones and to make end-of-life care more affordable. Notably, a North Carolina patient receiving end-of-life care through hospice received $11,354 less in care paid for by Medicare than did a patient receiving hospital-based care.
- **Death Service Ratio:** DSR offers a simple and pragmatic measure for monitoring hospice utilization, tying change in utilization to cost reduction/increase, and, with further development, monitoring quality of care, access, disparities, and performance against national benchmarks. We found that, in the 10% of counties with highest DSR compared to all counties, per patient hospice costs were higher (mean $8,063 vs. $7,031; difference of $1,032) but hospital costs were lower (mean $24,567 vs. $27,632; difference of -$3,065). On balance, in counties with higher use of hospice, the use of hospital care was reduced; this observation is consistent with a hypothesis that increased hospice use reduces overall Medicare costs at the end of life. Further, we found evidence that external grant funding to support the development of hospice and palliative care was related to increase in hospice use, which correlated with the cost savings observed in these counties.

13

National Statistics

- Increased growth nationally by over 13% 2004-09
- Average DSR nationally has increased to 42%
- Total hospice deaths have increased while death rate has slowly decreased

14

Factors that Affected Growth

- National exposure
- Board specialty
- Service expanded to non cancer diagnosis
- Increase in number of providers
- Palliative Care services
- Increase in investments through
  - Inpatient units
  - Grants – The Duke Endowment – 12 million in the Carolinas

15

Results : Carolinas and TDE

- Funded counties – increase in DSR
  - NC - 46.2% vs 38%
  - SC - 34.8% vs 24.7
- Top 10 counties in NC (DSR>46%) 80% TDE funding
- Funding given to IPU or PC – equally affected DSR
- ROI occurred in approximately 18 months

16

Presentation Outline

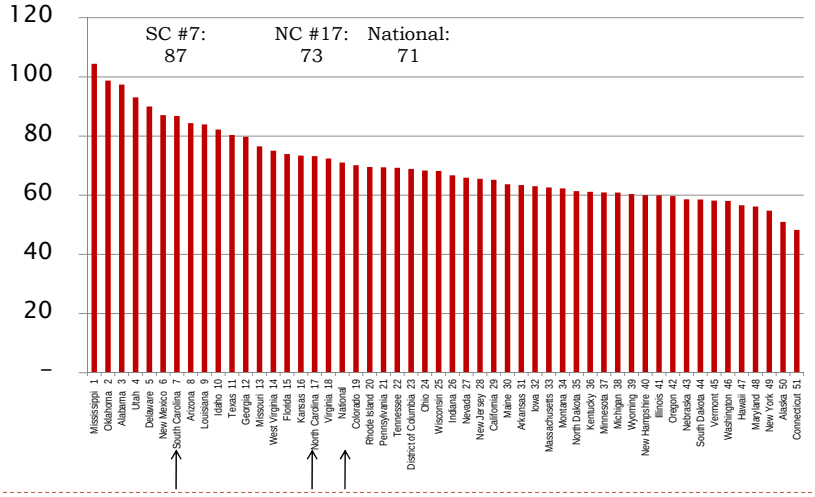
Part 1:

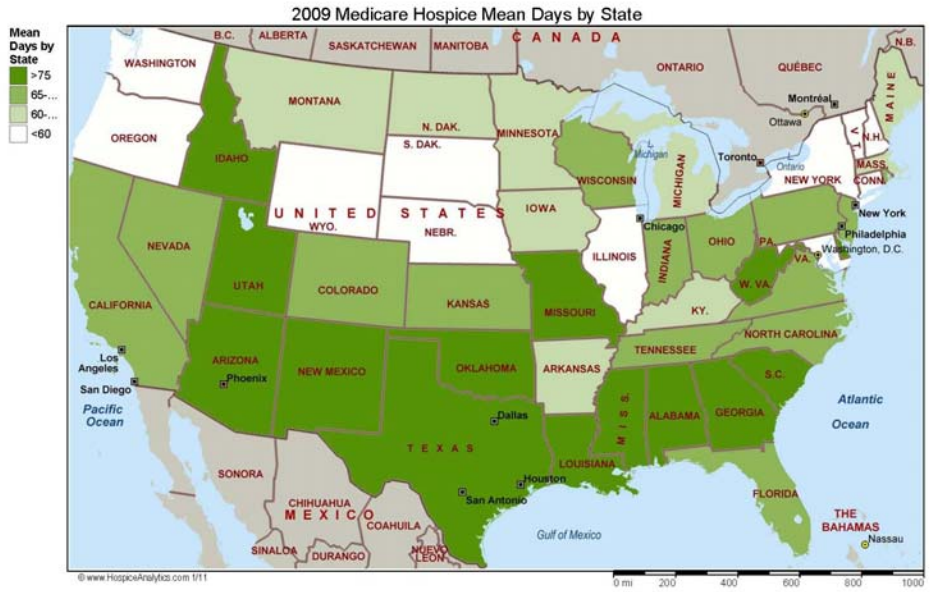
1. In the Beginning… Early Questions & Answers
2. Data Available
3. Data Applications for Hospice Administrators

Part II:

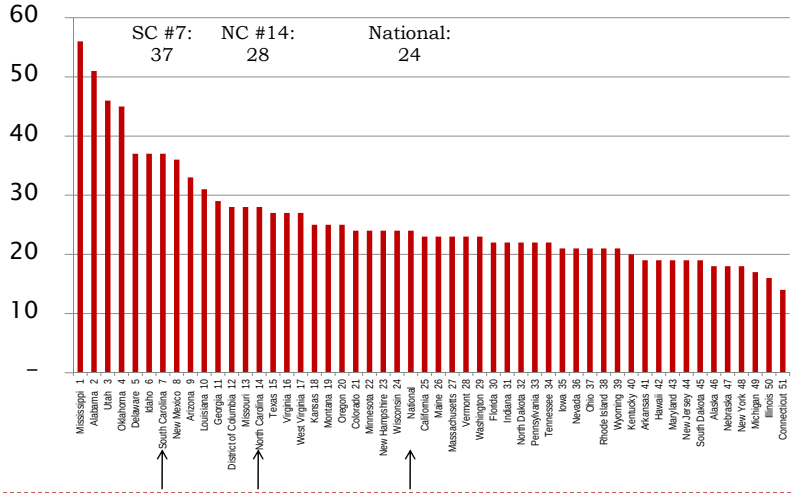
1. Death Service Ratio
2. **Length of Service**
3. Hospice in Nursing Facilities
4. Hospice Caps
5. Data Driven Advocacy
6. U-Shaped Curves
7. Disaster Preparedness & Misc.

2009 Mean Days / Patient of Hospice Care





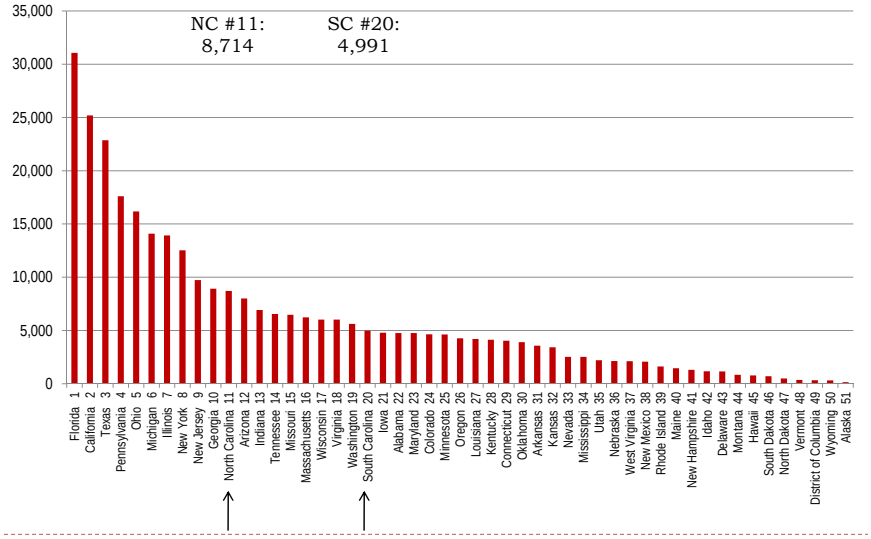
2009 Median Days / Patient of Hospice Care



2009 Hospice Short Length of Stay <7 Days

Who Does That Impact? Shown by Total Number of Patients

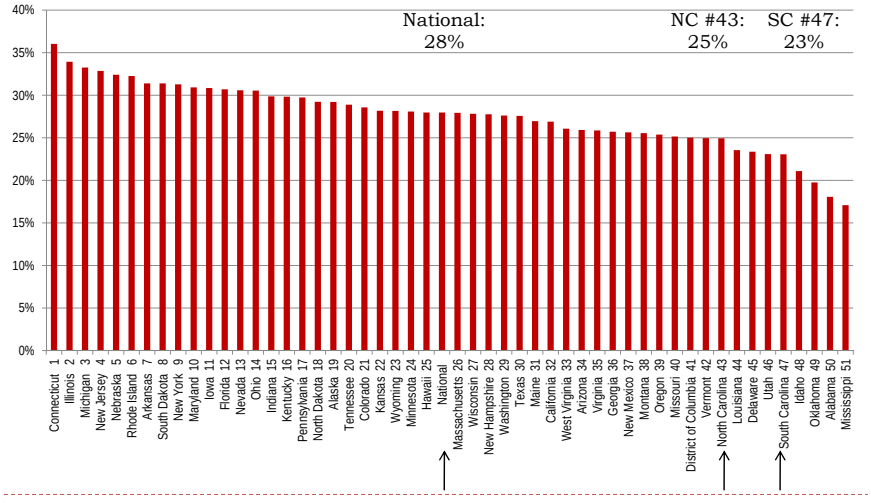
National= 314,301 (28% of all hospice patients)



2009 Hospice Short Length of Stay <7 Days

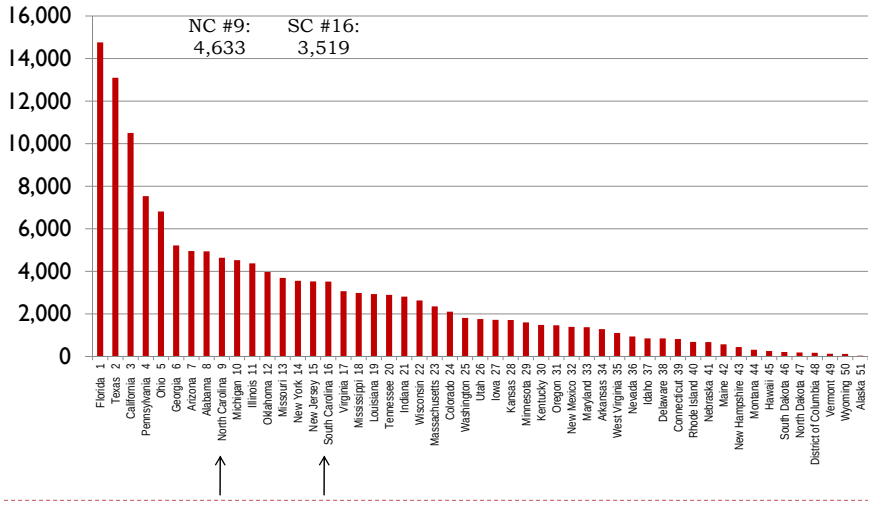
Who Does That Impact? Shown by Percent of Patients

National= 314,301 (28% of all hospice patients)



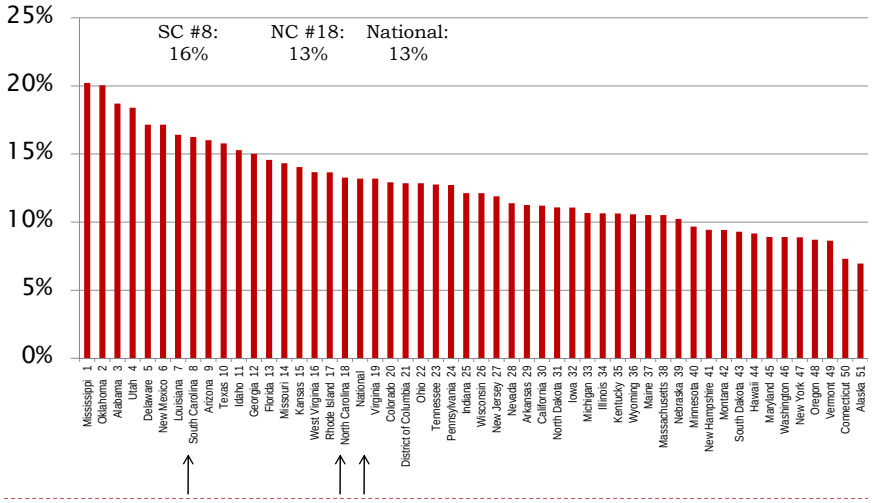
2009 Physician F2F Narratives for Patients at 180 Days

Who Does That Impact? Shown by Total Number of Patients
National= 148,323 (13% of all hospice patients)



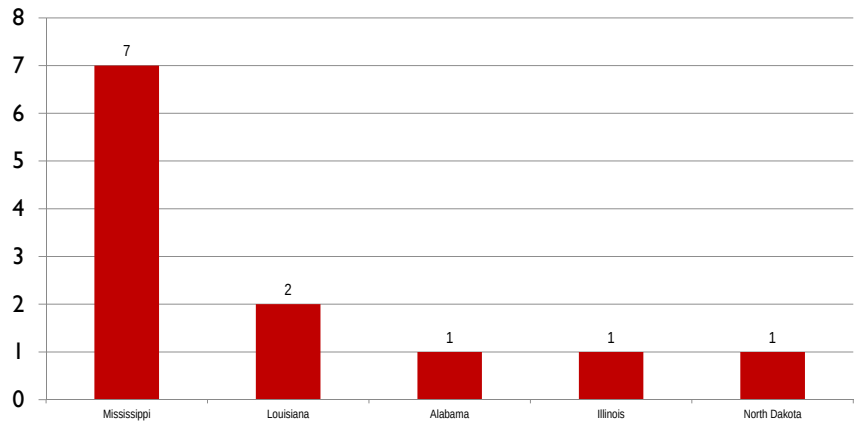
2009 Physician F2F Narratives for Patients at 180 Days

Who Does That Impact? Shown by Percent of Patients
National= 148,323 (13% of all hospice patients)



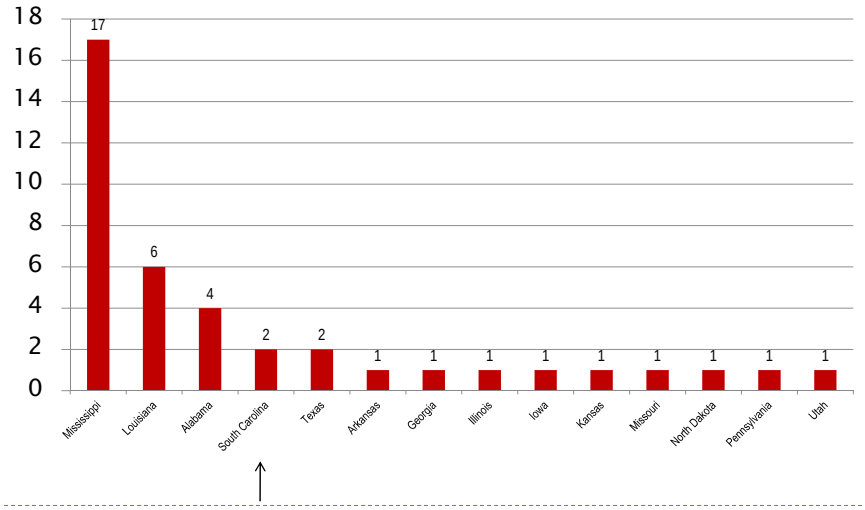
2009 Targeted Medical Review for All Patients With LOS >180 Days

If XX Percentage of Patients Exceed LOS 180 Days. If the Percentage= 50%, How Many Hospices Are At Risk? National= 12 (0.3%)



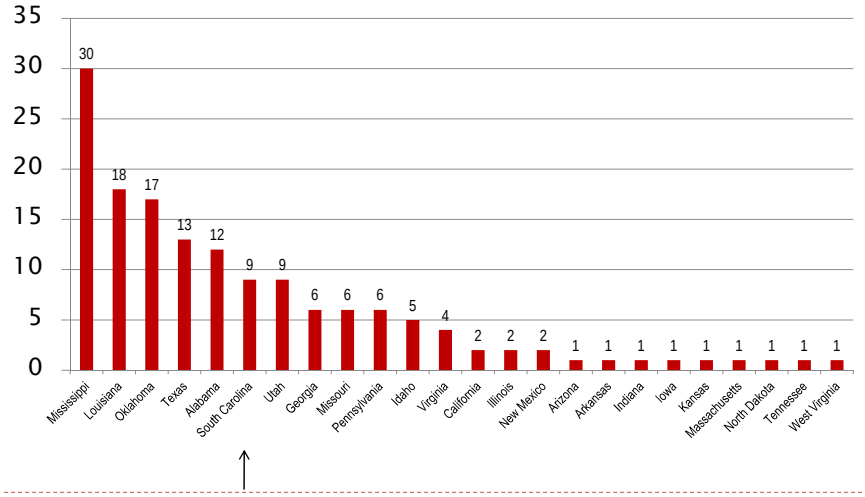
2009 Targeted Medical Review for All Patients With LOS >180 Days

If XX Percentage of Patients Exceed LOS 180 Days. If the Percentage= 40%, How Many Hospices Are At Risk? National= 45 (1%)



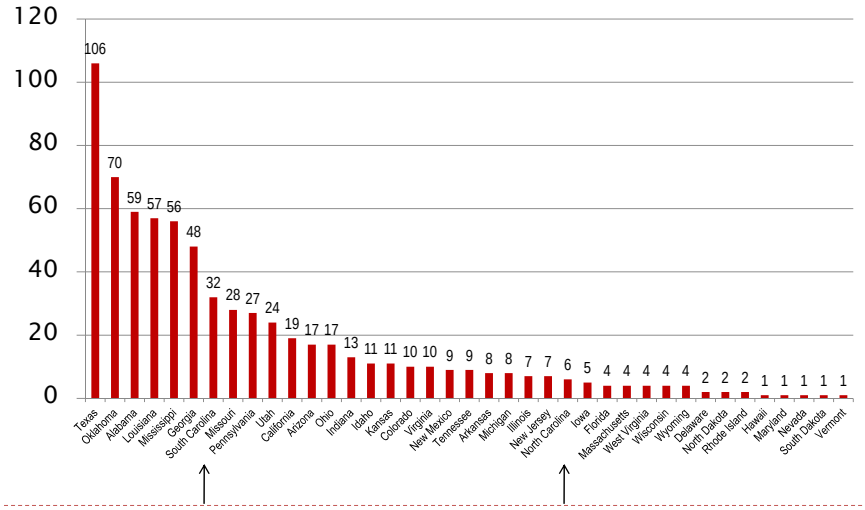
2009 Targeted Medical Review for All Patients With LOS >180 Days

If XX Percentage of Patients Exceed LOS 180 Days. If the Percentage= 30%, How Many Hospices Are At Risk? National= 165 (5%)



2009 Targeted Medical Review for All Patients With LOS >180 Days

If XX Percentage of Patients Exceed LOS 180 Days. If the Percentage= 20%, How Many Hospices Are At Risk? National= 736 (22%)

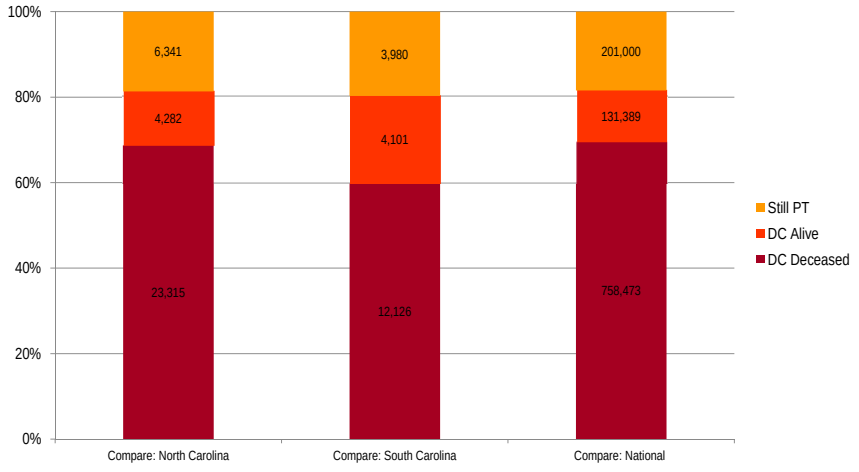


2009 Targeted Medical Review for All Patients With LOS >180

Which States Are NOT at Risk If the Percentage= 20%?

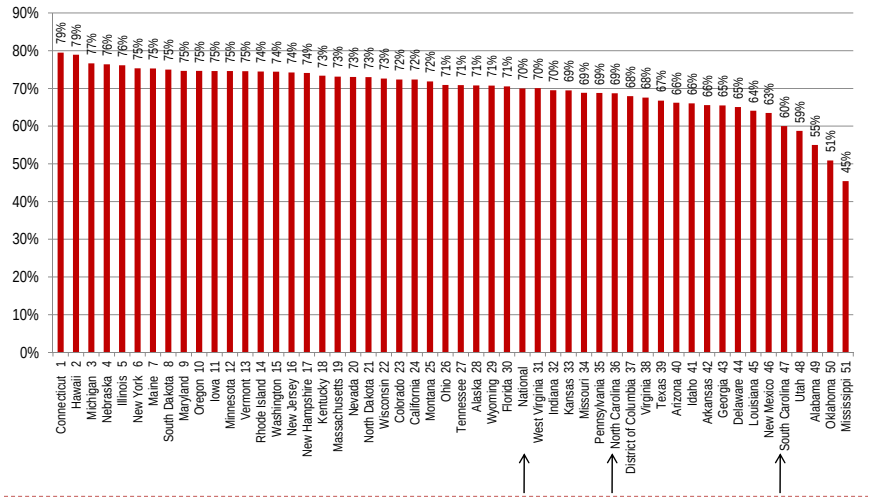
1. Alaska
2. Connecticut
3. District of Columbia
4. Kentucky
5. Maine
6. Minnesota
7. Montana
8. Nebraska
9. New Hampshire
10. New York
11. Oregon
12. Washington

2009 Patient Status at Discharge



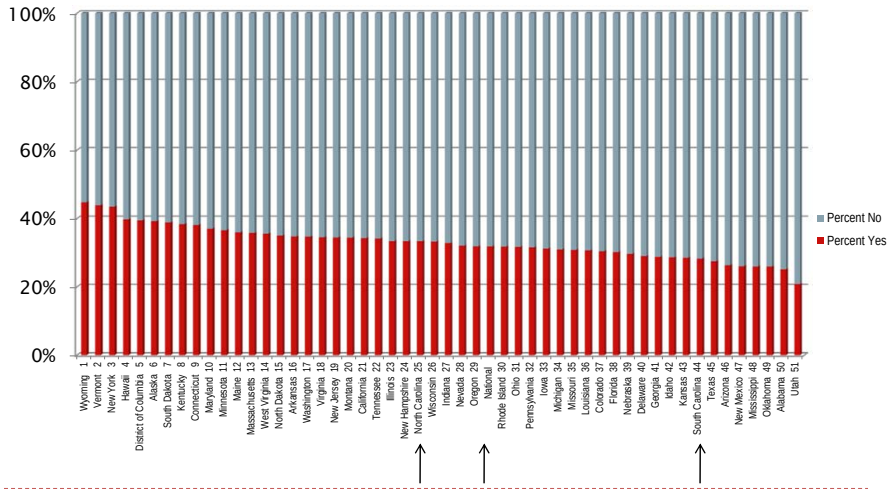
2009 Patient Discharge Status= Deceased

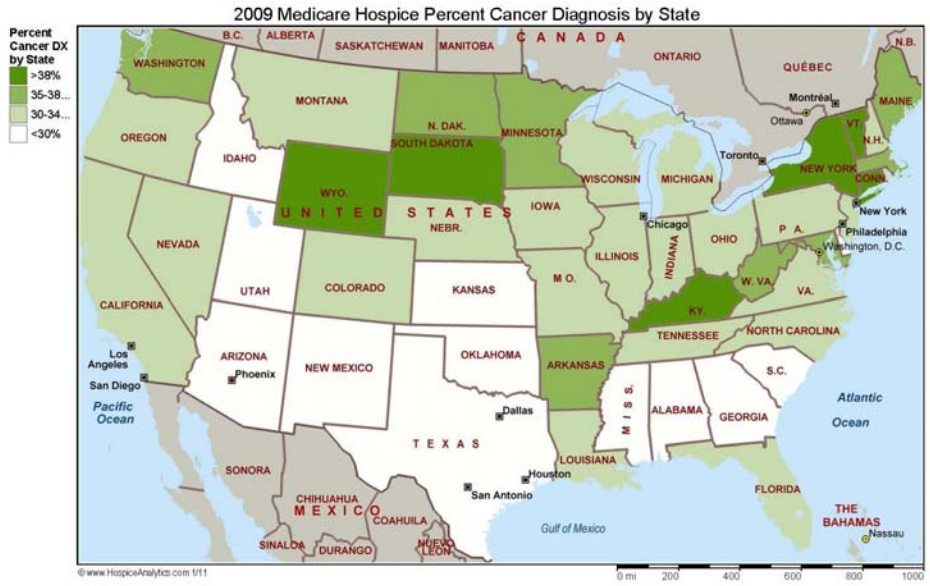
NC= 69% (#36); SC= 60% (#47); National= 70%



2009 Medicare Hospice Percent Cancer Diagnosis

NC= 33% Cancer (#25); SC= 28% (#44); National= 32%





Presentation Outline

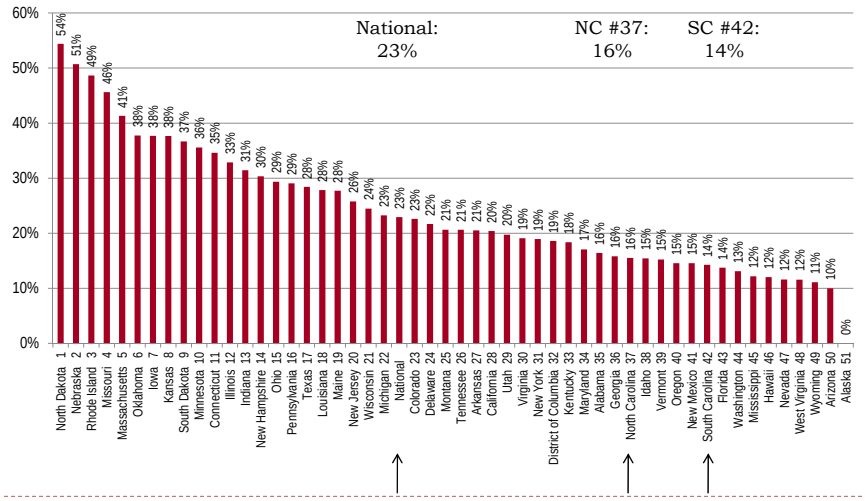
Part 1:

1. In the Beginning… Early Questions & Answers
2. Data Available
3. Data Applications for Hospice Administrators

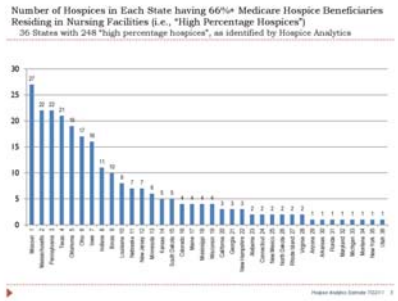
Part II:

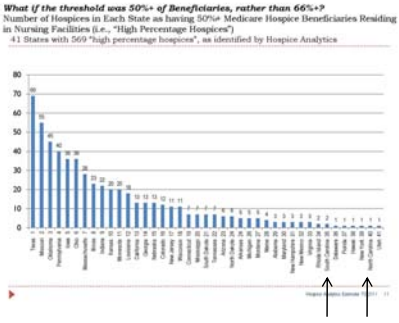
1. Death Service Ratio
2. Length of Service
3. **Hospice in Nursing Facilities**
4. Hospice Caps
5. Data Driven Advocacy
6. U-Shaped Curves
7. Disaster Preparedness & Misc.

2009 Medicare Percentage Beneficiaries Hospices Reported Caring for in Nursing Facilities



"High Percentage Hospices" per the 7/19/11 OIG Hospice in Nursing Facilities Report
Cordt T. Kassner, PhD, Principal of Hospice Analytics





Palliative Care Best Practice – LTC / Hospice, 1

Palliative Care Best Practice – LTC / Hospice

Colorado Health Care Association/Colorado Center for Hospice & Palliative Care

CHCA QIS Committee February 2008

RELEVANT FEDERAL AND STATE REGULATIONS	**F309,310,311,312,314,315,317,318,319,320,325,327,329-regarding Quality of Care (F309-revised guidance regarding pain). F279 regarding Coordinated and Comprehensive Care Plans. F241 and 242 regarding Quality of Life**
RELEVANT AHCA / CHCA STANDARDS OF CARE	**CHCA Publications: Pathways to Excellence AHCA Publications at: http://www.ahcancal.org/facility_operations/clinical_practice**
RELEVANT NHPCO / COCHPC STANDARDS OF CARE	**Hospice Care in Nursing Facilities (Volume 2, $75.00) Publisher-NHPCO available at NHPCO Marketplace National Hospice & Palliative Care Organization Quality Partners, Appendix II Nursing Facility Hospice Care, www.nhpco.org .**
RELEVANT JCAHO REQUIREMENTS	**Provision of Care Standards; PC.5.10, PC.8.10, PC.8.70**
ADDITIONAL RESOURCES	**Hospice in a Skilled Nursing Facility – a model for success; http://www.cdphe.state.co.us/hf/download/hospicenh.pdf CFMC/QIO information regarding pain management: http://www.medqic.org http://cfmc.org** **See Appendices for further references/resources**

Palliative Care Best Practice – LTC / Hospice, 2

PALLIATIVE CARE TIMELINE	Highly Recommended	Optional	Practices
ADMISSION	X X X	 X X	1) **Advance Care Planning – ranging from treatment practices to funeral services - What is in place? - CPR Directive, Living Will, MDPOA, POLST** 2) **Assessment of current medical and functional status** 3) **Administer MDS at admission and calculate Flacker Mortality Scale from it. Administer quarterly thereafter until Flacker Scale results identify a prognosis of 12 months or less.** 4) **Life review and Legacy planning discussions** 5) **Vision Mapping**
QUARTERLY	X X		1) **Re-administration of MDS and re-calculate Flacker Mortality Scale.** 2) **Review Advance Care Plan – is it still current and appropriate.**
12-MONTH PROGNOSIS	X	X	1) **Discussion with resident and family of current prognosis and goals of care** 2) **Palliative care consultation.**
6-MONTH PROGNOSIS	X X X X X		1) **Explanation of hospice, hospice services, and resident choice of services** 2) **Re-evaluate the patients understanding of the disease process, expectations, goals and values; Advance Directives (Clarify preferences: hospitalization, antibiotics, IV fluids, nutrition, etc.)** 3) **What is Hospice Care?** 4) **Developing coordinated Plan of Care** 5) **Aggressive management of symptoms, pain, and suffering**
DEATH PRACTICES	X X X	 X	1) **Informing residents of pending deaths and allowing them to say goodbye** 2) **Create a consistent practice done upon death – ringing a bell, etc.** 3) **Ideas and examples for death practices and memorials**
BEREAVEMENT	X X X		1) **Resident family** 2) **Resident community** 3) **LTC staff**
APPENDIX			1) **Resources for Understanding and Accommodating Religious, Cultural, and Ethnic Variations** 2) **Resources for Conducting Difficult Conversations** 3) **Resources for Life Review, including scan of Vision Map** 4) **Resources for Palliative Care & Hospice in the Long-Term Care Setting** 5) **Palliative and Hospice Care Resources** 6) **Hospices Providers in Colorado** 7) **Hospices by County**

Palliative Care Best Practice – LTC / Hospice, 3

- This tool is currently being updated and will be available in print and online ~October 1, 2011. For additional information, please contact:
  - Jennifer Ballentine, MA, Executive Director of the Life Quality Institute, at phone 303-398-6317 or email jballentine@lifequalityinstitute.org.
  - Web site: www.LifeQualityInstitute.org.

Presentation Outline

Part 1:

1. In the Beginning… Early Questions & Answers
2. Data Available
3. Data Applications for Hospice Administrators

Part II:

1. Death Service Ratio
2. Length of Service
3. Hospice in Nursing Facilities
4. **Hospice Caps**
5. Data Driven Advocacy
6. U-Shaped Curves
7. Disaster Preparedness & Misc.

2009 Estimated Cap on Aggregate Hospice Reimbursement

The Regulation

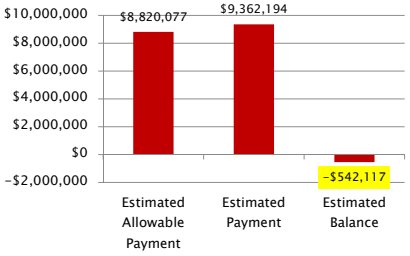
- The cap period runs from November 1st of each year through October 31st of the next year. The total payment made for services furnished to Medicare Beneficiaries during this period are compared to the "cap amount" for this period. Any payments in excess of the cap must be refunded by the hospice.
- The beneficiary must not have been counted previously in either another hospice's cap or another reporting year.
- The beneficiary must file an initial election during the period beginning 9/28 of the previous cay year through 9/27 of the current cap year.
- When a beneficiary elects to receive hospice benefits from two or more different Medicare certified hospices, proportional application of the cap amount is necessary.
- Medicare Claims Processing Manual; Rev. 1738; 5/15/09; p. 36. See Manual for additional detail, particularly if maximum is exceeded.

Should you be concerned? Yes.

Operating at 106%-126% of overall cap.

Estimated Payback= $542,117

Aggregate Cap

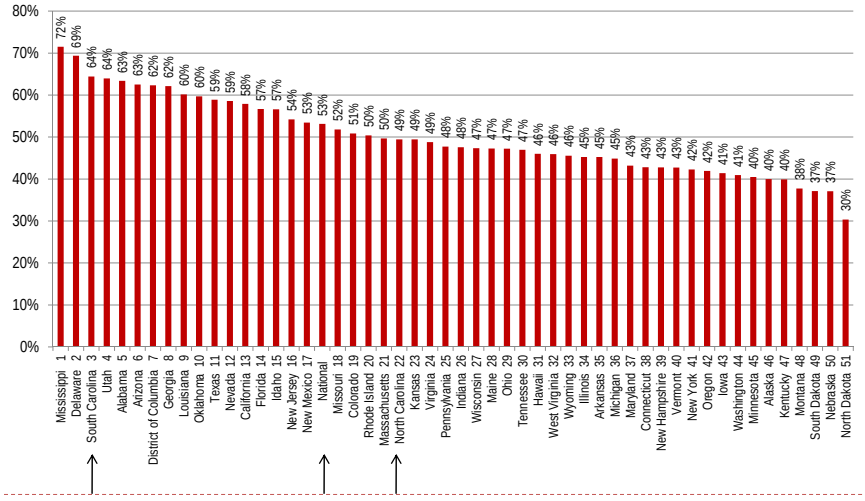


- Estimated Allowable Payment= Total Patients x 2009 Cap Amount ($23,014.50).
- Estimated Payment= Total Medicare Payments.
- National mean hospice cap on overall hospice reimbursement percentage (estimated payment/estimated allowable payment)= **53%**.

2009 Estimated Hospice Aggregate Caps

NC= 40% (#22); SC= 64% (#3); National= 53%

Adjust Similar to MedPAC= +20%



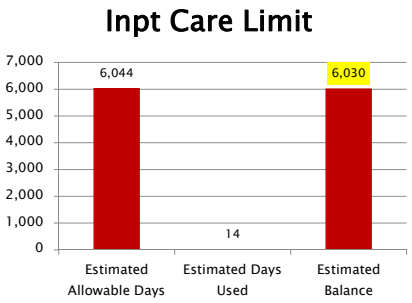
2009 Estimated Limitations on Payments for Inpatient Care

The Regulation

- During the 12-month period beginning November 1 of each year and ending October 31, the aggregate number of inpatient days (both for general inpatient care and inpatient respite care) may not exceed 20 percent of the aggregate total number of days of hospice care provided to all Medicare beneficiaries during that same period.
- Calculated by the FI as follows: The maximum allowable number of inpatient days is calculated by multiplying the total number of days of Medicare hospice care by 0.2.
- Medicare Claims Processing Manual; Rev. 1738; 5/15/09; p. 35. See Manual for additional detail, particularly if maximum is exceeded.

Should you be concerned?

Operating at ~0% of Inpatient Limit



- Estimated Allowable Days= Total Days x 0.20.
- Estimated Days Used= Total GI + Respite Days.
- National mean limit on payments for inpatient care (estimated days used / estimated allowable days)= **10%**.

2009 CMS Surveys

The Regulation

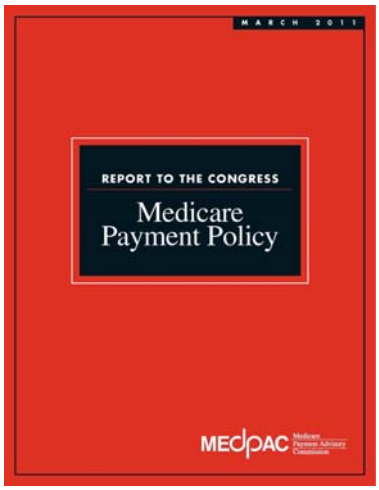
- Tier 1: Surveys occur immediately for complaints that if substantiated would result in immediate jeopardy.
- Tier 2: Surveys occur for all other complaints as prioritized; 5% targeted surveys annually.
- Tier 3: Surveys occur on **7-year interval** for any one provider.
- Tier 4: Surveys occur on **6-year average** for all providers in state (i.e., all surveys / all providers); initial Medicare Hospice Certification surveys.
- *Note: The only exceptions to these survey dates have involved deemed status accreditation surveys. If your hospice is accredited, it is possible that your accreditation survey has been more recent than what is posted in the CMS file.

Should you be concerned?

You have been surveyed more recently than most other hospices in the state

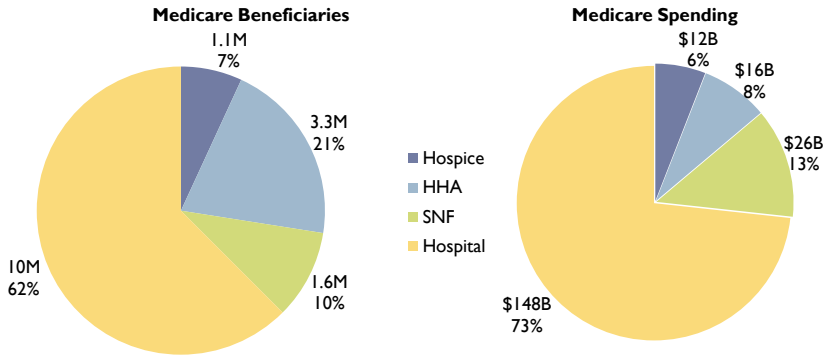
As of 12/31/09	
Initial Certification	11/30/05
Last survey date	11/30/05
Years since last survey	4.1 years
Rank: How many hospices in your state have a shorter time since last survey?	78 / 82
State average (NC) State average (SC)	3.9 years 2.1 years

MedPAC's March 15, 2011 Report to Congress



Hospice Highlights

What might be impacting MedPAC reimbursement recommendations?



Mean Hospice $/PT= $10,909
Mean SNF $/PT= $16,250

Mean HHA $/PT= $4,848
Mean Hospital $/PT= $14,800

What Does MedPAC Consider?

	Hospice	Home Health	SNF	Cent Hospitals
Patients:	•ALL: Number of Patients, Payer, Age, Race, Gender, Urban / rural			
		•Episodes / therapies	*•Clinical complexity*	
Providers:	•ALL: Number of Providers, Nonprofit / for profit / gov, Urban / rural, Access to capital			
	•Freestanding / HHA-based / Hospital-based / SNF-based		*•Freestanding / Hospital-based*	*•Type of service* *•Employment* *•Teaching*
Spending:	•ALL: Total Medicare Spending, Average cost / day, Net margins – high / low			
	•Aggregate cap			
Length of Stay:	•ALL: Mean, Median			
Diagnosis	•ALL: Primary Diagnosis			
Discharge disposition	*•Live discharges*	*•Live discharges*	*•Community* *•Hospital*	*•Readmission rates*
Quality	*•NA* *•Growing concern regarding waste, fraud, and abuse in hospice*	*•Fraud and abuse challenges – temp. moratorium for new providers, suspension of payments to providers with high risk of fraud* *•Functional measures* *•Adverse events*	*•Percent discharged to community* *•Percent rehospitalized for any of 5 conditions* *•"Efficient providers"*	*•Mortality rates* *•Patient safety indicators* *•Patient satisfaction* *•Readmission rates* *•"Efficient providers"* *•Value-based incentive pay*

Hospice Highlights

1. The Congress should update the payment rates for hospice for fiscal year 2012 by 1 percent.
2. The Congress should direct the Secretary to change the Medicare payment system for hospice to:
   A. have relatively higher payments per day at the beginning of the episode and relatively lower payments per day as the length of the episode increases,
   B. include a relatively higher payment for the costs associated with patient death at the end of the episode, and
   C. implement the payment system changes in 2013, with a brief transitional period.
   D. These payment system changes should be implemented in a budget neutral manner in the first year. *(First recommended in March 2009)*
3. The Secretary should direct the HHS Office of Inspector General to investigate:
   A. the prevalence of financial relationships between hospices and long-term care facilities such as nursing facilities and assisted living facilities that may represent a conflict of interest and influence admissions to hospice,
   B. differences in patterns of nursing home referrals to hospice,
   C. the appropriateness of enrollment practices for hospices with unusual utilization patterns (e.g., high frequency of very long stays, very short stays, or enrollment of patients discharged from other hospices), and
   D. the appropriateness of hospice marketing materials and other admissions practices and potential correlations between length of stay and deficiencies in marketing or admissions practices. *(First recommended in March 2009)*

Hospice Highlights

1. The Congress should update the payment rates for hospice for fiscal year 2012 by 1 percent.

Historical Trend:

	MedPAC Recommendation	Market Basket Adjustment
2012	+1%	+2.5%
2011	+2.6%	+2.6%
2010	NA	+2.1%
2009	NA	+3.6%
2008	NA	+3.3%
2007	NA	+3.4%
2006	NA	+3.7%
2005	NA	+3.3%

Hospice Highlights

MedPAC reimbursement recommendations for other industries:

	Hospice	Home Health	SNF	Hospital
2012	+1%	0%	0%	+1%
2011	+2.6%	0%	0%	+2.4%
2010	NA	0%	0%	2.7%
2009	NA	0%	0%	3.0%

Note: Per 8/4/11 *CMS Provider e-news*:

On Fri July 29, CMS today announced a final rule reducing Medicare skilled nursing facility (SNF) Prospective Payment System (PPS) payments in FY2012 by $3.87 billion, 11.1 percent lower than payments for FY2011. The FY2012 rates correct for an unintended spike in payment levels and better align Medicare payments with costs.

"CMS is committed to providing high quality care to those in skilled nursing facilities and to pay those facilities properly for that care," said CMS Administrator Donald M Berwick, MD. "The adjustments to the payment rates for next year reflect that policy."

Hospice Highlights

What might be impacting MedPAC reimbursement recommendations?

Net Margins:

	Hospice	Home Health	SNF	Hospital
2009	NA	17.7%	18.1%	-5.2%
2008	5.1%	17.0%	16.6%	-7.1%
2007	5.8%	16.5%	14.7%	-6.0%
2006	6.4%	15.9%	13.3%	-4.7%
2005	4.6%	17.3%	13.0%	-3.1%

* MedPAC has commented that 10%+ net margins are too high

Hospice Highlights

Hospice Net Margins:

	2008 Net Margin
All	5.1%
Freestanding	8.0%
Home health based	2.7%
Hospital based	-12.2%
For profit (all)	*10.0%*
For profit (freestanding)	*11.3%*
Nonprofit (all)	0.2%
Nonprofit (freestanding)	3.2%
Urban	5.6%
Rural	1.3%
Below cap	5.5%
Above cap (excluding cap overpayments)	1.0%
Above cap (including cap overpayments)	*19%*

Presentation Outline

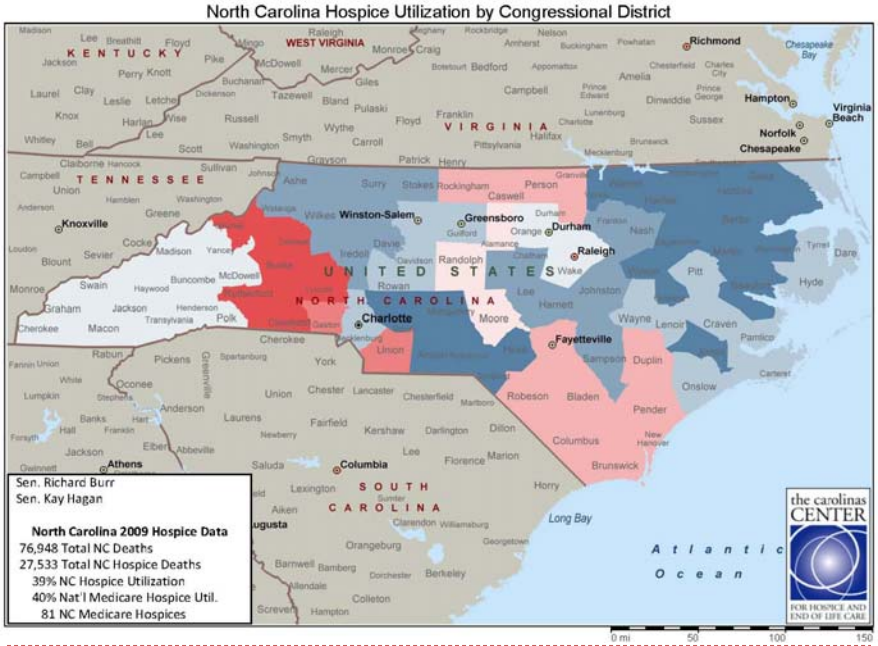
Part 1:

1. In the Beginning… Early Questions & Answers
2. Data Available
3. Data Applications for Hospice Administrators

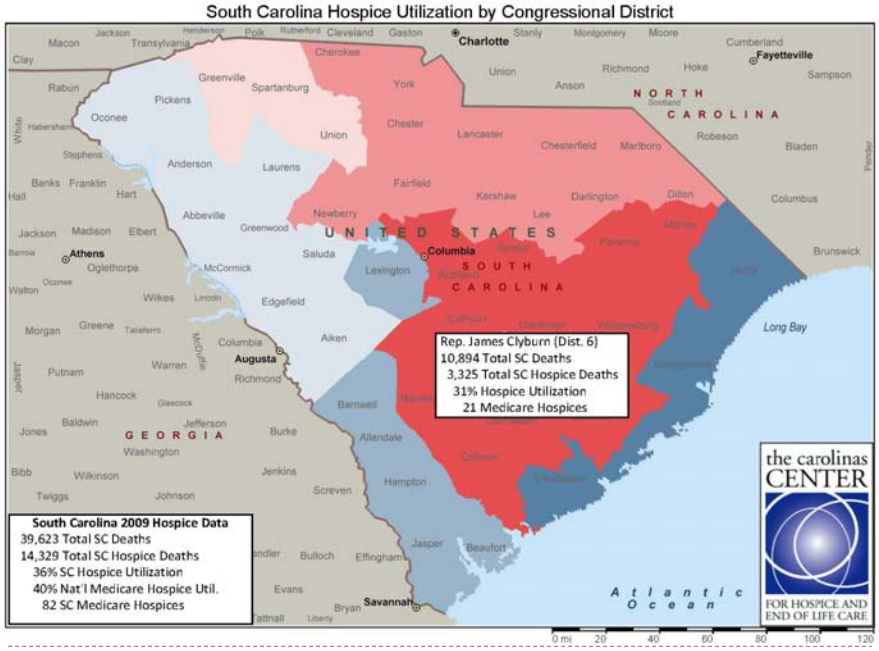
Part II:

1. Death Service Ratio
2. Length of Service
3. Hospice in Nursing Facilities
4. Hospice Caps
5. **Data Driven Advocacy**
6. U-Shaped Curves
7. Disaster Preparedness & Misc.

North Carolina Hospice Utilization by Congressional District



South Carolina Hospice Utilization by Congressional District



Presentation Outline

Part 1:

1. In the Beginning… Early Questions & Answers
2. Data Available
3. Data Applications for Hospice Administrators

Part II:

1. Death Service Ratio
2. Length of Service
3. Hospice in Nursing Facilities
4. Hospice Caps
5. Data Driven Advocacy
6. **U-Shaped Curves**
7. Disaster Preparedness & Misc.

Summary of MedPAC's March 2011 Report to Congress

Key Points	Findings / Recommendations
MedPAC is an independent Congressional agency established to advise the U.S. Congress on issues affecting the Medicare program. MedPAC is also tasked with analyzing access to care, quality of care, and other issues affecting Medicare.	MedPAC is analyzing hospice and trying to develop a reimbursement model intending to increase access to hospice care, improve the quality of hospice care, and to reduce waste, fraud, and abuse within the Medicare Hospice Benefit.
The growth of hospice – now exceeding $10B.	Annual review of hospice and inclusion in March Congressional Reports.
The numbers of hospice patients, length of stay, and providers are all growing.	This suggests growing awareness of hospice services, although length of stay has increased almost exclusively among those with long LOS, and new providers are almost exclusively for profit providers.
Limited data to assess the quality of hospice care.	The PPACA of 2010 mandates that CMS publish quality measure in 2012 and hospices will be required to report quality data in FY2014.
Hospice net margins are increasing, although there is significant variance between provider types.	Hospice mean net margin= 5.1%; although nonprofits= 0.2% and for profits= 10.0%.

What Is The U-Shaped Curve Intended To Do?

MedPAC's 3/11 Report to Congress	Recommendation / U-Shaped Curve
Compared with the current hospice payment system, this payment model would: 1. Result in a much stronger relationship between Medicare payments and hospices' level of effort in providing care throughout an episode, and 2. Promote stays of a length consistent with hospice as an end-of-life benefit.	1. Intuitively it makes sense that more intensive hospice services would be provided on admission and death, and this is consistent with some preliminary data provided to MedPAC. However, NHPCO has conducted a study that suggests relatively stable amounts of hospice services provided across the admission – perhaps like an ICU. So we don't know… 2. What exactly does this mean…?

What Is The U-Shaped Curve Intended To Do?

MedPAC's 3/11 Report to Congress	Recommendation / U-Shaped Curve
This second point ties MedPAC's role of analyzing Medicare services and making reimbursement recommendations to the mission, purpose, and integrity of the Medicare Hospice Benefit.	It appears that MedPAC is hoping the U-Shaped Curve helps reduce outliers and align the hospice industry according to the MHB's purpose. Perhaps other areas of the MedPAC report give insight into some of the inequalities: • Increased spending due to increased beneficiaries served, although minorities and those in rural areas receive less hospice, and there is an increase in non-cancer diagnoses. • Nearly all provider growth has been among for-profits. • Nearly all LOS change has been in the 4th quartile (75%+). • Increasing numbers of hospices exceeding caps. • Increasing numbers of beneficiaries discharged alive. • Hospice net margins have remained fairly stable between 2002-2008, with the greatest difference between nonprofit (0.2%) and for-profit (10.0%) providers.

Reimbursement Methodologies

- Flat reimbursement cuts (i.e., cuts applied evenly across all hospices) hurt those with the smallest net margins the fastest and hardest.
  - Eliminating the Budget Neutrality Adjustment Factor and imposing Productivity Factor Cuts are flat cuts with tremendous negative impact on all hospices. NHPCO released a study in March 2011 projecting median hospice profit margins will decrease 10% or more by 2019, and that 60%+ of hospices will have negative profit margins by 2019.
  - Community Hospice Partnership conducted a similar study last year and had similar findings. CHP projects the impact of these cuts will quickly close nonprofit and rural hospices (i.e., those with the smallest margins).
- Alternatives to flat reimbursement cuts may help – or they may not.
  - MedPAC's proposed U-Shaped Curve is an alternative to flat reimbursement cuts, but will it help protect the most vulnerable hospices?

Testing the Impact of Various U-Shaped Curves in Hospice Reimbursement

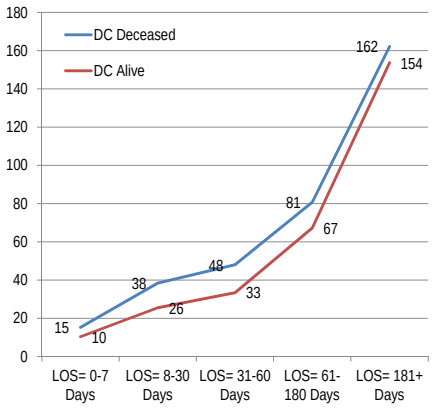
Criteria	All Hospices	Nonprofit	For-profit	Urban	Rural
RHC Baseline Revenue	100.0%	100.0%	100.0%	100.0%	100.0%
5% and 30 Days*	98.5%	98.8%	98.2%	98.5%	98.4%
10% and 30 Days	97.0%	97.6%	96.3%	97.0%	96.7%
5% and 14 Days	97.1%	97.3%	96.8%	97.1%	97.0%
5% and 7 Days	96.2%	96.4%	96.0%	96.2%	96.1%
10% and 14 Days	94.1%	94.6%	93.6%	94.1%	93.9%
25% and 30 Days	92.4%	94.0%	90.8%	92.5%	91.8%
10% and 7 Days	92.4%	92.7%	92.1%	92.4%	92.3%
25% and 14 Days	85.3%	86.5%	84.1%	85.4%	84.8%
25% and 7 Days	81.0%	81.8%	80.2%	81.1%	80.7%
Mean of all 9 models	**92.7%**	**93.3%**	**92.0%**	**92.7%**	**92.4%**

*For example, "5% and 30 Days" means: Reimbursing 105% of current RHC per diem for the first 30 days, followed by 95% for the remainder of days, with an increase to 105% for the last 30 days if the beneficiary dies. This model results in all hospices being reimbursed 98.5% of the current per diem rate.

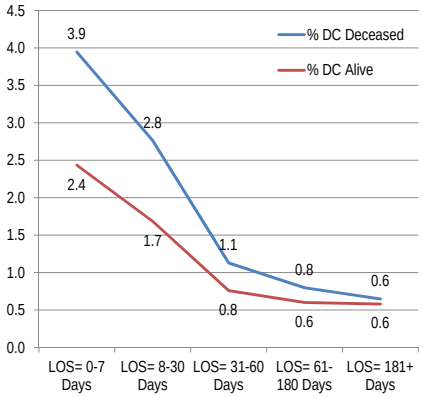
Conclusion: The impact of these 9 models has very little variation across different hospice provider groups – therefore the overall impact of these models is more like a flat reimbursement cut.

Length of Stay and Visits Per 2009 100% Hospice SAF / LDS

Total Visits (mean x LOS category)

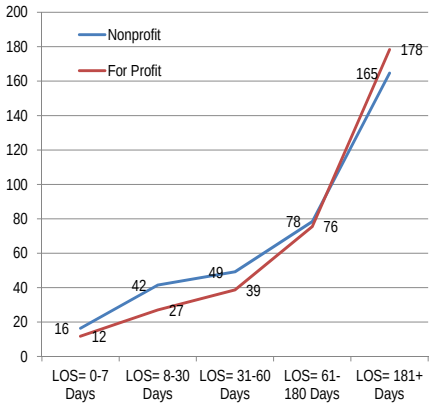


Mean Visits / Day

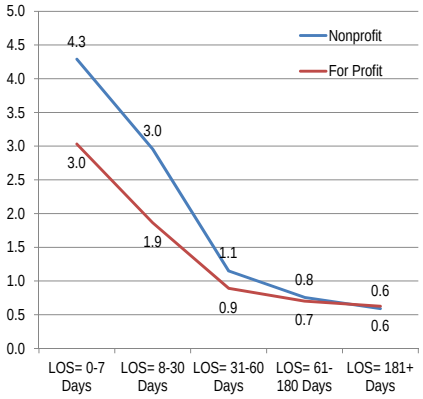


Length of Stay and Visits
Per 2009 100% Hospice SAF / LDS

Total Visits
(mean x LOS category)

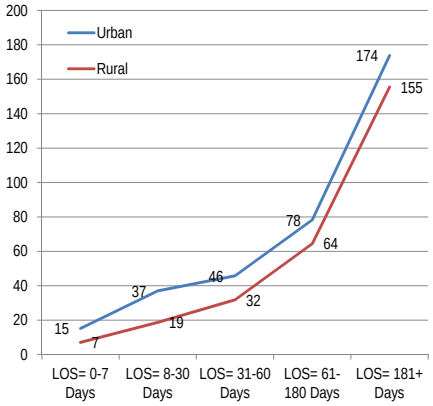


Mean Visits / Day

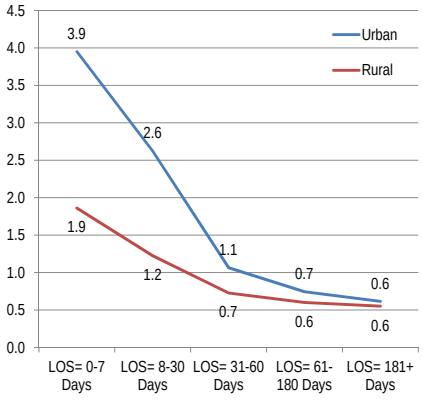


Length of Stay and Visits
Per 2009 100% Hospice SAF / LDS

Total Visits
(mean x LOS category)

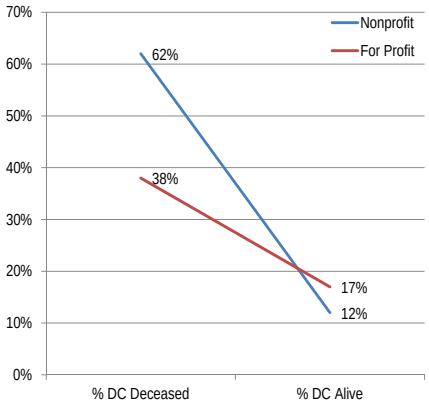


Mean Visits / Day

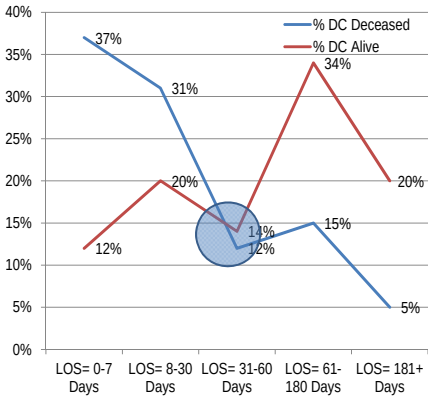


Discharge Status, Type of Control, and Length of Stay Per 2009 100% Hospice SAF / LDS

DC Status x Type of Control



LOS x DC Status



Conclusions Based on Preliminary Analysis

- MedPAC is correct – the hospice industry is changing.
- How do we support increasing access to quality hospice service, while decreasing the potential for waste, fraud, and abuse?
- Flat reimbursement cuts devastate hospice providers with small net margins – i.e., nonprofit and rural providers.

Conclusions Based on Preliminary Analysis

Does the U-Shaped Curve Work?

- While intuition suggests it might support quality hospice services and decrease the potential for WFA, preliminary data analysis suggests there is little differentiation between provider groups, suggesting it might not.
- Testing various shaped curves indicates the most vulnerable hospice providers would be hurt least by a wide / flat U-shape – although the impact is much like a flat reimbursement cut.

New Questions…

- Does the current hospice reimbursement via per diem work? Preliminary analysis suggests it does, although some regulatory changes (and perhaps statutory changes) need to be implemented to address MedPAC concerns.
- Does a U-Shaped hospice reimbursement curve alleviate MedPAC's concerns (e.g., cap excesses, live discharges, net revenues, etc.)? Preliminary analysis suggests it does not.

Conclusions Based on Preliminary Analysis

If the hospice per diem is maintained, what alternatives might help address MedPAC concerns?

- Clarify hospice cap definitions, strengthen CMS' right to recover excess payments, and *reduce* the aggregate hospice cap.
- Eliminate flat hospice reimbursement cuts (e.g., productivity factor).
- Place a temporary moratorium on new hospices.
- Hold hospices accountable for meeting statutory volunteer requirements.

Conclusions Based on Preliminary Analysis – Additional Thoughts

If the hospice per diem is maintained, what alternatives might help address MedPAC concerns?

- Increase appropriate hospice admissions by implementing clearer admission criteria guidelines – particularly regarding non-cancer diagnoses.
- Decrease the number of beneficiaries discharged alive. Review eligibility criteria more carefully at 30 days (where 70% of those who will die have died, and 70% of those who will be discharged alive are still on service).
- Longer hospice lengths of stay are not problematic – and in fact might be encouraged to maximize positive impact of hospice services (~60 days; compared to current median LOS= 24 days).
- Consider calculating hospice caps more frequently.

Presentation Outline

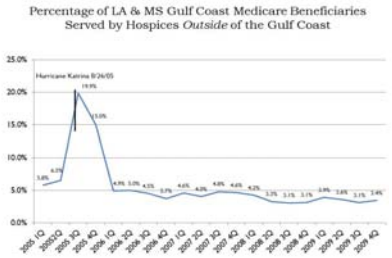
Part 1:

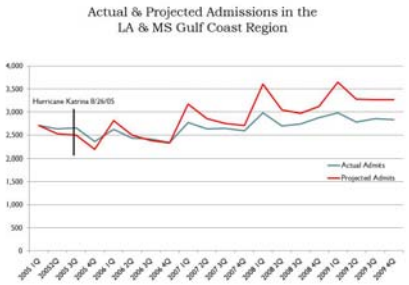
1. In the Beginning… Early Questions & Answers
2. Data Available
3. Data Applications for Hospice Administrators

Part II:

1. Death Service Ratio
2. Length of Service
3. Hospice in Nursing Facilities
4. Hospice Caps
5. Data Driven Advocacy
6. U-Shaped Curves
7. **Disaster Preparedness & Misc.**

The Impact of Hurricane Katrina on Gulf Coast Hospice Admissions
Cordt T. Kassner, PhD, Principal of Hospice Analytics





NHPCO / Moran Report March 2011

Cordt Kassner

From: NHPCO Communications [nhpco_news@nhpco.org]
Sent: Monday, March 07, 2011 8:17 AM
To: CKassner@HospiceAnalytics.com
Subject: Reimbursement Cuts will Negatively Affect Hospice Care: Report from NHPCO

For Immediate Release:
March 7, 2011

Reimbursement Cuts will Negatively Affect Hospice Care – Particularly in Rural America

NHPCO releases data showing devastating impact of cuts

(Alexandria, Va) – An independent study focusing on the projected margins of the hospice community found that, as a result of two recent cuts to Medicare reimbursement, the first regulatory and the second statutory, the overall median Medicare profit margin for the hospice community could decrease from 2 percent in 2008 to -14 percent by 2019. Further, analysis concludes that 88 percent of hospice programs could have negative margins by the same date.

Hospices caring for Americans in rural areas would be the most severely affected, with median profit margin decreases ranging from minus 2 percent in 2008 to minus 19 percent by 2019.

The National Hospice and Palliative Care Organization today released the results of the study commissioned as part of its ongoing work to protect patient access to hospice in America.

"This analysis confirms our worst fears," said J. Donald Schumacher, president and CEO of NHPCO. **"With the entire hospice community – rural and urban, large and small, community-based and multi-state – being hit by the same devastating slope downward, there is no way for patient access to not be negatively impacted."**

NHPCO / Moran Report March 2011

- Report issued 3/7/11
  - 2-page press release
  - 2-page summary
  - 6-page complete report
- Updated 3/17/11
  - 2-page press release
  - 2-page summary
  - 13-page complete report

NHPCO / Moran Report March 2011

3/7/11 Methods
Projected hospice profit margins from 2009-2019 using Hospice Cost Reports (for costs) and Hospice Claims (for revenues)
Hospices were classified as urban (<50% of services provided to patients living in rural settings) or rural (50%+)
Data cleaning reduced total hospices by 32% (from 3,756 to 2,539)
Reimbursement factors: • Market Basket 2009-2019: +2.4% annually (+2.6% in 2010) • BNAF 2009-2015: -0.4% annually (-0.3% in 2009) • Productivity Factor 2012-2019: -1.6% annually

3/7/11 Results
Medicare Hospice median profit margins for all hospices could decrease from 2% in 2008 to (-14%) in 2019. Urban Hospice: 3% to (-13%). Rural Hospice: (-2%) to (-19%)
The percent of hospices with negative profit margins could increase from 76% in 2008 to 88% in 2019. Urban Hospice: ??. Rural Hospice: 80% to 91%

NHPCO / Moran Report March 2011

- Major Conclusions From These Reports:
  - **OMG!!!**
  - Median hospice profit margins <(-10%) by 2019
  - >60% of hospices with negative profit margins by 2019
- What's driving this?
  - Productivity Factor Adjustments account for -13% revenue between 2012-2019
  - BNAF accounts for -3% revenue between 2009-2015
  - Market basket increases projected for 2.4% annually, but may not be that high
  - Note that all of these methods are "flat cuts" across the industry – so those with already low profit margins are hit hardest.
- What can be done?
  - Advocate – specifically against productivity factor adjustments and other "flat cuts"
  - Educate – this is catastrophic, and your hospice members need to know and prepare for it

Palliative Care

- Palliative Care was approved as a medical subspecialty 10/6/06
- Several interesting palliative care studies have recently been released, including (per PalliMed blog):
  - Hospitals increasingly offer palliative care - Washington Post
  - Critical (Re)thinking: How ICU's are getting a much-needed makeover - Wall Street Journal
  - Special needs, Special care (Pediatric Palliative Care) - Boston Globe
  - Many doctors still focus more on cure than managing pain - NPR
  - Hit by the reality of cancer treatment - NYT Well Blog
- We're seeing that, like hospice, palliative care:
  - Increases quality of care
  - Reduces suffering
  - Costs less
  - Improves patient transitions between providers
  - Is growing – fast

Palliative Care

- However, nearly all palliative care studies have small samples – e.g., "at my hospital", or perhaps with a small number of providers.
- Enter CMS billing code V66.7:
  - "Encounter for palliative care." Subheadings include "end-of-life care," "hospice care" and "terminal care."
  - V66.7 is always a secondary diagnosis with the underlying disease coded first.
  - V66.7 is not tied to reimbursement of any kind. Physicians generally bill under counseling time.
- V66.7 became effective 10/1/96

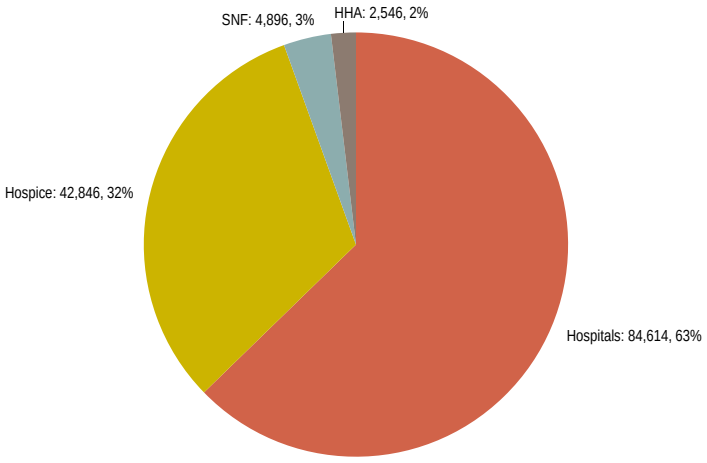
Palliative Care

- V66.7 Strengths:
  - The only palliative care billing code able to be used to easily and consistently track palliative care consults, outcomes, and costs.
  - The palliative care community has been encouraging the use of this code for years, particularly in the late 1990's.
  - Some hospitals (e.g., University of Colorado Hospital) have implemented an automatic process to include V66.7 on all palliative care consultations.
- V66.7 Weaknesses:
  - There is no detailed definition of when V66.7 can be used or shouldn't be.
  - The code isn't used consistently.
    - Sometimes "legitimate" palliative care consults do not include the V66.7 code on claims.
    - Sometimes "illegitimate" non-palliative care services include the V66.7 code on claims.
      - Radiation oncology might use this code as V66.7 is an exclusion criteria for some hospital mortality calculations.
      - Home based primary care programs may use this code (unsure why).
  - Some billing software may include only the first 4-5 (out of 10) diagnosis fields, so if V66.7 is used in a later field it may be inadvertently dropped.

Palliative Care

- Conclusions:
  1. At this point we cannot verify the reliability of V66.7, so results must remain in this context.
  2. However, the vast majority of providers would have no use in using a V-Code for "Encounter for Palliative Care".
  3. Let's look at the data and see if there might be benefit for the palliative care field.

2009 Total Medicare Beneficiaries Who Received At Least One Palliative Care Consult



Palliative Care

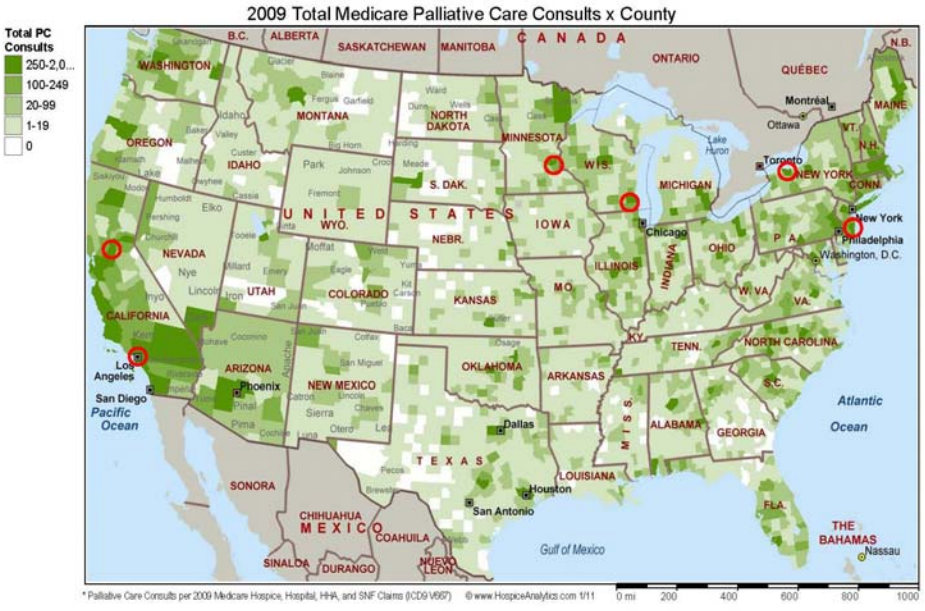
- How often is V66.7 used?

2009	# Beneficiaries	# PC Consults	# Died (%)	# Died in Hospital (%)	# Died in Hospice (%)
Medicare Total	131,696	134,904	110,512 (84%)	40,661 (30%)	58,956 (45%)
North Carolina	5,219	5,329	4,205 (81%)	1,517 (36%)	2,456 (58%)
South Carolina	2,614	2,659	2,169 (83%)	613 (28%)	1,407 (65%)

- Where was V66.7 used?

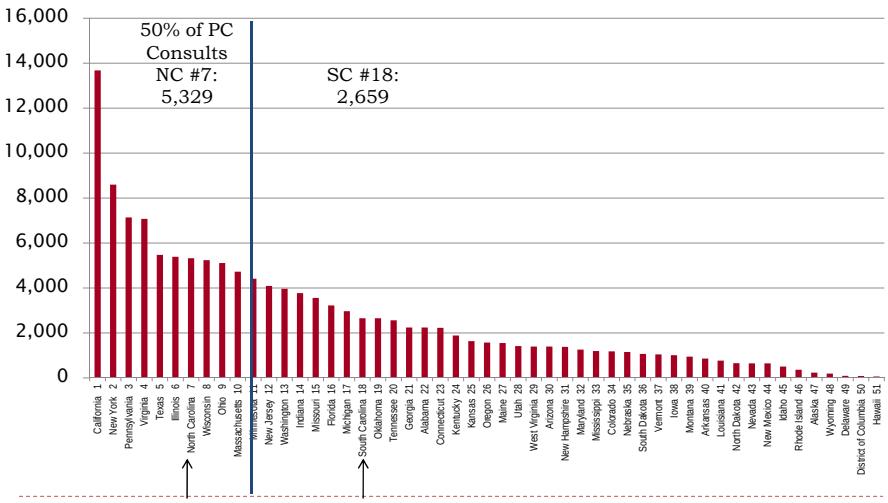
2009	# INPT Hospital (%)	# Hospice (%)	# SNF (%)	# HHA (%)
Medicare Total	84,614 (63%)	42,845 (32%)	4,896 (4%)	2,549 (2%)
North Carolina	3,186 (60%)	2,002 (38%)	97 (2%)	44 (1%)
South Carolina	1,298 (49%)	1,310 (49%)	48 (2%)	* (*%)

* Indicates CMS protected fields where cell size <11



2009 Total Medicare Beneficiaries Who Received At Least One Palliative Care Consult

National= 131,696



2009 Total Medicare Beneficiaries Who Received At Least One Palliative Care Consult

Provider Type	PC Consults	PC Benes Who Died	PC Benes Admitted to Hospice	Setting Where PC Benes Died
Hospices	42,846	33,100 (77%)	42,846 (100%)	*30,686 Hospice (93%)* *2,414 W/O Hospice (7%)*
Hospitals	84,614	74,475 (88%)	35,605 42% of PC Consults	*27,123 Hospice Alone (36%)* *39,001 Hospital Alone (52%)* *1,132 Both (2%)* *7,219 Neither (10%)*
Skilled Nursing Facilities	4,896	4,119 (84%)	1,490 30% of PC Consults	*868 Hospice Alone (21%)* *2,776 SNF Alone (67%)* *119 Both (3%)* *356 Neither (9%)*
Home Health Agencies	2,546	1,586 (62%)	1,079 42% of PC Consults	*789 Hospice Alone (50%)* *336 HHA Alone (21%)* ** Both (*%)* *454 Neither (29%)*
Total	**134,902**	**113,280 (84%)**	**81,020** **60% of PC Consults**	***60,724 (54%) With Hospice*** ***52,556 (46%) W/O Hospice***

Thank You! Please contact us with any questions.

Cordt T. Kassner, PhD

Principal
Hospice Analytics
2355 Rossmere Street
Colorado Springs, CO 80919
P: 719.209.1237
E: CKassner@HospiceAnalytics.com
W: www.HospiceAnalytics.com

Janet Bull, MD

Chief Medical Director
Four Seasons
571 South Allen Road
Flat Rock, NC 28731
P: 828-233-0302
E: JBull@FourSeasonsCFL.org
W: www.FourSeasonsCFL.org

85

Care Flanders. 2010. Palliative sedation guideline. [in Dutch]. Available from http://www.pallialine.be/template.asp?f=rl_sedatie.htm#page=page-1. Accessed March 29, 2011.

Death Service Ratio: A Measure of Hospice Utilization and Cost Impact

To the Editor:

In October 2007, Taylor et al.[1] published compelling data showing that use of hospice care reduces United States Medicare expenditures at the end of life. In a case-control study of a sample of Medicare decedents (1993–2003), the authors compared 1819 hospice decedents with 3638 matched controls. Hospice use reduced Medicare program expenditures after the initiation of hospice by an average of $2309 per hospice user ($7318 for hospice users vs. $9627 for controls; $P < 0.001$). For cancer, maximum savings of $7000 occurred with a length of stay (LOS) in hospice between 60 and 100 days; for other primary conditions, maximum savings of $3500 occurred with a LOS of 50–110 days.[1] Thus, cost savings were maximized with much longer periods of hospice use than is common among Medicare beneficiaries (median LOS of 16 days in not-for-profit, and 20 days in for-profit hospices).[2]

Examining Medicare expenditures in North Carolina for patients receiving hospice care vs. not served by hospice, we have obtained results that are consistent in showing that hospice use appears to lessen overall health care spending near the end of life. We acknowledge that these are preliminary analyses; we did not match hospice decedents with those nonhospice decedents who are most similar, as our goal here was to simply describe unadjusted Medicare cost differences in North Carolina. Likewise, a limitation of this initial exploration is that our analyses included only patients who died; we did not examine costs incurred by hospice patients who did not die.

Using 2008 data from the Centers for Medicare and Medicaid Services (CMS) Standard Analytic Files, Limited Data Sets for Hospice, Hospitals, Home Health Agencies, and Skilled Nursing Facilities (SNFs), we compared total Medicare expenditures for all Medicare beneficiaries who died under the care of one of these provider types. In North Carolina, average costs to Medicare for patients who died with a history of the following types of service use were hospice, $19,249; home health agency, $19,810; SNF, $25,842; hospital, $30,603; and multiple settings, $30,732 vs. not receiving care from any service, $6853. Notably, a North Carolina patient receiving end-of-life care through hospice received $11,354 less in care paid for by Medicare than did a patient receiving hospital-based care.

Clearly, hospice utilization exerts a strong force on health care system costs. How can we examine and monitor hospice utilization and impact? We propose "death service ratio" (DSR) as a simple measure of hospice use for this purpose. Calculated as a percentage—the numerator being deaths in a defined area or population served by hospice and the denominator being all deaths in that area/population—DSR serves as an indicator of hospice utilization in a region and, therefore, as an indirect indicator for impact of hospice on health care costs. We explicitly acknowledge that DSR is a crude indicator, as it does not accommodate for hospice LOS, patient complexity, or other important factors; but, in its simplicity, DSR allows regional monitoring of hospice utilization that can be linked to health system costs.

Using DSR as a primary measure, we recently completed a study of the impact of philanthropic funding for hospice services on hospice utilization and costs. In North Carolina counties receiving grants for hospice development through a large foundation (The Duke Endowment, Charlotte, NC), the DSR was 40% as compared with that of 30% in counties not funded by the foundation. Here, DSR was calculated as the number of Medicare beneficiaries in North Carolina who died under hospice care (numerator) over the total number of Medicare beneficiary deaths in North Carolina (denominator). Calculation of the DSR allowed for informative comparisons across service areas. Per patient hospital costs were similar between grant-funded and unfunded counties ($30,822 vs. $30,375; difference of $447). Per patient hospice rates were also similar ($19,258 vs. $19,234; difference of $24). However, looking

more closely at the highest DSR counties, we found that, in the 10% of counties with highest DSR compared with all counties, per patient hospice costs were higher (mean $8063 vs. $7031; difference of $1032) but hospital costs were lower (mean $24,567 vs. $27,632; difference of -$3065). On balance, in counties with higher use of hospice, the use of hospital care was reduced; this observation is consistent with a hypothesis that increased hospice use reduces overall Medicare costs at the end of life. Further, we found evidence that external grant funding to support the development of hospice and palliative care was related to increase in hospice use, which correlated with the cost savings observed in these counties.

These analyses demonstrate that DSR can serve as a useful marker of hospice utilization and financial impact at the local level, leading to valuable insights about the relationship between use and costs within a regional population. We are currently examining DSR by county in North Carolina to understand trends in care, distribution of available services (including hospice and palliative care), and impact of bridging community-based palliative care programs; results will likely be useful for workforce planning.

As a measure, DSR could be further developed as an indicator of access and impact, but certain steps must first be taken. These include exploration of the relationship between change in DSR and change in quality of care; determination of whether or not results generated in North Carolina are generalizable to other areas of the United States or the country as a whole; development of quality-of-care benchmarks followed by studies exploring methods for improving performance against those benchmarks; and standardization of what is encompassed by "hospice" care, as well as by its overarching discipline, "palliative care," to enable cleaner analyses.

From a policy standpoint, it is most important to consider hospice expenditures in the context of the "systemic cost" of end-of-life care, that is, the total cost of care from all care settings for the patient who dies on a specific service (especially important given the crossover of patients from one setting to another, making clear distinctions of hospice and nonhospice problematic). Hospice comprises only a fraction of total Medicare costs; as a proportion of total Medicare expenditures in 2008, hospice accounted for 8% ($11.1 billion), hospitals for 71% ($113 billion), and SNFs for 13% ($23 billion). Aggregate cost analyses support continued and substantial Medicare spending on hospice care, both to enhance end-of-life experiences for patients and their loved ones and make end-of-life care more affordable. DSR offers a simple and pragmatic measure for monitoring hospice utilization, tying change in utilization to cost reduction/increase, and, with further development, monitoring quality of care, access, disparities, and performance against national benchmarks. With this motivation, we plan to further study and strengthen DSR as a measure.

Acknowledgment

This project was supported in part by funding from The Duke Endowment.

Amy P. Abernethy, MD
Division of Medical Oncology
Department of Medicine
Duke University Medical Center
Durham, North Carolina, USA
Division of Medicine
Department of Palliative
and Supportive Services
Flinders University
Bedford Park, South Australia,
Australia

Cordt T. Kassner, PhD
Hospice Analytics
Colorado Springs, Colorado, USA

Elizabeth Whitten, MBA
Janet Bull, MD
Four Seasons
Flat Rock, North Carolina, USA

Donald H. Taylor Jr., PhD
Sanford Institute of Public Policy
Duke University
Durham, North Carolina, USA

doi:10.1016/j.jpainsymman.2011.03.004

References

1. Taylor DH Jr, Ostermann J, Van Houtven CH, Tulsky JA, Steinhauser K. What length of hospice use maximizes reduction in medical expenditures near death in the US Medicare program? Soc Sci Med 2007;65:1466–1478.

2. Wachterman MW, Marcantonio ER, Davis RB, McCarthy EP. Association of hospice agency profit status with patient diagnosis, location of care, and length of stay. JAMA 2011;305:472–479.