

protect:

Preserving
Hospice Services
means protecting
Medicaid funds.



THE MISSOURI HOSPICE MEDICAID PROJECT.

ACKNOWLEDGEMENTS:

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THE MISSOURI HOSPICE MEDICAID PROJECT.

Preserving Hospice Services Means Protecting Medicaid Funds

The Missouri Department of Social Services approved a research study submitted by the Missouri Hospice & Palliative Care Association (MHPCA) in 2013 to explore potential cost savings of hospice services associated with end-of-life services within the Missouri Medicaid program. This project was completed, in part, by funding from The Missouri Foundation for Health. **Missouri Medicaid provided MHPCA the following information for this study:**

- An Eligibility File including 22,687 records accounting for all Medicaid Recipients who died in 2011, regardless of whether or not the Recipient was receiving Medicaid on the date of death.
- A Claims File including 789,511 records of all 2011 general hospital, nursing facility, home health agency, rural health clinic, and hospice claims for deceased Recipients.

Hospice is a benefit that is currently part of the “optional” services in State Medicaid Programs. During this time of constrained budgets, Medicaid programs are asking whether certain services are worth maintaining in their benefit package. **Most states have determined that hospice should remain a part of their states’ Medicaid program.** However, two states have recently decided to curtail Medicaid Hospice services – Oklahoma opted to stop covering hospice in 2010 and Michigan eliminated the inpatient portion of its benefit in September, 2013^{1,2}. Additionally, several states have recently considered eliminating the Medicaid Hospice benefit, including AL, LA, NC, SC, and WA. Given budget constraints in the state and the desire to increase patient benefit per dollar spent, Missouri is right to ask a basic question: what are the benefits and costs of maintaining hospice as a part of its Medicaid benefit package?

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HOSPICES IS.. Considered to be the model for quality, compassionate care for people facing a life-limiting illness or injury, hospice care involves a team-oriented approach to expert medical care, pain management, and emotional and spiritual support expressly tailored to the patient's needs and wishes. Support is provided to the patient's loved ones as well.

– National Hospice & Palliative
Care Organization,
www.nhpco.org/about/hospice-care



¹ The Henry J. Kaiser Family Foundation Website: <http://kff.org/medicaid/state-indicator/hospice-care/>, accessed 11/12/13.

² Detroit New Website: <http://www.detroitnews.com/article/20130930/BIZ/309300108>, accessed 11/12/13.

Missourians Choosing Hospice Cost Medicaid Less Than They Otherwise Would

Missouri had 1,202,060 Medicaid Recipients and spent a total of \$6.2 Billion on Medicaid payments in 2010, including \$72.9 Million on Medicaid Hospice.³ Missouri's increase in overall Medicaid expenditures from 2009-2010 is higher than the national average (7.4% vs. 4.0%, respectively) while our spending on hospice is lower (5.4% vs. 4.8%, respectively).

	2009 Total Medicaid Spending	2009 Hospice Medicaid Spending	2010 Total Medicaid Spending	2010 Hospice Medicaid Spending	Total Spending Percentage Difference 2009-2010	Hospice Spending Percentage Difference 2009-2010
NATIONAL	\$326,024,595,905	\$2,202,123,488	\$338,994,377,857	\$2,321,569,336	4.0%	5.4%
MISSOURI	\$5,771,062,410	\$69,596,537	\$6,196,284,095	\$72,924,538	7.4%	4.8%

An analysis of 2011 Missouri Medicaid data shows that hospice actually reduces spending for Medicaid beneficiaries near death as compared to what it would have been without hospice.

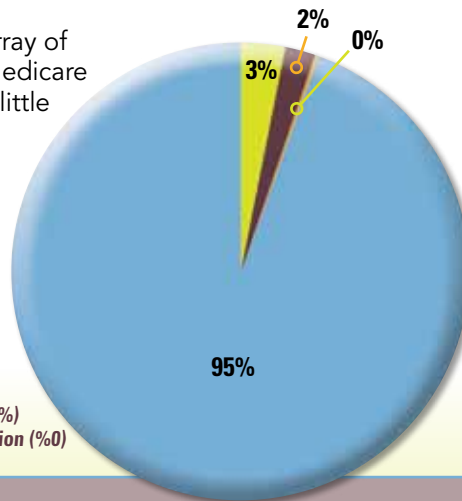
45% LOWER COSTS...

An analysis of Medicaid recipients in Missouri who died under the care of a single Medicaid provider in 2011 showed that those dying while under the care of hospice had total Medicaid costs that were 45% lower than were those incurred by persons who died in the hospital⁴.

- Total costs for hospice users: **\$126,000**
- Total costs for those dying in a hospital: **\$284,000**

It is important to keep in mind that the costs of both of these groups were high because Medicaid was responsible for the care of seriously ill Missourians who were dying. If you account for the fact that those dying in hospice were older (age 81) than those who died in the hospital (age 66) then the cost savings that accrued to Missouri's Medicaid program due to hospice as compared to a hospital death would be even larger. National research has confirmed cost savings associated with hospice, again as compared to what costs would have been had an individual who subsequently died did not choose to use this service 2003^{5,6}, and found hospice saves Medicaid – \$282 Million per year nationally.

Also important, Medicaid pays for a much broader array of services for the elderly and terminally ill than does the Medicare program. For example, whereas Medicare pays for very little nursing home care, Medicaid pays for a great deal of it. In fact, when a Medicaid recipient receives hospice services in a nursing home, most state Medicaid programs pay hospice the nursing home Room & Board and the hospice passes this payment through to the nursing home – i.e., while these Room & Board payments are accrued to hospice, it is not revenue realized by the hospice.



THE most important question to answer is not how much Medicaid spent on hospice, but rather how spending on persons who choose to use hospice differ from those not choosing hospice.

SUMMARY / CONCLUSION

A key issue for Missouri's Medicaid program is to look closely at recipients with advanced, life limiting illnesses and disabilities, and seek to make hospice care available as early as is legitimately allowed by the program (patients must be believed to be in their last 6 months of life to access the hospice benefit). Seeking to expand such care to a broader group of Medicaid patients who are approaching death could both reduce the cost to Medicaid, as well as improve quality of life for patients.

³ Centers for Medicare & Medicaid Services Website: <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MSIS-Mart-Home.html>, accessed 11/12/13.

⁴ Missouri Hospice & Palliative Care Association, 11/13, publication pending.

⁵ Milliman USA, "Value of Hospice Benefit to Medicaid Programs", 5/2/2003.

⁶ Pyenson B, et. al, "Medicare Cost in Matched Hospice and Non-Hospice Cohorts"; *Journal of Pain & Symptom Management*, 2004; 28:3, 200-210.

Missouri Medicaid provided MHPCA with an Eligibility File including 22,687 records accounting for all Medicaid Recipients who died in 2011, regardless of whether or not the Recipient was receiving Medicaid on the date of death. Additionally, Missouri Medicaid provided a Claims File including 789,511 records of all 2011 general hospital, nursing facility, home health agency, rural health clinic, and hospice claims for deceased Recipients. Therefore, outpatient and other charges are not represented in these results. The Eligibility File included Eligibility Start and Stop Dates (month and year). The Claims File included First and Last Dates of Service, Date of Birth, and Date of Death (year). Therefore, when matching the Claims and Eligibility Files, MHPCA could match dates based on year only.

Results:

Combining the Eligibility and Claims Files, and limiting the database to include only those active Medicaid Recipients during the year of death, MHPCA found:

Of the 22,687 Total Recipients:

- 14,080 (62%) were included in the analysis
- 8,415 (37%) were excluded because they had no 2011 claims
- 192 (1%) were excluded because their Eligibility Stop Date was prior to 2011

Of the 789,511 Claims:

- 782,009 (99%) were included in the analysis
- 7,502 (1%) were excluded because their Eligibility Stop Date was prior to 2011

Of the 782,009 eligible claims, provider types included:

- 532,099 (68%) General Hospital
- 195,707 (25%) Nursing Home
- 24,487 (3%) Hospice
- 18,517 (2%) Rural Health Clinic
- 11,199 (1%) Home Health Agency

The purpose of this study is to examine healthcare costs associated with end-of-life care. Of the 14,080 Missouri Medicaid Recipients eligible for this study, 1,255 died while under the service of a healthcare provider (note: none of the Recipients were under the service of more than one healthcare provider at death):

● **756 (60%) DIED IN A GENERAL HOSPITAL**

● **499 (40%) DIED IN A HOSPICE**

When examining all eligible Recipient demographics (Table 2), Recipients dying in hospice were older with less racial diversity compared to Recipients dying in the hospital. International Classification of Diseases, Revision 9 (ICD-9) categories were used to identify disease categories for the primary diagnosis field in claims (Table 3). Recipients dying in hospice had higher percentages of cancer, ill-defined conditions, and nervous system diagnoses – and lower percentages of circulatory system and “all other” diagnoses – compared to Recipients dying in the hospital.

All general hospital, nursing home, hospice, rural health clinic, and home health agency claim payments were totaled and reported by provider type based on whether the Recipient died in the hospital or hospice setting (Table 4). Mean Medicaid payments per Recipient were calculated (Table 5). Recipients dying in hospice had mean total Missouri Medicaid payments across these provider groups of \$126,831 compared to \$284,657 for Recipients dying in the hospital – **therefore Recipients dying in hospice averaged 44.5% of total payments compared to Recipients dying in the hospital.**

Table 2:	All Eligible Recipient Demographics:							
	Age	Sex		Race		Medical Eligibility Code		
	(Mean Years)	Female	Male	White	Black & Other	Permanently & Totally Disabled	Old Age Assistance	All Other
HOSPITAL	48	362 (48%)	397 (52%)	517 (68%)	242 (32%)	604 (80%)	51 (7%)	104 (14%)
HOSPICE	75	325 (65%)	174 (35%)	425 (85%)	74 (15%)	155 (31%)	293 (59%)	51 (10%)
TOTAL	59	687 (55%)	571 (45%)	942 (75%)	316 (25%)	759 (60%)	344 (27%)	155 (12%)

Table 3:	All Eligible Recipient Diagnoses Groups:					
	Circulatory System	Cancer	Respiratory System	III-Defined Conditions	Nervous System	All Other
HOSPITAL	285 (38%)	73 (10%)	92 (12%)	13 (2%)	23 (3%)	271 (36%)
HOSPICE	84 (17%)	134 (27%)	60 (12%)	73 (15%)	59 (12%)	88 (18%)
TOTAL	369 (29%)	207 (16%)	152 (12%)	86 (7%)	82 (7%)	359 (29%)

Table 4:	All Claim Payments by Provider Types:														
	Hospital Payments			Nursing Home Payments			Hospice Payments			Rural Health Clinic Payments			Home Health Agency Payments		
	N	Mean	Sum	N	Mean	Sum	N	Mean	Sum	N	Mean	Sum	N	Mean	Sum
HOSPITAL	756	\$281,572	\$212,868,776	93	\$14,265	\$1,326,629	21	\$6,491	\$136,302	116	\$581	\$67,372	118	\$6,792	\$801,447
HOSPICE	237	\$215,237	\$51,011,157	269	\$15,460	\$4,158,730	492	\$15,998	\$7,870,889	72	\$309	\$22,231	23	\$9,812	\$225,669
TOTAL	993	\$265,740	\$263,879,933	362	\$15,153	\$5,485,359	513	\$15,609	\$8,007,190	188	\$477	\$89,604	141	\$7,285	\$1,027,116

Table 5:	All Claim Payments – Mean Payments per Recipient:		
	Total Payments		
	N	Mean	Sum
HOSPITAL	756	\$284,657	\$215,200,525
HOSPICE	499	\$126,831	\$63,288,677
TOTAL	1,255	\$221,904	\$278,489,202

Refine Results by Age:

Note the difference in mean age between the groups above – this is significant and an important driver of end-of-life costs. Therefore, MHPCA limited this sample from 1,255 Recipients to only Recipients age 60+ years (N=595; 47%), resulting in the following:

● 201 (34%) DIED IN A GENERAL HOSPITAL
● 394 (66%) DIED IN A HOSPICE

When examining eligible Recipients 60+ years old demographics (Table 6), Recipients dying in hospice were still older with less racial diversity compared to Recipients dying in the hospital. International Classification of Diseases, Revision 9 (ICD-9) categories were used to identify disease categories for the primary diagnosis field in claims (Table 7). Recipients dying in hospice had slightly higher percentages of cancer, ill-defined conditions, and nervous system diagnoses – and lower percentages of circulatory system and “all other” diagnoses – compared to Recipients dying in the hospital.

All general hospital, nursing home, hospice, rural health clinic, and home health agency claim payments were totaled and reported by provider type based on whether the Recipient died in the hospital or hospice setting (Table 8). Mean Medicaid payments per Recipient were calculated (Table 9). Recipients dying in hospice had mean total Missouri Medicaid payments across these provider groups of \$56,936 compared to \$262,805 for Recipients dying in the hospital – **therefore Recipients aged 60+ years dying in hospice averaged 21.7% of total payments compared to Recipients dying in the hospital.**

Table 6:	Recipients 60+ Years Old Demographics:							
	Age	Sex		Race		Medical Eligibility Code		
	(Mean Years)	Female	Male	White	Black & Other	Permanently & Totally Disabled	Old Age Assistance	All Other
HOSPITAL	66	96 (48%)	106 (52%)	136 (67%)	52 (33%)	139 (69%)	51 (25%)	12 (6%)
HOSPICE	81	268 (68%)	126 (32%)	332 (84%)	42 (16%)	53 (13%)	293 (74%)	48 (12%)
TOTAL	76	364 (61%)	232 (39%)	468 (79%)	94 (21%)	192 (32%)	344 (58%)	60 (10%)

Table 7:	Recipients 60+ Years Old Diagnoses Groups:					
	Circulatory System	Cancer	Respiratory System	III-Defined Conditions	Nervous System	All Other
HOSPITAL	74 (37%)	24 (12%)	23 (11%)	6 (3%)	4 (2%)	71 (35%)
HOSPICE	80 (20%)	64 (16%)	53 (13%)	68 (17%)	55 (14%)	73 (19%)
TOTAL	154 (26%)	88 (15%)	76 (13%)	74 (12%)	59 (10%)	144 (24%)

Table 8:	All Claim Payments by Provider Types:														
	Hospital Payments			Nursing Home Payments			Hospice Payments			Rural Health Clinic Payments			Home Health Agency Payments		
	N	Mean	Sum	N	Mean	Sum	N	Mean	Sum	N	Mean	Sum	N	Mean	Sum
HOSPITAL	201	\$257,677	\$51,793,098	43	\$15,335	\$659,390	7	\$13,259	\$92,810	37	\$533	\$19,708	37	\$6,994	\$258,793
HOSPICE	152	\$83,355	\$12,669,908	251	\$15,970	\$4,008,442	387	\$14,594	\$5,648,051	51	\$270	\$13,781	9	\$10,300	\$92,700
TOTAL	353	\$182,615	\$64,463,006	294	\$15,877	\$4,667,832	394	\$14,571	\$5,740,860	88	\$381	\$33,489	46	\$7,641	\$351,493

Table 9:	All Claim Payments – Mean Payments per Recipient:		
	Total Payments		
	N	Mean	Sum
HOSPITAL	201	\$262,805	\$52,823,798
HOSPICE	394	\$56,936	\$22,432,881
TOTAL	595	\$126,482	\$75,256,680

Conclusions:

When examining all possible records of deceased 2011 Missouri Medicaid Recipients, total Medicaid payments across available providers found mean payments per Recipient for those dying in hospice cost 44.5% of those dying in hospitals (\$126,831 vs. \$284,657, respectively). However, there was a significant age difference when examining all possible records of deceased 2011 Missouri Medicaid Recipients. To adjust for this age difference, MHPCA limited participants to those 60+ years old. Hospice cost savings continued to

be impressive. Mean payments per Recipient across available providers found payments for those dying in hospice cost 21.7% of those dying in hospitals (\$56,936 vs. \$262,805, respectively).



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MISSOURI HOSPICE

*& Palliative Care
Association*

*Walking Beside You.
Navigating the Way. Since 1980.*

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