NASHP | NATIONAL ACADEMY FOR STATE HEALTH POLICY

nashp.org

Palliative Care in Medicaid Costing Out the Benefit: Actuarial Analysis of Medicaid Experience

By Elrycc Berkman, ASA, MAAA;
Tim Doyle, FSA, MAAA; and Ryan Brancati

SEPTEMBER 2022

CBIZ Optumas
Consultants • Actuaries • Economists

The John A. Hartford Foundation

TABLE OF CONTENTS

Background

What Is Palliative Care?

Palliative care is specialized medical care for people living with a serious illness such as cancer, heart failure, kidney failure, and advanced neurologic disorders, among others. This type of care is focused on providing relief from both the symptoms and stress of the serious illness with the goal of improving quality of life for both the patient and their family. Palliative care is provided by a specially trained team of doctors, nurses, and other specialists to provide additional support for the patient, including medical, emotional, and spiritual support.[1] Comprehensive palliative care as defined in this report includes an initial assessment, advanced care planning and ongoing shared decision-making, care coordination, pain and symptom management, and counseling and social services (mental health and medical social services). Additional services can include 24/7 telephonic support and chaplain services. The set of covered services can vary based on the availability and affordability of services and by payer preferences.

There is often confusion between palliative care and hospice given some of the overlap in services (e.g., pain and symptom management, physical and emotional support), but importantly, palliative care is not determined by the prognosis of the patient. Palliative care benefits people with serious chronic illness regardless of prognosis and should be offered alongside curative treatment and without a six-month or less time period.

KEY FINDINGS

Effective administration of a Medicaid palliative care benefit for the highest service utilizers could produce cost avoidance savings ranging between $231 and $1,165 per Medicaid member per month, with potential return on investment ranging between $0.80 and $2.60 for every $1 spent on palliative care.

At a minimum, it is expected that implementation of palliative care for all utilizers in a state Medicaid program would be overall cost neutral to the state while improving the quality of life for the members utilizing palliative care, as well as for their families.

No state Medicaid programs, however, offer a comprehensive or "stand-alone" palliative care benefit, although California has led the way with required coverage of community palliative care by its contracted managed care organizations, and several other states have recently expressed interest in adding palliative care as a covered benefit.

Medicaid members with disabilities and those receiving long-term services and supports (LTSS) have a higher prevalence of serious illness.

Medicaid members with serious illness use increasingly high levels of costly inpatient and emergency department services as they approach end-of-life.

Medicaid Coverage of Palliative Care

Currently, no Medicaid programs offer a comprehensive or "stand-alone" palliative care benefit. California was the first state to require coverage: In Senate Bill (SB) 1004, California state law required the California Department of Health Care Services (DHCS) to issue guidance to managed care plans participating in the state's Medicaid managed care program on covering palliative care services.[2] There are other states that offer a limited Medicaid benefit covering a set of discrete services, such as pain and symptom management, but the lack of a complete comprehensive service package falls short of providing members the true benefits of interdisciplinary palliative care. The absence of a comprehensive Medicaid benefit across state programs can partly be attributed to confusion about what palliative care entails, the combination of both medical and non-medical services in one service, and how they can be included as part of their Medicaid benefit package. Additionally, if funding is unavailable for the addition of a new benefit, a state will often have to show that a newly covered benefit would be cost neutral overall.

Over the past few years, there have been a number of states interested in learning more about coverage of palliative care services. In response to interest from state leaders, the National Academy for State Health Policy (NASHP)[3], Torrie Fields Analytics, and the Center to Advance Palliative Care (CAPC)[4] have created a series of resources to provide additional information on palliative care for state officials to illustrate how these services can be covered for people with serious illness.

Actuarial Analysis of Palliative Care Benefits for State Medicaid Programs

Optumas worked with NASHP and Torrie Fields Analytics to analyze the impact of a palliative care benefit in Medicaid through an actuarial approach. This approach included identifying the likely population to utilize the benefit, determining the cost of the benefit, and estimating the impact on per-member per-month costs. This report outlines a method for estimating the financial impact of offering palliative care to Medicaid enrollees and highlights the potential cost reductions for those members utilizing a palliative care benefit.

Identifying the Population

The first step was looking at the prevalence of serious illness across state Medicaid programs. Medical claims data for experiences from 2018 to 2019 were analyzed for three separate state Medicaid programs: two states that administer the Medicaid program via managed care and one that administers the program via fee-for-service. The prevalence analysis included all populations for which the data were available.

(State two data does not include LTSS populations, and state three does not include the Expansion population, otherwise known as the Affordable Care Act population.) The states included in this analysis had average monthly enrollment throughout 2018 and 2019 that ranged from 700,000 members up to 1 million members. For each state, the prevalence was calculated for each of the following serious illnesses by broad population:

- Cancer (solid and hematological)
- Cardiovascular disease (congestive heart failure and stroke)
- Chronic obstructive pulmonary disease
- Kidney failure
- Advanced liver disease
- Neurologic disorders (amyotrophic lateral sclerosis or ALS, multiple sclerosis, Alzheimer's, Parkinson's, and Huntington's disease)

These illnesses were selected for review in this analysis because they are conditions that require ongoing medical attention for periods of time often longer than a year. Members with at least one of these serious illnesses were flagged based on having a qualifying diagnosis code within the two-year study period. The results by state and broad category of aid (COA) are presented in Appendix I along with definitions of the broad Medicaid COAs by which the population was grouped. The intent of grouping members into these eligibility categories was to review the experience at a level where the groups are expected to have similar levels of utilization and cost of services as compared to the populations that would utilize the palliative care benefit.

The results show high levels of prevalence across many of these serious illnesses within the Disabled and LTSS populations, including the LTSS Dual populations (members are dually eligible if they qualify for both Medicaid and Medicare). Medicaid members are considered disabled based on having a disabling condition acquired through illness, injury, or trauma and often receive Medicaid eligibility through receipt of Supplemental Security Income. The LTSS members are those in the Medicaid program residing in a facility (e.g., nursing facility, intermediate care facilities) or those utilizing services under one of the state's home and community-based services (HCBS) waivers requiring an institutional level of care. While eligibility for palliative care services in a Medicaid program would likely depend on more than a diagnosis for a qualifying serious illness, these prevalence summaries highlight areas in which a palliative care benefit is likely to be utilized.

Reviewing Costs of Identified Population

After establishing the population with serious illness, the analysis focused the review of member costs on those members that could be identified as having utilized hospice services. The intent was to concentrate the analysis on the populations that were likely to utilize acute care services at a higher level. The limitation to hospice members was also made due to the lack of clinical and functional status data that would have allowed for clinically driven disease-specific criteria for limiting the population with serious illness. For the hospice-limited population, a look-back study was performed to review the costs of these members prior to them utilizing hospice service. For instance, if a member began using hospice services in April 2019, the three-month look-back study included the experience for January through March 2019. The look-back study was performed for a three-month, six-month, and 12-month look-back period. The detailed costs for each of the look-back periods by broad COA for the Disabled, Dual, and LTSS COAs can be seen in Appendix II. It should be noted that although we are only analyzing the COAs in Appendix II that could result in larger savings, we believe that all populations could benefit from the use of palliative care services.

The results of the look-back study show an increasing level of per-member per-month (PMPM) expenditures for the Medicaid-only (Disabled and Non-Dual LTSS) COAs. This is largely driven by increases in utilization of inpatient and outpatient services as the member's health deteriorates and they get closer to their hospice period. The inpatient and outpatient emergency department services are the main areas where improved care through the use of a palliative care benefit is expected to generate cost savings. Additionally, the Dual COAs exhibited small differences in costs across the different look-back study periods. This is due to the acute care cost largely being covered by Medicare for these members.

Bundled Fee Schedule Amount

After establishing the population likely to utilize the palliative care benefit and their costs, the next step was determining the cost of the palliative care benefit. The model benefit used to estimate the costs generally followed the set of services required in the California Department of Health Care Services "All Plan Letter 18-020."[5] The palliative care team providing the services also generally followed what is outlined in the All Plan Letter.

The modeled benefit used in this paper included the following:

- Services: initial assessment, 24/7 telephonic support, pain/symptom management, advanced care planning (including completion of a physician order for life-sustaining treatment [POLST] form), ongoing shared decision-making, care management plan, care monitoring, caregiver education and counseling, and warm

hand-offs across providers, including to hospice when warranted.

- Palliative care team: MD/DO, nurse practitioner/physician's assistant, medical director, nurse, social worker, home health aide. In addition, an appropriate team member must be available to provide after-hours triage.

Note that chaplain services are recommend for inclusion as part of palliative care but were not included because these services are generally not covered as a Medicaid benefit. An average monthly benefit cost over a six-month period was developed by first determining the expected monthly number of visits, duration, and staff allotment for each service. These values were determined based on consultation with the Optumas internal clinician and were validated for reasonableness against preliminary modeling performed by Torrie Fields Analytics for development of a palliative care benefit in another state Medicaid program. These figures were used to calculate the direct care minutes per month required for each service and are shown in Appendix III. Once the direct care minutes were determined, wage information from the Bureau of Labor Statistics was then used to determine an average hourly rate for each service based on the assigned staff allotment. The wage information reflected state specific calendar year 2019 wages to account for regional differences in wages and costs among the states included in the analysis and to be consistent with the time period of data that was analyzed. The average hourly wages were then used to determine the total direct care benefit cost. Once the direct care benefit cost amount was calculated, an additional 20 percent was added to the overall cost to account for indirect costs such as milage reimbursement, software costs, administration, training, and certifications. The resulting benefit cost amounts are shown in the table to the right.

	Benefit Cost
State 1	$484.24
State 2	$507.40
State 3	$455.90

The benefit cost amounts for this analysis were developed based on assumptions for the duration and number of visits for each of the services that would be provided under the benefit. Optumas recommends that a state interested in developing its own estimated benefit cost amount consult with qualified providers of palliative care services to determine appropriate assumptions to suit the state's desired palliative care service offering.

Savings Assumption

Effective administration of a palliative care benefit is associated with a reduced number of readmissions experienced by those utilizing the palliative care services.[6] One study of concurrent hospice services submitted to the Center for Medicare and Medicaid Innovation (CMMI) and submitted by Mathematica noted a reduction in inpatient admissions of 26 percent and a reduction in outpatient emergency department visits and observation stays of 14 percent.[7] This study was for a comparison of a fee-for-services Medicare population at the end of their life and with a qualifying serious illness enrolled in a program offering palliative care-type services against those not enrolled in the program. Additionally, preliminary analysis of the Medi-Cal palliative care benefit shows that when comparing a member's total cost of care prior to and after enrollment in the palliative care benefit, reductions in costs are between 42 and 51 percent, with the majority of the cost reduction occurring for hospital-related expenditures.

For this analysis, a range of savings assumption for the reduced utilization of inpatient services and emergency department visits of 26 percent (lower bound) and 46 percent (upper bound) was assumed for the members utilizing a palliative care benefit. While data on actual savings for a Medicaid population utilizing a palliative care benefit remain limited, the reduced utilization assumption range is reasonable for the population considered under this analysis based on the information available for comparable studies, as well as in consultation with the Optumas lead clinician. The savings estimate was considered for the Non-Dual or Medicaid-only populations to calculate a level of potential average PMPM savings over a six-month period for these members utilizing the palliative care benefit. Aggregate savings for the three states can be seen in the table below.

	Lower Bound - 26% Reduction		Upper Bound - 46% Reduction	
	Potential Savings PMPM	**Medicaid-Only ROI**	**Potential Savings PMPM**	**Medicaid-Only ROI**
State 1	$378.27	0.8	$1,041.73	2.2
State 2	$231.10	0.5	$775.38	1.5
State 3	$460.32	1.0	$1,165.10	2.6

Estimated PMPM savings for Medicaid members based on the lower bound assumption ranged between approximately $392 and $584, with the potential return on investment ranging between 1.1 and 1.8. The upper bound assumptions generated estimated PMPM savings ranging between approximately $936 and $1,289, with potential return on investment ranging between 2.7 and 3.9.

Additional Considerations

Palliative care has repeatedly been shown to improve the quality of life for both the patient with serious illness and the patient's family. But in addition to improving quality of life, evidence continues to show cost savings associated with effective administration of palliative care services prior to end-of-life. At a minimum, Optumas believes it is reasonable to assume that implementation of palliative care would be cost neutral to a state Medicaid program. The analysis performed and described in this report may be focused on patients expected to experience higher cost savings due to their closer proximity to hospice care. Results in actual Medicaid programs will vary based on the eligible population (qualifying illnesses and functional health), the richness of the palliative care benefit, provider education and network adequacy, uptake of the benefit, and the levels of reimbursement for Medicaid services. Analysis and estimation for similar analyses in other Medicaid program will also vary based on the availability and completeness of data. Development of this analysis and results were also reviewed and vetted through two listening sessions with state health care policy and finance officials. The listening sessions highlighted that there may be other areas not considered within this analysis in which savings could materialize or costs could be higher. Some studies have shown savings related to reduction in long-term-care services such as skilled nursing facility stays. This was not explored in this study due to data limitations and remains an area of interest for future analysis. For state policy officials, consideration should also be given to the method by which palliative care services could be added as a Medicaid covered benefit such as through state plan amendments or Medicaid 1115 demonstration waivers.

Endnotes

1. Get Palliative Care: What Is Palliative Care?
2. Palliative Care and SB 1004
3. NASHP Palliative Care
4. Center to Advance Palliative Care (CAPC)
5. Medi-Cal Palliative Care All Plan Letter
6. Providing Palliative Care Across the Continuum
7. Evaluation of the Medicare Care Choices Model

Acknowledgements

The authors with CBIZ Optumas would like to thank Art Pelberg, MD (Optumas lead clinician); Torrie Fields (Torrie Fields Analytics); Allison Silvers (CAPC); Kate Meyers (California Health Care Foundation); Brian Cassel, PhD (Virginia Commonwealth University); Kathleen Kerr (Transforming Care Partners); Kitty Purington (formerly of NASHP); and Wendy Fox-Grage (NASHP), with generous funding provided by The John A. Hartford Foundation. We also thank the state health care policy and finance officials that participated and provided feedback during the two listening sessions hosted by NASHP.

Appendix I

CY18-CY19 Member Disease Prevalence by Broad Category of Aid (COA)

		Population	Disease Prevalence					
	Broad COA	Distribution	Cancer	Cardiovascular Disease	COPD	Kidney Failure	Liver Disease	Neurologic Disorders
State 1	Children	45.6%	0.1%	0.1%	0.1%	0.2%	0.2%	0.0%
State 1	TANF Adult	9.1%	1.1%	0.9%	1.4%	1.3%	3.1%	0.2%
State 1	Pregnant Women	1.5%	0.2%	0.1%	0.1%	0.2%	0.5%	0.1%
State 1	Expansion	28.6%	2.0%	2.0%	3.9%	2.7%	3.6%	0.3%
State 1	Disabled	4.0%	5.5%	7.2%	14.8%	8.6%	7.1%	1.5%
State 1	Dual	5.4%	7.9%	11.1%	20.8%	13.4%	7.5%	3.2%
State 1	LTSS Institutional	2.6%	10.5%	32.3%	21.5%	27.3%	4.0%	45.1%
State 1	LTSS Waiver	3.2%	7.7%	16.7%	17.3%	16.1%	4.8%	8.6%
State 2	Children	38.7%	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%
State 2	TANF Adult	7.7%	1.2%	0.8%	1.0%	1.0%	3.3%	0.3%
State 2	Pregnant Women	1.0%	0.2%	0.1%	0.1%	0.3%	1.0%	0.1%
State 2	Expansion	39.3%	2.1%	1.6%	2.4%	2.0%	3.7%	0.3%
State 2	Disabled	4.6%	5.1%	7.4%	12.3%	7.9%	8.5%	2.3%
State 2	Dual	8.6%	7.4%	12.7%	12.9%	13.6%	6.1%	9.7%
State 2	LTSS Institutional							
State 2	LTSS Waiver							
State 3	Children	67.5%	0.1%	0.1%	0.1%	0.2%	0.2%	0.0%
State 3	TANF Adult	12.3%	0.8%	1.3%	2.2%	1.3%	2.4%	0.3%
State 3	Pregnant Women	3.5%	0.1%	0.3%	0.1%	0.3%	0.4%	0.0%
State 3	Expansion							
State 3	Disabled	11.6%	5.3%	9.1%	12.7%	8.9%	6.3%	1.6%
State 3	Dual	2.9%	5.6%	17.0%	15.3%	15.7%	3.8%	19.4%
State 3	LTSS Institutional	0.6%	22.9%	32.5%	26.0%	23.4%	8.3%	47.8%
State 3	LTSS Waiver	1.5%	6.0%	18.8%	17.0%	16.9%	5.0%	7.9%

Broad COA Definitions (populations covered under Medicaid)

TANF Adults

- Healthy adults with low income

Children

- Healthy children with low household income
- Some children can be covered under CHIP, which generally has a higher FPL threshold than the traditional Medicaid children

Expansion

- Through the ACA, each state has the ability to expand Medicaid which increases the income threshold to qualify
- Covers healthy adults, often referred to as 'Expansion' population
- These members have a higher income than TANF Adults, but generally not higher than approximately 138% of the FPL

Disabled

- Adults and children who have disabling conditions acquired through illness, injury, or trauma.
- Includes those with physical conditions (such as quadriplegia, traumatic brain injuries); intellectual or developmental disabilities; and serious behavioral disorders or mental illness.
- These members often have eligibility through receipt of Supplemental Security Income (SSI).
- These are non-institutional and non-waiver (HCBS) members.

Dual

- Medically needy and covered under both Medicare and Medicaid.
- These are non-institutional and non-waiver (HCBS) members.

LTSS

- Dual and non-dual members that require an institutional level of care.
- Institutions are residential facilities, and assume total care of the individuals who are admitted.
- Institutions include: Intermediate Care Facilities for People with Intellectual Disability (ICF/ID), Nursing Facility, Inpatient Psychiatric Services, and State Resource Centers.
- In addition these institutional members, states can extend eligibility to individuals who receive certain home and community based services (HCBS) and require the institutional level of care. These are typically referred to as waiver members since their eligibility is covered through a waiver with CMS.

Appendix II

		State 1			State 2			State 3		
COA	COS	3-Months	6-Months	12-Months	3-Months	6-Months	12-Months	3-Months	6-Months	12-Months
Disabled	Behavioral Health	$ 33.35	$ 63.07	$ 58.50	$ 90.36	$ 99.89	$ 92.00	$ 15.29	$ 18.19	$ 21.27
Disabled	Inpatient	$ 4,339.74	$ 3,107.08	$ 2,373.26	$ 3,442.29	$ 2,623.66	$ 2,046.86	$ 4,421.79	$ 3,436.82	$ 2,586.29
Disabled	LTC Facility	$ -	$ -	$ -	$ -	$ -	$ -	$ 8.03	$ 4.47	$ 2.75
Disabled	Other Care	$ 746.56	$ 627.41	$ 607.61	$ 458.33	$ 418.75	$ 391.09	$ 207.13	$ 176.73	$ 154.98
Disabled	Outpatient-ER	$ 477.85	$ 363.78	$ 307.30	$ 343.23	$ 277.95	$ 256.78	$ 90.91	$ 77.57	$ 64.06
Disabled	Outpatient-Other	$ 1,666.74	$ 1,488.15	$ 1,241.13	$ 1,197.19	$ 1,137.03	$ 1,037.08	$ 1,067.56	$ 1,005.77	$ 909.36
Disabled	Pharmacy	$ 943.23	$ 1,006.08	$ 958.43	$ 1,077.77	$ 969.96	$ 953.37	$ 930.06	$ 907.12	$ 852.94
Disabled	Professional	$ 1,063.45	$ 839.53	$ 731.76	$ 1,047.57	$ 873.90	$ 733.27	$ 2,037.02	$ 1,803.57	$ 1,590.81
Disabled	Waiver Services	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Dual	Behavioral Health	$ 16.79	$ 60.87	$ 56.46	$ 17.41	$ 17.26	$ 18.88	$ 4.34	$ 4.31	$ 6.23
Dual	Inpatient	$ 319.76	$ 264.33	$ 229.56	$ 38.81	$ 37.19	$ 34.16	$ 1,505.55	$ 1,190.88	$ 1,012.91
Dual	LTC Facility	$ -	$ -	$ -	$ -	$ -	$ -	$ 525.66	$ 449.52	$ 400.21
Dual	Other Care	$ 238.09	$ 294.44	$ 336.90	$ 115.02	$ 108.62	$ 103.27	$ 28.46	$ 27.56	$ 29.63
Dual	Outpatient-ER	$ 87.74	$ 69.09	$ 57.07	$ -	$ -	$ -	$ 0.02	$ 0.01	$ 0.01
Dual	Outpatient-Other	$ 143.85	$ 142.26	$ 158.49	$ 44.52	$ 42.22	$ 38.18	$ 0.51	$ 0.34	$ 0.41
Dual	Pharmacy	$ 13.33	$ 20.59	$ 15.51	$ 13.10	$ 11.96	$ 10.69	$ 3.99	$ 4.04	$ 3.38
Dual	Professional	$ 103.89	$ 80.91	$ 68.61	$ 74.55	$ 65.83	$ 58.01	$ 79.52	$ 83.64	$ 73.42
Dual	Waiver Services	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.41	$ 1.17	$ 0.75
LTSS Institutional - Dual	Behavioral Health	$ 1.93	$ 1.71	$ 1.64				$ 12.19	$ 12.69	$ 13.45
LTSS Institutional - Dual	Inpatient	$ 141.18	$ 140.50	$ 144.89				$ 212.59	$ 153.27	$ 117.36
LTSS Institutional - Dual	LTC Facility	$ 3,936.53	$ 3,967.05	$ 3,970.11				$ 4,262.81	$ 4,348.25	$ 4,387.47
LTSS Institutional - Dual	Other Care	$ 34.41	$ 35.70	$ 36.89				$ 10.52	$ 10.54	$ 10.92
LTSS Institutional - Dual	Outpatient-ER	$ 22.47	$ 17.07	$ 13.80				$ 0.01	$ 0.00	$ 0.00
LTSS Institutional - Dual	Outpatient-Other	$ 24.05	$ 20.86	$ 19.17				$ 0.66	$ 0.73	$ 0.63
LTSS Institutional - Dual	Pharmacy	$ 3.31	$ 3.28	$ 3.48				$ 1.58	$ 1.34	$ 2.19
LTSS Institutional - Dual	Professional	$ 13.00	$ 11.41	$ 10.36				$ 14.92	$ 12.66	$ 11.52
LTSS Institutional - Dual	Waiver Services	$ 1.50	$ 1.14	$ 1.35				$ 0.28	$ 0.30	$ 0.19
LTSS Institutional - Non-Dual	Behavioral Health	$ 26.09	$ 251.57	$ 208.91				$ 9.57	$ 9.68	$ 9.24
LTSS Institutional - Non-Dual	Inpatient	$ 2,595.30	$ 2,265.65	$ 1,808.85				$ 4,577.19	$ 3,519.15	$ 3,056.00
LTSS Institutional - Non-Dual	LTC Facility	$ 4,769.17	$ 4,800.42	$ 4,916.90				$ 4,807.21	$ 5,041.19	$ 5,157.09
LTSS Institutional - Non-Dual	Other Care	$ 338.04	$ 325.54	$ 291.31				$ 243.44	$ 219.28	$ 189.28
LTSS Institutional - Non-Dual	Outpatient-ER	$ 484.52	$ 377.79	$ 297.88				$ 55.11	$ 57.57	$ 57.43
LTSS Institutional - Non-Dual	Outpatient-Other	$ 704.02	$ 898.67	$ 881.34				$ 143.24	$ 154.74	$ 151.15
LTSS Institutional - Non-Dual	Pharmacy	$ 861.41	$ 875.46	$ 837.16				$ 887.49	$ 877.66	$ 848.73
LTSS Institutional - Non-Dual	Professional	$ 680.55	$ 593.67	$ 514.44				$ 1,100.75	$ 943.67	$ 819.70
LTSS Institutional - Non-Dual	Waiver Services	$ 1.09	$ 0.63	$ 0.40				$ 3.09	$ 2.40	$ 2.61
LTSS Waiver - Dual	Behavioral Health	$ 1.28	$ 3.16	$ 2.99				$ 6.87	$ 3.46	$ 3.08
LTSS Waiver - Dual	Inpatient	$ 120.36	$ 89.54	$ 72.07				$ 1,152.42	$ 606.18	$ 344.66
LTSS Waiver - Dual	LTC Facility	$ 85.25	$ 76.49	$ 65.88				$ 15.38	$ 17.70	$ 15.20
LTSS Waiver - Dual	Other Care	$ 413.17	$ 456.27	$ 494.70				$ 38.34	$ 52.76	$ 69.14
LTSS Waiver - Dual	Outpatient-ER	$ 67.40	$ 50.32	$ 42.55				$ 0.03	$ 0.01	$ 0.14
LTSS Waiver - Dual	Outpatient-Other	$ 59.03	$ 58.01	$ 51.82				$ -	$ 0.01	$ 0.01
LTSS Waiver - Dual	Pharmacy	$ 4.01	$ 4.39	$ 4.18				$ 0.85	$ 0.95	$ 0.81
LTSS Waiver - Dual	Professional	$ 40.00	$ 35.76	$ 30.29				$ 40.14	$ 36.39	$ 29.20
LTSS Waiver - Dual	Waiver Services	$ 444.82	$ 471.49	$ 491.46				$ 734.41	$ 738.28	$ 752.98
LTSS Waiver - Non-Dual	Behavioral Health	$ -	$ -	$ -				$ 42.00	$ 22.34	$ 13.04
LTSS Waiver - Non-Dual	Inpatient	$ 3,588.04	$ 2,630.60	$ 1,780.30				$ 5,055.49	$ 3,524.17	$ 2,430.11
LTSS Waiver - Non-Dual	LTC Facility	$ 59.42	$ 33.70	$ 22.81				$ -	$ -	$ -
LTSS Waiver - Non-Dual	Other Care	$ 2,379.24	$ 2,634.73	$ 3,375.26				$ 652.26	$ 559.02	$ 506.38
LTSS Waiver - Non-Dual	Outpatient-ER	$ 273.10	$ 211.92	$ 152.72				$ 81.37	$ 70.93	$ 62.66
LTSS Waiver - Non-Dual	Outpatient-Other	$ 1,126.57	$ 763.48	$ 856.51				$ 980.76	$ 806.58	$ 586.16
LTSS Waiver - Non-Dual	Pharmacy	$ 1,576.60	$ 2,276.73	$ 2,275.05				$ 989.20	$ 754.53	$ 628.83
LTSS Waiver - Non-Dual	Professional	$ 655.02	$ 525.98	$ 437.76				$ 1,014.52	$ 693.10	$ 514.45
LTSS Waiver - Non-Dual	Waiver Services	$ 216.23	$ 281.47	$ 278.17				$ 566.05	$ 489.36	$ 500.39

		State 1			State 2			State 3		
COA	COS	3-Months	6-Months	12-Months	3-Months	6-Months	12-Months	3-Months	6-Months	12-Months
Disabled	All	$ 9,270.92	$ 7,495.10	$ 6,277.99	$ 7,656.75	$ 6,401.13	$ 5,510.45	$ 8,777.78	$ 7,430.23	$ 6,182.46
Dual	All	$ 923.45	$ 932.50	$ 922.61	$ 303.40	$ 283.08	$ 263.18	$ 2,148.46	$ 1,761.48	$ 1,526.96
LTSS Institutional - Dual	All	$ 4,178.38	$ 4,198.71	$ 4,201.69				$ 4,515.56	$ 4,539.78	$ 4,543.74
LTSS Institutional - Non-Dual	All	$10,460.18	$10,389.40	$ 9,757.18				$11,827.09	$10,825.34	$10,291.22
LTSS Waiver - Dual	All	$ 1,235.33	$ 1,245.44	$ 1,255.93				$ 1,988.44	$ 1,455.74	$ 1,215.21
LTSS Waiver - Non-Dual	All	$ 9,874.23	$ 9,358.62	$ 9,178.59				$ 9,381.66	$ 6,920.03	$ 5,242.03

Appendix III

Palliative Care Team and Service Allocation

	Palliative Care Team					
Service	MD/DO	Nurse Practitioner/Physician's Assistant	Medical Director	Nurse	Social Worker	Home Health Aide
Initial assessment				60.0%	40.0%	
24/7 telephonic support		50.0%		50.0%		
Pain/symptom management	15.0%	30.0%	15.0%	40.0%		
Advanced care planning					100.0%	
POLST	30.0%	20.0%			50.0%	
Care management plan	20.0%	10.0%		35.0%	35.0%	
Care monitoring, caregiver education and counseling				30.0%	40.0%	30.0%
Warm hand-offs across providers				70.0%	30.0%	
Additional case management	10.0%	10.0%			80.0%	

Service	Visit/Assessment Duration (minutes)	Visits Per User Per Month	Direct Care Minutes/Month
Initial Assessment (average of 2 visits over 6 months)	90	0.33	30.00
24/7 telephonic support	30	3.00	90.00
Pain/symptom management	30	1.00	30.00
Advanced care planning	60	1.00	60.00
POLST	30	0.50	15.00
Care management plan	30	1.75	52.50
Care monitoring, caregiver education and counseling	30	0.50	15.00
Warm hand-offs across providers	30	0.25	7.50
Additional case management	30	4.00	120.00