# Medicaid Reimbursement for Supportive Palliative Care in Texas and Other States

**As Required by Senate Bill 916, 86th Legislature, Regular Session, 2019**

**Health and Human Services Commission**

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TEXAS
Health and Human Services

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# 1. Executive Summary

Senate Bill (S.B.) 916, 86th Texas Legislature, Regular Session, 2019, authorizes the Health and Human Services Commission (HHSC) to conduct a study to assess potential improvements to a patient's quality of care, health outcomes, and anticipated cost savings to the state from supporting the use of or providing Medicaid reimbursement to certain Medicaid recipients for supportive palliative care (SPC). The study must include an evaluation and comparison of other states that provide Medicaid reimbursement for SPC.[1]

This report presents the differing policies, programs, and services of states to provide Medicaid-reimbursed SPC services. Variation exists among each state's SPC benefits and services. However, some states have developed similar policies and strategies to enhance awareness, education, and access as well as promote quality improvement initiatives for SPC services to individuals with serious illnesses. These strategies to promote SPC through Medicaid and other state-funded initiatives include:

- Implementing policies and regulations that define and standardize SPC to promote high-quality service delivery;
- Developing comprehensive SPC benefits within Medicaid that promote greater access to high-quality care;
- Using existing billing codes to define the SPC service array;
- Incorporating quality improvement initiatives and SPC-related metrics into state Medicaid programs; and
- Promoting SPC through continuing education and public education strategies.

This report also includes current policies and initiatives related to SPC in Texas. The report presents results of data analytics conducted to evaluate opportunities for improvement to patient quality of care and health outcomes and identify potential cost-savings from providing Medicaid reimbursement for SPC services.

[1] Senate Bill 916, 87th Texas Legislature, 2021. https://capitol.texas.gov/tlodocs/86R/billtext/pdf/SB00916F.pdf#navpanes=0

# 2. Introduction

Palliative care is defined broadly in the United States (U.S.), often as an umbrella term, encompassing both SPC and hospice care. Hospice care is for terminally ill patients with a life expectancy of six months or less who choose to discontinue life-prolonging, curative treatments and focus instead on ensuring comfort and quality of life near a patient's end-of-life. SPC serves a larger group of patients, potentially all individuals living with a serious or life-limiting illness who have not yet progressed to a terminal diagnosis. Under SPC, such patients may continue to receive curative treatments along with other services to alleviate pain and symptom burden.

Recognizing the need for a clear distinction between the two services, S.B. 916 defined SPC, stating that any reference to "palliative care" in state law or the Texas Administrative Code means "SPC." For this report, palliative care provided outside of the context of hospice is defined as "SPC."

Hospice care is a Medicaid and Medicare Part A benefit in all states. SPC is a Medicaid benefit in some states, but not in Texas. SPC in Texas is defined in statute as physician-directed interdisciplinary, patient and family-centered care for individuals with serious illness, provided in a hospital, community, or home setting, and may be delivered alongside curative treatment at any time following an individual's diagnosis.[2] SPC services are typically provided by an interdisciplinary team that may consist of a prescribing clinician (physician, advanced practice registered nurse, physician assistant), licensed vocational and registered nurses, spiritual leaders, social workers, and other healthcare providers. Services provided commonly include specialized pain and symptom management, goals of care conversations, care coordination, advance care planning (ACP), mental health and medical social services, and other collaborative services as needed.

S.B. 916 authorizes HHSC to conduct a study to assess potential improvements to a patient's quality of care and health outcomes and anticipated cost savings to the state from providing Medicaid reimbursement to certain Medicaid recipients for SPC. The study must include an evaluation and comparison of other states that provide Medicaid reimbursement for SPC. The Palliative Care Interdisciplinary Advisory Council (PCIAC) must provide recommendations on the structure of the study,

[2] Senate Bill 916, 87th Texas Legislature, 2021. https://capitol.texas.gov/tlodocs/86R/billtext/pdf/SB00916F.pdf#navpanes=0

including recommendations on identifying specific populations of Medicaid recipients, variables, and outcomes to measure in the study. Not later than September 1, 2022, HHSC must provide the findings of the study to the PCIAC. Not later than October 1, 2022, the advisory council must include the findings of the study in their biennial legislative report.

# 3. Background

Although hospice care is established across Texas and the U.S., adequate access to SPC services remains a challenge. At the same time, people with serious and life-limiting illnesses continue to experience care needs that drive healthcare costs, including hospital admissions, emergency department (ED) utilization, and nursing home care. Several states have made substantial efforts over the past few years to provide well-coordinated SPC services through a variety of comprehensive programs aimed at improving patient awareness, access, education, and quality of care, and reducing costs.

Evidence demonstrates that SPC services can provide cost savings, improve quality of care, and lead to greater patient satisfaction. For example:

- A meta-analysis study of several states' hospital admissions showed that patients receiving a SPC consultation within three days of admission had a statistically significant reduction in costs averaging $3,237 lower in the total cost of care compared to patients who did not.[3] One of the largest groups of patients in this study was patients from a health care system in Texas with a SPC program.

- When California piloted its Medicaid SPC program, the financial analysis showed significant cost savings, such that for every $1 spent on palliative care, $3 were saved in hospital costs.[4]

- Another study done in New York found that hospital patients who received SPC care had on average $6,900 less in hospital costs during an admission than a matched group of patients who received care without the benefit of SPC services.[5]

[3] May, P., Normand, C., Cassel, J.B., et al. (2018). Economics of Palliative Care for Hospitalized Adults With Serious Illness: A Meta-analysis. JAMA Intern Med. 2018;178(6):820-829. doi:10.1001/jamainternmed.2018.0750
[4] California Health Care Foundation. (2019). The SB 1004 Patient Population. Retrieved from https://www.chcf.org/wp-content/uploads/2019/06/SlidesSB1004PatientPopulation.pdf
[5] Morrison, R.S., Dietrich, J., Ladwig, S., et al. (2011). Palliative care consultation teams cut hospital costs for Medicaid beneficiaries. Health Aff (Millwood). 2011;30(3):454-463. doi:10.1377/hlthaff.2010.0929

- In Texas, one study found overall cost savings from SPC services to be $3,426 per patient for individuals in the study population who died in the hospital.[6]

Texas continues to promote public and provider awareness and education of SPC through the HHSC PCIAC's work. The PCIAC was established by House Bill (H.B.) 1874, 84th Legislature, Regular Session, 2015, and was charged with assessing and defining policy issues regarding the availability of SPC in Texas along with promoting public education to enhance Texans' access to high-quality SPC services. Since its inception, the PCIAC worked with HHSC to launch educational SPC and hospice website pages, conducted annual continuing education events, and developed biennial legislative reports with policy recommendations to the Texas legislature to promote the advancement of SPC. The PCIAC provided recommendations on the structure of this report and identified specific populations of Medicaid recipients, variables, and outcomes to measure as required by S.B. 916.

[6] McCarthy, I.M., Robinson, C., Huq, S., Philastre, M., Fine, R.L. (2015). Cost savings from palliative care teams and guidance for a financially viable palliative care program. Health Serv Res. 2015 Feb;50(1):217-36. doi: 10.1111/1475-6773.12203. Epub 2014 Jul 15. PMID: 25040226; PMCID: PMC4319879. https://pubmed.ncbi.nlm.nih.gov/25040226/

# 4. Medicaid Supportive Palliative Care Policies and Programs in Other States

A variety of Medicaid reimbursed SPC benefits exist for both adults and children that states can include in a Medicaid palliative care benefit to meet the needs of their specific populations.

## State Policies and Regulations to Standardize SPC

Implementing policies and regulations that define and standardize SPC is essential for states to promote and enhance high-quality service delivery. Based on this review, states define SPC in a variety of ways. Most states reference SPC in their facility or provider licensing regulations or statutes, and the majority do so within the context of hospice care services and provider requirements. Five states (Minnesota, North Carolina, North Dakota, Washington, and Virginia) define palliative care within their state's hospice regulations and therefore, services are available only to individuals with a terminal or life-limiting condition. Three states (Colorado, Maryland, and New York) define palliative care as part of their healthcare facility licensing.[7] Five states (Florida, Massachusetts, New York, Arizona, and Tennessee) define SPC within statutes that promote ACP and/or information sharing. Colorado has the most expansive definition of palliative care, defining the service as team-based, specialized care for people with serious illnesses to provide relief from symptoms regardless of diagnosis. Texas does not have a Medicaid palliative care program but does define SPC within its home and community-based services regulations and in statute.[8]

## State Medicaid SPC Benefits

Twelve states currently incorporate adult and/or pediatric SPC benefits into their Medicaid programs through Medicaid waivers, state plan amendments, or as part of a specialized managed care program. Key services typically covered in the benefit

[7] Donlon, Rachel., et al. (2018). "Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs." National Academy for State Health Policy. Retrieved from https://www.nashp.org/wp-content/uploads/2018/12/Palliative-Care-Brief-Final.pdf.

[8] Texas Health and Safety Code Sec. 142.006 for Home and Community Support Services Agencies. Retrieved from https://statutes.capitol.texas.gov/Docs/HS/htm/HS.142.htm

include specialized pain and symptom management, care coordination, case management, mental health services, and ACP, which is the most common service provided. Among these Medicaid SPC benefits, each state varies in its description of services provided, service delivery settings, and patient eligibility criteria.

# Pediatric SPC Benefits

While comprehensive pediatric palliative care benefits exist in only a handful of states, all states must provide some palliative care benefits for children following Section 2302 of the Affordable Care Act (also known as "Concurrent Care for Children").[9] The provision was enacted in 2010 and requires that a child receiving hospice care cannot be denied simultaneous curative treatments. Reimbursement for such services is covered for children who are eligible for Medicaid or the Children's Health Insurance Program. Despite this provision, there are still barriers to providing more comprehensive pediatric palliative care services. In all states that do not provide a comprehensive pediatric palliative care benefit, physicians must certify that a child's expected life span is six months or less, so services may only be available to children who are hospice eligible.

States that do provide Medicaid reimbursement for pediatric SPC services use a variety of options to fund and provide these services, including directly through their state Medicaid managed care programs, home I/II Medicaid waiver programs, 1915(b) waivers, 1915(c) waivers, state plan amendments, or state-funded through community-based organizations. These states include California, New York, Florida, Colorado, North Dakota, Washington Massachusetts, and Illinois. Texas provides concurrent palliative care services for children who are receiving services through hospice but does not currently have a comprehensive pediatric SPC benefit.

## State Medicaid Managed Care Organizations

In conjunction with its adult SPC program, California also has a Medi-Cal (Medicaid) pediatric SPC program specifically for children under the age of 21. Before 2019, California used a 1915(c) waiver to support children with life-limiting or life-threatening medical conditions.[10] At the beginning of 2019, children receiving palliative care services were transitioned to receive those services under Medi-Cal

[9] Patient Protection and Affordable Care Act, PL 111-148, March 23, 2010, 124 Stat 119
[10] Department of Health Care Services. (2021). "Partners for Children." Pediatric Palliative Care. Retrieved from https://www.dhcs.ca.gov/services/ppc.

and fee-for-service (FFS) delivery systems.[11] Children are eligible for the same benefits as adults through both managed care and FFS plans.[12] Services are detailed below in the adult-focused SPC benefits section and can be offered in any setting.

## Home I/II Medicaid Waiver Program

New York provides expanded benefits for pediatric SPC through the Care at Home I/II Medicaid Waiver Program.[13] Through this benefit, children under eighteen years of age who have a physical disability can receive services such as case, pain, and symptom management, bereavement services, massage therapy, family palliative care education for hospice and certified home health agencies, and expressive therapy.

## 1915(b) Waiver

Florida also uses a waiver to provide pediatric SPC services. Florida operates its Partners in Care: Together for Kids program through its 1915(b) managed care waiver.[14] The program was implemented in 2005 and was the first waiver program of its kind. The program provides palliative care services to children under 21 with life-limiting conditions. Services include pain and symptom management, counseling, expressive therapy, and hospice. Hospice staff administer the services in communities and patients' homes and are reimbursed by Florida's Agency for Health Care Administration.

## 1915(c) Waiver

Colorado and North Dakota both operate pediatric SPC programs using the Section 1915(c) waiver. Under Colorado's waiver, services are provided to children ages 18 and younger with a life-limiting condition. Colorado's waiver provides services such as expressive therapies, respite care, and palliative care services provided

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[11] Department of Health Care Services. (2018). Pediatric Palliative Care (PPC) Waiver Transition Frequently Asked Questions for Call Centers. Retrieved March 22, 2022, from https://www.dhcs.ca.gov/services/ppc/Documents/PPCW-FAQ%20Final12.21.18.pdf
[12] Coalition for Compassionate Care of California. Pediatric Palliative Care. Retrieved from https://www.coalitionccc.org/CCCC/Our-Work/Pediatric-Palliative-Care.aspx
[13] State of New York Department of Health (2010). Care at Home (CAH) I/II Medicaid Waiver Palliative Care Provider Application. Retrieved from https://www.health.ny.gov/facilities/long_term_care/docs/cah_1-2_palliative_care_provider_application_package.pdf
[14] Florida Health. Partners in Care: Together for Kids (PIC:TFK). Retrieved from https://cms-kids.com/home/resources/documents/pic.pdf

concurrently with curative treatments.[15] North Dakota provides services to children up to age 22 who are not expected to live longer than one year (up to six months longer than the standard definition for hospice). These services include case management, respite care, skilled nursing, bereavement counseling, and expressive therapy.[16]

## State Plan Amendment

Washington State incorporated its pediatric SPC benefit through a State Plan Amendment. Services are delivered to patients through a hospice agency while the Medicaid agency's case management/coordination services provide care coordination and skilled care services to clients.[17] Washington's pediatric palliative care services are provided to those 20 years old or younger with a life-limiting medical condition. Those using the benefit can have up to six pediatric palliative care contacts per month. These contacts can include visits from a nurse practitioner, social worker, or therapist who perform services like care coordination, counseling, education/training, and pain management in the patient's home.[18] Family members and caregivers of clients eligible for pediatric palliative care services also may receive support through care coordination when the services are related to the client's medical needs.

## State-Funded through Home and Community-Based Organizations

Massachusetts operates a state-funded non-Medicaid program called the Pediatric Palliative Care Network, which provides services to children who have a life-limiting condition and are 18 years old or younger. Services include pain and symptom management, nursing, case management, respite care, bereavement counseling,

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[15] Programs for Children. Colorado Department of Health Care Policy & Financing. (n.d.). Retrieved March 22, 2022, from https://hcpf.colorado.gov/programs-children.
[16] North Dakota Department of Human Services. (n.d.). Children's Hospice Services. Retrieved from https://www.nd.gov/dhs/info/pubs/docs/medicaid/brochure-children-hospice-waiver.pdf
[17]Washington State Health Care Authority. (2020). Hospice Services Billing Guide. Retrieved March 22, 2022, from https://www.hca.wa.gov/assets/billers-and-providers/Hospice-bg-20200101.pdf
[18] National Hospice and Palliative Care Organization. (2019). Concurrent Care for Children Implementation Toolkit. Retrieved from https://www.nhpco.org/wp-content/uploads/2019/06/CCCR_Toolkit.pdf.

and expressive therapies.[19] The Massachusetts Department of Public Health contracts with community-based organizations throughout the state to provide the services through licensed hospice organizations.

On June 1, 2021, Illinois passed a bill (S.B. 2384) to create an in-home palliative care benefit for children facing a serious illness. Patients 21 years old or younger are eligible to enroll in the state-funded medical assistance program if they have been diagnosed by a primary care physician or specialist as "suffering from a serious illness." Providers authorized to deliver services under the program include licensed hospice or home health agencies or entities with demonstrated expertise in pediatric palliative care. Agencies providing the services must have a pediatric interdisciplinary team that includes a physician who is board certified or board eligible in pediatrics or hospice and pediatrics; a registered nurse; and a licensed social worker with a background in pediatric care. Services offered will include nursing, expressive therapies, client and family counseling, respite care, bereavement services, case management, and any other services that the Illinois State Department determines to be appropriate. The Illinois State Department has 12 months from federal approval to implement the waiver or state plan amendment for this Medicaid program. Reimbursement parameters and rates for pediatric palliative care services remain undetermined. Details of the benefit are still being finalized.

# Adult-Focused SPC Benefits

Adult SPC benefits in the U.S. range from providing limited services to comprehensive benefit programs that provide an array of interdisciplinary services. Much like pediatric palliative care programs, adult SPC programs use a variety of options to fund and provide services, including through financial alignment initiatives, PACE, and their state Medicaid managed care programs. States providing these benefits include Arizona, California, Florida, Iowa, Michigan, New York, South Carolina, and Washington.

## Financial Alignment Initiative

One of the models currently used by states with the Centers for Medicare and Medicaid Services (CMS) is the financial alignment initiative, which is a model to align the financing of Medicare and Medicaid programs and integrate primary,

[19] Massachusetts Department of Public Health. (n.d.). Learn About the Pediatric Palliative Care Network. Mass.gov. Retrieved March 22, 2022, from https://www.mass.gov/info-details/learn-about-the-pediatric-palliative-care-network#is-my-child-eligible?-

acute, behavioral health and long-term services and supports for their Medicare-Medicaid enrollees.[20] Michigan, New York, and South Carolina each partnered with CMS between 2013 and 2015 to provide benefits to Medicare-Medicaid enrollees and align the finances and administration of the two programs.[21]

New York phased out the program in 2019 and enrollees were transitioned to Medicaid Advantage Plus. New York also has a Care at Home I/II Program, which allows hospice and certified home health agencies to act as waiver SPC providers.[22]

Benefits in South Carolina apply to those with serious, chronic, or terminal illnesses who have been hospitalized in the past. Benefits cover pain and symptom management and are aimed at addressing patients' needs earlier in the timeline of illness. The benefit is available in all care settings.

## Program of All-Inclusive Care for the Elderly

The PACE program is also used by states to provide SPC benefits. PACE programs are operated by an approved PACE organization that provides comprehensive healthcare services to its enrollees.[23]

These models are used in Florida, Iowa, and Texas (described on page 23). Florida's program provides services to enrollees in their homes. The program is available to individuals who qualify for Medicaid nursing home placement.[24] In Iowa, the PACE program offers a benefit that combines medical care, long-term care, and prescription drugs to help individuals with disabilities age 55 and older live independently within the community. Individuals must also meet Iowa's criteria

[20] Centers for Medicare and Medicaid Services. Financial Alignment Initiative. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/FinancialModelstoSupportStatesEffortsinCareCoordination
[21] Donlon, R., et al. (2018). National Academy for State Health Policy (December 2018). Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs. Retrieved from https://www.nashp.org/wp-content/uploads/2018/12/Palliative-Care-Brief-Final.pdf
[22] State of New York Department of Health. (2010). Care at Home (CAH) I/II Medicaid Waiver Palliative Care Provider Application. Retrieved from https://www.health.ny.gov/facilities/long_term_care/docs/cah_1-2_palliative_care_provider_application_package.pdf
[23] Electronic Code of Federal Regulations. Retrieved from https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-E/part-460#460.92
[24] Florida Department of Elder Affairs. (2021, May 4). Program of All-inclusive Care for the Elderly (PACE). Retrieved from http://elderaffairs.state.fl.us/doea/pace.php

for nursing facility level of care.[25] Services offered include all the required Medicaid services as well as additional services such as physical therapy, occupational therapy, speech therapy, personal care, nutritional counseling, recreational therapy, social activities, and meals.

## State Medicaid Managed Care Programs

Washington state provides its SPC benefit, which can be used by individuals with a life-limiting medical condition, through its Medicaid managed care program.[26] Services include skilled care and care coordination and can be provided in the hospital, home, and hospice settings.[27]

In 2017, Arizona developed an SPC benefit plan for those in managed care, FFS, and managed long-term services and supports. Arizona defines SPC as, "member and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering and is provided to address physical, intellectual, emotional, social, and spiritual needs and to facilitate member autonomy, access to information, and choice."[28] The goal is to improve the quality of life for both members and their families. The SPC benefit is appropriate at any age and any stage in the illness and can be provided in conjunction with curative treatment outside the context of hospice care."[29] The services are accessible to anyone with an illness leading to dependence on life-sustaining treatments or a person who needs long-term care that is supported by others for their activities of daily living. Benefits of the plan include but are not necessarily limited to pain management,

[25] Program of All Inclusive Care for the Elderly (PACE). Iowa Department of Human Services. (2019). Retrieved from https://dhs.iowa.gov/ime/members/medicaid-a-to-z/hcbs/pace.
[26] Washington State Health Care Authority. (n.d.). Palliative care. Palliative Care. Retrieved from https://www.hca.wa.gov/about-hca/making-informed-health-care-decisions/palliative-care
[27] Washington State Health Care Authority, Washington Apple Health – Fully Integrated Managed Care Contract, effective January 1, 2021. https://www.hca.wa.gov/assets/billers-and-providers/ahimc-medicaid.pdf
[28] AHCCCS Medical Policy Manual Chapter 310 ... - azahcccs.gov. (n.d.). Retrieved from https://www.azahcccs.gov/shared/Downloads/MedicalPolicyManual/300/310J.pdf
[29] Arizona Health Care Cost Containment System. (October 2017). End of Life Care. Retrieved from https://www.azahcccs.gov/PlansProviders/Downloads/RFPInfo/YH18/ReqForProp/AMPM_Policy_310_TBD_EndOfLifeCare.pdf

counseling, personal care services, and ACP which are all available in combination with curative treatment.[30]

California has the most comprehensive Medicaid SPC benefit in the U.S. In 2014, California's palliative care program was signed into law (S.B. 1004). This law was implemented in 2018 as a no-cost solution to provide SPC access. No additional money was appropriated to increase MCO capitation rates. However, the California Health Care Foundation, a non-profit organization, provided funding to health plans to conduct community-based palliative care pilot programs and build SPC infrastructure. Program services are delivered through Medi-Cal managed care health plans and FFS. California largely relies on CMS' definition that palliative care is "patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering."[31] California's program is available to all adults who have a qualifying health condition and meet other general criteria. The SPC program was expanded to include pediatric patients in 2019.

There are seven primary services in California's SPC benefit, including ACP, palliative care assessment and consultation, plan of care, interdisciplinary palliative care team, care coordination, pain and symptom management, and mental health and medical social services. In addition to the required services, California also recommends spiritual support and 24-hour/7-days-a-week telehealth services. These services are offered in any setting, including in a patient's home. The SPC benefit provides access to SPC services to patients who have serious illnesses but are not limited or required to be within the six-month life expectancy prognosis that is required under the hospice care benefit.

## State SPC Benefits in Development

Hawaii is in the process of developing a community-based palliative care benefit for its Medicaid program.[32] Hawaii has previously implemented ACP and hospital-based SPC benefits. Through this new program, the Hawaii Medicaid program would offer

[30] Donlon, R., et al. (2018). National Academy for State Health Policy (December 2018). Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs. Retrieved from https://www.nashp.org/wp-content/uploads/2018/12/Palliative-Care-Brief-Final.pdf
[31] CMS Manual System Pub. 100-07 State Operations Provider Certification https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R65SOMA.pdf
[32] Hawaii Palliative Care Virtual Summit 2021 PowerPoint. Retrieved from https://kokuamau.org/wp-content/uploads/Slides-Hawaii-Palliative-Care-Virtual-Summit-2021.pdf

community-based services to enrollees with serious illnesses. In addition to ACP, the community-based palliative care benefit would cover comprehensive assessment, a plan of care, care coordination, pain and symptom management, medical social services, and mental health services using already established revenue and professional billing codes. Depending on decisions made about program design, providers would bill Medicaid using a new capitated payment as part of an 1115 waiver or as part of Hawaii's state plan amendment.

# Payment Methodologies: Using Existing Billing Codes

States that provide Medicaid reimbursement for palliative care services can determine how these services are delivered, used, and paid. Most state Medicaid programs that reimburse for palliative care services do so through a series of Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes which can be used to reimburse for individual SPC services in inpatient, outpatient, or community-based settings. A comprehensive list of CPT and HCPS codes for all states that provide Medicaid reimbursement for select SPC services in the inpatient, outpatient, or community settings is provided in the appendix (Table A-1). The table shows most states have one or more services in place to support palliative care, laying the foundation for a comprehensive SPC benefit in the future.

Arizona's SPC services are implemented through the agency's hospice policy.[33] The state's Medicaid program uses the following ACP billing codes to reimburse for ACP services: CPT codes 99497 (for the first thirty minutes) and 99498 (for each additional thirty minutes), and HCPCS code S0257 (for counseling and discussions about advance directives).

Table 1.1, 1.2, and 1.3 outline ACP codes most frequently used in Arizona in 2018 and 2019. The total sum of quantity billed for all of Arizona ACP utilization codes in federal fiscal year 2018-2019 was 10,601 with a total sum of health plan valued amount of $349,291.

[33] Arizona Health Care Cost Containment System. (2017). End of Life Care. Retrieved March 22, 2022, from https://www.azahcccs.gov/PlansProviders/Downloads/RFPInfo/YH18/ReqForProp/AMPM_Policy_310_TBD_EndOfLifeCare.pdf

**Table 1.1 Arizona ACP Utilization Codes, Federal Fiscal Year 2018 -2019**

| Code | Fiscal Year | Sum of Health Plan Valued Amount | Sum of Quantity Billed |
|---|---|---|---|
| 99497 (ACP, first 30 mins) | 2018 | $123,666 | 3,209 |
| 99497 (ACP, first 30 mins) | 2019 | $209,427 | 6,953 |
| 99497 Total | 2018-2019 | $333,093 | 10,162 |

**Table 1.2 Arizona ACP Utilization Codes, Federal Fiscal Year 2018 -2019**

| Code | Fiscal Year | Sum of Health Plan Valued Amount | Sum of Quantity Billed |
|---|---|---|---|
| 99498 (ACP, 30+ mins) | 2018 | $7,877 | 207 |
| 99498 (ACP, 30+ mins) | 2019 | $7,705 | 200 |
| 99498 Total | 2018-2019 | $15,582 | 407 |

**Table 1.3 Arizona ACP Utilization Codes, Federal Fiscal Year 2018 -2019**

| Code | Fiscal Year | Sum of Health Plan Valued Amount | Sum of Quantity Billed |
|---|---|---|---|
| S0257 (Counseling and discussion regarding advance directives or end-of-life care planning) | 2018 | $479 | 19 |
| S0257 (Counseling and discussion regarding advance directives or end of life care planning) | 2019 | $137 | 13 |
| S0257 Total | 2018-2019 | $616 | 32 |

California also uses existing billing codes for reimbursement of palliative care services. These services include ACP, palliative care assessment and consultation, pain and symptom management, mental health, plan of care, care coordination, and interdisciplinary palliative care team consults. A list of California's palliative care services and their billing codes can be found in Table 2 below.

**Table 2: California Palliative Care Billing Codes for Palliative Care Services[34]**

| Palliative Care Service | Billing Codes |
|---|---|
| ACP (Inpatient/Outpatient [I/O] and Hospital [H]) | Evaluation and Management (E&M) codes 99497 (reimbursable twice a year before Treatment Authorization Request override) and 99498 (reimbursable once a year before Treatment Authorization Request override) |
| Palliative Care Assessment and Consultation (I/O) | E&M codes for counseling 99251-99255 |
| Palliative Care Assessment and Consultation (H) | E&M codes 99341 – 99350 for MD/NP, or Home Health for RN/LPN |
| Pain and Symptom Management (I/O) | Pharmacy benefit |
| Pain and Symptom Management (H) | Pharmacy benefit |
| Plan of Care (I/O) | CPT codes 99251-99255 |
| Plan of Care (H) | CPT codes 99341-99350 |
| Care Coordination (H) | CPT 99490, 99491 |
| Nursing Services (H)<br>Home Health Aide | HCPCS codes G0299, G0162, G0300, and G0156 |
| Psychosocial Services | CPT code 90832, (psychotherapy), HCPCS G0155 (clinical social worker) |
| Discharge Planning (I/H) | CPT codes 99238 and99239, CPT codes 99341 - 99350 |
| Physical therapy (H/Hospice) | HCPCS code G0151 |
| Occupational therapy (H/Hospice) | HCPCS code G0152 |
| Palliative Care team (I/O)-qualified health professional (QHP) | CPT codes 99366 and 99368 |
| Chaplain services/Spiritual support | Only as a hospice benefit. Not billable for palliative care services. |

Note: I=inpatient, O=outpatient, H= home

# Quality Improvement Initiatives in SPC Programs

Five states embedded SPC-related metrics or quality improvement initiatives into their state Medicaid programs, including Colorado, Illinois, New York, Rhode Island and Texas.[35] Colorado, Illinois, New York, and Rhode Island incorporated at least

[34] State of California Department of Health Care Services. Palliative Care Service Codes. (May 2019). Retrieved from https://www.dhcs.ca.gov/services/ppc/Documents/PalliativeCareServiceCodes05302019.pdf

[35] Donlon, Rachel, et al (2018). "Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs." National Academy for State Health Policy. Retrieved from https://www.nashp.org/wp-content/uploads/2018/12/Palliative-Care-Brief-Final.pdf

one quality-related measure in their financial alignment initiatives or managed long-term services and supports (MLTSS) contracts.[36] Some metrics these states incorporated are linked to financial incentives for their Medicaid managed care health plans. The Healthcare Effectiveness Data and Information Set (HEDIS) Care for Older Adults is the most common metric used by other states. This HEDIS measure is based on the percentage of beneficiaries aged 66 years and older who have the following four services in one measurement year: ACP, medication review, functional status assessment, and pain screening.[37]

New York and Texas both incorporated SPC into their quality improvement initiatives, specifically through their Delivery System Reform Incentive Payment Programs (DSRIP).

- For its DSRIP waiver, New York implemented an optional clinical improvement project for Performing Provider Systems.[38] The project included five metrics related to integrating SPC into the health care continuum: pain and symptom management, physical symptom management, mental health, and completion of advanced directives.[39]

- Texas' DSRIP program under the Healthcare Transformation and Quality Improvement Waiver (1115 Waiver) helped support the establishment of inpatient SPC programs across the state.[40] DSRIP included a quality improvement program where providers could earn incentive payments by reporting and improving on selected measures, among them a bundle of

[36] Donlon, Rachel, et al (2018). "Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs." National Academy for State Health Policy. Retrieved from https://www.nashp.org/wp-content/uploads/2018/12/Palliative-Care-Brief-Final.pdf
[37] "Care for Older Adults (COA)," National Committee for Quality Assurance. Retrieved from https://www.ncqa.org/hedis/measures/care-for-older-adults/
[38] Centers for Medicare & Medicaid Services, technical correction letter, New York Medicaid Redesign Team Section 1115 Waiver Number 11-W-00114/2, Jan. 19, 2017. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ny/ny-medicaid-rdsgn-team-ca.pdf
[39] Donlon, Rachel., et al. (2018). "Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs." National Academy for State Health Policy. Retrieved from https://www.nashp.org/wp-content/uploads/2018/12/Palliative-Care-Brief-Final.pdf#:~:text=For%20this%20scan%2C%20NASHP%20defined%20palliative%20care%20as,social%2C%20and%20spiritual%20well-being%20of%20seriously%20ill%20individuals
[40] Texas Health and Human Services Commission. Medicaid 1115 Waiver. Retrieved from https://www.hhs.texas.gov/regulations/policies-rules/waivers/medicaid-1115-waiver

measures focused on SPC. These metrics included pain assessment, documentation of treatment preferences, documentation of discussion on spiritual/religious concerns, bowel regimen for patients treated with an opioid, dyspnea screening and treatment, hospice admissions of less than three days, and patients who died from cancer not admitted to hospice.

# Promoting SPC Via Continuing Education and Public Education

States can promote the advancement of SPC by encouraging or mandating healthcare providers and professionals to pursue continuing education, share SPC-related information with patients, and increase public awareness campaigns and education efforts about the benefits of SPC across healthcare settings.

Several states are implementing continuing education requirements to build provider capacity in SPC. The medical boards and licensing authorities of California, Massachusetts, New Jersey, Oregon, Rhode Island, and Vermont require continuing education in end-of-life care, palliative care, and/or pain management. Vermont also requires physicians to demonstrate competence in identifying and referring patients to hospice, SPC, and pain management services by completing at least one hour of qualifying continuing medical education credits on these topics.[41] Georgia's physicians who work in pain management clinics must demonstrate coursework in palliative care.[42] While not a requirement, California encourages its managed care plans to contract with Medicaid providers who have received SPC training. Their state Medicaid program also uses a combination of state and federal administrative matching funds to contract with California State University's Institute for Palliative Care to offer palliative training to Medicaid providers and practice staff.

Some states are implementing policies and initiatives that require providers to share information with patients and the public regarding SPC. In Massachusetts, Michigan, and New York, primary care providers are required to provide information about options related to pain management and SPC, though this requirement applies only to patients with a terminal illness. In Florida, health care providers

[41] Vermont Department of Health Board of Medical Practice, "Rule of the Board of Medical Practice," effective October 15, 2017. Retrieved from http://www.healthvermont.gov/sites/default/files/documents/pdf/BMP_Board%20Rules%20Effective%202017.pdf

[42] "Chapter 360-8 Pain Management Clinics," Rules of the Georgia Composite Medical Board. Retrieved from http://rules.sos.state.ga.us/gac/360-8?urlRedirected=yes&data=admin&lookingfor=360-8.

must share information with all patients about pain management and/or palliative care.

Several states aim to increase public awareness and education of SPC by creating councils or task forces that provide recommendations to advance SPC, as well as by requiring their state public health agencies to disseminate resources about SPC. Currently, 27 states run a palliative care council or task force, including Texas, to develop recommendations to promote palliative care for their state legislature's consideration.[43] Similarly, 15 states have existing legislation requiring public health agencies to develop and disseminate resources about SPC. More specifically, Vermont requires that patients with serious illnesses be made aware of palliative care to make informed decisions about their treatment.[44] In Wisconsin, the state's public health agencies work to educate older adults and individuals with developmental or intellectual disabilities about the benefits of SPC and hospice care.

[43] Donlon, Rachel., et al. (2018). "Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs." National Academy for State Health Policy. Retrieved from https://www.nashp.org/wp-content/uploads/2018/12/Palliative-Care-Brief-Final.pdf

[44] 18 V.S.A. § 1871. https://legislature.vermont.gov/statutes/section/18/042A/01871.

# 5. Supportive Palliative Care Policies and Initiatives in Texas

The current policy framework for SPC in Texas was established largely by two pieces of legislation, H.B. 1874 and S.B. 916. H.B. 1874 established HHSC's PCIAC, charging the council with assessing and defining relevant clinical, system, educational, and policy issues regarding the availability of palliative care in Texas. It also charged the council with promoting professional and public education about SPC to enhance Texans' access to high-quality and continuously improving SPC services.

S.B. 916 established a standardized definition of palliative care termed "SPC." SPC is defined as "physician-directed interdisciplinary patient and family-centered care provided to a patient with a serious illness without regard to the patient's age or terminal prognosis that may be provided concurrently with methods of treatment or therapies that seek to cure or minimize the effects of the patient's illness and seeks to optimize the quality of life for a patient and the patient's family."

SPC offers pain and symptom management services to help balance comfort and function, can be combined with disease-modifying treatments to cure illness or extend life, and is most effective when delivered from both a patient and family-centered perspective. Texas defines SPC in the context of its home and community-based services regulations but does not currently provide Medicaid reimbursement for these services.

## Establishing Regulations and SPC Delivery

Texas established a standardized definition for SPC, but S.B. 916 did not establish a category of licensure for the provision of SPC services, neither standalone nor as a category within an existing care delivery setting. On September 15, 2021, HHSC released a Long-Term Care Regulatory Provider Letter, PL 2021-35, regarding licensing requirements for in-home SPC to individuals who have not elected hospice.[45] The letter established providers who deliver SPC in the home or community settings must obtain a Home and Community Support Services Agencies

[45] Texas Health and Human Services Commission. Long-Term Care Regulatory Provider Letter. Retrieved from https://www.hhs.texas.gov/sites/default/files/documents/providers/communications/2021/letters/PL2021-35.pdf

home health license. The letter also highlighted exemptions under Texas Health and Safety Code § 142.003 for physicians, dentists, registered nurses, occupational therapists, or physical therapists who provide home health services to a client only as part of the person's private office practice.[46] This notice to the Home and Community Support Services Agencies industry paved the way for existing and newly licensed agencies to provide SPC to Texas citizens in community settings.

# SPC-Related Initiatives

Like a few other states mentioned previously in this report, Texas participates in the PACE program. In Texas, PACE programs provide health services to elderly people who qualify for nursing facility placement, are 55 years or older, live in a PACE service area, and can be safely served in the community. While Texas' PACE programs do not explicitly define or outline a SPC benefit, the benefits do include related palliative care services covered by Medicare and Medicaid, as well as "other services determined necessary by the interdisciplinary team to improve and maintain the participant's overall health status."[47] Services for both acute and long-term care are provided by an interdisciplinary team within communities. These interdisciplinary teams must consist of a primary care provider, a registered nurse, a social worker, a physical therapist, an occupational therapist, a recreational therapist, a dietitian, a PACE center manager, a home care coordinator, a personal care attendant, and a driver.[48]

# Policies in Consideration to Advance SPC in Texas

In 2020, the PCIAC outlined a Medicaid benefit design for a recommended SPC benefit in Texas.[49] Individuals of all ages who meet certain eligibility requirements

[46] Texas Health and Safety Code § 142.003. Retrieved from https://statutes.capitol.texas.gov/Docs/HS/htm/HS.142.htm
[47] Electronic Code of Federal Regulations. Retrieved from https://www.ecfr.gov/cgi-bin/text-idx?SID=8279ffbdc4f252d1d4a337a65d920735&mc=true&node=pt42.4.460&rgn=div5#se42.4.460_192
[48] Ibid.
[49] Texas Palliative Care Interdisciplinary Advisory Council (October 2020). Texas Palliative Care Interdisciplinary Advisory Council Recommendations to the 87th Texas Legislature. https://www.hhs.texas.gov/sites/default/files/documents/laws-regulations/reports-presentations/2020/txpciac-recs-86th-leg-oct-2020.pdf

would be able to receive the benefit. The recommended SPC benefit includes the following nine services:

1. SPC Assessment and Consultation: consultation includes the collection of patient data and assessment of patient needs.
2. Advance Care Planning: ACP includes the completion of Texas legally recognized documents like an advanced directive/living will, out-of-hospital do not resuscitate, or medical power of attorney.
3. Plan of Care/Goals of Care: an SPC plan of care includes plans for symptom management, life-prolonging interventions, and supportive interventions only if or when life-prolonging interventions are no longer desired by or are non-beneficial for the patient.
4. Interdisciplinary Palliative Care Team: this is a health care team that collaborates to meet the physical, medical, psychosocial, emotional, and spiritual needs of patients and their families and can assist in identifying sources of pain and discomfort.
5. Care Coordination: a member of the palliative care team helps coordinate and implement the patient's care plan.
6. Pain and Symptom Management: services used to reduce pain and other symptoms of serious illness including but not limited to shortness of breath, nausea, fatigue, and more. The services may involve medications, physical and occupational therapy, nutritional support, emotional and spiritual support, and more.
7. Mental Health and Medical Social Services: counseling to reduce stress, depression, anxiety, and other psychological problems associated with illness.
8. Training and Respite Services for Family Caregivers: training and respite services help to reduce caregiver burnout.
9. Telehealth Services: telemedicine and telehealth can be used to minimize burdens on the patient and family.

# 6. Quality Improvement and Cost-Savings Opportunities in Texas

S.B. 916 authorizes HHSC to conduct a study to assess potential improvements to a patient's quality of care and health outcomes and anticipated cost savings to the state from supporting the use of or providing Medicaid reimbursement for SPC. In order to conduct the study HHSC analyzed the most prevalent chronic diagnoses among deceased Texas Medicaid members to identify populations with the highest potential for improved quality from a structured SPC benefit. The study design and analytics reflect recommendations and ongoing input from the PCIAC, per S.B. 916. Throughout this report the term "decedents" is used for a person who has died and more specifically the phrase "Texas Medicaid decedents" is used to describe Texas Medicaid members who died while enrolled in Medicaid. Additional analyses were conducted on Medicaid decedents with the top eight complex chronic conditions to evaluate inpatient stays and ED utilization within the 12 months before death to identify potential cost savings opportunities from SPC.

Results from this analysis may be used to inform the development of Texas Medicaid SPC policies and standards and to evaluate potential opportunities for quality improvement and cost savings from the use of SPC services. This study also analyzes the role of ACP as an SPC service to potentially improve quality of care, patient health outcomes, and reduce costs.

## Populations That May Benefit from SPC

This report includes analyses for two distinct groups:

1. Dually eligible Medicare and Medicaid plan (MMP) beneficiaries, and
2. Medicaid only beneficiaries (not eligible for Medicare).

Medicaid-only beneficiaries are the report's primary focus because for individuals eligible for Medicare, coverage for provider services, prescription drugs, home health, and other palliative care-related services are provided by Medicare. However, some analyses are included for the MMP program since Texas has access

to both Medicaid and Medicare data for this population. Dually eligible individuals not enrolled in MMP are excluded from the analysis.[50]

Table 3 shows Texas Medicaid decedent enrollment, claims, and encounter data from the period beginning 12 months before death. Among all Texas Medicaid and MMP decedents from 2018 to 2019, chronic kidney disease (53.45 percent), heart failure/ischemic heart disease (41.30 percent), diabetes (38.74 percent), and COPD (31.71 percent) were the four most common chronic conditions.

The notable difference in the most common chronic diseases between Medicaid only and the MMP decedents was Alzheimer's disease (55.51 percent), the second most prevalent condition for the MMP population. The age of Medicaid-only participants compared to MMP participants may account for this difference. Most MMP beneficiaries are age 65 and older while many Medicaid-only beneficiaries are children and adolescents through age 20 (about 76 percent in Texas).[51] Table 3 also highlights that liver disease accounted for a higher proportion of diseases among Medicaid-only decedents (29.67 percent) than among MMP decedents (15.78 percent).

This data provides a broad overview of Medicaid beneficiaries with chronic conditions who could be most impacted by SPC services in Texas. While the four most prevalent conditions make up the majority of Medicaid clients, beneficiaries with any of the eight listed chronic conditions could benefit from SPC services in Texas. However, these data have limitations, and it should be noted that the conditions are not listed as the cause of death but as the most common chronic conditions among Texas Medicaid and MMP decedents.

**Table 3.1 Most Prevalent Chronic Conditions Among State Fiscal Year (SFY) 2018-2019 Texas Medicaid and MMP Decedents, with Enrollment in the 12 Month Period Prior to Death**

| Top Chronic Conditions | Medicaid Only Total | Medicaid Only Percentage | MMP Only Total | MMP Only Percentage | Total Number | Total Percentage |
|---|---|---|---|---|---|---|
| Chronic Kidney Disease* | 5,807 | 51.98% | 1,425 | 60.43% | 7,232 | 53.45% |

[50] https://www.hhs.texas.gov/services/health/medicaid-chip/medicaid-chip-programs-services/dual-eligible-project-mmp
[51] 13th edition Texas Medicaid and Chip Reference Guide. Retrieved from https://www.hhs.texas.gov/sites/default/files/documents/laws-regulations/reports-presentations/2020/medicaid-chip-perspective-13th-edition/13th-edition-complete.pdf

| Top Chronic Conditions | Medicaid Only Total | Medicaid Only Percentage | MMP Only Total | MMP Only Percentage | Total Number | Total Percentage |
|---|---|---|---|---|---|---|
| Heart Failure* or Ischemic Heart Disease | 4,330 | 38.76% | 1,258 | 53.35% | 5,588 | 41.30% |
| Diabetes | 4,035 | 36.12% | 1,206 | 51.15% | 5,241 | 38.74% |
| COPD* | 3,597 | 32.20% | 693 | 29.39% | 4,290 | 31.71% |
| Liver Disease, Cirrhosis and Other Liver Conditions* | 3,315 | 29.67% | 372 | 15.78% | 3,687 | 27.25% |
| Alzheimer's Disease, Related Disorders or Senile Dementia* | 1,387 | 12.41% | 1,309 | 55.51% | 2,696 | 19.93% |
| Stroke | 1,593 | 14.26% | 476 | 20.19% | 2,069 | 15.29% |
| Cancer-Breast, Colorectal, Endometrial, Lung, Prostate* | 1,444 | 12.93% | 243 | 10.31% | 1,687 | 12.47% |

Note: One decedent can be counted in multiple categories. Diseases with a * are based on the Chronic Conditions Data Warehouse (CCW) categories.[52] Prepared by: HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by the Institute for Child Health Policy (ICHP) in 2020.

[52] Chronic Conditions Data Warehouse. Condition Categories. Retrieved from https://www2.ccwdata.org/web/guest/condition-categories

**Table 3.2 Most Prevalent Chronic Conditions Among SFY 2018-2019 Texas Medicaid and MMP Decedents, with Enrollment in the 12 Month Period Prior to Death**

| Top Chronic Conditions | Medicaid Only Total | Medicaid Only Percentage | MMP Only Total | MMP Only Percentage | Total Number | Total Percentage |
|---|---|---|---|---|---|---|
| Total Decedents | 11,172 | % | 2,358 | % | 13,530 | % |
| All Top Diseases (Listed in Table 3.1) | 8,779 | 78.58% | 2,102 | 89.14% | 10,881 | 80.42% |
| All Other Decedents (None of the top Diseases) | 2,393 | 21.42% | 256 | 10.86% | 2,649 | 19.58% |

Note: One decedent can be counted in multiple categories. Diseases with a * are based on the Chronic Conditions Data Warehouse (CCW) categories.[53] Prepared by: HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by the Institute for Child Health Policy (ICHP) in 2020.

# Potential Opportunities for Quality Improvement and Cost Savings in Texas

HHSC conducted analysis to determine the potential benefit of providing SPC services to Medicaid beneficiaries earlier in the disease progression than the six-month period of hospice eligibility. Inpatient (IP) stays and ED visits were analyzed for all the listed top chronic conditions among Texas Medicaid decedents from Table 3.

Table 4 below shows that IP stays, acute inpatient (AIP) stays, and ED use for Medicaid-only beneficiaries with the top chronic conditions are still relatively high between the seven-to-nine and 10–12 month periods before death.

[53] Chronic Conditions Data Warehouse. Condition Categories. Retrieved from https://www2.ccwdata.org/web/guest/condition-categories

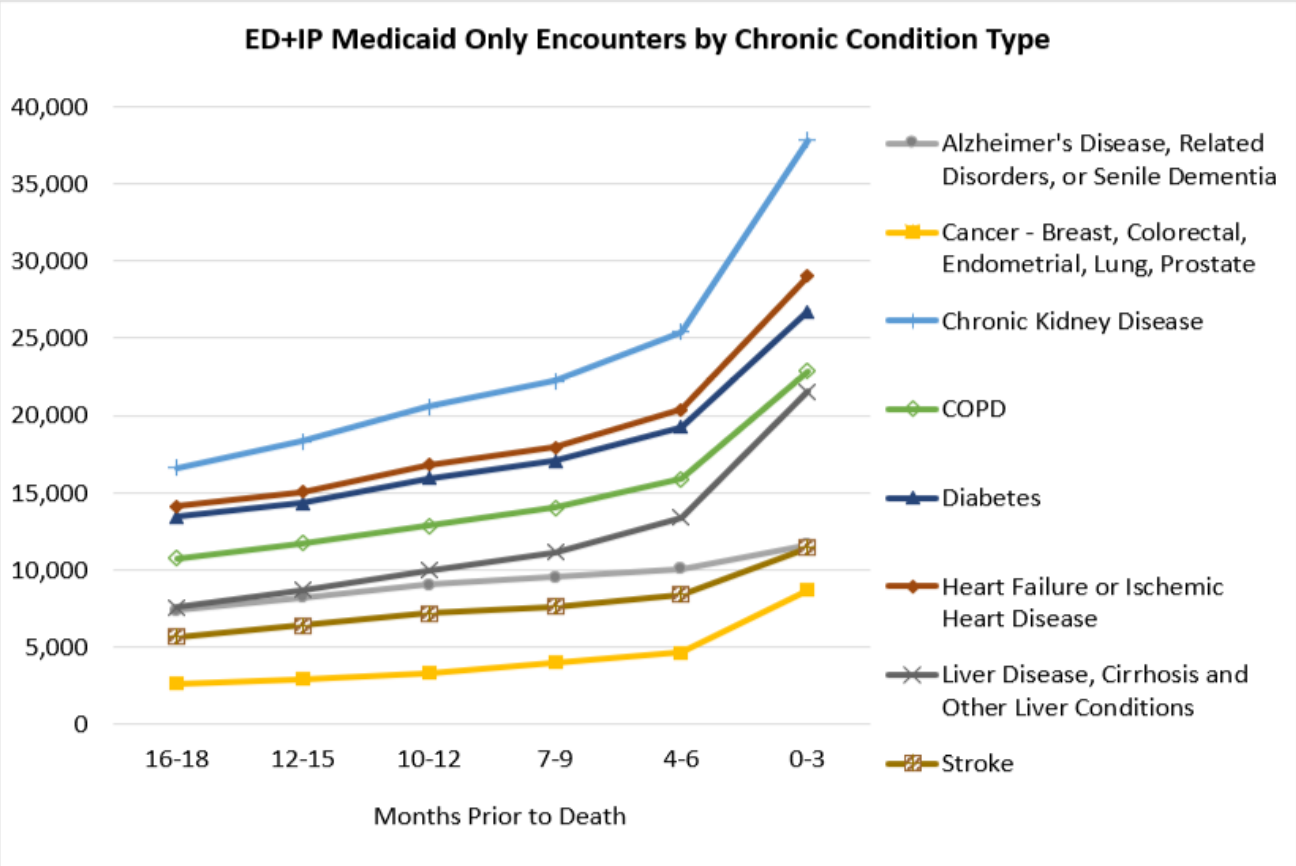
**Table 4: Number of Encounters for ED Visits, IP Stays, and AIP Stays for Medicaid only Beneficiaries with the Top Chronic Conditions, with Deaths SFY 2018-2019, 12 months of continuous enrollment, with Claims/Encounters in the 18 months Before Death**

| Months Prior to Death | Total Medicaid (Top Chronic Conditions) Members | Members with 1+ ED Encounter | Members with 1+ IP Encounter | Members with 1+ AIP Encounter |
|---|---|---|---|---|
| 0-3 | 8,779 | 7,077 | 6,382 | 6,377 |
| 4-6 | 8,779 | 4,376 | 3,598 | 3,595 |
| 7-9 | 8,779 | 3,827 | 3,105 | 3,101 |
| 10-12 | 8,779 | 3,578 | 2,905 | 2,902 |
| 12-15 | 8,779 | 3,379 | 2,545 | 2,537 |
| 16-18 | 8,779 | 3,023 | 2,329 | 2,324 |

Prepared by: HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by the ICHP in 2020.

Figure 1 shows the total number of ED and IP stay encounters by top chronic condition for Medicaid-only beneficiaries in three-month increments, from 18 months before death until death. This data indicates that total encounters continue to increase closer to the death date, especially within 12 months before death.

**Figure 1: Total ED + IP Stay Encounters for Medicaid only Beneficiaries with All Top Chronic Conditions, with Deaths SFY 2018-2019, 12 months of continuous enrollment, with Claims/Encounters in the 18 months Before Death**




Prepared by: HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by the ICHP in 2020.

| Medicaid Top Chronic Conditions | Months Prior to Death 16-18 | Months Prior to Death 12-15 | Months Prior to Death 10-12 | Months Prior to Death 7-9 | Months Prior to Death 4-6 | Months Prior to Death 0-3 |
|---|---|---|---|---|---|---|
| Alzheimer's Disease, Related Disorders or Senile Dementia* | 7,393 | 8,189 | 9,016 | 9,511 | 10,065 | 11,606 |
| Cancer- Breast, Colorectal, Endometrial, Lung, Prostate* | 2,639 | 2,919 | 3,326 | 3,974 | 4,631 | 8,679 |

| Medicaid Top Chronic Conditions | Months Prior to Death 16-18 | Months Prior to Death 12-15 | Months Prior to Death 10-12 | Months Prior to Death 7-9 | Months Prior to Death 4-6 | Months Prior to Death 0-3 |
|---|---|---|---|---|---|---|
| Chronic Kidney Disease* | 16,627 | 18,335 | 20,553 | 22,215 | 25,410 | 37,812 |
| COPD* | 10,756 | 11,701 | 12,831 | 14,036 | 15,884 | 22,855 |
| Diabetes | 13413 | 14320 | 15932 | 17064 | 19228 | 26717 |
| Heart Failure* or Ischemic Heart Disease | 14,131 | 15,049 | 16,797 | 17,914 | 20,379 | 29,028 |
| Liver Disease, Cirrhosis and Other Liver Conditions* | 7,580 | 8,712 | 9,962 | 11,113 | 13,382 | 21,560 |
| Stroke | 5,646 | 6,394 | 7,155 | 7,596 | 8,400 | 11,410 |

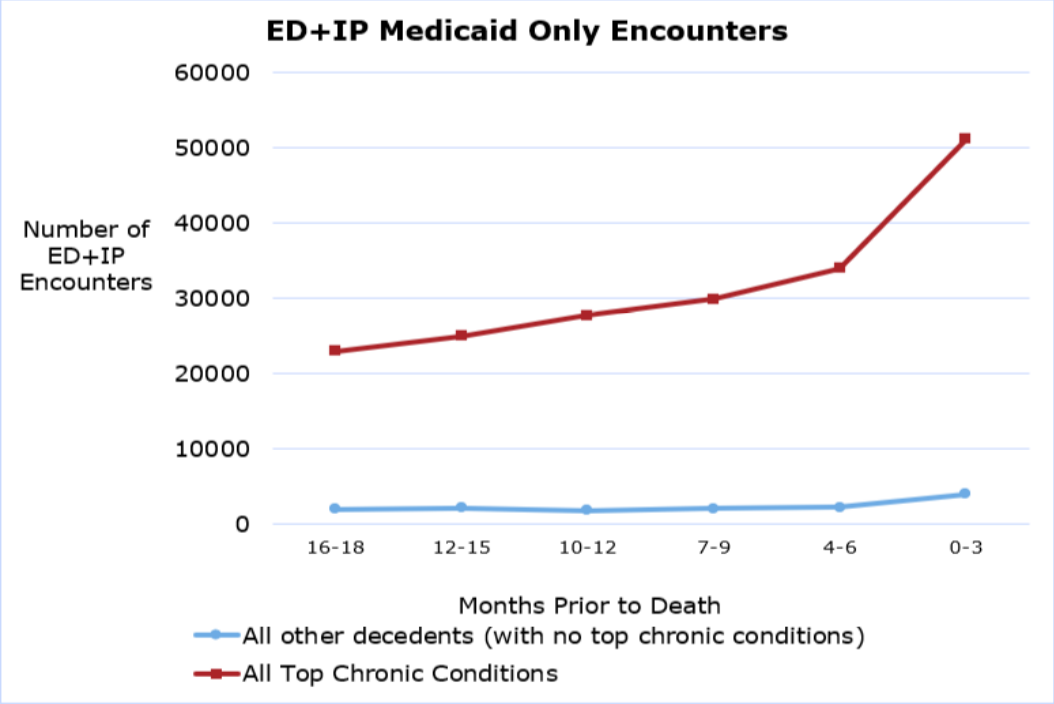
Note: One decedent can be counted in multiple categories. Diseases with a * are based on the CCW categories.[54] Prepared by: HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by ICHP in 2020.

Figure 2 shows the total number of ED and IP stay encounters for Medicaid-only beneficiaries by all top chronic conditions and all other decedents. This data compares the total number of ED and IP encounters for 18 months before death. As shown in Figure 2, Medicaid beneficiaries with chronic conditions experience increasing rates of ED and IP utilization near the end of life, especially in the 12 months before death, an indication they could benefit from early access to palliative care before the period of hospice eligibility. Evidence indicates that patients who accessed community-based SPC services over the last 12 months of life were associated with having a significant reduction in the average number of days spent in the hospital (-7.60) and total acute care costs (-$5,491).[55]

[54] Chronic Conditions Data Warehouse. Condition Categories. Retrieved from https://www2.ccwdata.org/web/guest/condition-categories

[55] Youens, D., & Moorin, R. (2017). The Impact of Community-Based Palliative Care on Utilization and Cost of Acute Care Hospital Services in the Last Year of Life. Journal of palliative medicine, 20(7), 736–744. https://doi.org/10.1089/jpm.2016.0417

**Figure 2: Total ED + IP Stay Encounters for Medicaid only Beneficiaries, with Deaths SFY 2018-2019, 12 months of continuous enrollment, with Claims/Encounters in the 18 months Prior to Death**




Prepared by: HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by the ICHP in 2020.

| Months Prior to Death | All Medicaid Top Chronic Conditions | All Other Medicaid Decedents (No top chronic conditions) |
|---|---|---|
| 16-18 | 7,077 | 1,116 |
| 12-15 | 4,376 | 466 |
| 10-12 | 3,827 | 475 |
| 7-9 | 3,578 | 435 |
| 4-6 | 3,379 | 500 |
| 0-3 | 3,023 | 438 |

Prepared by: HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by the ICHP in 2020.

Table 5 below shows, for Medicaid-only decedents, total IP stays per member and the total number of days in the hospital per member were higher among people with common chronic diseases than for all other Medicaid-only decedents.

A commonly cited study shows Medicaid patients with a serious illness who received SPC consultation in the hospital incurred $6,900 less in hospital costs during a given admission, on average.[56] Additionally, future cost savings averaged $2,000 to $4,000 per patient/per stay whenever patients received palliative care services. Patients who received palliative care consultations were also more likely to receive hospice referrals than the matched usual patients.

The estimated reductions (in 2007 dollars) in Medicaid hospital spending from providing Medicaid patients with SPC consultations in New York State could range from $84 million to $252 million annually if every hospital with 150 or more beds had a fully operational palliative care consultation team. Accounting for medical inflation since the ending period for the study data (2007), the estimate for cost avoidance in 2017 dollars would be $113 million to $341 million.[57]

Based on this information, Texas Medicaid could potentially achieve cost savings through wider utilization of SPC consultations in hospitals with 150 or more beds, which make up 24 percent of all hospitals in the state. Additional cost savings may be possible from the adoption of community-based SPC services, as studies show that these services can significantly decrease hospital utilization and lower costs.[58,59]

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[56] Morrison, R. S., Dietrich, J., Ladwig, S., Quill, T., Sacco, J., Tangeman, J., & Meier, D. E. (2011). Palliative care consultation teams cut hospital costs for Medicaid beneficiaries. Health affairs (Project Hope), 30(3), 454–463. https://doi.org/10.1377/hlthaff.2010.0929

[57] Ibid.

[58] Brian, Cassel. J., Kerr, K. M., McClish, D. K., Skoro, N., Johnson, S., Wanke, C., & Hoefer, D. (2016). Effect of a Home-Based Palliative Care Program on Healthcare Use and Costs. Journal of the American Geriatrics Society, 64(11), 2288–2295. https://doi.org/10.1111/jgs.14354

[59] Gans, D., Kominski, G. F., Roby, D. H., Diamant, A. L., Chen, X., Lin, W., & Hohe, N. (2012). Better outcomes, lower costs: palliative care program reduces stress, costs of care for children with life-threatening conditions. Policy brief (UCLA Center for Health Policy Research), (PB2012-3), 1–8. https://pubmed.ncbi.nlm.nih.gov/22946141/

**Table 5: Claim and Encounter Analyses for SFY 2018-2019 Top Chronic Disease Decedents, with enrollment at death and all 12 prior months**

| Medicaid Only | Total Members | Total Stays | Stays/ Member | Total Days | Days/Member |
|---|---|---|---|---|---|
| Total decedents | 11,172 | 29,428 | 2.6 | 795,857 | 71 |
| Chronic Kidney Disease* | 5,807 | 21,304 | 3.7 | 554,046 | 95 |
| Heart Failure* or Ischemic Heart Disease | 4,330 | 15,770 | 3.6 | 458,050 | 106 |
| Diabetes | 4,035 | 14,381 | 3.6 | 440,872 | 109 |
| COPD* | 3,597 | 12,441 | 3.5 | 328,664 | 91 |
| Liver Disease, Cirrhosis and Other Liver Conditions* | 3,315 | 12,764 | 3.9 | 215,576 | 65 |
| Alzheimer's Disease, Related Disorders, or Senile Dementia* | 1,387 | 4,803 | 3.5 | 345,878 | 249 |
| Stroke* | 1,593 | 5,518 | 3.5 | 215,960 | 136 |
| Cancer - Breast, Colorectal, Endometrial, Lung, Prostate* | 1,444 | 4,402 | 3.0 | 75,242 | 52 |
| Any Top Diseases (rows above) | 8,779 | 27,462 | 3.1 | 757,704 | 86 |
| All other decedents (with no top diseases) | 2,393 | 1,966 | 0.8 | 38,153 | 16 |

Note: Stays are defined by combining ER encounters leading to admission (ER on the same day or day before and IP encounter) and IP encounters with no gap between the end and subsequent start dates. Prepared by HHSC using data prepared from the decedent file for SFY 2018-2019, retrieved by the ICHP in 2020.

## Supporting Sustainable Payment of SPC Through Value-Based Strategies

Experience in other states and available data on potential quality improvement and cost savings opportunities indicate that it may be an option to implement SPC as a value-based model. Value-based payment strategies can increase access to sustainable, high-quality SPC services by increasing healthcare providers' responsibility for managing patient quality of care and maximizing high-value services usage. Patients who receive SPC have reduced patient pain and suffering,[60] have fewer hospital readmissions,[61] survive longer for diagnoses of metastatic cancer,[62] receive fewer non-beneficial interventions, have shorter intensive care unit lengths of stay,[63] receive treatments more congruent with their wishes,[64] and have higher patient satisfaction.[65,66]

Under most alternative payment model (APM) arrangements, healthcare providers can earn incentive payments if they meet certain patient quality metric goals and spending targets. In some models, providers may be at financial risk for poor provider performance on patient quality metrics. As large purchasers of healthcare,

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[60] Morrison, R.S., Dietrich, J., Ladwig, S., et al. (2011). Palliative care consultation teams cut hospital costs for Medicaid beneficiaries. Health Aff (Millwood). 2011;30(3):454-463. doi:10.1377/hlthaff.2010.0929

[61] Lorenz, K. A., Lynn, J., Dy, S. M., Shugarman, L. R., Wilkinson, A., Mularski, R. A., Morton, S. C., Hughes, R. G., Hilton, L. K., Maglione, M., Rhodes, S. L., Rolon, C., Sun, V. C., & Shekelle, P. G. (2008). Evidence for improving palliative care at the end of life: a systematic review. Annals of internal medicine, 148(2), 147–159. https://doi.org/10.7326/0003-4819-148-2-200801150-00010

[62] Temel, J. S., Greer, J. A., Muzikansky, A., Gallagher, E. R., Admane, S., Jackson, V. A., Dahlin, C. M., Blinderman, C. D., Jacobsen, J., Pirl, W. F., Billings, J. A., & Lynch, T. J. (2010). Early palliative care for patients with metastatic non-small-cell lung cancer. The New England journal of medicine, 363(8), 733–742. https://doi.org/10.1056/NEJMoa1000678

[63] Norton, S. A., Hogan, L. A., Holloway, R. G., Temkin-Greener, H., Buckley, M. J., & Quill, T. E. (2007). Proactive palliative care in the medical intensive care unit: effects on length of stay for selected high-risk patients. Critical care medicine, 35(6), 1530–1535. https://doi.org/10.1097/01.CCM.0000266533.06543.0C

[64] Lautrette, A., Darmon, M., et al. (2007). A communication strategy and brochure for relatives of patients dying in the ICU. The New England Journal of Medicine. 356(5), 469-478. https://www.nejm.org/doi/full/10.1056/nejmoa063446

[65] Chand, P., Gabriel, T., Wallace, C. L., & Nelson, C. M. (2013). Inpatient palliative care consultation: describing patient satisfaction. The Permanente journal, 17(1), 53–55. https://doi.org/10.7812/TPP/12-092

[66] Parker, S.M., Remington, R., et al. (2013). Patient outcomes and satisfaction with care following palliative care consultation. Journal of Hospice and Palliative Nursing. 15(4), 225-232. Doi:10.1097/NJH.0b013e318279f4ce

states have many opportunities to drive value and promote APM development of SPC benefit designs and educational efforts.

Value-based strategies can encourage increased completion of ACP documents. ACP documents, such as a Living Will and Medical Power of Attorney, help ensure that a patient's wishes are known in the event the individual loses medical decision-making capacity and can guide a patient's caregiver, medical surrogate, legal guardian, and health care team during stressful situations of medical decline. ACP is appropriate for people of all ages regardless of health. For patients with serious and life limiting illness, early conversations about goals of care are associated with improved patient and family outcomes, reduced use of undesired and nonbeneficial medical care, and reduced costs.[67]

Another opportunity for states includes educating Medicaid MCOs, hospitals, and other healthcare providers on the benefits of SPC for reducing costs related to readmissions and other preventable hospital utilization and improving patient quality of care. Texas Medicaid puts a portion of both MCO and hospital reimbursement at risk based on performance metrics. These performance incentives are strongly influenced by rates of potentially preventable events, including avoidable admissions, readmissions, and ED visits. State efforts to quantify and report to MCOs and hospitals on the potential increased cost savings and quality of care benefits of SPC for patients with serious illnesses could encourage the formation of new SPC teams.

Additionally, strategies such as financially incentivizing hospitals, MCOs, and community-based SPC programs to meet Joint Commission or another certifying body's quality standards for palliative care are options for state and MCO Medicaid value-based programs.[68]

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[67] Bernacki RE, Block SD; American College of Physicians High Value Care Task Force. Communication about serious illness care goals: a review and synthesis of best practices. JAMA Intern Med. 2014 Dec;174(12):1994-2003. doi: 10.1001/jamainternmed.2014.5271. PMID: 25330167.

[68] https://www.jointcommission.org/accreditation-and-certification/certification/certifications-by-setting/hospital-certifications/palliative-care-certification/

# 7. Report Findings

## Key Takeaways from State Medicaid SPC Programs

Based on this review, most states with a Medicaid palliative care benefit developed standard definitions of SPC and established specific eligibility criteria. Many of these states also identify a comprehensive set of SPC services based on national consensus guidelines that should be delivered by a trained interdisciplinary team in a variety of service delivery settings.[69] Some states, such as Arizona and California, use pre-existing billing codes in their Medicaid programs to support the array of SPC services they offer. Additionally, some states incorporate palliative care into their quality improvement initiatives to monitor access to services and incorporate metrics tied to financial incentives to measure the quality of SPC services. All states with a state Medicaid SPC program reimburse for ACP.

## Define Patient Eligibility Criteria and Covered Services

When determining patient eligibility criteria for SPC, other states include serious or life-limiting illnesses that had a high risk of mortality and that were common among their Medicaid population. For example, California determined its initial Medi-Cal SPC patient eligibility criteria by analyzing Medicaid decedent data to determine the most frequent causes of death among its Medi-Cal decedents. Most states communicate their patient eligibility criteria under the terms "life-limiting condition" or "serious illness," which are typically defined as a health condition that carries a high risk of mortality and negatively impacts a person's daily function or quality of life. Such a definition allows individuals to access SPC services before hospice eligibility. For states with a pediatric SPC benefit, most states' eligibility criteria for children are for ages up to either 18 or 21 years of age.

Several states with an SPC program require an interdisciplinary team composition consisting of at least a physician, nurse, licensed social worker, and spiritual advisor. This reflects the national consensus guidelines, which include an

[69] Clinical practice guidelines for quality palliative care. - NCHPC. (n.d.). https://www.nationalcoalitionhpc.org/wp-content/uploads/2020/07/NCHPC-NCPGuidelines_4thED_web_FINAL.pdf.

interdisciplinary team composed of the following: physicians, advanced practice registered nurses, physician assistants, nurses, social workers, chaplains, and others based on need.[70] States vary in the services offered to their Medicaid clients under their palliative care benefits. The most common services identified in this report include ACP, pain, and symptom management, and care coordination/case management. Most states also deliver these services in the inpatient, outpatient, and community settings.

## Use Existing Billing Codes

Among states with a Medicaid SPC benefit, most provide reimbursement using CPT and HCPCS billing codes. Using existing billing codes to pay for palliative care services under a Medicaid program's SPC benefit may prevent the need for states to submit a state plan amendment or create new billing codes. The most common palliative care services and associated billing codes include end-of-life counseling (HCPCS S0257); ACP (CPT 99497, 99498); home/community interdisciplinary care team consults (CPT 99341, 99350); inpatient/outpatient interdisciplinary care team consults (CPT 99366, 99368); individual, family, marriage counseling in-home (CPT 99510); and respite in-home (HCPCS T1005). Table A-1 in Appendix A provides a detailed list of CPT and HCPS codes for all states who provide Medicaid reimbursement for select SPC services in the inpatient, outpatient, or community settings. States using existing billing codes may provide guidance to providers and explain how to use these codes to better track service usage and support best clinical practices.

## Ensure Quality and Oversight of State SPC Benefits

A few states have incorporated at least one SPC-related metric into their state Medicaid programs, with some metrics linked to financial incentives. The HEDIS Care for Older Adults metric is the most common metric used by other states to assess patient quality of life.

A few states also incorporated SPC into their state Medicaid program quality improvement initiatives through their DSRIP waivers. Common metrics included in these quality initiatives that were linked to financial incentives included: pain and symptom management, physical symptom management, mental health, and completion of ACP.

[70] Ibid.

## Promote Public Awareness and Provider Education

Several states are implementing continuing medical education requirements in end-of-life care, palliative care, or pain management to build provider capacity in SPC. Some states are also implementing policies and initiatives that require providers to share information with patients and require state health agencies to disseminate resources to the public about palliative care. Additionally, many states also have palliative care councils or task forces that develop recommendations to promote SPC.

# Future Opportunities for Quality Improvement in Texas

The study in this report identifies potential quality improvement and cost-savings opportunities in Texas from SPC services. Based on the review of other states with an SPC benefit, eligibility was often associated with chronic conditions most common among the Medicaid population.

The report identifies which chronic conditions are most common among decedents in the Texas Medicaid and MMP population. While some chronic conditions are more prevalent than others, experts on the PCIAC agreed that all beneficiaries with any of the eight leading chronic diseases could benefit from SPC services.[71] The analysis also shows IP stays and ED utilization were relatively high for Medicaid decedents with the top chronic conditions, especially from the 12 months before death. For individuals with a high chronic disease burden, palliative care services can help manage symptoms and reduce the number of IP stays and ED visits. Improvements in patient quality of care from the use of palliative care services could prevent unnecessary IP stays and ED visits, potentially providing cost

[71] Note: The eight leading chronic conditions include chronic kidney disease, heart failure/ischemic heart disease, diabetes, chronic obstructive pulmonary disease (COPD), liver disease/other liver conditions, Alzheimer's disease/related disorders or senile dementia, stroke, and cancer (breast, colorectal, endometrial, lung, prostate).

savings.[72] Providing SPC services to patients may reduce the length of stay and intensity of treatment and provide cost savings.[73]

Value-based payment strategies can promote SPC by developing APM arrangements or providing other incentives to promote the formation of new SPC teams in hospitals or community settings. Additionally, state Medicaid SPC programs could financially incentivize hospitals, MCOs, and other community-based SPC programs to meet certain quality standards of the Joint Commission or other palliative care certifying bodies.

[72] Spilsbury, K., Rosenwax, L., Arendts, G., & Semmens, J. B. (2017). The impact of community-based palliative care on acute hospital use in the last year of life is modified by time to death, age and underlying cause of death. A population-based retrospective cohort study. PloS one, 12(9), e0185275. https://doi.org/10.1371/journal.pone.0185275

[73] May, P., Garrido, M. M., Cassel, J. B., Kelley, A. S., Meier, D. E., Normand, C., Smith, T. J., & Morrison, R. S. (2017). Cost analysis of a prospective multi-site cohort study of palliative care consultation teams for adults with advanced cancer: Where do cost-savings come from?. Palliative medicine, 31(4), 378–386. https://doi.org/10.1177/0269216317690098

# List of Acronyms

| Acronym | Full Name |
|---|---|
| ACP | Advance Care Planning |
| AIP | Acute Inpatient |
| APM | Alternative Payment Model |
| BRFSS | Behavioral Risk Factor Surveillance System |
| CCW | Chronic Conditions Data Warehouse |
| CMS | Centers for Medicare and Medicaid Services |
| COPD | Chronic Obstructive Pulmonary Disease |
| CPT | Current Procedural Terminology |
| DSRIP | Delivery System Reform Incentive Payment Program |
| ED | Emergency Department |
| E&M | Evaluation and Management |
| FFS | Fee-for-Service |
| H.B. | House Bill |
| HCPCS | Healthcare Common Procedure Coding System |
| HEDIS | Healthcare Effectiveness Data and Information Set |
| HHSC | Health and Human Services Commission |
| ICHP | Institute for Child Health Policy |
| IP | Inpatient |
| I/O | Inpatient/Outpatient |
| MCO | Managed Care Organization |
| MMP | Medicare and Medicaid Plan |
| PACE | Programs of All-Inclusive Care for the Elderly |
| PCIAC | Palliative Care Interdisciplinary Advisory Council |
| S.B. | Senate Bill |
| SFY | State Fiscal Year |
| SPC | Supportive Palliative Care |

# Appendix A. List of Tables

**Table A-1: Medicaid Reimbursement for CPT and HCPCS Codes[74]**

| State | End-of-Life Counseling HCPCS (S0257) | Advanced Care Planning CPT (99497, 99498) | Home/Community Inter-disciplinary Care Team Consult CPT (99341- 99350) | I/O Interdisciplinary Care Team Consult CPT (99366, 99368) | Individual, Family, Marriage Counseling, In-Home CPT (99510) | Respite, In-Home HCPCS (T1005) |
|---|---|---|---|---|---|---|
| **AL** | | | X | | | |
| **AZ** | X | X | | | | |
| **CA** | X | X | X | X | | X |
| **CO** | | X (99497 only) | X | X | | X |
| **CT** | | | X | | | |
| **DE** | X | X | X | X | X | X |
| **DC** | | | X | X | | X |
| **FL** | | | X | | | |
| **GA** | | | X (99341, 99342, 99343 only) | | | |
| **HI** | | | X | X | | |
| **ID** | | X | X | X | | |
| **IL** | | | X | | | |
| **IN** | | | X | | | X |
| **IA** | | X | X | | X | X |
| **LA** | | | X | | | |
| **ME** | | | X | | | X |
| **MD** | | | X | | | |
| **MA** | | X | X | X | | |
| **MI** | | X | X | | | |
| **MN** | | | X | | X | X |
| **MO** | | | X | X (99366 only) | | |

[74] NASHP_State-Palliative-Care-Scan_Appendix-B-New.pdf

| State | End-of-Life Counseling HCPCS (S0257) | Advanced Care Planning CPT (99497, 99498) | Home/Community Inter-disciplinary Care Team Consult CPT (99341- 99350) | I/O Interdisciplinary Care Team Consult CPT (99366, 99368) | Individual, Family, Marriage Counseling, In-Home CPT (99510) | Respite, In-Home HCPCS (T1005) |
|---|---|---|---|---|---|---|
| **MT** | | X | X | | | |
| **NE** | | X | X | | | |
| **NV** | | | X | | | |
| **NH** | | X | X | X | | X |
| **NJ** | | | X (99347, 99348) | X | | X |
| **NM** | | X | X | | | |
| **NY** | | | X | | | |
| **NC** | | | X | | | X |
| **ND** | | | X | X (99366 only) | | |
| **OH** | | X | X | X | | |
| **OK** | | | X | X | | X |
| **OR** | | | X | | | |
| **PA** | | | X | | | |
| **SC** | | X | X | | X | |
| **SD** | | | X | X (99366 only) | | |
| **TX** | | | X | | | |
| **UT** | | X | X | X | | |
| **VT** | | | X | X | X | X |
| **VA** | X | X | X | X | X | X |
| **WA** | X | X | X | X | | |
| **WV** | | | X | | | |
| **WY** | | | X | X (99366 only) | | |
| **Total:** | 5 States | 17 States | 42 States | 19 States | 6 States | 14 States |

Note: This table highlights Medicaid programs that reimburse for a series of CPT and HCPCS codes that can be used to reimburse for individual palliative care services in inpatient, outpatient, or community settings. "X" denotes that the state provides the service.

**Table A-2: Texas BRFSS 2018 Data, Question: Do you have a written advance directive? (Adults 18+)**

| Demographics | Sample Size | % Yes | Yes 95% CI |
|---|---|---|---|
| Sex: Male | 3,641 | 28.1 | (25.0 – 31.5) |
| Sex: Female | 4,877 | 29.3 | (26.5 – 32.3) |
| Age 18 to 29 | 881 | 11.8 | (7.6 – 17.8) |
| Age 30 to 44 | 1,459 | 18.1 | (13.8 – 23.4) |
| Age 45 to 64 | 2,771 | 30.6 | (27.0 – 34.4) |
| Age 65+ | 3,261 | 51.4 | (47.1 – 55.7) |
| Race/Ethnicity: White, Non-Hispanic | 5,375 | 38 | (35.2 – 40.8) |
| Race/Ethnicity: Black, Non-Hispanic | 711 | 20.9 | (14.9 – 28.5) |
| Race/Ethnicity: Hispanic | 1,821 | 20.2 | (16.4 – 24.7) |

| Demographics | Sample Size | % Yes | Yes 95% CI |
|---|---|---|---|
| Race/Ethnicity: Other/Multiracial, Non-Hispanic | 422 | 22.4 | (16.0 – 30.5) |
| Income: <$25,000 | 1,960 | 21.6 | (17.3 -26.8) |
| Income: $25,000 to <$50,000 | 1,557 | 27 | (22.4 – 32.2) |
| Income: $50,000+ | 3,447 | 33.8 | (30.8 – 37.0) |
| Disability: Yes | 2,810 | 29.5 | (25.6 – 33.8) |
| Disability: No | 5,674 | 28.6 | (26.1 – 31.3) |
| Health Insurance: Yes | 7,265 | 33.1 | (30.7 – 35.5) |
| Health Insurance: No | 1,249 | 14.7 | (10.3 – 20.6) |
| **Total** | **8,556** | **28.8** | **(26.7 – 31.0)** |

Note: N = Sample size less than 50, estimate not displayed. R = Relative Standard Error greater than 30%, estimate unreliable and not displayed. All reported rates are weighted for Texas demographics and the probability of selection. Prepared by: Center for Health Statistics, Texas Department of State Health Services

**Table A-3: Texas BRFSS 2018 Data, Question: Do you have a written advance directive? (Adults 65+)**

| Demographics | Sample Size | % Yes | Yes 95% CI |
|---|---|---|---|
| Sex: Male | 1,246 | 46.3 | (39.8 - 52.9) |
| Sex: Female | 1,998 | 54.8 | (49.3 - 60.3) |
| Race/Ethnicity: White, Non-Hispanic | 2,431 | 60.5 | (55.6 - 65.1) |
| Race/Ethnicity: Black, Non-Hispanic | 227 | 38.3 | (22.3 - 57.2) |
| Race/Ethnicity: Hispanic | 423 | 30.6 | (22.9 - 39.5) |
| Race/Ethnicity: Other/Multiracial, Non-Hispanic | 111 | 40.7 | (22.3 - 62.1) |
| Income: <$25,000 | 751 | 41.5 | (33.0 - 50.5) |
| Income: $25,000 to <$50,000 | 683 | 50.0 | (41.6 - 58.4) |
| Income: $50,000+ | 1,043 | 61.1 | (53.6 - 68.2) |
| Disability: Yes | 1,516 | 47.2 | (40.5 - 53.9) |

| Demographics | Sample Size | % Yes | Yes 95% CI |
|---|---|---|---|
| Disability: No | 1,705 | 55.7 | (50.2 - 61.1) |
| Health Insurance: Yes | 3,184 | 52.7 | (48.3 - 57.0) |
| Health Insurance: No | 69 | R | (. - .) |
| Chronic Condition: Yes | 3,031 | 51.7 | (47.2 - 56.2) |
| Chronic Condition: No | 229 | 48.2 | (35.3 - 61.2) |
| **Total** | **3,261** | **51.4** | **(47.1 - 55.7)** |

Note: N = Sample size less than 50, estimate not displayed. R = Relative Standard Error greater than 30%, estimate unreliable and not displayed. Prepared by: Center for Health Statistics, Texas Department of State Health Services