

VNA Care Choices™

Home-Based
Supportive Palliative Care





Mission Statement

Our mission is to provide interdisciplinary home-based supportive palliative care services that meet the complex needs of patients with progressive, advanced and serious illnesses by delivering patient and family-centered compassionate care.

Medicare Care Choices Model



A National Need for a Palliative Care Program



Only 51.6% of Medicare beneficiaries use Hospice services at end of life
50% of hospice patients have a length of stay \leq 18 days

\$32,420 average cost of the last 90 days of life without Hospice
(with no \uparrow quantity or quality of life)

\$15,000 cost for 90 days Hospice (generally greater quality of life)



Medicare Care Choices Model

MCCM was a Medicare Pilot Program to determine if access to “hospice-like” support services would result in:

- Improved quality of care and patient/family satisfaction
- Reduction of total Medicare expenditures relating to ER visits, ambulance services, acute hospital stays and diagnostic tests/procedures

The Center for Medicare & Medicaid Innovation

- VNA applied to model in 2014
- Selected as one of 140 hospices
- VNA launched January 2018
- Model ended with 82 active hospices
- Model was scheduled to end December 2020
- Model extended through December 2021 due to success and to increased enrollment





Medicare Care Choices Model

National data:

6,427 enrolled through 9/30/20

83% participants enrolled in hospice

Requirements:

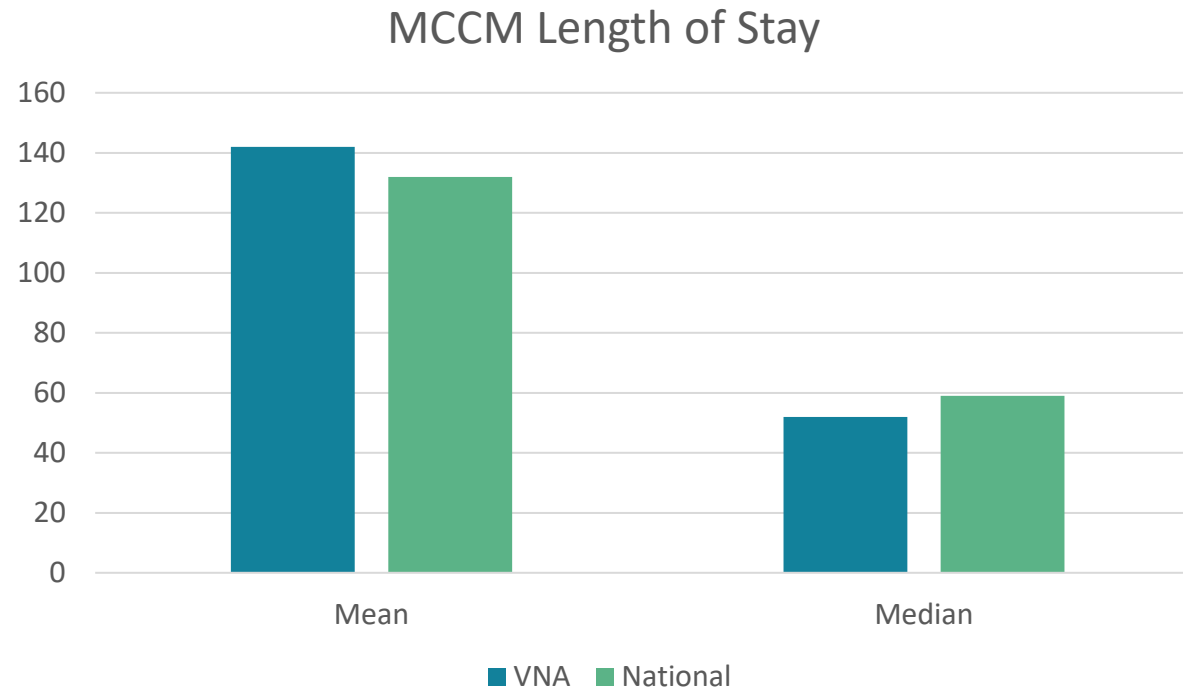
- End-stage cancer, chronic obstructive pulmonary disease, congestive heart failure and HIV
- Terminal prognosis <6 months
- Living at home or independent living
(no Assisted Living, Skilled Nursing Facility, Residential Care Home)
- Traditional Medicare Insurance

Medicare Care Choices Model

VNA received 724 referrals

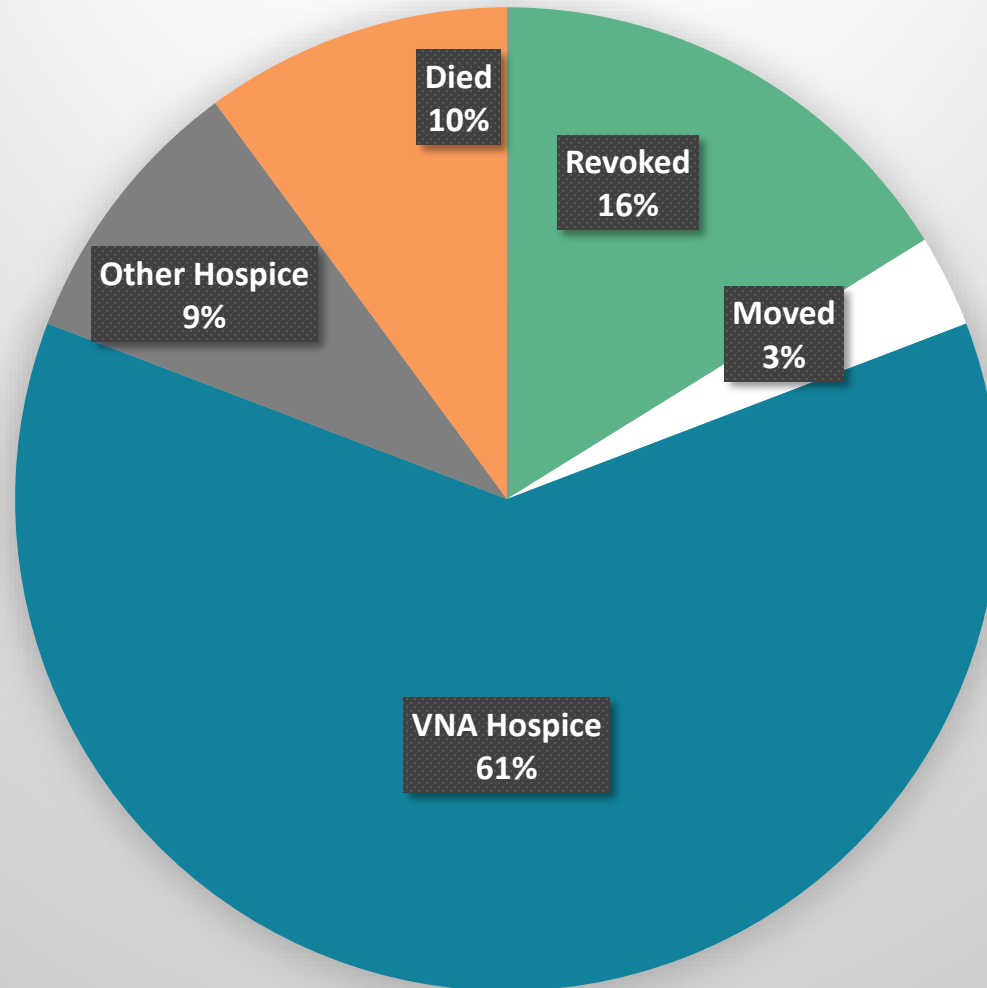
Enrolled 370 patients

Average daily census 45



Medicare Care Choices Model

Where Did Participants Go?



Impact Percentages

- 14% percent lower net Medicare A/B expenditures
- 26% fewer inpatient hospital admissions
- 14% fewer outpatient ER visits/observation stays

Note: VNA statistics were consistent with national data.





Savings

Medicare A/B expenditures

- \$7,254 saved per enrollee
- \$33.2 million saved for all enrollees
- 39% lower inpatient expenditures
- 22% lower Skilled Nursing Facility expenditures
- 22% lower “other” expenditures*

* Outpatient ER visits, ambulatory care visits, other medically necessary services



Quality of Life Measures

Outcomes	MCCM enrollees' mean	Percentage impact ^a
Percentage who received an aggressive life-prolonging treatment in the last 30 days of life ^b	46.1	26% decrease
Number of days at home ^c	167.5	4% increase
Percentage with more than one outpatient emergency department visit in last 30 days of life	2.6	21% decrease
Percentage with more than one hospitalization in last 30 days of life	5.2	45% decrease
Percentage with an intensive care unit admission in last 30 days of life	17.4	46% decrease
Percentage with death in an acute care hospital	10.1	54% decrease

Sources: Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2013, to March 31, 2021.

Hospice Election from MCCM

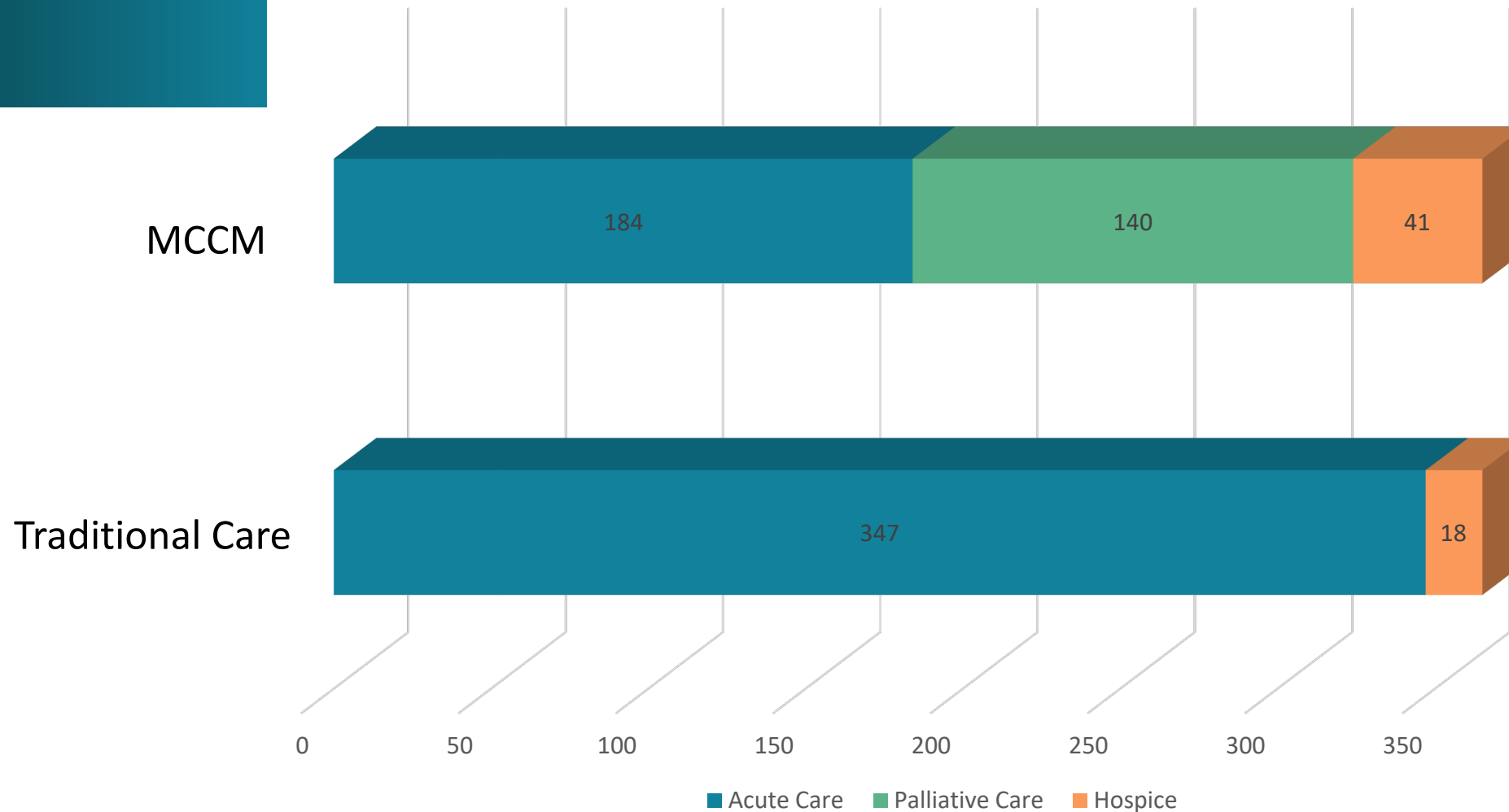
- 43% more likely to elect hospice
- 126% longer days on Hospice after MCCM Palliative Care
- 13% more days of hospice benefits



Care Timeline

Traditional Care vs MCCM Palliative Care

Last Year of Life





Proof of Concept

- The data supports the effectiveness of the program
- Based on these outcomes, the MCCM proof-of-concept bears out and is worth continuing
- This is why VNA is uniquely positioned to provide high-quality supportive palliative care, based in part on the MCCM model



Lessons Learned

Physicians and patients are searching for hospice alternatives for those not ready for the hospice discussion

Palliative offers support to patients that may never seek hospice but still need care navigation and symptom management

Palliative does prevent unnecessary hospitalizations by giving patients an alternative health care option

Transition from palliative to hospice is less traumatic and often initiated by the patient versus provider, for those patients who are appropriate and at that end of the health care continuum

VNA Care Choices Home-Based Supportive Palliative Care



Target Populations

COPD

CHF

Cancer

Liver Failure

Pulmonary Failure





Program Goals

- Prevent unnecessary hospitalizations
- Provide expert symptom management
- Educate on disease process
- Medication review
- Emotional and spiritual support
- Coordination with other doctors/clinicians
- Facilitate communication between the patient and physician
- Assist in advanced care planning/goals of care discussions



Team Approach

Interdisciplinary Team Approach:

Patient's Primary Physician or Specialist
(continues to be principal physician for patient)

Palliative Care Physician & Nurse
Practitioners

RN Case Manager

Medical Social Worker

Chaplain

Pharmacist



Reimbursement Source Targets

- Managed Medicare
- Private Insurance Contracts
- Managed Medicaid
- Hospital Systems
- ACOs



References

Medicare Care Choices Model Quarterly Hospice Report Q4 2020-Q3-2021 for 45-106 Visiting Nurse Association of Texas

Evaluation of the Medicare Care Choices Model, Annual Report 4, April 2022, K Kranker, M Niedzwiecki, R Vincent Pohl, A Chen, M Luhr, L V Forrow, V Cheh

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The Impact of a Home-Based Palliative Care Program in an Accountable Care Organization

Dana Lustbader, Mitchell Mudra, Carole Romano, Ed Lukoski, Andy Chang, James Mittelberger, Terry Scherr, and David Cooper

Published Online: 1 Jan 2017 <https://doi.org/10.1089/jpm.2016.0265>

National Hospice and Palliative Care Organization Facts and Figures: 2021 Edition
<https://www.nhpc.org/hospice-facts-figures/>

<https://www.caringinfo.org/>

Appendix

Table ES.1. Estimated effects of MCCM on the evaluation's primary quantitative beneficiary outcome measures

Outcome	MCCM mean	Comparison mean	Impact estimate	Percentage impact
Average Medicare Part A and B expenditures (\$ per beneficiary)	44,149	53,229	-9,080	-17%
Average Medicare Part A and B expenditures plus MCCM payments (\$ per beneficiary)	45,976	53,229	-7,254	-14%
Average number of inpatient admissions (number per 1,000 beneficiaries)	1,187	1,608	-421	-26%
Number of outpatient emergency department visits and observation stays (number per 1,000 beneficiaries)	839	970	-131	-14%
Percentage who elected the Medicare hospice benefit	83	64	19	+29%
Percentage who received an aggressive life-prolonging treatment in the last 30 days of life	46	62	-16	-26%
Average number of days at home ^a	167	161	6	+4%

Sources: Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2013, to March 31, 2021.

Note: We base impact estimates on regression-adjusted differences between MCCM enrollees (N = 4,574) and matched comparison beneficiaries (N = 13,575 before weighting). It covers beneficiaries who enrolled through September 30, 2020, and their experiences in the model. All seven impact estimates in this table were statistically significant at the $p < 0.001$ level. The rest of this report and its technical appendices discuss methods and results in more detail.

^a Days at home counts the number of days a beneficiary is alive and not admitted to a hospital, inpatient rehabilitation facility, long term care hospital, or skilled nursing facility.



Appendix

Table II.2. Unadjusted time-to-event analyses for deceased MCCM enrollees: MCCM beneficiaries live slightly more than 6 months on average, with the vast majority enrolling in hospice at the end of life

Measure	Mean number of days	Median number of days	Sample size (percentage of MCCM enrollees)
Time from enrollment to end of life	185	104	4,574 (100%)
Time from enrollment to Medicare hospice benefit enrollment ^a	132	59	3,801 (83%)
Time from Medicare hospice benefit enrollment to death ^a	52	15	3,801 (83%)

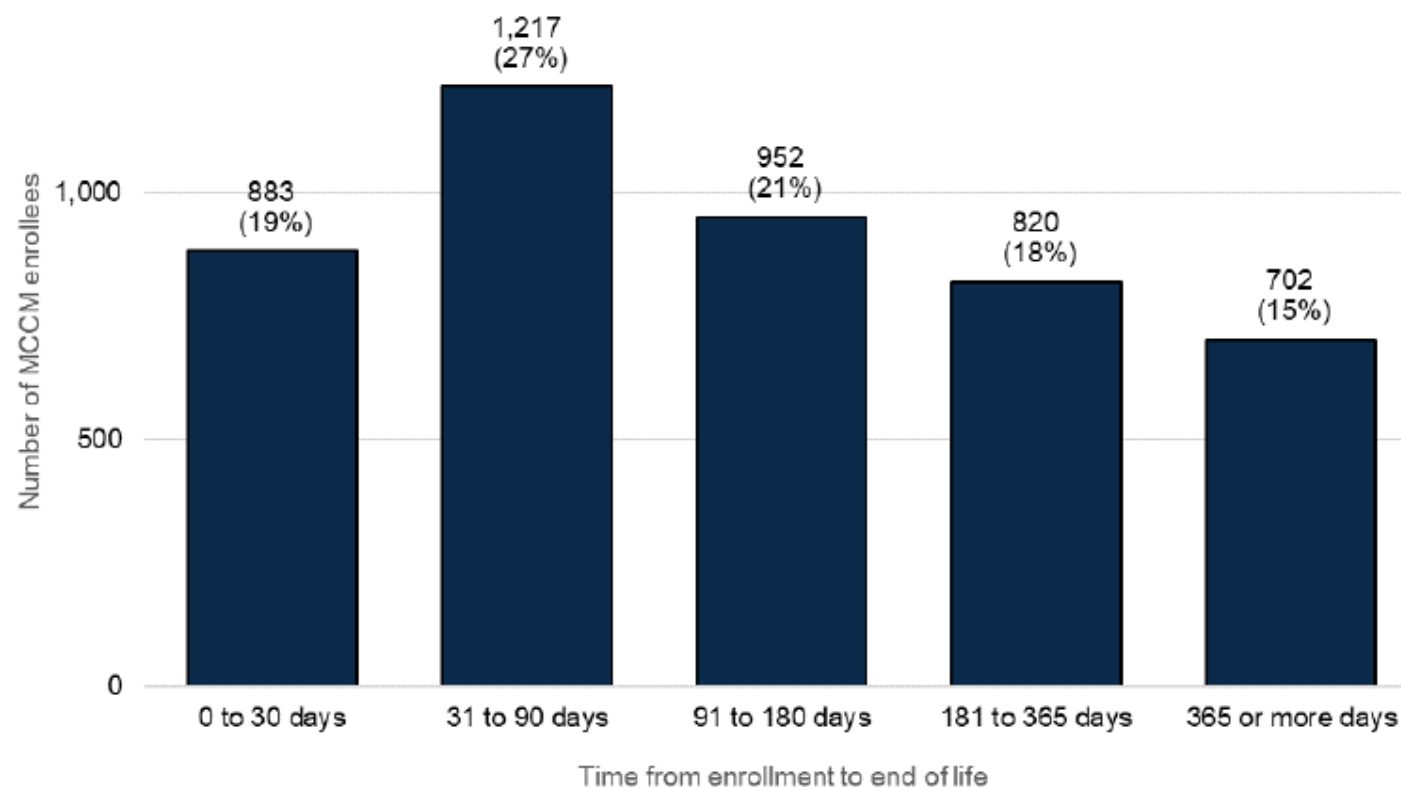
Sources: MCCM program data, Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2013, to September 30, 2020.

^a This measure was calculated among beneficiaries who elected the Medicare hospice benefit before death.

MCCM = Medicare Care Choices Model.

Appendix

Figure II.2. Distribution of time from enrollment to end of life for deceased MCCM enrollees: Two-thirds of enrollees lived less than six months and 15 percent lived longer than one year

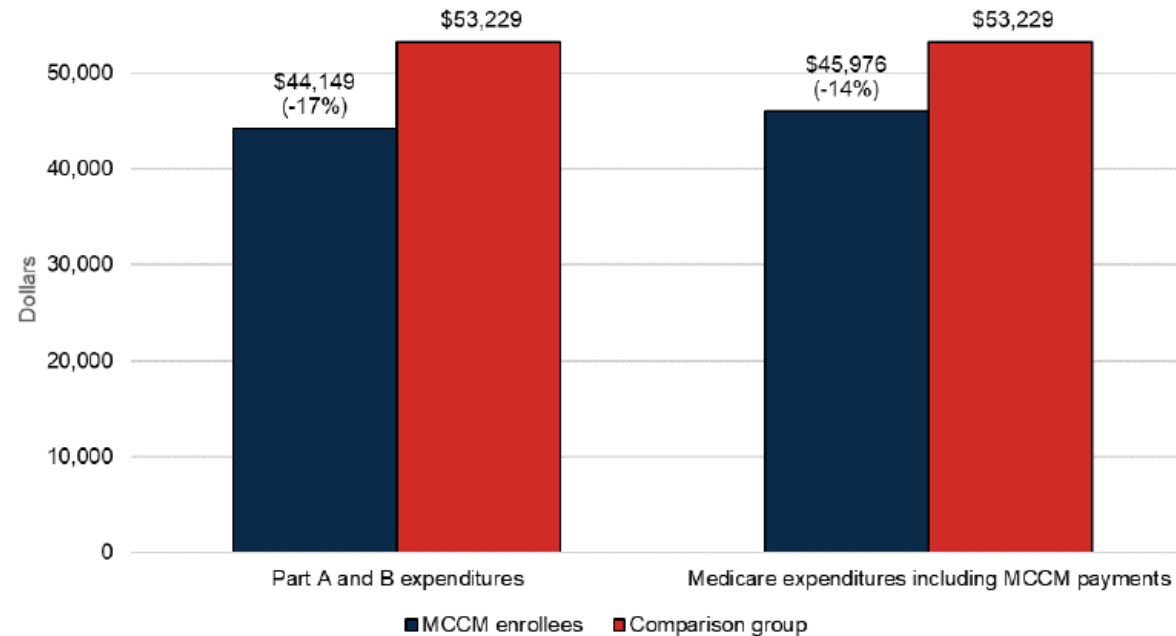


Sources: MCCM program data, Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2013, to September 30, 2020.

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Appendix

Figure III.1. Average Medicare expenditures for deceased MCCM enrollees and matched comparison beneficiaries: MCCM enrollees had lower Medicare expenditures, even when accounting for model payments



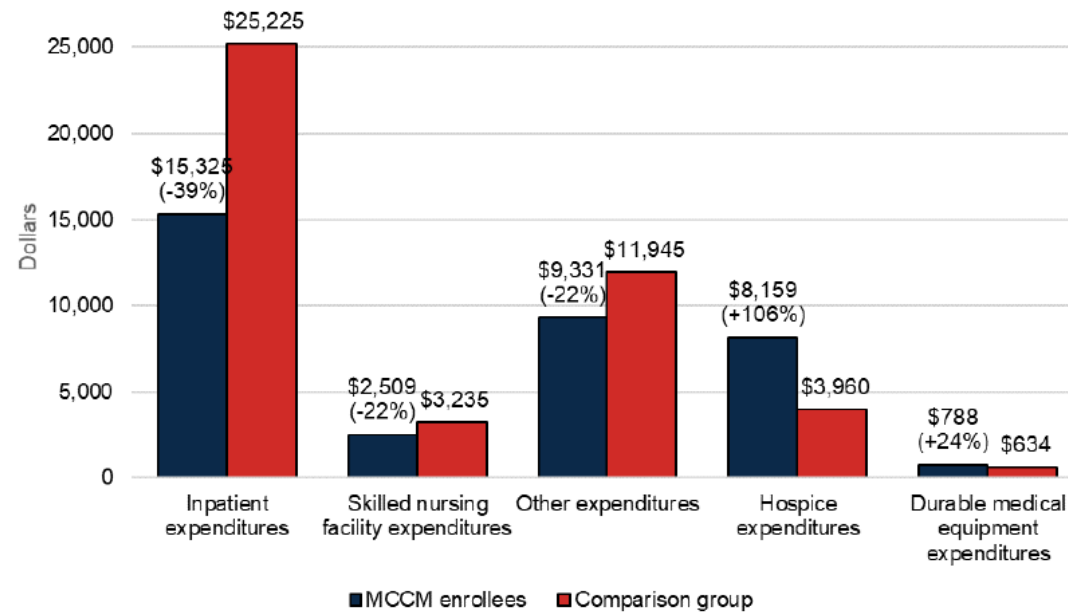
Sources: Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2013, to March 31, 2021.

Note: We base impact estimates on regression-adjusted differences between MCCM enrollees (N = 4,574) and matched comparison beneficiaries (N = 13,575 before weighting). It covers beneficiaries who enrolled through September 30, 2020, and their experiences in the model. Numbers in parentheses above MCCM enrollees' bars show estimated percentage impacts. Impacts estimates for Medicare expenditures were statistically significant at the $p < 0.01$ level. See Appendix D, Table D.1 for full impact analysis results for these outcome measures.

MCCM = Medicare Care Choices Model.

Appendix

Figure III.2. Average Medicare expenditures, by type of health care service, for deceased MCCM enrollees and matched comparison beneficiaries: MCCM enrollees had lower inpatient, skilled nursing facility, and other expenditures and higher hospice and durable medical equipment expenditures



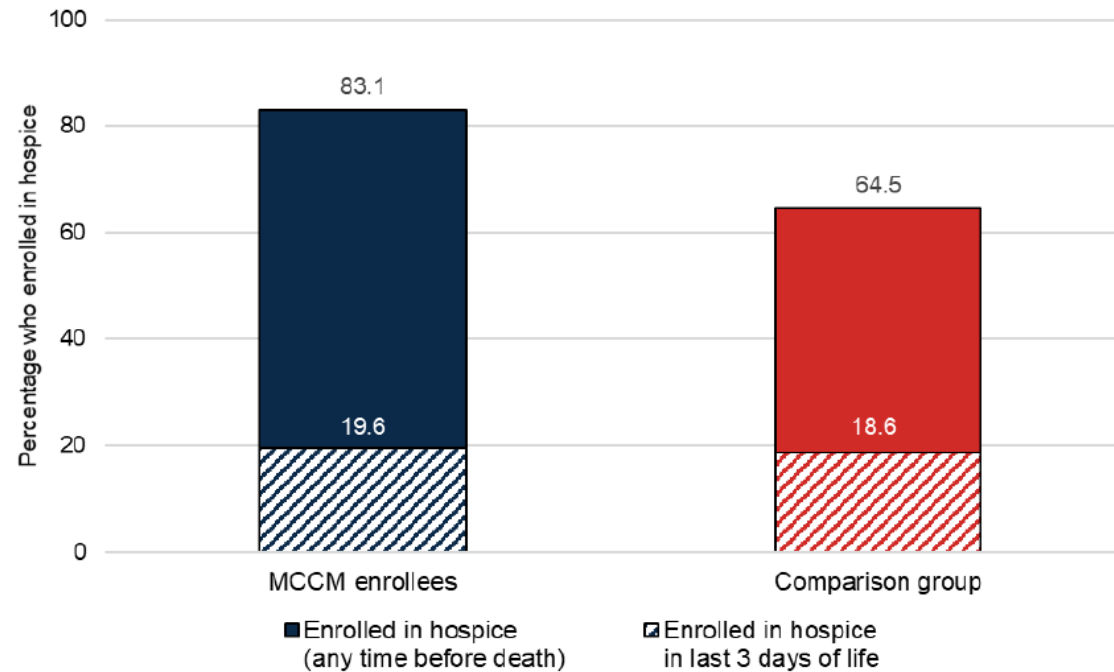
Sources: Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2013, to March 31, 2021.

Note: We base impact estimates on regression-adjusted differences between MCCM enrollees (N = 4,574) and matched comparison beneficiaries (N = 13,575 before weighting). It covers beneficiaries who enrolled through September 30, 2020, and their experiences in the model. "Other expenditures" include expenditures for outpatient emergency department visits, ambulatory care visits, and other medically necessary services. Numbers in parentheses above MCCM enrollees' bars show estimated percentage impacts. Impacts estimates were statistically significant at the $p < 0.05$ level. See Appendix D, Table D.1 for full impact analysis results for these outcome measures and other categories of Medicare expenditures.

MCCM = Medicare Care Choices Model.

Appendix

Figure IV.2. Hospice enrollment for deceased MCCM enrollees and matched comparison beneficiaries: MCCM enrollees elected hospice at higher rates than comparison beneficiaries, but the difference was not driven by those who elected hospice in the last three days of life



Sources: Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2016, to March 31, 2021.

Note: We base impact estimates on regression-adjusted differences between MCCM enrollees (N = 4,574) and matched comparison beneficiaries (N = 13,575 before weighting). It covers beneficiaries who enrolled through September 30, 2020, and their experiences in the model. Impact estimates for electing hospice (solid shading) were statistically significant at the $p < 0.01$ level. However, estimates for MCCM's impact on electing hospice in the last three days of life (dotted shading) were not statistically significant. See Appendix D, Table D.3 for full impact analysis results for these outcome measures.

MCCM = Medicare Care Choices Model.

Appendix

Table V.1. Regression-adjusted differences in quality of care and beneficiaries' experiences between deceased MCCM enrollees and matched comparison beneficiaries: MCCM beneficiaries more often had outcomes consistent with higher quality end-of-life care

Outcomes	MCCM enrollees' mean	Percentage impact ^a
Percentage who received an aggressive life-prolonging treatment in the last 30 days of life ^b	46.1	26% decrease
Number of days at home ^c	167.5	4% increase
Percentage with more than one outpatient emergency department visit in last 30 days of life	2.6	21% decrease
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Percentage with an intensive care unit admission in last 30 days of life	17.4	46% decrease
Percentage with death in an acute care hospital	10.1	54% decrease

Sources: Medicare Enrollment Database, Master Beneficiary Summary File, and Medicare claims data, January 1, 2013, to March 31, 2021.

Note: We base impact estimates on regression-adjusted differences between MCCM enrollees (N = 4,038) and matched comparison beneficiaries (N = 11,935). It covers beneficiaries who enrolled through September 30, 2020, and their experiences in the model. See Appendix D, Table D.5 for full impact analysis results for these outcome measures.

^a MCCM mean minus the comparison mean divided by the comparison mean (regression adjusted). All impact estimates in this table were statistically significant at the $p < 0.05$ level. As described in Appendix A, even after matching, the regression models controlled for residual differences in beneficiaries' characteristics, differences in baseline outcomes, and hospice market area fixed effects.

^b As discussed in the text, nearly all of the validated aggressive life-prolonging treatments are disease-specific, so we created a composite outcome of *any* of the validated aggressive life-prolonging treatment specific to a beneficiary's condition in the last 30 days of life. See Appendix B, Exhibit B.3 for details.

^c Days at home counts the number of days a beneficiary is alive and not admitted to a hospital, inpatient rehabilitation facility, long term care hospital, or skilled nursing facility. The number of days at home is calculated only for those