About this Report

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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CAHPS®</td>
<td>Consumer Assessment of Healthcare Providers and Systems</td>
</tr>
<tr>
<td>Caregiver survey</td>
<td>Caregiver Experience of Care Survey</td>
</tr>
<tr>
<td>CCN</td>
<td>CMS Certification Number</td>
</tr>
<tr>
<td>CHF</td>
<td>Congestive heart failure</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>COPD</td>
<td>Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>HCC</td>
<td>Hierarchical condition category</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human immunodeficiency virus/acquired immunodeficiency syndrome</td>
</tr>
<tr>
<td>MCCM</td>
<td>Medicare Care Choices Model</td>
</tr>
<tr>
<td>MHB</td>
<td>Medicare hospice benefit</td>
</tr>
<tr>
<td>QAPI</td>
<td>Quality assurance and performance improvement</td>
</tr>
<tr>
<td>24/7</td>
<td>Twenty-four hours a day, seven days a week</td>
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## Taxonomy of Call-Out Boxes

Throughout Annual Report 2, several types of call-out boxes provide more information.

<table>
<thead>
<tr>
<th>Type</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>Describes where to find additional information on beneficiary-level data.</td>
<td>Describes where to find additional information on beneficiary-level data.</td>
</tr>
<tr>
<td>Provides details on where to find additional information on data collection, methodology, or analysis.</td>
<td>Provides details on where to find additional information on data collection, methodology, or analysis.</td>
</tr>
<tr>
<td>Includes cross-references for hospice-level data.</td>
<td>Includes cross-references for hospice-level data.</td>
</tr>
<tr>
<td>Provides hospice staff, beneficiary, or caregiver perspectives.</td>
<td>Provides hospice staff, beneficiary, or caregiver perspectives.</td>
</tr>
<tr>
<td>Details hospice innovations in implementing Medicare Care Choices Model.</td>
<td>Details hospice innovations in implementing Medicare Care Choices Model.</td>
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Executive Summary

Under current Medicare policy, beneficiaries who elect the Medicare hospice benefit (MHB) must forgo coverage for non-hospice services intended to treat their terminal condition. Due in part to this policy, fewer than half of all beneficiaries elect MHB at the end of life, and they often do so less than a week before death—too late in their disease trajectory to experience the full benefit of hospice care. In 2016, the Center for Medicare & Medicaid Innovation at the Centers for Medicare & Medicaid Services (CMS) implemented the Medicare Care Choices Model (MCCM).

MCCM tests the impact of allowing eligible beneficiaries the option to receive supportive services from participating hospices while continuing to receive coverage for treatment of their terminal condition through fee-for-service. Medicare beneficiaries who enroll in MCCM receive supportive care that is generally similar to most MHB services, which include care coordination and case management, nursing care, medical social services, hospice aide care, volunteer services, and bereavement counseling for enrollees and their caregivers.¹

Medicare beneficiaries are eligible for MCCM if they have one or more of the following diagnoses: Advanced cancer, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), or human immunodeficiency virus/acquired immunodeficiency syndrome; have a prognosis of six months or less to live if the disease runs its expected course; and satisfy other eligibility criteria.²

¹ Some MHB-covered services are not covered under MCCM. Under MHB, but not MCCM, hospices directly provide care related to the beneficiary’s terminal condition, including physician services; medications; durable medical equipment; and physical, occupational, and speech therapy, as needed. However, MHB does not cover life-prolonging services. For MCCM enrollees, traditional fee-for-service Medicare covers these additional services and equipment, and enrollees can receive life-prolonging services under their fee-for-service insurance.

² Medicare beneficiaries who meet the following criteria are eligible for MCCM:
   - Has been enrolled in Medicare fee-for-service Part A and Part B as their primary insurance for the past 12 months
   - Has a 6-month prognosis documented with a certification of terminal illness
   - Has a diagnosis of advanced cancer, CHF, COPD, or human immunodeficiency virus/acquired immunodeficiency syndrome
   - Has had at least 1 hospital encounter in the last 12 months
   - Has had at least 3 office visits with any provider (defined as the person’s primary care or specialty provider)
Hospices participating in MCCM receive $400 per beneficiary per month to cover the supportive care services and care coordination activities they provide to enrolled beneficiaries. CMS randomized participating hospices into two cohorts: Cohort 1 implemented the model beginning on January 1, 2016, and cohort 2 began on January 1, 2018.

This report presents preliminary evaluation findings for beneficiaries who enrolled in MCCM between January 1, 2016 and June 30, 2018, and findings for participating hospices through December 31, 2018, unless otherwise noted. Low MCCM enrollment to date limits our ability to assess the impact of MCCM on Medicare expenditures and other outcomes at the end of life. Instead, this report focuses on MCCM enrollment patterns; implementation of the model; and experiences of participating hospices, and beneficiaries and their caregivers.

The evaluation has identified four cross-cutting findings so far, as shown in Exhibit ES.1. We discuss these findings in more detail throughout the report.

- Has not elected MHB or the Medicaid hospice benefit in the last 30 days
- Has lived in a traditional home continuously for the last 30 days
- Resides within the service area of the participating hospice

3 Beneficiaries who enroll in MCCM retain the option to elect MHB at any time, if they wish to receive hospice services beyond those offered under MCCM. If a beneficiary enrolls for less than 15 days in the first month of enrollment, the MCCM hospice will receive only $200 for that month.


5 This report contains recently updated data describing trends in hospice participation and beneficiary enrollment, where noted.
Maturation and evolution of MCCM over time was associated with increased beneficiary enrollment, expanded care delivery, and positive participant experience.

Participating hospices differed in the ease and effectiveness of their implementation process. These differences may account for variation in MCCM enrollment and service delivery.

MCCM GOALS:
- Increase access to supportive services
- Improve quality of life and care
- Inform new payment systems

MCCM beneficiaries and caregivers received services consistent with a high quality of care and high quality of life at the end of life, and reported satisfaction with MCCM.

MCCM may offer a bridge to the Medicare hospice benefit (MHB), as well as counseling, symptom management, and supportive care for beneficiaries who might otherwise not have access to those services.
Below we summarize important findings from each section of Annual Report 2.

**Who Participates in MCCM?**

- Eighty-five hospices, 60 percent of the 141 hospices originally selected to participate in MCCM, remained active in MCCM as of June 30, 2019 (43 in cohort 1 and 42 in cohort 2). Withdrawals slowed as implementation of MCCM progressed, and the experiences of hospices in the model and community providers improved over time. Six hospices withdrew during the first half of 2019, compared to 13 in 2018, 20 in 2017, 5 in 2016, and 12 in the year prior to model implementation in 2015. Hospices that withdrew from the model were similar to hospices that remained in MCCM in terms of ownership status, size, age, and other organizational characteristics.

- The original 141 MCCM hospices were more likely to be non-profit than all other hospices (69 percent versus 20 percent), and they were more likely to be classified as large\(^6\) compared to other hospices (77 percent versus 28 percent). The original 141 MCCM hospices have also been in business longer than other hospices, with 52 percent of MCCM hospices initiating operations prior to 1990 compared to 10 percent of other hospices. These differences suggest that the evaluation results of MCCM are not generalizable to the entire hospice industry.

- MCCM enrollment increased, with the addition of cohort 2 hospices, to a total of 4,465 beneficiaries as of May 31, 2019. Eight hospices accounted for over 50 percent of MCCM enrollment. This uneven pattern may limit the generalizability of evaluation findings.

- MCCM enrollees were more likely than MCCM-eligible decedents not in MCCM to have cancer (58 percent versus 39 percent), more likely to have lower predicted health care costs as measured by hierarchical condition category scores (2.2 versus 2.7), and less likely to be dually eligible for Medicare and Medicaid (6 percent versus 16 percent). We plan to adjust for these differences in future analyses.

- Almost half of the 16,519 Medicare beneficiaries (43 percent) referred to MCCM by community providers met all of the eligibility requirements for the model, as of May 31, 2019. Among the 7,168 MCCM-eligible beneficiaries, 62 percent enrolled in MCCM and 19 percent enrolled directly in MHB.

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\(^6\) We categorized hospices as large if they provided 20,000 or more routine home care days under the MHB in 2015 (the year before MCCM began). This classification is used by CMS for hospice payment and policy. See https://www.federalregister.gov/documents/2017/08/04/2017-16294/medicare-program-fy-2018-hospice-wage-index-and-payment-rate-update-and-hospice-quality-reporting.
How Do Hospices Implement MCCM?

- Strong organizational leadership, well-defined MCCM care teams providing an array of supportive services, and clear communication channels facilitated MCCM implementation.

- Prior experience with a palliative care or similar program may facilitate MCCM enrollment and implementation when staff are familiar with the goals of both supportive services and treatment for serious illnesses. However, several hospices with low MCCM enrollment noted that other local palliative care programs, or even the hospice’s own palliative care programs, can compete for enrollment with MCCM.

- Participating hospices leveraged their existing staff to implement the core components of MCCM, and few hired new staff. A key to beneficiary satisfaction was having the same care team and staff while in MCCM and later after transitioning to MHB.

- As a new model, MCCM was unfamiliar to most providers and beneficiaries. Enhancing awareness of the advantages of MCCM was critical for increasing referrals from local providers, and MCCM hospices targeted outreach to referring providers that likely would have a high volume of potential referrals (e.g., oncologists and community providers). Direct outreach to beneficiaries and their caregivers also enhanced awareness of MCCM.

- Oncologists referred more than one-third (37 percent) of the beneficiaries that MCCM hospices enrolled, followed by internal medicine and family practice physicians (51 percent). The types of physicians who referred beneficiaries to MCCM did not change from 2016 to 2018.

- Cohort 2 hospices learned from their peers in cohort 1, who had two years of implementation experience by the time cohort 2 hospices joined the model. Cohort 2 hospices adopted best practices on how to integrate MCCM into their organizational infrastructure and service lines, and enrolled more beneficiaries in their first six months of participating in MCCM than was true in the first six months of cohort 1.

- MCCM hospices also learned from CMS implementation support activities, including training and informational in-person meetings and webinars, and peer-based virtual sessions. CMS project officers provided support to hospices in solving problems and identifying improvements.
What Elements of Care Do MCCM Enrollees Receive?

- MCCM provides enrollees with a wide array of beneficial services. Comprehensive assessments ensure that hospice staff have complete information with which to create individualized care plans and provide appropriate services. Once enrolled in MCCM, beneficiaries quickly began to receive services and then met with MCCM staff multiple times per month.

- Almost 78 percent of MCCM enrollees received an initial assessment, as of June 30, 2018. Over 80 percent of those eligible (based on their length of enrollment in MCCM) received a 5-day comprehensive assessment, and 67 percent received a 15-day comprehensive assessment.

- Most MCCM encounters (75 percent) were in person; the remaining encounters were by telephone (25 percent) or, infrequently, online (less than 1 percent).

- Enrollees had, on average, 10 encounters per month with MCCM staff, including 3.1 encounters per month with registered nurses/licensed practical nurses, 3.1 encounters per month with care coordinators, and 2.3 encounters per month with social workers. Enrollees had less than one encounter per month, on average (0.8 encounters with hospice aides and 0.7 encounters per month with all other disciplines combined).

- MCCM enrollees with cancer tended to receive services for their terminal condition that could potentially be life prolonging while enrolled in MCCM. Of the 1,526 MCCM enrollees with cancer, the majority (71 percent) had at least 1 office visit where the provider’s specialty was oncology (i.e., either medical oncology or radiation oncology), while enrolled in MCCM.

- Overall, 43 percent of beneficiaries received services under the Medicare home health benefit while enrolled in MCCM and receiving services under the model. Cohort 1 had a higher percentage of enrollees receiving home health services than cohort 2 (46 percent versus 33 percent). Among those receiving home health services, cohort 1 enrollees had more home health visits, on average, than did cohort 2 enrollees (5.3 versus 4.0).
What Do We Know about Transitions from MCCM to MHB?

- MCCM offers supportive services that may ease the transition to MHB. The majority of MCCM enrollees (83 percent) transitioned to MHB prior to death. MCCM decedents spent, on average, 78 days in MCCM, followed by 37 days in MHB prior to death.\(^7\)

- From 2016 to 2018, the overall rate of transition from MCCM to MHB remained largely the same. However, the proportion of decedents transitioning to MHB in the last 2 days of life increased from 7 percent to 12 percent. Just 1 or 2 days of full hospice care at the end of life is generally considered poor-quality care compared to being enrolled in hospice for a longer time, or at least represents an insufficient length of time to manage a dying person’s symptoms. However, this delayed entry to MHB may reflect that MCCM enrollees were receiving adequate supportive care through the model, and that some beneficiaries may not have enrolled in MHB had they not first enrolled in MCCM.

- MCCM decedents with a primary diagnosis of cancer transitioned to MHB an average of 67 days after enrollment, which is sooner than decedents with COPD or CHF, who transitioned an average of 101 and 118 days after MCCM enrollment, respectively. The difference in this MHB transfer rate reflects the less-predictable disease trajectory of COPD and CHF.

- Approximately 90 percent of caregivers for MCCM decedents who transitioned to MHB indicated that the MHB transition happened at the right time, and that the beneficiary and caregivers were involved as much as they wanted to be in the MHB decision. Also, 91 percent of caregivers indicated there was no pressure from hospices’ MCCM teams on MCCM enrollees to transition to MHB. Caregivers for decedents not enrolled in MCCM (comparison beneficiaries) had similar experiences of shared decision making with MHB.

- Some MCCM decedents never transitioned to MHB. Seventeen percent of the 245 MCCM decedents who did not transition to MHB died during the performance period; the remaining 84 percent stayed in MCCM until death. Hospices indicated that the most common reasons that MCCM enrollees did not transition to MHB were a rapid decline in the enrollee’s condition (i.e., no time for transition to MHB); beneficiaries’ or caregivers’ desire to continue life-prolonging treatment for the terminal condition; and enrollees or their caregivers not wanting to “give up,” which they believed occurs when electing MHB.

\(^7\) Note that the amount of time from MCCM enrollment to MHB transition to death (114 days) is exactly 1 day greater than the amount of time from MCCM enrollment to death (113 days). This is because in calculating the timing from MCCM to MHB transition, we count the transition day twice for the total. For example, suppose a person enrolls in MCCM on Monday, transitions to MHB on Tuesday, and dies on Wednesday. We would say their total survival was 3 days (Monday, Tuesday, and Wednesday); they were on MCCM 2 days before transitioning to MHB (Monday and Tuesday); and they elected MHB 2 days before death (Tuesday and Wednesday).
How Does MCCM Affect the Quality of Care Experienced by MCCM Enrollees and Their Caregivers?

- The majority of MCCM hospices screened all or almost all enrollees for pain and shortness of breath. Of the MCCM enrollees assessed as having pain or shortness of breath, MCCM nurses judged that palliation was sufficient for pain in 91 percent of encounters and for shortness of breath in 97 percent of encounters.

- There is room for improvement in screening for and addressing emotional and spiritual needs. For example, 8 MCCM hospices with at least 10 enrollees screened fewer than 90 percent of enrollees for emotional concerns, and 13 MCCM hospices with at least 10 enrollees screened fewer than 90 percent of enrollees for spiritual concerns.

- MCCM hospice staff spoke with 77 percent of beneficiaries and/or caregivers about their goals of care within the first week of MCCM enrollment. MCCM hospice staff conducted advance care planning discussions with over 95 percent of MCCM enrollees, helping to avoid unwanted hospitalizations and ensure more seamless transitions to care provided under MHB.8

- Caregivers’ ratings of MCCM enrollee quality of life were similar (an average of 8.8 out of a possible 10) to those for comparison beneficiaries in MHB.

- Caregivers of MCCM enrollees who transitioned to MHB prior to death reported care consistent with enrollees’ goals and services that met enrollees’ needs, and rated MCCM highly overall (9.1 out of a possible 10).

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8 MCCM discharge typically leads to an enrollment in MHB, but can also result from death or the beneficiary wanting to leave the model.
**Lessons Learned, Limitations, and Next Steps**

This second report of the evaluation of MCCM presents findings from descriptive analyses on a broad array of topics. As MCCM is still ongoing, patterns and trends discussed in this report may change with additional years of the model. Further, some beneficiaries who had enrolled in MCCM during the period covered by this report are still in MCCM (i.e., have not yet died), and this report does not reflect all their outcomes (e.g., total time in MCCM, services received, metrics related to death).

MCCM is a voluntary model, and we know that participating hospices differ in important ways from those that did not volunteer. Enrollment is concentrated in eight hospices that account for just over 50 percent of all beneficiaries in the model. Findings in this report may therefore not be generalizable to all hospices nationwide.

The comparisons in this report are purely descriptive, not causal. Beneficiary-level differences that we cannot measure using Medicare claims and administrative data include specific MCCM eligibility requirements—for example, certification that the beneficiary is within six months of death if the end-stage condition runs its usual course, and information on the beneficiary’s preferences for treating the terminal illness versus receiving only supportive services.

In future reports, we will use sophisticated statistical analyses to measure impacts that control for differences between beneficiaries in MCCM and comparison groups. We will continue to monitor trends in enrollment, satisfaction with the model, and use of health care services. We will also examine how organizational characteristics, implementation processes, and technical assistance, influence enrollment and care delivery. We will measure the impact of MCCM by comparing beneficiaries who enrolled in MCCM with a matched comparison group of similar beneficiaries who did not enroll in the model.
1. Introduction

Terminally ill beneficiaries and their caregivers face a difficult choice when considering the Medicare hospice benefit (MHB). Current Medicare policy requires that beneficiaries electing MHB forgo non-hospice services intended to treat their terminal condition. Due in part to this policy, fewer than half of all beneficiaries elect MHB near the end of life, and those that do are often too far along in their disease trajectory to experience the full benefit of hospice care. Prior research has shown that individuals who continue to receive treatment for their terminal condition—while also receiving hospice services to increase comfort—report improved quality of life and greater satisfaction with their health care, and are less likely to be admitted to an intensive care unit.9,10,11,12,13,14,15,16,17

In 2014, the Center for Medicare & Medicaid Innovation in the Centers for Medicare & Medicaid Services (CMS) launched the Medicare Care Choices Model (MCCM). MCCM tests the effects of allowing eligible beneficiaries the option to receive supportive care services from participating hospices while continuing to receive coverage for treatment of their


terminal condition through fee-for-service Medicare. MCCM focuses on Medicare beneficiaries who are eligible for MHB and have one or more of the following diagnoses: Advanced cancer, congestive heart failure, chronic obstructive pulmonary disease, and human immunodeficiency virus/acquired immunodeficiency syndrome; and a prognosis of six months or less to live if the disease runs its expected course. Participating hospices in cohort 1 began providing MCCM services on January 1, 2016, and cohort 2 implemented the model on January 1, 2018.

MCCM has six hallmarks, as shown in Exhibit 1.1: Care coordination and case management; twenty-four hours, seven days a week (24/7) access to the hospice team; person- and family-centered care planning; shared decision making; symptom management; and counseling. Complete definitions of the hallmarks appear in Appendix A.

CMS contracted with Abt Associates and our partners to evaluate whether MCCM accomplishes the following key objectives:

- Increased access to supportive care services provided by hospices
- Improved coordination of care among hospice and other community providers
- Improved beneficiary and caregiver satisfaction with care at the end of life
- Enhanced quality of care and quality of life
- Reduced Medicare expenditures

Previously, we found that participating hospices were successfully implementing MCCM, but that beneficiary enrollment was lower than expected (Annual Report 1, September 2018). Hospice staff, referring providers, and MCCM enrollees generally expressed high levels of satisfaction with MCCM and the care provided under the model.

This second MCCM evaluation report (Annual Report 2) incorporates data from another year of experience with the model. We provide further details in the report on how hospices implemented the model, the services hospices provided MCCM beneficiaries, the experiences of care MCCM beneficiaries and their caregivers reported, and how frequently beneficiaries transitioned from MCCM to MHB.

Future reports will have more years of data, and more MCCM enrollees, with which to measure impacts of the model.
Exhibit 1.1  Six Hallmarks of Hospice Care Serve as the Foundation of MCCM


24/7 = Twenty-four hours a day, seven days a week.
1.1 OVERVIEW OF MCCM

MCCM provides supportive services and care coordination to Medicare beneficiaries near their end of life. Current MCCM eligibility criteria include the following:\(^{18}\):

- Has been enrolled in Medicare fee-for-service Part A and Part B as the person’s primary insurance for the past 12 months
- Has a 6-month prognosis documented with a certification of terminal illness
- Has a diagnosis of advanced cancer, congestive heart failure, chronic obstructive pulmonary disease, or human immunodeficiency virus/acquired immunodeficiency
- Has had at least 1 hospital encounter in the last 12 months
- Has had at least 3 office visits with any provider (defined as the person’s primary care or specialty provider)
- Has not elected MHB or the Medicaid hospice benefit in the last 30 days
- Has lived in a traditional home continuously for the last 30 days
- Resides within the service area of the participating hospice

Hospices participating in MCCM receive a $400 per beneficiary per month payment to provide MCCM services, which include symptom and treatment support, care coordination, case management, and advance care planning for MCCM enrollees. The per beneficiary per month payment covers all MCCM services that the hospice provides to the beneficiary in a given month. If the beneficiary enrolls in MCCM for fewer than 15 days during the first month of enrollment, the MCCM hospice receives only $200 for that month.

MCCM services are similar to those that MHB offers, and similar to some Medicare home health services, although there are important differences, as detailed in Exhibits 1.2 and 1.3. Beneficiaries who enroll in MCCM retain the option to elect MHB at any time, if they wish to receive the full array of hospice services beyond those offered under MCCM.

## Exhibit 1.2 Goals, Eligibility, and Payment Differ for the Medicare Hospice Benefit, the Medicare Home Health Benefit, and MCCM

<table>
<thead>
<tr>
<th>Program Feature</th>
<th>Medicare Hospice Benefit</th>
<th>MCCM</th>
<th>Medicare Home Health Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals of care</strong></td>
<td>Focuses on physical, intellectual, emotional, social, and spiritual needs; but Medicare does not pay for treatment related to the terminal condition.</td>
<td>Focuses on improving comfort and quality of life, and emotional and spiritual support. Beneficiaries can continue to receive treatment for their terminal condition.</td>
<td>Focuses on treatment of illness or injury that requires intermittent skilled care. Helps individuals improve or maintain their current level of function, or to slow decline.</td>
</tr>
<tr>
<td><strong>Eligibility requirements “at a glance”</strong></td>
<td>Must have a certification of terminal illness signed by their physician (prognosis of six months or less to live). Resides in any type of setting, including a home, a skilled nursing facility, an intermediate care facility for the developmentally disabled, or an assisted living facility. May have any Medicare coverage; however, Medicare-managed care plans revert to fee-for-service Medicare when the beneficiary elects hospice care.</td>
<td>Must have a certification of terminal illness signed by the patient’s physician (prognosis of six months or less to live). Resides in a traditional home (not a nursing home or assisted living facility). Terminal diagnosis of advanced cancer, congestive heart failure, chronic obstructive pulmonary disease, or human immunodeficiency virus/acquired immunodeficiency syndrome. Must have Medicare Parts A &amp; B as primary payer. Cannot be enrolled in a Medicare-managed care plan.</td>
<td>Must be under the care of a physician who establishes and reviews a plan of care. Must have a face-to-face encounter with the physician. Resides in a home or institutional setting that is not providing care duplicative of home health services. Must need intermittent skilled nursing or therapy services. Must be homebound and unable to leave home without considerable effort unaided, or at all; can be provided in assisted living facility under certain conditions.</td>
</tr>
</tbody>
</table>
## Payment structure

<table>
<thead>
<tr>
<th>Program Feature</th>
<th>Medicare Hospice Benefit</th>
<th>MCCM</th>
<th>Medicare Home Health Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per diem payment for all related care at the following rates (fiscal year 2018):</td>
<td>Per diem payment for all related care at the following rates (fiscal year 2018):</td>
<td>Per beneficiary per month payment:</td>
<td>Payment based on a 60-day episode of care (fiscal year 2018):</td>
</tr>
<tr>
<td>• Routine home care is $193 per day for days 1-60, $151 per day for days 61+.</td>
<td>• General inpatient care is $744 per day.</td>
<td>• $400 per month for full months of enrollment (15 days or more), and $200 per month for initial month if less than 15 calendar days of enrollment. The Centers for Medicare &amp; Medicaid Services pays $400 for the final month of enrollment, regardless of duration. To collect the per beneficiary per month payment, a hospice must provide at least one service in a given month to each of their enrolled beneficiaries. Enrollees remain responsible for usual share of other Medicare costs, including coinsurance. However, enrollees do not owe co-insurance on the $400 per beneficiary per month payment.</td>
<td>• Base rate for a single 60-day episode is $3,040. Payment is case-mix adjusted depending on the enrollee’s number of therapy visits, functional impairment level, and diagnosis.</td>
</tr>
<tr>
<td>• General inpatient care is $744 per day.</td>
<td>• Continuous home care is $41 per hour.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Inpatient respite care is $173 per day.</td>
<td>• Limited co-pays (i.e., $5 per prescription and 5% for inpatient respite care).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sources:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Exhibit 1.3  Services Provided by the Medicare Hospice Benefit, the Medicare Home Health Benefit, and MCCM Vary**

<table>
<thead>
<tr>
<th>Program Feature</th>
<th>Medicare Hospice Benefit</th>
<th>MCCM</th>
<th>Medicare Home Health Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary receives treatment for terminal diagnosis</td>
<td>No.</td>
<td>Yes, as covered under Medicare Parts A &amp; B.</td>
<td>Yes, as covered under Medicare Parts A &amp; B.</td>
</tr>
<tr>
<td>Levels of care and services offered</td>
<td>Four levels of care are offered:</td>
<td>MCCM supportive services are similar to services that Medicare hospice benefit provides through routine home care.</td>
<td>The Medicare home health benefit does not differentiate services by level of care, but provides many services similar to those provided under routine home care in the Medicare hospice benefit.</td>
</tr>
<tr>
<td></td>
<td>• Routine home care: Hospice services delivered at the beneficiary’s residence.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• General inpatient care: Services for acute symptom management that cannot be provided in another setting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Continuous home care: Care provided in the residence for acute symptom management, as necessary, to maintain the beneficiary at home between 8 and 24 hours a day.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Inpatient respite care: Care that provides temporary respite for the primary caregiver for a maximum of five consecutive days.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other services</td>
<td>Nursing, social work, aide services, volunteers, bereavement per chaplain, counseling (nutritional, spiritual, emotional).</td>
<td>Nursing, social work, aide services, volunteers, bereavement per chaplain, counseling (nutritional, spiritual, emotional).</td>
<td>Nursing, social work, aide services.</td>
</tr>
<tr>
<td>Respite care</td>
<td>Inpatient.</td>
<td>In-home only.</td>
<td>None.</td>
</tr>
<tr>
<td>Durable medical equipment</td>
<td>Yes.</td>
<td>No. Available as covered under Medicare Part B.</td>
<td>No. Available as covered under Medicare Part B.</td>
</tr>
<tr>
<td>Medications</td>
<td>Yes. Covers all medications to relieve pain and manage symptoms related to the beneficiary’s terminal condition. Medications that are unrelated to the terminal condition are available through the beneficiary’s usual resources (including Medicare Part D, other insurance, or private pay).</td>
<td>No. Available through the beneficiary’s usual resources (including Medicare Part D, other insurance, or private pay).</td>
<td>No. Available through the beneficiary’s usual resources (including Medicare Part D, other insurance, or private pay).</td>
</tr>
</tbody>
</table>
### Program Feature | Medicare Hospice Benefit | MCCM | Medicare Home Health Benefit
--- | --- | --- | ---
Therapy | Yes. The hospice provides physical therapy, occupational therapy, and speech-language pathology services as related to the terminal condition. | No. Available as covered under Medicare Part B. | Yes. The home health agency provides physical therapy, occupational therapy, and speech-language pathology services as established under a physician’s plan of care. |
Physician services | Yes. Hospice medical director and physician staff direct the beneficiary’s care in collaboration with the beneficiary-identified attending physician, if any. The attending (non-hospice) provider can continue to see the beneficiary and bill Medicare separately for services and conditions not related to the terminal illness. | No. Available as covered under Medicare Part B. | No. Beneficiary must be under the care of a physician and have a plan of care that the physician has established and reviews periodically. A face-to-face encounter is also required with the physician to establish home health services. Physicians bill separately for their services. |

Sources:

CMS selected 141 hospices from among those that applied to participate in the model in 2014. To support a rigorous evaluation, CMS randomly assigned participating hospices to 1 of 2 cohorts. Cohort 1 hospices started enrolling Medicare beneficiaries in the model on January 1, 2016, and cohort 2 hospices began enrolling beneficiaries on January 1, 2018. Participating hospices implement the model for 3 to 5 years depending on their cohort, with the model scheduled to run through December 31, 2020. As of June 30, 2019, 85 hospices were active and 56 hospices (40 percent) had withdrawn from the model.

Key data related to model participants and enrollment are shown in Exhibit 1.4, factors affecting hospice withdrawal are described in Section 2.1.3, and factors affecting beneficiary enrollment rates are discussed in Section 2.2.3.
1. INTRODUCTION

Exhibit 1.4  Overview of MCCM Participation and Enrollment

<table>
<thead>
<tr>
<th>MCCM HOSPICES (AS OF JUNE 30, 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COHORT 1</strong></td>
</tr>
<tr>
<td>Active: 43 Hospices</td>
</tr>
<tr>
<td>Withdrawn: 28 Hospices</td>
</tr>
<tr>
<td><strong>COHORT 2</strong></td>
</tr>
<tr>
<td>Active: 42 Hospices</td>
</tr>
<tr>
<td>Withdrawn: 28 Hospices</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BENEFICIARIES (JANUARY 1, 2016 - MAY 31, 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care providers referred</td>
</tr>
<tr>
<td>16,519 Medicare beneficiaries to the MCCM participating hospices</td>
</tr>
<tr>
<td>4,465 eligible beneficiaries enrolled in the model (total enrolled)</td>
</tr>
<tr>
<td>Of eligible beneficiaries, 2,412 died on or before May 31, 2019 (total decedents)</td>
</tr>
</tbody>
</table>

Sources: MCCM portal data, January 1, 2018-June 30, 2019; and Medicare Enrollment Data, 2019.

1.2  MCCM EVALUATION OVERVIEW

CMS contracted with Abt Associates and our partners to conduct a robust, mixed-methods evaluation of MCCM and assess whether the model increases access to supportive services; improves coordination of care among hospices and other community providers; enhances quality of care and quality of life, including beneficiary and caregiver satisfaction with care at the end of life; and reduces Medicare expenditures.

The conceptual framework shown in Exhibit 1.5 depicts the various hospice and beneficiary factors that influence MCCM implementation and the outcomes that are the focus of this evaluation. The intended outcomes of MCCM are improved beneficiary and caregiver satisfaction with care at the end of life, enhanced quality of care and quality of life, and reduced Medicare expenditures. To achieve these outcomes, MCCM hospices must increase access to supportive services, use the principles of shared decision making to educate beneficiaries about their prognosis and treatment options in advance so beneficiaries can make informed choices about their care, and be experts in assessing and managing symptoms. Additionally, MCCM hospices need to coordinate care among hospices and other community providers, and ensure that the care addresses needs and preferences of beneficiaries and their caregivers. The degree to which MCCM hospices achieve these objectives depends on internal organizational factors, such as staff training and technological capabilities; the environments in which hospices operate; as well as the
This mixed-methods evaluation collects and synthesizes findings from a variety of data sources, including Medicare claims and administrative data; information submitted by participating MCCM hospices via the secure, web-based MCCM portal; interviews with hospice staff, referring providers, and beneficiaries and their caregivers; and organizational and caregiver surveys. To answer the research questions outlined in Exhibit 1.6, we analyzed characteristics and experiences of participating hospices, enrolled beneficiaries, and the subgroup of enrolled beneficiaries who died during the relevant study period.
1. INTRODUCTION

Exhibit 1.6  MCCM Evaluation Research Questions Discussed in Annual Report 2

<table>
<thead>
<tr>
<th>Research Domain</th>
<th>Question</th>
<th>Section of this Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation effectiveness</td>
<td>1. What are the characteristics of beneficiaries enrolled in the model, the participating hospices, and the hospices’ markets?</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2. What are the reasons for beneficiary participation or non-participation?</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3. Are there any factors that limited the number of beneficiaries enrolled in the model? If so, to what degree?</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4. What are the characteristics of those beneficiaries and hospices that withdrew from the model, and why did they leave?</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>6. What is the length of time to implement the organizational changes necessary to deliver services?</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>7. What referral patterns are observed?</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>8. Are learning system activities effective in preparing hospices to succeed and continue to succeed in the model?</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9. What features of hospices’ administration and structure account for the successes or failures of their implementation of the model?</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10. What are the elements of care delivered under this model?</td>
<td>4</td>
</tr>
<tr>
<td>Utilization and costs</td>
<td>13. Do the beneficiaries in the model elect the Medicare hospice benefit at a higher rate and earlier in their disease?</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>15. Do beneficiaries in the model receive different patterns of supportive services and life-prolonging treatment?</td>
<td>4</td>
</tr>
<tr>
<td>Quality of care and health outcomes</td>
<td>19. Do beneficiaries in the model and their caregivers express greater satisfaction and improved experiences with their care?</td>
<td>5, 6</td>
</tr>
</tbody>
</table>

Note: This report addresses only a subset of the research questions; Appendix B contains the complete set of research questions for the evaluation.

1.2.1  MCCM Programmatic Data and Medicare Administrative Data

CMS requires MCCM hospices to document MCCM referrals and enrollments through a web-based portal. Additionally, hospices report delivered services and activities, such as screenings and assessment results, what staff (by title) provided those services, and information about the enrollees’ clinical and social support characteristics. We use this programmatic data to (1) identify and characterize participating hospices and their enrolled beneficiaries, (2) assess model implementation, (3) describe MCCM services provided to enrollees, and (4) assess the quality of care delivered by participating hospices.

Using these data, we identified a group of 2,591 Medicare beneficiaries enrolled by the 96 hospices participating in MCCM between January 1, 2016 and June 30, 2018. This group comprises our MCCM enrollee intervention group. Among this group of enrollees, 1,462 died on or before June 30, 2018 and comprise our MCCM decedent intervention group. We describe these groups in more detail in Section 2.2.2.
We used Medicare administrative data from a variety sources and statistical modeling techniques to identify a set of hospices to serve as a matched comparison group. The matched comparison hospices operated outside of the markets served by MCCM hospices and were similar to MCCM hospices in terms of geography and operating characteristics. We further describe administrative data sources and the matching process in Appendix C and Appendix F.

We originally identified 272 matched comparison hospices to use in the claims analysis and organizational and caregiver surveys (Section 1.2.3 and Section 1.2.4, respectively). After additional review, we applied restrictions that resulted in a final set of 236 matched comparison hospices that were similar to the 91 hospices participating in MCCM through December 31, 2018.

In the markets served by matched comparison hospices, we used Medicare claims data to identify 70,345 beneficiaries who met the eligibility criteria for MCCM and died between January 1, 2016 and June 30, 2018. This group, defined as MCCM-eligible decedents not enrolled in MCCM, is the beneficiary comparison group used in this report. 19

1.2.2 Interviews with Hospice Staff, Referring Providers, Beneficiaries, and Caregivers

We conducted in-person and telephone interviews with hospice staff, referring providers, and beneficiaries and their caregivers to capture contextual details not available in the administrative data. An overview of primary data collection activities for this report appears in Exhibit 1.7.

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19 We provide further details on how the comparison group of MCCM-eligible decedents not enrolled in MCCM was selected in Appendix F and Exhibit F.1.
### Exhibit 1.7 Number and Purpose of Interviews Conducted for the MCCM Evaluation

<table>
<thead>
<tr>
<th>Interview Type</th>
<th>Objective</th>
<th>Mode</th>
<th>Number Conducted in 2017</th>
<th>Number Conducted in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews with MCCM hospices selected for case studies</td>
<td>Gather information from hospice staff, referring providers, and beneficiaries and their caregivers about MCCM implementation and model impact.</td>
<td>In person</td>
<td>10&lt;sup&gt;a&lt;/sup&gt;</td>
<td>14&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Interviews with cohort 2 hospices</td>
<td>Gather information from hospice leadership and staff about plans for MCCM implementation, including changes to operations, clinical processes, marketing methods, and staffing.</td>
<td>Telephone</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Interviews with MCCM hospices with low enrollment</td>
<td>Learn about challenges hospices faced when enrolling beneficiaries in MCCM, in particular, whether providers “divert” potential referrals to competing programs with less-stringent requirements.</td>
<td>Telephone</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Interviews with withdrawn MCCM hospices&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Understand the circumstances and experiences that led the hospice to withdraw from MCCM, including lessons learned, and how the Centers for Medicare &amp; Medicaid Services might improve experiences for hospices continuing in the model.</td>
<td>Telephone</td>
<td>18</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Qualitative data collection, January 2017-December 2018.

<sup>a</sup> Interviews included cohort 1 hospices only.

<sup>b</sup> Interviews included both cohort 1 and 2 hospices.

<sup>c</sup> Interviews were conducted with a subset of the hospices that withdrew from MCCM. Of the 50 hospices that withdrew through December 31, 2018, we interviewed staff from a total of 33 hospices; 11 hospices declined our interview request; and 6 hospices withdrew before the model start date.

In 2017, we conducted a group interview with 4 hospices with separate CCNs that were part of the same parent organization. In 2018, we conducted a group interview with 3 hospices with separate CCNs that were part of the same parent organization. In each of these 2 instances, we conducted only 1 interview, but applied the information across the multiple CCNs.

CCN = CMS Certification Number.

In 2018, we conducted site visits with 14 hospices selected for case studies (7 hospices in each cohort) during in-person interviews with MCCM hospice leadership and staff. We also interviewed community providers who referred beneficiaries to MCCM, as well as MCCM enrollees and their caregivers. We conducted telephone interviews with 8 low-enrolling cohort 2 hospices to explore possible barriers to enrollment. Finally, we interviewed representatives from 15 hospices that withdrew from MCCM between November 15, 2017.
and August 29, 2018 to understand their experiences and reasons for withdrawal. In this report, we combine themes from the qualitative data activities we conducted in 2018 with the previous year of data, with important differences noted by year and type of interview.

We coded themes from interviews using qualitative analytic software. It is important to note that we based emergent themes on the limited number of case studies and interviews conducted to date, so these themes may not be generalizable to the entire group of MCCM hospices and enrollees. We include findings in this report only if interviewees from more than one MCCM hospice described similar experiences. When reporting on findings from case study qualitative interviews, we use the word “few” to denote 2 to 3 hospices, “several” to denote 4 to 8 hospices, “many” to denote more than 8 but fewer than three-fourths, and “most” to indicate three-fourths or more of hospices. For most topics, we have data from 24 hospices, but qualitative interviews differ from surveys in that the approach is conversational and free flowing. Not all respondents answered every question. Hence, the number of hospices with data on a given topic varies, and we considered this carefully when characterizing the relative prevalence of a given finding.

We describe the procedures that we used to collect and analyze interview data in Appendix G.

1.2.3 Organizational Survey

We surveyed MCCM and comparison hospices to learn about their organizational structure and characteristics affecting MCCM implementation. Survey items addressed:

- Hospice staff experiences coordinating care with community providers
- Changes the hospice made to implement MCCM
- Whether MCCM hospices are partnering with palliative care programs (or have their own palliative care program) for enrollees with advanced illnesses who have not yet elected MHB
- Implementation challenges

We surveyed cohort 1 and cohort 2 hospices, and matched comparison hospices, in wave 1 of the data collection, conducted in 2017.\(^\text{20}\) We surveyed MCCM hospices but did not survey comparison hospices in wave 2 of the data collection, conducted in 2018. This report includes results from the surveys conducted in 2017 and 2018.

\(^{20}\) We describe the methodology to select matched hospices in Appendix F.2.
A tabulation of the number of surveys sent and the response rate for each wave of data collection appears in **Exhibit 1.8**. For more information on the design and administration of the organizational survey, see **Appendix H**.

**Exhibit 1.8  Organizational Survey Response Rates, by Year**

<table>
<thead>
<tr>
<th>Survey Group</th>
<th>2017 (wave 1)</th>
<th>2018 (wave 2)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Surveys Administered</td>
<td>Number of Surveys Completed</td>
<td>Response Rate</td>
<td>Number of Surveys Administered</td>
</tr>
<tr>
<td>Cohort 1 hospices</td>
<td>58</td>
<td>49</td>
<td>84.5%</td>
<td>49</td>
</tr>
<tr>
<td>Cohort 2 hospices</td>
<td>55</td>
<td>45</td>
<td>81.8%</td>
<td>42</td>
</tr>
<tr>
<td>Comparison hospices</td>
<td>272</td>
<td>139</td>
<td>50.7%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Sources: Organizational survey fielded in 2017 (wave 1) and 2018 (wave 2).

Note: For wave 1, we administered surveys to a preliminary group of 272 matched comparison hospices. The analysis presented in **Section 2.1.2** employs a comparison group of 236 MCCM hospices that was finalized after survey administration.

### 1.2.4 Caregiver Experience of Care Survey

Individuals may differ in terms of the type and intensity of care they need and desire, and in their interest in shared decision making about end-of-life care. To assess the experiences of MCCM enrollees and their caregivers, as well as comparison beneficiaries who were eligible for MCCM but enrolled directly in MHB, we developed a modified version of the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Hospice Survey, which we call the Caregiver Experience of Care Survey (caregiver survey). The caregiver survey assesses three main types of experiences:

- **Shared decision making** regarding transitions to MHB, including level of involvement, timing of referral to hospice, and reasons for enrolling or not enrolling in MHB
- **Quality of life**
- **Other beneficiary and caregiver experiences** of care in MCCM or MHB, including communication, timeliness of care, respect, and willingness to recommend the model or hospice to others
We identified MCCM enrollees and comparison beneficiaries who died in fall 2017, and began surveying their caregivers in January 2018. The caregiver survey is a continuous data collection effort, with four new samples drawn every month, as follows:

1. **MCCM + MHB**: Caregivers of deceased MCCM enrollees who elected MHB
2. **MCCM only**: Caregivers of deceased MCCM enrollees who did not elect MHB (i.e., who died while still receiving MCCM services)
3. **Comparisons from MCCM hospices**: Caregivers of deceased beneficiaries who met MCCM eligibility criteria and received MHB care from MCCM hospices, but who were not enrolled in MCCM
4. **Comparisons from matched hospices**: Caregivers of deceased beneficiaries who met MCCM eligibility criteria and received MHB care from 1 of 33 matched comparison hospices (a subset of the 236 matched hospices used in the overall evaluation)

Deceased beneficiaries for the two comparison groups (Groups 3 and 4 above) were randomly selected from all those served by relevant hospices based on whether these individuals were eligible for MCCM, using CMS claims data. We sent surveys to those beneficiaries’ caregivers.

This report includes survey results about care received by MCCM enrollees and beneficiaries in both comparison groups who died between October 2017 and June 2018. The overall response rate to the caregiver survey during this period was 47 percent.

For more information on how we developed the caregiver survey, survey sampling, and data collection, see Appendix I.

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21 It was not feasible to sample from the full set of 236 matched comparison hospices; a subset of 33 hospices was determined to be sufficient to meet sample size targets and to ensure a sufficient number of completed surveys to support statistically precise comparisons. The subset of 33 hospices was randomly selected within strata defined by census regions and performance on the CAHPS® Hospice Survey, to ensure that the subset of matched hospices was similar to the MCCM hospices. The caregiver survey sample design calls for sampling 1 comparison beneficiary in each of the 2 comparison groups (Group 3 and Group 4) for every MCCM enrollee sampled; however, fewer than this number of comparisons were available for this annual report. The subset of 33 hospices have similar characteristics to the MCCM hospices, as shown in Appendix F.2.3.

22 Information on the eligibility criteria and selection process is available in Appendix I.2.

23 As a point of comparison, the average response rate for the national CAHPS® Hospice Survey is 41 percent when CMS administers it via mail with a telephone follow-up.
1.3 SUMMARY OF CROSS-CUTTING EVALUATION RESULTS

Four overarching cross-cutting findings emerged through evaluation activities covering MCCM performance from 2016 to 2018, as shown in Exhibit 1.9.24

Exhibit 1.9 Evaluation Findings Demonstrate Improved Care Delivery, High Quality of Care, and Expanded Enrollment

Maturation and evolution of MCCM over time was associated with increased beneficiary enrollment, expanded care delivery, and positive participant experience.

Participating hospices differed in the ease and effectiveness of their implementation process. These differences may account for variation in MCCM enrollment and service delivery.

MCCM beneficiaries and caregivers received services consistent with a high quality of care and high quality of life at the end of life, and reported satisfaction with MCCM.

MCCM may offer a bridge to the Medicare hospice benefit (MHB), as well as counseling, symptom management, and supportive care for beneficiaries who might otherwise not have access to those services.

24 This report presents preliminary evaluation findings for participating MCCM hospices between January 1, 2016 and December 31, 2018, and findings for beneficiaries who enrolled in MCCM through June 30, 2018. Trends in hospice participation and beneficiary referrals and enrollment are updated where noted.
Maturation and evolution of MCCM was associated with increased beneficiary enrollment, expanded care delivery, and improved participant experience (see Sections 2 and 3). Tailored learning activities, including training, informational webinars, and peer-based virtual sessions, supported hospice implementation of MCCM. CMS project officers provided guidance to hospices to solve problems and identify improvements that the hospices could make. MCCM hospice withdrawals slowed in 2018 compared to levels observed in the second half of 2017, as participant experiences improved. Hospices refined their MCCM marketing strategies and referral systems to better communicate and collaborate with referring providers, and with beneficiaries and their caregivers. These factors may have led to enhanced referral networks and an increased number of beneficiaries referred to MCCM. Enrollment expanded in 2018, with the addition of cohort 2 hospices. However, enrollment was concentrated within a small number of MCCM hospices with only 8 hospices (6 percent of the original 141 MCCM hospices) responsible for just over 50 percent of MCCM beneficiaries.

Participating hospices differed in how smoothly, quickly, and successfully they implemented the model, which may have led to variation in MCCM enrollment and service delivery (see Sections 2, 3, and 4). Strong organizational leadership, well-defined teams, and clear communication channels may have facilitated effective MCCM implementation. Experience with a palliative care or similar program prior to MCCM also may have facilitated implementation and enrollment, because staff were familiar with both supportive services and treatment for serious illnesses. On the other hand, several hospices with low MCCM enrollment noted that local palliative care programs competed with MCCM, potentially limiting enrollment. Cohort 2 hospices, joining MCCM two years after the model started, learned from cohort 1 hospices’ experiences and had different early implementation paths than cohort 1 hospices, using strategies that aligned with their staff and beneficiary populations. As a potential consequence, cohort 2 hospices experienced early enrollment success, unlike cohort 1 hospices in their first year of implementation. Cohort 2 hospices appeared to provide some services at statistically significant different rates than cohort 1 hospices. Cohort 2 hospices were more likely than cohort 1 hospices to provide symptom management (72 versus 68 percent), care coordination (88 versus 81 percent), and shared decision making (50 versus 42 percent). Cohort 2 hospices were less likely than cohort 1 hospices to provide care management (70 versus 88 percent), psychological or emotional counseling (49 versus 68 percent), and family conferences (41 versus 58 percent). Fewer MCCM enrollees cared for by cohort 2 hospices received spiritual counseling than enrollees cared for by cohort 1 hospices (10 percent versus 45 percent). These results may change when cohort 2 hospices have been active for longer than six months.
**MCCM beneficiaries and caregivers reported receiving a high quality of care, a high quality of life at the end of life, and satisfaction with MCCM (see Section 6).** Caregivers of MCCM enrollees who transitioned to MHB rated MCCM highly and reported that deceased enrollees had received care that met their needs. In addition, among MCCM enrollees assessed as having pain or shortness of breath, nurses judged that palliation was sufficient for pain (91 percent) and for shortness of breath (97 percent). MCCM staff spoke with 77 percent of beneficiaries and/or caregivers about their goals of care within the first week of MCCM enrollment, which increased to 95 percent prior to MCCM discharge. Finally, some enrollees were pleased that certain MCCM staff maintained informal relationships with them—even those enrollees who transitioned to MHB at an unaffiliated hospice.

**MCCM may offer a bridge to MHB, and provide access to counseling, symptom management, and supportive services to Medicare beneficiaries who might otherwise not have had access to those services (see Section 5).** MCCM enrollees spent an average of 92 days in the model prior to discharge. Most MCCM enrollees (83 percent) eventually transitioned to MHB prior to death. This group of MCCM enrollees who transitioned to MHB averaged 113 days between MCCM enrollment and death. During this time, they spent, on average, the first 78 days in MCCM and the remaining 37 days in MHB. Of the small proportion of enrolled decedents who did not transition to MHB (17 percent), most (84 percent) remained in MCCM until their death. Without MCCM, these individuals might not have received any supportive services. For MCCM enrollees who transitioned to MHB prior to death, approximately 90 percent of their caregivers indicated that (1) the transition happened at the right time, (2) the beneficiary and caregivers were involved as much as they wanted to be in the MHB decision, and (3) the MCCM team did not pressure them to transition to MHB. There was no difference between MCCM decedents and non-enrollees on these aspects of shared decision making regarding enrollment in MHB.

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Note that the amount of time (114.3 days) from MCCM enrollment to MHB transition (77.5 days) and MHB transition to death (36.8 days) is exactly 1 day greater than the amount of time from MCCM enrollment to death (113.3 days). This is because in calculating timing with respect to MHB transition, we count the transition day twice. For example, suppose a person enrolls in MCCM on Monday, transitions to MHB on Tuesday, and dies on Wednesday. We would say their survival was 3 days (Monday, Tuesday, Wednesday); they were on MCCM 2 days before transitioning to MHB (Monday and Tuesday); and they elected MHB 2 days before death (Tuesday and Wednesday). In this case, we count Tuesday twice, the reason for the extra day in the calculations.
1.4 EVALUATION LIMITATIONS

It is important to note certain limitations that apply throughout the report:

- MCCM is a voluntary model and we know that participating hospices differ in important ways from those that did not volunteer. Findings in this report may therefore not be generalizable to all hospices nationwide.

- As MCCM is still ongoing, patterns and trends discussed in this report may change with additional years of the model. Further, some beneficiaries were still alive and enrolled in the model on June 30, 2018 (the ending date for data included in this report), so findings to date do not provide a full picture of enrollee experiences in the model and resulting outcomes (e.g., total time in MCCM, services received, metrics related to death).

- This report presents descriptive comparisons of MCCM enrollees with their MCCM-eligible counterparts from the market areas of non-participating, matched hospices. Differences between these groups should not be interpreted as causal because the factors that affect MCCM enrollment are not fully observable. For example, to establish MCCM eligibility, a community provider must certify that a beneficiary is within six months of death if his or her end-stage condition runs its usual course. However, we cannot fully apply this criterion for the comparison group using only claims data. In addition, claims data lack information on factors such as the beneficiary’s preference for treating the terminal illness versus receiving only supportive services. Future reports will use statistical analyses to control for differences between beneficiaries in MCCM and comparison groups, and will include estimates of survival as a proxy for the six-month certification of terminal illness mentioned above.

- As of this annual report, we have only a small number of completed caregiver surveys reflecting care received by deceased beneficiaries. Given this small number of completed surveys to date, the results shown in this report are preliminary and mainly reflect care provided by cohort 1 hospices. As more survey response data accumulate, our ability to compare between the groups will improve, and we will conduct additional analyses to account further for differences in characteristics between MCCM and comparison groups.
1.5 ORGANIZATION OF THIS REPORT

This report includes descriptive findings from the MCCM evaluation.

- **Section 2** presents information on MCCM hospice participation and beneficiary enrollment.
- **Section 3** describes how participating hospices are implementing MCCM, including their referral patterns and organizational features associated with MCCM implementation effectiveness.
- **Section 4** describes the elements of care MCCM enrollees receive.
- **Section 5** provides information on transitions to MHB after MCCM.
- **Section 6** provides information on the quality of care based on MCCM programmatic data and the experiences of MCCM beneficiaries and their caregivers.
- **Section 7** discusses these findings in the context of lessons learned, the next steps to take in the MCCM evaluation, and the content of future reports.
Beneficiary Story

The beneficiary knew about hospice care long before her health care providers discussed it as an option for her congestive heart failure. Her husband had received hospice care before he died from prostate cancer a few years before. He traveled a lot and so she raised their four children more or less on her own. She rejected three different private caretakers before finally bonding with her current caretaker. They have a good relationship and the private caretaker is covered by the beneficiary’s other (non-Medicare) insurance provider. The beneficiary knew her husband was more ill when he entered hospice care than she is now, and feels strongly that she is not ready for hospice care yet.

The beneficiary had triple bypass surgery and part of her lung removed, and has trouble breathing; she has had her lungs drained repeatedly since the surgery. She is prone to falling, cannot cook, and cannot drive anymore. The beneficiary is not sure who first mentioned MCCM to her, possibly someone in the hospital after her bypass surgery. She refuses hospice care because she wants to continue getting her lungs drained at the hospital. When the hospital discharged her after surgery, she went home and could not walk up the stairs to her second floor. The neighbors found her collapsed on the staircase floor and brought her back to the hospital. This event led the beneficiary to realize she needed more help, and she enrolled in MCCM.

The beneficiary and the MCCM nurse coordinator get along well. The MCCM nurse coordinator recounted that when they first met, the beneficiary’s feet and lips were blue and she was very pale. The nurse learned that prior to enrolling in MCCM, the beneficiary had gone grocery shopping on her own, and it would take her an hour to bring the groceries into the house because she would need to stop and rest. Then she was too tired to cook the food she had bought. The beneficiary started getting her meals from drive-through fast food restaurants and eating in her car, even though she has heart failure. The MCCM nurse coordinator recalled the back seat of the beneficiary’s car littered with take-out containers and wrappers because the beneficiary was too exhausted to discard the trash.

Since enrolling in MCCM, the beneficiary has not returned to the hospital to drain her lungs. The MCCM nurse coordinator works with the private caretaker to educate and monitor the beneficiary on what foods she can eat. The beneficiary currently takes 18 different medications, which the MCCM nurse coordinator helps her manage. When asked about her experience in the model, the beneficiary exclaimed, “The program is great!” She feels the services she receives are adequate for her needs.

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26 This beneficiary story is an actual story given by an MCCM enrollee during a site visit. The story is not a composite, and represents a typical MCCM enrollee the qualitative data collection team interacts with during in-person case studies. We maintain confidentiality by omitting the beneficiary’s name, age, ethnicity, and geographic location.
2. Who Participates in MCCM?

Key Takeaways about MCCM Participation and Enrollment

- Eighty-five hospices, 60 percent of the 141 hospices originally selected to participate in MCCM, remained active in MCCM as of June 30, 2019 (43 in cohort 1 and 42 in cohort 2). Withdrawals slowed as implementation of MCCM progressed, and the experiences of hospices in the model and community providers improved over time. Six hospices withdrew during the first half of 2019, compared to 13 in 2018, 20 in 2017, 5 in 2016, and 12 in the year prior to model implementation in 2015. Hospices that withdrew from the model were similar to hospices that remained in MCCM in terms of ownership status, size, age, and other organizational characteristics. *(Section 2.1)*

- The original 141 MCCM hospices were more likely to be non-profit than all other hospices (69 percent versus 20 percent), and they were more likely to be classified as large\(^1\) compared to other hospices (77 percent versus 28 percent). The original 141 MCCM hospices have also been in business longer than other hospices, with 52 percent of MCCM hospices initiating operations prior to 1990 compared to 10 percent of other hospices. These differences suggest that the evaluation results of MCCM are not generalizable to the entire hospice industry. *(Section 2.1)*

- MCCM enrollment increased, with the addition of cohort 2 hospices, to a total of 4,465 beneficiaries as of May 31, 2019. Eight hospices accounted for over 50 percent of MCCM enrollment. This uneven pattern may limit the generalizability of evaluation findings. *(Section 2.2)*

- MCCM enrollees were more likely than MCCM-eligible decedents not in MCCM to have cancer (58 percent versus 39 percent), more likely to have lower predicted health care costs as measured by hierarchical condition category scores (2.2 versus 2.7), and less likely to be dually eligible for Medicare and Medicaid (6 percent versus 16 percent). We plan to adjust for these differences in future analyses. *(Section 2.2)*

- Almost half of the 16,519 Medicare beneficiaries (43 percent) referred to MCCM by community providers met all of the eligibility requirements for the model, as of May 31, 2019. Among the 7,168 MCCM-eligible beneficiaries, 62 percent enrolled in MCCM and 19 percent enrolled directly in MHB. *(Section 2.2)*
Medicare-certified hospices applied to participate in the Medicare Care Choices Model (MCCM) and the Centers for Medicare & Medicaid Services (CMS) selected hospices based on their experience with care coordination and case management, and their ability to involve beneficiaries and caregivers in shared decision making. Successful participation in MCCM over time requires operational capacity, a steady stream of referrals from providers, and leadership engaged in and committed to the model. In this section, we describe the characteristics of MCCM hospices and enrolled beneficiaries, why hospices and beneficiaries chose to participate in MCCM, and why some hospices withdrew from the model. We also explore trends in MCCM enrollment, and identify recruitment and enrollment challenges, as well as beneficiaries’ reasons for leaving the model.

2.1 MCCM HOSPICE PARTICIPATION

2.1.1 Overview of Hospice Participation in MCCM

CMS initially selected 141 hospices for MCCM from among those that had applied. As of June 30, 2019, 85 hospices remained in MCCM: 43 in cohort 1 and 42 in cohort 2, as shown in Exhibit 2.1. Nearly 40 percent of the original hospices withdrew from MCCM: 28 from cohort 1 and 28 from cohort 2. Before the model officially launched in 2016, 12 hospices withdrew; 5 withdrew during 2016; 20 withdrew in 2017; 13 withdrew in 2018; and 6 withdrew in early 2019. Hospices that withdrew from the model are similar to those that remain, as discussed in Section 2.1.3.

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Exhibit 2.1  Location of MCCM Hospices

Source: Implementation contractor’s July 2019 report of hospice participation.
Note: This exhibit presents hospices actively participating in the model as of June 30, 2019.
Withdrawals slowed in 2018 compared to 2017 and were associated with changes that CMS implemented to stabilize the model, shown in Exhibit 2.2.

Exhibit 2.2  CMS Modified the Program and Technical Assistance Resources to Promote and Stabilize Enrollment

2.1.2 Characteristics of MCCM Participating Hospices versus All Other Hospices

Organizational and market characteristics of hospices participating in MCCM may influence how the model is implemented and, ultimately, model outcomes. This section describes the characteristics of MCCM hospices and the markets they operate in compared to all other Medicare-certified hospices operating in the United States.

The original MCCM hospice participants, prior to any withdrawals, differ from all other hospices in terms of ownership type, size, and age (years in business), as shown in Exhibits 2.3 and 2.4. Therefore, the model and our evaluation results may not be generalizable to all hospices nationwide.

We used information from the Dartmouth Atlas of Health Care to examine utilization and Medicare spending for beneficiaries in the markets of hospices participating and not participating in MCCM, but found no statistically significant differences. We show these market results in Appendix F.2.3 and Appendix J, Exhibit J.4.
### Exhibit 2.3  MCCM Hospices Differed from All Other Hospices along Several Characteristics

<table>
<thead>
<tr>
<th>STATISTICALLY SIGNIFICANT DIFFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCM hospices are <strong>more likely to be non-profit</strong> than all other hospices</td>
</tr>
<tr>
<td>COHORT 1</td>
</tr>
<tr>
<td>MCCM hospices are <strong>larger</strong> than all other hospices</td>
</tr>
<tr>
<td>COHORT 1</td>
</tr>
<tr>
<td>MCCM hospices were <strong>more likely to be founded before 1990</strong> than other hospices</td>
</tr>
<tr>
<td>COHORT 1</td>
</tr>
</tbody>
</table>

#### NO STATISTICALLY SIGNIFICANT DIFFERENCES

| Most MCCM hospices are **affiliated with** a hospital-based or community-based palliative care program |
| COHORT 1 | 82.1% | COHORT 2 | 79.4% | ALL OTHER HOSPICES | 73.1% |

Source: CMS Provider of Services file, 2016; and cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018

Note: This exhibit describes features of 141 hospices originally participating in MCCM, prior to any withdrawals, and the remaining 3,985 Medicare-certified hospices in 2016, not including 236 matched comparison hospices. We used chi-square tests to identify differences across hospices for each characteristic (e.g., non-profit versus all other ownership types). Where noted, differences are statistically significant at the 10% level.

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#### 2.1.3 Reasons for Hospice Withdrawal from MCCM

Participating hospices may withdraw from MCCM at any time for any reason, and must notify CMS 90 days in advance of their withdrawal date. MCCM hospices that withdrew from the model by the end of 2018 had similar characteristics to those that remained active in the model, as shown in Exhibit 2.5. This finding implies that hospices withdrew from the model for reasons not closely correlated with their ownership status, size, age, and other observable characteristics reported in this analysis.
### Exhibit 2.4 MCCM Hospices Were More Likely To Be Non-Profit, and Were Larger and Older than Matched Comparison Hospices or All Other Hospices

<table>
<thead>
<tr>
<th>Hospice Characteristic</th>
<th>MCCM Cohort 1 Hospices (n = 71)</th>
<th>MCCM Cohort 2 Hospices (n = 70)</th>
<th>Matched Comparison Hospices (n = 236)</th>
<th>All Other Hospices (n = 3,985)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-profit</td>
<td>66.2%</td>
<td>71.4%</td>
<td>61.0%</td>
<td>20.1%</td>
</tr>
<tr>
<td>For-profit</td>
<td>19.7%</td>
<td>14.3%</td>
<td>28.8%</td>
<td>66.9%</td>
</tr>
<tr>
<td>Other</td>
<td>12.7%</td>
<td>14.3%</td>
<td>9.7%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Government</td>
<td>1.4%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Size***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>80.3%</td>
<td>74.3%</td>
<td>61.4%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Medium</td>
<td>16.9%</td>
<td>22.9%</td>
<td>36.0%</td>
<td>47.3%</td>
</tr>
<tr>
<td>Small</td>
<td>2.8%</td>
<td>2.9%</td>
<td>2.5%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Age***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founded in 1980s</td>
<td>54.9%</td>
<td>48.6%</td>
<td>42.8%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Founded in 1990s</td>
<td>31.0%</td>
<td>37.1%</td>
<td>37.3%</td>
<td>23.2%</td>
</tr>
<tr>
<td>Founded in 2000s</td>
<td>9.9%</td>
<td>10.0%</td>
<td>15.7%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Founded in 2010s</td>
<td>4.2%</td>
<td>4.3%</td>
<td>4.2%</td>
<td>35.3%</td>
</tr>
<tr>
<td>Census region***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>33.8%</td>
<td>34.3%</td>
<td>35.2%</td>
<td>20.9%</td>
</tr>
<tr>
<td>South</td>
<td>32.4%</td>
<td>31.4%</td>
<td>28.0%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Northeast</td>
<td>22.5%</td>
<td>17.1%</td>
<td>21.2%</td>
<td>9.3%</td>
</tr>
<tr>
<td>West</td>
<td>11.3%</td>
<td>17.1%</td>
<td>15.7%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>81.7%</td>
<td>85.7%</td>
<td>79.7%</td>
<td>78.6%</td>
</tr>
<tr>
<td>Rural</td>
<td>18.3%</td>
<td>14.3%</td>
<td>20.3%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Facility type***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freestanding</td>
<td>64.8%</td>
<td>71.4%</td>
<td>67.4%</td>
<td>82.3%</td>
</tr>
<tr>
<td>Facility-based</td>
<td>35.2%</td>
<td>28.6%</td>
<td>32.6%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Religious affiliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>97.2%</td>
<td>97.1%</td>
<td>97.5%</td>
<td>97.9%</td>
</tr>
<tr>
<td>Yes</td>
<td>2.8%</td>
<td>2.9%</td>
<td>2.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Chain affiliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>52.1%</td>
<td>55.7%</td>
<td>58.5%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Yes</td>
<td>47.9%</td>
<td>44.3%</td>
<td>41.5%</td>
<td>43.6%</td>
</tr>
</tbody>
</table>

Source: CMS Provider of Services file, 2016.

Note: This exhibit displays column percentages describing the features of the original MCCM hospice participants prior to any withdrawals, comparison hospices matched to the MCCM hospices, and all other hospices that in 2016 were Medicare-certified and submitted 1 or more MHB claims. We categorized hospices as large if they provided 20,000 or more routine home care days under the Medicare hospice benefit in 2015 (the year before MCCM began), medium if they provided 3,500-19,999 routine home care days, and small if they provided 0-3,499 routine home care days. This classification is used by CMS for hospice payment and policy. See [https://www.federalregister.gov/documents/2017/08/04/2017-16294/medicare-program-fy-2018-hospice-wage-index-and-payment-rate-update-and-hospice-quality-reporting](https://www.federalregister.gov/documents/2017/08/04/2017-16294/medicare-program-fy-2018-hospice-wage-index-and-payment-rate-update-and-hospice-quality-reporting). We pooled MCCM cohort 1 and 2 hospices. We used chi-square tests to detect differences between MCCM hospices and all other hospices for each characteristic, and reported statistical significances at the 10% (*), 5% (**), and 1% (***) levels.

Results of chi-square tests of subgroup differences that are significant at the 1% level.
### Exhibit 2.5  **Active and Withdrawn MCCM Hospices Have Similar Characteristics**

<table>
<thead>
<tr>
<th>Hospice Characteristic</th>
<th>Active - Cohort 1 Hospices (n = 47)</th>
<th>Active - Cohort 2 Hospices (n = 44)</th>
<th>Withdrawn - Cohort 1 Hospices (n = 24)</th>
<th>Withdrawn - Cohort 2 Hospices (n = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-profit</td>
<td>68.1%</td>
<td>68.2%</td>
<td>62.5%</td>
<td>76.9%</td>
</tr>
<tr>
<td>For-profit</td>
<td>19.1%</td>
<td>15.9%</td>
<td>20.8%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Other</td>
<td>10.6%</td>
<td>15.9%</td>
<td>16.7%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Government</td>
<td>2.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>80.9%</td>
<td>75.0%</td>
<td>79.2%</td>
<td>73.1%</td>
</tr>
<tr>
<td>Medium</td>
<td>14.9%</td>
<td>22.7%</td>
<td>20.8%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Small</td>
<td>4.3%</td>
<td>2.3%</td>
<td>0.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Founded in 1980s</td>
<td>57.4%</td>
<td>45.5%</td>
<td>50.0%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Founded in 1990s</td>
<td>27.7%</td>
<td>40.9%</td>
<td>37.5%</td>
<td>30.8%</td>
</tr>
<tr>
<td>Founded in 2000s</td>
<td>8.5%</td>
<td>11.4%</td>
<td>12.5%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Founded in 2010s</td>
<td>6.4%</td>
<td>2.3%</td>
<td>0.0%</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>Census region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>36.2%</td>
<td>36.4%</td>
<td>29.2%</td>
<td>30.8%</td>
</tr>
<tr>
<td>South</td>
<td>31.9%</td>
<td>29.5%</td>
<td>33.3%</td>
<td>34.6%</td>
</tr>
<tr>
<td>Northeast</td>
<td>19.1%</td>
<td>18.2%</td>
<td>29.2%</td>
<td>15.4%</td>
</tr>
<tr>
<td>West</td>
<td>12.8%</td>
<td>15.9%</td>
<td>8.3%</td>
<td>19.2%</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>85.1%</td>
<td>84.1%</td>
<td>75.0%</td>
<td>88.5%</td>
</tr>
<tr>
<td>Rural</td>
<td>14.9%</td>
<td>15.9%</td>
<td>25.0%</td>
<td>11.5%</td>
</tr>
<tr>
<td><strong>Facility type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freestanding</td>
<td>72.3%</td>
<td>68.2%</td>
<td>50.0%</td>
<td>76.9%</td>
</tr>
<tr>
<td>Facility-based</td>
<td>27.7%</td>
<td>31.8%</td>
<td>50.0%</td>
<td>23.1%</td>
</tr>
<tr>
<td><strong>Religious affiliation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>95.7%</td>
<td>95.5%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Yes</td>
<td>4.3%</td>
<td>4.5%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Chain affiliation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>51.1%</td>
<td>43.2%</td>
<td>41.7%</td>
<td>46.2%</td>
</tr>
<tr>
<td>No</td>
<td>48.9%</td>
<td>56.8%</td>
<td>58.3%</td>
<td>53.8%</td>
</tr>
</tbody>
</table>

Source: CMS Provider of Services file, 2016.

Note: This exhibit displays column percentages describing the features of 91 active MCCM hospices and 50 hospices that withdrew from the model as of December 31, 2018 by cohort. We categorized hospices as large if they provided 20,000 or more routine home care days under the Medicare hospice benefit in 2015 (the year before MCCM began), medium if they provided 3,500-19,999 routine home care days, and small if they provided 0-3,499 routine home care days. This classification is used by CMS for hospice payment and policy. See [https://www.federalregister.gov/documents/2017/08/04/2017-16294/medicare-program-fy-2018-hospice-wage-index-and-payment-rate-update-and-hospice-quality-reporting](https://www.federalregister.gov/documents/2017/08/04/2017-16294/medicare-program-fy-2018-hospice-wage-index-and-payment-rate-update-and-hospice-quality-reporting). We used chi-square tests to identify differences across all active and all withdrawn hospices. The results were not statistically significant even at the 10% level.
A spike in cohort 2 withdrawals occurred in late 2017 and early 2018, as shown in Exhibit 2.6, as cohort 2 hospices began preparing for and implementing MCCM. However, compared to 2017, the pace of withdrawals slowed later in 2018, suggesting that the number of hospices participating in the model may be stabilizing.

Exhibit 2.6  Fewer Hospices Withdrew from MCCM in 2018 Compared to 2017

Source: MCCM implementation contractor’s July 2019 report of hospice participation.
Note: Hospices must notify CMS of their intent to withdraw, and there is a 90-day window before their withdrawal is effective.
After a hospice withdraws, the evaluation team requests an interview with the former participating leadership staff to learn about their experiences and reasons for withdrawing. The reasons for withdrawing have remained consistent since the start of the model, and the primary reasons hospices gave for withdrawing from MCCM included:

- **Administrative burden and associated costs**, including reporting requirements, confirming eligibility of referred beneficiaries, documenting activities in the MCCM portal, and participating in learning and implementation activities.
- **Resource concerns** about the high cost of participating in MCCM and the low relative MCCM per-beneficiary per-month reimbursement.
- **Overlap with other hospice programs.** Several hospices operate other programs—including their own palliative care programs that offer similar services that beneficiaries prefer. The resulting low MCCM enrollment led these hospices to withdraw.
- **Lack of leadership buy-in.** Several withdrawn hospices mentioned a lack of a staff champion for MCCM, and turnover in leadership and staff positions. The latter was especially challenging when staff involved with the original MCCM application left the participating hospice, and the staff replacing them were not familiar with the application or model.
- **Stringent eligibility requirements for beneficiary enrollment.** Although CMS relaxed eligibility requirements during the first year of the model, even the relaxed criteria were a barrier to enrollment for several hospices in some markets. For example, Medicare-managed care plan members’ eligibility for MCCM was a barrier in markets with high managed care penetration. A few hospices reported that some MCCM diagnoses [e.g., human immunodeficiency virus/acquired immunodeficiency (HIV/AIDS)] are rare in the community they serve, and suggested other diagnoses CMS could consider for inclusion in MCCM (e.g., terminal neurological diseases, end-stage renal disease).

**Advantages of MCCM Mentioned by Withdrawn Hospices**
Despite their withdrawal from the model, many hospices said that participating in MCCM had been a positive experience, and that the model can be worthwhile for beneficiaries. For example, one interview participant indicated that MCCM had enabled them to offer an alternative for beneficiaries not yet ready for the Medicare hospice benefit (MHB). By developing a relationship with the beneficiary earlier in the disease trajectory, they had been able to discuss beneficiaries’ end-of-life goals and the approaching need for hospice care. While participating in the model, a few hospices had considered MCCM to be a bridge to MHB. Interviewees had more mixed assessments of MCCM’s financial impact on the specific hospice and broader health care system, but several offered that MCCM might reduce Medicare spending (e.g., through reduced use of emergency departments).
2. WHO PARTICIPATES IN MCCM?

2.2 MCCM ENROLLMENT

Medicare beneficiaries must meet specific eligibility criteria to enroll in MCCM, as discussed in Section 1.1. Many referred beneficiaries, however, did not meet all the model's eligibility requirements, as described in Section 2.1. In response to low initial MCCM enrollment, CMS relaxed several eligibility criteria in April 2016 and January 2017 (as described in Exhibit 2.8), and enrollment levels increased.

2.2.1 Referrals, Screening, and Enrollment

Providers referred 16,519 beneficiaries to MCCM hospices through May 31, 2019, as shown in Exhibit 2.7. These referrals were then screened by the MCCM hospice for eligibility. Of those referred and screened, only 43 percent met all the MCCM eligibility requirements. A much higher proportion of beneficiaries screened by cohort 2 hospices were found eligible for MCCM (59 percent, compared to 39 percent for cohort 1), probably due to changes CMS made in MCCM eligibility criteria. The revised criteria made it easier for referring providers to understand the model, and for more beneficiaries to qualify.

Of the 7,168 beneficiaries who were screened and eligible, 62 percent enrolled in MCCM and 19 percent elected to go directly into MHB rather than start with MCCM. Since one goal of MCCM is to increase access to supportive services offered by hospices, declining MCCM in favor of MHB is a positive outcome. Cohort 2 hospices had a lower rate of beneficiaries enrolling directly in MHB: 15 percent, compared to 22 percent for cohort 1. This may be because hospices initially participating in cohort 1 faced stricter MCCM eligibility criteria, and referred beneficiaries were more likely to be ineligible and had only MHB as an option. Finally, 15 percent (1,056 beneficiaries) of eligible beneficiaries declined to enroll in either MCCM or MHB, and 4 percent (258 beneficiaries) died before making an enrollment decision.

---

28 Information about beneficiaries referred to MCCM and screened comes from the MCCM portal that participating hospices use to enter data about the model. It is not clear whether all hospices are entering all referrals into the MCCM portal. If they are not, the actual number of referrals may be higher than reported. Additionally, if a provider (e.g., hospital) refers a beneficiary to MCCM but the beneficiary never follows up with the hospice, the hospice will not record that referral in the MCCM portal.

29 For example, a beneficiary may not have a certification of terminal illness by his or her physician that the person likely has six months or less to live.

30 See Section 1.1 for information regarding eligibility requirements. Hospices screen for these eligibility requirements and then enter data into the MCCM portal about whether each referred beneficiary is eligible for MCCM and chooses to enroll.
MCCM enrollment has steadily increased since the model began in 2016, especially following relaxation of the eligibility criteria and cohort 2 hospice entry into the model, as shown in Exhibit 2.8. This suggests that CMS’s changes addressed some, but not all, of the challenges posed by the original eligibility criteria.\(^{31}\) A few cohort 1 hospices reported that after the changes in eligibility criteria, they tried to re-contact beneficiaries they had previously judged ineligible who might qualify under the revised criteria. Hospices successfully enrolled some of these beneficiaries, while other beneficiaries remained ineligible for MCCM. Some of those ineligible beneficiaries had transitioned to MHB and others had died.

\(^{31}\) We discuss remaining enrollment challenges related to eligibility criteria in Section 2.2.4.
Exhibit 2.8  Monthly MCCM Enrollment Increased over Time, Especially after Changes in Eligibility and the Start of Cohort 2 Enrollment

Enrollment in MCCM was highly concentrated in a small number of the 141 hospices originally participating in MCCM. Eight MCCM hospices enrolled over 51 percent of all beneficiaries enrolled in MCCM, as shown in Exhibit 2.9, and 74 hospices enrolled the remaining 49 percent. Fifty-nine hospices had not enrolled any beneficiaries. Average enrollment among the 82 hospices that enrolled at least one MCCM beneficiary was 35.7. This uneven pattern of enrollment suggests that the results from the MCCM evaluation may not be generalizable to all hospices.

**Exhibit 2.9  Enrollment Was Concentrated in a Small Number of the 141 MCCM Hospices**

<table>
<thead>
<tr>
<th>NUMBER OF HOSPICES</th>
<th>PERCENT</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>51%</td>
<td>over 100</td>
</tr>
<tr>
<td>42</td>
<td>44%</td>
<td>1 to 99</td>
</tr>
<tr>
<td>32</td>
<td>5%</td>
<td>Under 10</td>
</tr>
<tr>
<td>59</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

141 100%

Note: This exhibit displays enrollment data from the original 141 MCCM hospices.
Cohort 2 hospices had much higher monthly enrollment in the first six months of implementation than cohort 1 hospices, as shown in Exhibit 2.10. Reasons for this difference may include the relaxation of eligibility criteria in 2016 and 2017 (see Exhibit 2.8), cohort differences in the practice style of referring providers, and easier early implementation paths of the cohort 2 hospices (discussed further in Sections 3.1.3 and 3.1.5, respectively).

**Exhibit 2.10 Monthly Enrollment in MCCM Was Higher during the First Six Months for Cohort 2 than for Cohort 1**


Note: Cohort 1’s first month of enrollment was January 2016 and Cohort 2’s first month of enrollment was January 2018.
2.2.2 Characteristics of Beneficiaries in MCCM versus MCCM-Eligible Decedents Not in MCCM

To understand how those who enrolled in MCCM differed from those who did not enroll, we compared the following groups:

1. **MCCM enrollees:** A total of 2,591 beneficiaries enrolled in cohort 1 or cohort 2 hospices between January 1, 2016 and June 30, 2018. These enrollees serve as 1 of 2 intervention groups for descriptive analyses presented in this report.

2. **MCCM decedents:** A subset of 1,462 MCCM enrollees (described above) who died before June 30, 2018. These decedents serve as the second intervention group for descriptive analyses in this report.

3. **MCCM-eligible decedents not in MCCM:** A total of 70,345 deceased beneficiaries were selected from markets served by matched comparison hospices between January 1, 2016 and June 30, 2018. The selected decedents would have been eligible for MCCM had a hospice in their community offered the model.

This section of the report compares these 3 groups in terms of demographic characteristics, clinical characteristics, and social supports. Future reports will include a second comparison group of MCCM-eligible beneficiaries not in MCCM, which we are in the process of developing. We will use both comparison groups to measure the impact of MCCM on Medicare expenditures and service use patterns at the end of life.

**Demographics, Clinical Characteristics, and Social Supports**

MCCM enrollees were more likely to have a cancer diagnosis (57.6 percent) than MCCM-eligible decedents not in MCCM (39 percent), as shown in Exhibit 2.11 and Exhibit 2.12. MCCM enrollees also appeared healthier than MCCM-eligible decedents not in MCCM, with lower average hierarchical condition category (HCC) scores and fewer comorbidities, as shown in Exhibit 2.13. Similar characteristics for MCCM decedents appear in Appendix J. These differences will be important to account for when determining impacts of the model on outcomes, such as medical expenditures at the end of life.

Functional status is another indicator of a beneficiary’s health, and those whom the hospice identifies at MCCM admission as “dependent” may require more services and support than those who are “independent.” Of all MCCM enrollees, 52 percent had a functional status of “needs some assistance” at the time of MCCM admission, as shown in Exhibit 2.13. Fewer than 20 percent had a functional status of “independent” at the time of admission. These data are available only for beneficiaries who enrolled in the model. Equivalent data are not available for beneficiaries referred to MCCM who did not enroll, nor for MCCM-eligible decedents not in the model.
Exhibit 2.11  

MCCM Enrollees Tended To Be Roughly the Same Age as MCCM-Eligible Decedents Not in MCCM, but Were More Likely To Have Cancer and Lower Predicted Health Care Costs

<table>
<thead>
<tr>
<th></th>
<th>MCCM Enrollees</th>
<th>MCCM-Eligible Decedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>The average age of MCCM enrollees and MCCM-eligible decedents were roughly the same</td>
<td>78.0 years</td>
<td>77.7 years</td>
</tr>
</tbody>
</table>

**NO STATISTICALLY SIGNIFICANT DIFFERENCES**

<table>
<thead>
<tr>
<th></th>
<th>MCCM Enrollees</th>
<th>MCCM-Eligible Decedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCM enrollees were more likely than MCCM-eligible decedents to have a cancer diagnosis</td>
<td>57.6%</td>
<td>39.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>MCCM Enrollees</th>
<th>MCCM-Eligible Decedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCM enrollees had a lower HCC score, indicating lower predicted health care costs, compared to MCCM-eligible decedents</td>
<td>2.2 score</td>
<td>2.7 score</td>
</tr>
</tbody>
</table>

**STATISTICALLY SIGNIFICANT DIFFERENCES**

<table>
<thead>
<tr>
<th></th>
<th>MCCM Enrollees</th>
<th>MCCM-Eligible Decedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional status and living situations of MCCM enrollees varied</td>
<td>17.4%</td>
<td>49.2%</td>
</tr>
</tbody>
</table>

**OTHER CHARACTERISTICS OF MCCM ENROLLEES**

Sources: Medicare Enrollment Data, Master Beneficiary Summary File, and MCCM portal, January 1, 2016-June 30, 2018.

Note: We define each characteristic in Appendix D.3. We obtained information on functional status through the MCCM portal and only had that information for MCCM enrollees. Functional status is the first recorded assessment result, whether at screening (for beneficiaries who enrolled prior to January 1, 2018) or during an encounter (after January 1, 2018). Functional status is recorded at the beneficiary level, with the beneficiary meeting one of the following: independent, needs some assistance, dependent, or disabled. We used chi-square tests to identify significant differences across MCCM enrollees (n = 2,591) and MCCM-eligible, decedents not in MCCM (n = 70,345). For those items listed as having statistically significant differences, we found the differences to be statistically significant at the 1% level. HCC = hierarchical condition category.
### Exhibit 2.12 The Characteristics of MCCM Enrollees and MCCM Decedents Not in MCCM Differed Slightly

<table>
<thead>
<tr>
<th>Beneficiary Characteristic</th>
<th>MCCM Enrollees (n = 2,591)</th>
<th>MCCM-Eligible Decedents Not in MCCM (n = 70,345)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-64</td>
<td>8.2%</td>
<td>11.0%</td>
</tr>
<tr>
<td>65-74</td>
<td>27.1%</td>
<td>26.3%</td>
</tr>
<tr>
<td>75-84</td>
<td>37.3%</td>
<td>33.7%</td>
</tr>
<tr>
<td>85+</td>
<td>27.4%</td>
<td>29.1%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.4%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Female</td>
<td>52.6%</td>
<td>49.6%</td>
</tr>
<tr>
<td><strong>Race and ethnicity</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>88.0%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Black</td>
<td>8.8%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other</td>
<td>2.5%</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Dual eligible</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5.8%</td>
<td>15.5%</td>
</tr>
<tr>
<td>No</td>
<td>94.2%</td>
<td>84.5%</td>
</tr>
<tr>
<td><strong>Census region</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>40.1%</td>
<td>40.3%</td>
</tr>
<tr>
<td>Midwest</td>
<td>29.4%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Northeast</td>
<td>19.7%</td>
<td>20.8%</td>
</tr>
<tr>
<td>West</td>
<td>10.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td><strong>Location</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>88.2%</td>
<td>80.9%</td>
</tr>
<tr>
<td>Rural</td>
<td>11.8%</td>
<td>19.1%</td>
</tr>
</tbody>
</table>


Note: This exhibit displays column percentages for characteristics of MCCM enrollees and MCCM-eligible decedents not in MCCM, with dates of death on or prior to June 30, 2018. We used chi-square tests to identify differences across MCCM enrollees and MCCM-eligible decedents not in MCCM, with statistical significance at the 10% (*), 5% (**), and 1% (***)) levels. We define each characteristic in Appendix D.3 and Appendix J, and provide additional analysis in Exhibit J.1.
### Exhibit 2.13 Most MCCM Enrollees Needed Some Assistance with Activities, and Had a Diagnosis of Cancer and Hypertension

<table>
<thead>
<tr>
<th>Beneficiary Characteristic</th>
<th>MCCM Enrollees (n = 2,591)</th>
<th>MCCM-Eligible Decedents Not in MCCM (n = 70,345)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>17.4%</td>
<td></td>
</tr>
<tr>
<td>Needs some assistance</td>
<td>52.0%</td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td>10.2%</td>
<td></td>
</tr>
<tr>
<td>Disabled</td>
<td>7.1%</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>13.3%</td>
<td></td>
</tr>
<tr>
<td><strong>MCCM-qualifying diagnosis</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>57.6%</td>
<td>39.0%</td>
</tr>
<tr>
<td>Congestive heart failure</td>
<td>19.6%</td>
<td>38.3%</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>17.5%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Human immunodeficiency virus/acquired immunodeficiency syndrome</td>
<td>0.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Missing</td>
<td>5.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Comorbidity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension ***</td>
<td>78.1%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Hyperlipidemia ***</td>
<td>57.1%</td>
<td>71.0%</td>
</tr>
<tr>
<td>Anemia ***</td>
<td>59.2%</td>
<td>68.8%</td>
</tr>
<tr>
<td>Ischemic heart disease ***</td>
<td>53.2%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Chronic kidney disease ***</td>
<td>49.9%</td>
<td>61.9%</td>
</tr>
<tr>
<td><strong>CMS hierarchical condition category risk score</strong>*</td>
<td>2.2</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Sources: Medicare claims, Master Beneficiary Summary File, and MCCM portal, January 1, 2016-June 30, 2018.

Note: This exhibit displays column percentages for characteristics of MCCM enrollees and MCCM-eligible decedents not enrolled in MCCM with dates of death on or prior to June 30, 2018. Comorbidities presented in the table represent the five most common chronic conditions among MCCM enrollees. Information on functional status is available for MCCM enrollees only. We used chi-square tests to identify group differences between categorical characteristics and a multivariate difference in means for the hierarchical condition category risk score, which is a continuously measured characteristic. We report statistical significance at the 10% (*), 5% (**), and 1% (*** levels.

* Indicates the results of chi-square tests of subgroup differences that are significant at the 1% level. We provide further analysis in Appendix J, Exhibit J.2.
Beneficiaries with less social support at home may require more support from MCCM hospices. About half of the beneficiaries were married when they enrolled in MCCM, 40 percent had a spouse or partner as their caregiver, and 77 percent lived with another person rather than alone, as shown in **Exhibit 2.14**. Equivalent data are not available for the comparison group, or for beneficiaries referred to MCCM who did not enroll. This will be important to monitor in understanding the cost of the model, as having a caregiver available may affect the types of services the hospice needs to provide.

**Exhibit 2.14  Almost Half of MCCM Enrollees Were Married and Few Lived Alone**

<table>
<thead>
<tr>
<th>Beneficiary Characteristic</th>
<th>MCCM Enrollees (n = 2,591)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>49.2%</td>
</tr>
<tr>
<td>Widowed</td>
<td>28.5%</td>
</tr>
<tr>
<td>Divorced</td>
<td>9.6%</td>
</tr>
<tr>
<td>Never married</td>
<td>6.4%</td>
</tr>
<tr>
<td>Declined to report</td>
<td>5.4%</td>
</tr>
<tr>
<td>Partner</td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>Caregiver availability</strong></td>
<td></td>
</tr>
<tr>
<td>Spouse/partner</td>
<td>37.7%</td>
</tr>
<tr>
<td>Immediate family</td>
<td>30.2%</td>
</tr>
<tr>
<td>Other relative</td>
<td>3.9%</td>
</tr>
<tr>
<td>Friend/neighbor</td>
<td>2.3%</td>
</tr>
<tr>
<td>Other</td>
<td>5.4%</td>
</tr>
<tr>
<td>None listed</td>
<td>20.6%</td>
</tr>
<tr>
<td><strong>Living arrangement</strong></td>
<td></td>
</tr>
<tr>
<td>Lives with other person(s)</td>
<td>77.2%</td>
</tr>
<tr>
<td>Lives alone</td>
<td>22.2%</td>
</tr>
<tr>
<td>Missing</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Note: This exhibit displays column percentages for MCCM enrollee characteristics. Information on marital status, caregiver, and living arrangements are available for MCCM enrollees only. We provide further analysis in **Appendix J, Exhibit J.3.**
MCCM enrollees in cohort 2 generally had lower HCC scores than cohort 1 enrollees across all functional levels, as shown in Exhibit 2.15. This indicates that cohort 2 hospices enrolled healthier beneficiaries, measured by HCC scores, than cohort 1 enrollees. We will need to account for this difference when comparing impacts by cohort in future analyses. We plan to continue to monitor these trends in future reports to determine whether these patterns persist with additional enrollment.

**Exhibit 2.15  Cohort 2 Hospices Enrolled MCCM Beneficiaries with Lower Hierarchical Condition Category Scores than Cohort 1 Hospices, across All Functional Levels**

Sources: Medicare claims, Master Beneficiary Summary File, and MCCM portal, January 1, 2016-June 30, 2018.  
Note: This exhibit displays comparison HCC scores by functional level by MCCM cohort membership. The analysis is based on MCCM enrollees (n = 2,591), with dates of enrollment on or prior to June 30, 2018. Sample sizes for each cohort and functional status were as follows: Independent, cohort 1: n = 389, cohort 2: n = 53; needs some assistance, cohort 1: n = 1,107, cohort 2: n = 205; dependent, frequent care, cohort 1: n = 185, cohort 2: 73; disabled, cohort 1: n = 160, cohort 2: 18. Information on HCC was missing for 82 enrollees and functional status was missing for 319 enrollees (cohort 1: n = 186, cohort 2: n = 133).  
HCC = hierarchical condition category.
2.2.3 Reasons Beneficiaries Accept or Decline MCCM Enrollment

Terminally ill Medicare beneficiaries who view MCCM services as beneficial are more likely to enroll in the model, and those who are satisfied are less likely to disenroll from MCCM and return to fee-for-service Medicare. This section provides information on beneficiary reasons for enrolling in, declining, and leaving MCCM.

Reasons for Enrolling in MCCM

Beneficiaries enrolled in MCCM based on recommendations of referring providers and the need for additional services. We interviewed 43 beneficiaries and caregivers during 2017 and 2018 who enrolled in the model; and all clearly understood that MCCM is distinct from MHB. All seemed to understand that MHB requires forgoing life-prolonging treatment for their terminal illness and MCCM does not; however, few identified this as the reason they chose MCCM instead of MHB. Common reasons interviewees mentioned for MCCM enrollment included:

- Having a discharge planner or other acute/post-acute care provider recommend MCCM due to a change in their medical condition
- Having a palliative care provider or specialist recommend MCCM
- Reaching a point in their disease trajectory where they needed extra support, in addition to the assistance of their primary caregiver
- Being eligible for, but unwilling to accept, MHB

MCCM hospice staff and referring providers also told us that when eligible beneficiaries became familiar with the model, they were generally enthusiastic.

Reasons for Declining MCCM

A small number of beneficiaries whom hospices deemed eligible for MCCM declined to enroll in MCCM or MHB. Cohort 2 hospices had fewer individuals declining enrollment than cohort 1 hospices (11 percent declined versus 16 percent, as shown above in Exhibit 2.7). The most common reason beneficiaries gave for declining MCCM was “Not ready for palliative care,” as shown in Exhibit 2.16. Other reasons included the beneficiary not wanting care coordination and not wanting MCCM staff in their home.
2. WHO PARTICIPATES IN MCCM?

**Exhibit 2.16** Most Common Reason Beneficiaries Gave for Declining MCCM Was “Not Ready for Palliative Care”

<table>
<thead>
<tr>
<th>Main Reason for Declining MCCM</th>
<th>Percentage Declining MCCM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Referrals Who Declined (n = 768)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Not ready for palliative care</td>
<td>48.3%</td>
</tr>
<tr>
<td>Declined care coordination</td>
<td>15.8%</td>
</tr>
<tr>
<td>Declined MCCM staff in home</td>
<td>9.1%</td>
</tr>
<tr>
<td>Other reason</td>
<td>26.8%</td>
</tr>
</tbody>
</table>


**Reasons for Leaving MCCM**

The most common reason for leaving MCCM was electing MHB. Once enrolled, over 80 percent of beneficiaries transitioned from MCCM to MHB. MHB provides services that are not available under MCCM, as described in Exhibit 1.3. These additional services could incrementally improve outcomes at the end of life beyond those achieved by MCCM. Among the 1,698 beneficiaries who enrolled in MCCM and subsequently left, 81 percent transitioned from MCCM to MHB, as shown in Exhibit 2.17; this is an increase from the 76 percent we reported last year in Annual Report 1.

For more information on transitions to MHB, see Section 5.
2. WHO PARTICIPATES IN MCCM?

Exhibit 2.17 Most Common Reason for Leaving MCCM Was Electing the Medicare Hospice Benefit

<table>
<thead>
<tr>
<th>Reason for Leaving MCCM</th>
<th>Percentage Leaving MCCM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All MCCM Enrollees Who Left (n = 1,698)</td>
</tr>
<tr>
<td>Elected MHB</td>
<td>80.6%</td>
</tr>
<tr>
<td>Died without electing MHB</td>
<td>13.0%</td>
</tr>
<tr>
<td>Requested voluntary discharge from MCCM</td>
<td>3.6%</td>
</tr>
<tr>
<td>Moved out of hospice service area</td>
<td>1.8%</td>
</tr>
<tr>
<td>Resided in long-term nursing facility for more than 90 daysa</td>
<td>0.5%</td>
</tr>
<tr>
<td>Lived outside the home for 90 days or moreb</td>
<td>0.5%</td>
</tr>
<tr>
<td>Discharged for causea</td>
<td>0.1%</td>
</tr>
<tr>
<td>Transferred to another MCCM hospicea</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Note: This exhibit displays analysis of 1,698 beneficiaries who enrolled in MCCM on or before June 30, 2018 and subsequently left MCCM.
Categories (rows) in the exhibit are mutually exclusive, with one reason counted for each beneficiary. The percentage of MCCM users transitioning to MHB in this exhibit is slightly lower than the 83 percent reported in Section 5. This difference is due to the use of MCCM portal data in this exhibit, rather than claims data used in Section 5. The MCCM portal does not reliably capture transitions to MHB that occur after enrollees leave MCCM. Hospices may be more likely to misreport transitions to MHB in the MCCM portal, and beneficiaries may enter MHB after leaving MCCM. Possible reasons that beneficiaries may have been discharged for cause include being disruptive or abusive to hospice staff, and living in homes that are unsafe for hospice staff to visit.

a This reason was included in the original MCCM portal effective January 1, 2016-December 31, 2017.
b This reason was included in the revised MCCM portal effective January 1, 2018.

MHB = Medicare hospice benefit.

2.2.4 Enrollment Challenges Related to Eligibility Criteria

Hospices appreciated that CMS relaxed some eligibility criteria in 2016 and 2017, as shown in Exhibit 2.8, and these changes led to increased enrollment in MCCM, as discussed in Section 2.2.1. We interviewed MCCM hospice staff in 2017 and 2018, and heard on multiple occasions that the MCCM eligibility criteria remained a barrier to enrolling beneficiaries.
The following text speaks to the factors that continue to pose enrollment challenges.

**Managed Care**
Most MCCM hospices struggled with MCCM enrollment in regions with high Medicare-managed care penetration. Some hospices reported that they expect this challenge to grow because Medicare-managed care participation is increasing. For example, a cohort 2 hospice told us that more than 30 percent of beneficiaries referred to them were ineligible for MCCM due to having Medicare-managed care coverage, and another hospice explained that Medicare-managed care plans cover 80 percent of their beneficiaries with cancer.

**Diagnoses**
Three of the four MCCM-eligible diagnoses (CHF, COPD, and cancer) were common among beneficiaries referred to MCCM hospices. A few MCCM hospices mentioned eliminating HIV/AIDS as an eligible diagnosis because so few potential enrollees have it. Several hospices see MCCM as valuable for beneficiaries with other diagnoses, such as end-stage renal disease, dementia, pulmonary fibrosis, and amyotrophic lateral sclerosis and other neurological diseases.

**Certification of Terminal Illness**
All the hospices we visited in 2017 and 2018 described the challenge of cultural norms surrounding end-of-life and hospice conversations, for both physicians and beneficiaries in their regions. Many explained the medical culture in their service area as favoring aggressive treatment until death. Many also mentioned physicians’ reluctance to specify an anticipated survival of six months or less, especially for individuals with CHF and COPD, whose disease trajectory is difficult to predict. A few interviewees pointed out, however, that MCCM meets the care needs of beneficiaries who are within six months of death, but are not ready (or may never be ready) to forgo treatment for their terminal illness.

### 2.3 CONCLUSION
In this section, we described hospice and beneficiary participation in MCCM. These results provide useful background on who participates in the model, and some key differences between participants and non-participants. Future reports will control for those differences to measure the impact of the model on key outcomes (e.g., health care utilization and spending at the end of life).

We discussed the characteristics of the 91 hospices (as of December 2018) who were implementing MCCM, and the 2,591 beneficiaries who had enrolled in MCCM through June 30, 2018. MCCM hospices were more likely to be non-profit, and were larger and older than all other hospices. Therefore, the model and our evaluation results may not be generalizable.

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32 There were only three MCCM enrollees with HIV/AIDS listed as their MCCM-qualifying diagnosis.
to all hospices nationwide. MCCM enrollees were more likely to have cancer and less likely to be dually eligible than MCCM-eligible decedents not enrolled in MCCM. These findings reflect that MCCM hospices enroll a slightly different population of beneficiaries compared to who is eligible for MCCM.

After CMS relaxed eligibility criteria in 2016 and 2017, as shown in Exhibit 2.2, the number of hospices withdrawing from the model decreased, with only 13 hospices withdrawing in 2018; compared with 20 hospices withdrawing in 2017, as shown in Exhibit 2.6. MCCM enrollment increased after CMS relaxed eligibility criteria and cohort 2 began enrolling beneficiaries. However, enrollment remained concentrated among 8 hospices. While cohort 2 hospices have just 6 months of experience reflected in this report, preliminary analysis indicates that they were more effective in enrolling beneficiaries than cohort 1 hospices. Given that enrollment was driven by a small number of hospices, the results we provide in this report may be somewhat influenced by idiosyncrasies of those hospices.

Many beneficiaries who declined to enroll in MCCM chose to enroll in MHB. Only a small percentage of beneficiaries who were eligible for MCCM declined to enroll in either MCCM or MHB, and this was generally because they were not ready for palliative care services, as shown in Exhibit 2.16. Most MCCM enrollees eventually transitioned to MHB.

We recommend interpreting descriptive findings related to MCCM and comparison beneficiaries with caution. The comparison group is not a matched sample and we do not interpret any differences with MCCM enrollees as impacts of the model. In a future evaluation report, we plan to present impact estimates using a matched sample.
3. How Do Hospices Implement MCCM?

Key Takeaways about Hospices’ Implementation of MCCM

- Strong organizational leadership, well-defined MCCM care teams providing the array of supportive services, and clear communication channels facilitated effective implementation of MCCM. (Section 3.2)

- Prior experience with a palliative care or similar program may facilitate MCCM enrollment and implementation when staff are familiar with the goals of both supportive services and treatment for serious illnesses. However, several hospices with low MCCM enrollment noted that other local palliative care programs, or even the hospice’s own palliative care programs, can compete for enrollment with MCCM. (Section 3.1)

- Participating hospices leveraged their existing staff to implement the core components of MCCM, and few hired new staff. A key to beneficiary satisfaction was having the same care team and staff while in MCCM and later after transitioning to MHB. (Section 3.2)

- As a new model, MCCM was unfamiliar to most providers and beneficiaries. Enhancing awareness of the advantages of MCCM was critical for increasing referrals from local providers, and MCCM hospices targeted outreach to referring providers that likely would have a high volume of potential referrals (e.g., oncologists and community providers). Direct outreach to beneficiaries and their caregivers also enhanced awareness of MCCM. (Section 3.6)

- Oncologists referred more than one-third (37 percent) of the beneficiaries MCCM hospices enrolled; this was followed by internal medicine and family practice physicians (26 and 25 percent, respectively). The types of physicians who referred beneficiaries to MCCM did not change from 2016 to 2018. (Section 3.7)

- Cohort 2 hospices learned from the experiences of their peers in cohort 1, who had had two years of implementation experience by the time cohort 2 hospices joined the model. Cohort 2 hospices adopted best practices on how to integrate MCCM into their organizational infrastructure and service lines, and enrolled more beneficiaries in their first six months of participating in MCCM than was true in the first six months of cohort 1. (Section 3.5)

- MCCM hospices also learned from CMS implementation support activities, including training and informational in-person meetings and webinars, and peer-based virtual sessions. CMS project officers provided support to hospices in solving problems and identifying improvements. (Section 3.5)
In preparing for the Medicare Care Choices Model (MCCM), hospices added to and improved their infrastructures, including systems, people, and processes necessary for outreach and enrollment. MCCM hospices decided which of their locations and service lines were appropriate to implement the model. Hospices also developed or adapted business and clinical processes, identified internal champions, assigned and trained staff, and developed or refined systems and technology to support MCCM. Hospices marketed MCCM to providers and potential enrollees, and tracked performance and quality metrics. In this section, we discuss what, and how, organizational characteristics and environmental factors affect implementation of MCCM. We examine leadership and staffing; health information technology infrastructure; quality performance monitoring; staff training; and the marketing, referral, and enrollment processes of participating hospices.

3.1 ORGANIZATIONAL AND ENVIRONMENTAL FACTORS AFFECTING IMPLEMENTATION OF MCCM

3.1.1 Location and Local Context

Most MCCM hospices have more than 1 office to cover their service area, which can be geographically dispersed. The number of physical office locations for MCCM hospices ranged from 1 to 8, as shown in Exhibit 3.33 Twenty-seven percent of cohort 1 hospices and 64 percent of cohort 2 hospices had multiple locations. Hospices that operate in multiple locations must market the model to local providers in more places, and maintain these relationships over time. This requires additional resources for operating and marketing the model, and provides more opportunity to deliver services to a larger potential population. In future analysis, we will assess differences in implementation approaches for hospices that operate in multiple locations and the effect on the delivery of care under MCCM.

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33 We defined a hospice by their CMS Certification Number (CCN), which is the hospice provider number. A CCN can encompass several locations, or a single location. It is industry standard to use CCNs to identify hospices. Since some CCNs belong to the same chain of hospices and share the same leadership and staff, we did not match comparison hospices to an MCCM hospice that was part of the same chain.

34 Two cohort 1 hospices did not respond to this question.

35 One cohort 2 hospice did not respond to this question.
Exhibit 3.1  Hospices Implemented MCCM in Multiple Locations

<table>
<thead>
<tr>
<th>Hospice Characteristic</th>
<th>Cohort 1 Hospices</th>
<th>Cohort 2 Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of physical locations associated with the hospice’s CMS Certification Number</td>
<td>1 to 8</td>
<td>1 to 7</td>
</tr>
<tr>
<td>Percentage of hospices with multiple locations</td>
<td>27%</td>
<td>64%</td>
</tr>
<tr>
<td>Average number of physical locations participating in MCCM</td>
<td>2.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Percentage of hospices not recruiting for MCCM from all locations in their CMS Certification Number</td>
<td>44.4%</td>
<td>35.3%</td>
</tr>
</tbody>
</table>

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.
Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices.

Cohort 2 hospices designated fewer locations to participate in MCCM than did cohort 1 hospices (1.9 separate locations for cohort 2 hospices and 2.7 separate locations for cohort 1). Additionally, 44 percent of cohort 1 hospices and 35 percent of cohort 2 hospices did not recruit potential enrollees from all their locations; this was especially true for hospices with many locations.

Hospices considered a number of factors when deciding how to implement MCCM, and which of their office locations should participate. Most offered MCCM in a subset of their locations and to a subset of beneficiaries. The most important factor in deciding whether to include a location in MCCM was the commitment to the model among local referral sources, such as oncologists and community providers (information on referrals is further discussed in Section 3.7). This was a key factor for both cohort 1 and cohort 2 hospices, as shown in Exhibit 3.2. The second most important factor in the selection of locations for MCCM was the local population of beneficiaries potentially eligible for MCCM based on diagnoses.
### Exhibit 3.2 Hospices Implemented MCCM in Their Locations with Strong Referral Sources and Many Eligible Beneficiaries

<table>
<thead>
<tr>
<th>Rationale Characteristic - Rank Ordered from 1 to 4 (most to least important)</th>
<th>Cohort 1 Hospices</th>
<th>Cohort 2 Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment among usual hospice referral sources to refer beneficiaries to MCCM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Number of local beneficiaries with MCCM diagnoses (cancer, congestive heart failure, chronic obstructive pulmonary disease, human immunodeficiency virus/acquired immunodeficiency syndrome)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Desire to serve an underserved population</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Proximity of hospice staff to that location</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.
Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. Characteristics were rank ordered from 1 to 4 (most important to least important).

#### 3.1.2 Access to a Pre-Hospice or Bridge Program

Some MCCM hospices had a pre-existing “pre-hospice” or “bridge” program in place for beneficiaries who were not eligible for, or did not want, the Medicare hospice benefit (MHB). Although comparison hospices were more likely to have a pre-hospice or bridge program (55 percent) than hospices in cohort 1 (44 percent) or cohort 2 (46 percent), these differences are not statistically significant. Prior experience with such programs could affect MCCM implementation, and the ability to quickly assess and enroll MCCM beneficiaries. For example, hospices with these types of programs may have experience coordinating the care of seriously ill beneficiaries who are still pursuing life-prolonging treatment, and may be more knowledgeable about offering concurrent life-prolonging treatment and pre-hospice care. Since hospices with these programs have experience working with referral sources to recruit Medicare beneficiaries who may be eligible for pre-hospice care, they also may be better able to recruit and screen Medicare beneficiaries suitable for MCCM. Future evaluation activities will investigate this potential relationship.

#### 3.1.3 Affiliation with Other Health Care and Palliative Care Programs

Working collaboratively with other health care providers who might refer beneficiaries to MCCM helped participating hospices successfully implement the model. Cohort 2 hospices had more of these relationships than cohort 1 (although the differences were not statistically significant). For example, 81 percent of cohort 1 hospices and 91 percent of cohort 2 hospices had affiliations with hospitals, as shown in Exhibit 3.3. These affiliations may have positioned hospices to recruit beneficiaries to MCCM, and may partially explain the higher enrollment rates for cohort 2 hospices.
Hospital- and community-based palliative care programs are especially important partners for MCCM hospices. Referring providers may participate in these programs, and the hospice can offer community-based programs, as can other organizations in the community. In addition, many MCCM hospices offer their own palliative care programs alongside (and often preceding) MCCM. Hospices described their experiences collaborating with or operating a palliative care program as a helpful primer for understanding care coordination and meeting beneficiaries’ needs at home. Operating such a program, or working closely with one, may help MCCM hospices identify potential enrollees, introduce their services, and begin to form a relationship that leads to enrollment. The transition from palliative care to MCCM may also be smoother if the same organization offers both, as beneficiaries who trust their palliative care providers may be more willing to consider a recommendation about MCCM. Cohort 1 hospices identified more affiliations with hospital- and community-based palliative care programs than did cohort 2 or comparison hospices, as shown in Exhibit 3.4.
3. HOW DO HOSPICES IMPLEMENT MCCM?

Exhibit 3.4  
Cohort 1 MCCM Hospices Were More Likely to Affiliate with Hospital and Community-Based Palliative Care Programs than Cohort 2 or Comparison Hospices

Hospices leveraged their strong palliative care program referral networks for faster MCCM start-up, and reported that their palliative care staff were experienced with the four diagnoses relevant for MCCM and were able to build trust with beneficiaries who might be interested in the model. A few hospice interviewees told us, however, that their internal palliative care programs compete with MCCM to recruit beneficiaries who are eligible for both options.

Hospices that operate or affiliate with palliative care programs tended to have higher MCCM enrollment ratios than hospices with no affiliation, as shown in Exhibit 3.5. These relationships may have helped MCCM hospices educate palliative care providers about MCCM, which in turn led to more—and more appropriate—referrals.
Exhibit 3.5  Hospices Affiliated with Palliative Care Providers Had Higher MCCM Enrollment Relative to Their Market Size, than Those without Affiliations

Sources: Medicare claims data and MCCM portal data, January 1, 2016-June 30, 2018.
Note: This exhibit displays analysis of 2,591 MCCM enrollees who enrolled through June 30, 2018. We examined the attributes of MCCM hospices with high enrollment using information from the organizational survey. For the 85 hospices with valid organizational survey and enrollment data, we calculated a hospice-specific enrollment ratio equal to the hospice’s average number of new MCCM enrollments per month, divided by the hospice’s monthly average of Medicare hospice benefit patients from 2015 who would have been eligible for MCCM using the current eligibility criteria. Through August 2018, cohort 1 hospices had been enrolling beneficiaries for 32 months and cohort 2 hospices had been enrolling beneficiaries for 8 months. A higher enrollment ratio indicates greater levels of MCCM enrollment, after accounting for the varying sizes of MCCM hospices. The Kruskal-Wallis non-parametric test was conducted to determine statistical significance. There was a statistically significant difference at the 5% level across the 3 categories of hospices, p-value = 0.03 based on the Kruskal-Wallis test.
3.1.4 Participation in Other Payment Models or Demonstration Programs

A small percentage of MCCM hospices surveyed—18 percent of cohort 1 hospices and 15 percent of cohort 2 hospices—participated in other payment models or payment demonstration programs at the federal or state level, or with commercial payers, including accountable care organizations, medical home models, and preferred provider networks.\(^{36}\) Comparison hospices were similar, with only 17 percent participating in such programs.\(^{37}\) These differences were not statistically significant and likely will not affect any other MCCM outcomes to be measured later in this evaluation.

3.1.5 Business and Clinical Processes

MCCM implementation required fewer business and clinical process changes than most cohort 2 hospices had expected.\(^{38}\) Most cohort 2 hospices (81 to 94 percent) initially anticipated incorporating changes to their data collection and reporting, marketing and public relations, billing and finance, and quality assurance and performance improvement (QAPI) program operations and processes. However, far fewer cohort 2 hospices actually made changes to their business and clinical operations and processes once they began planning for and implementing MCCM. For example, 84 percent of cohort 2 hospices anticipated altering their enrollee intake process; however, only 27 percent actually changed their process, as shown in Exhibit 3.6.

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\(^{36}\) Source: Cohorts 1 and 2 organizational survey, wave 2, fielded October-December 2018. Information is from hospices that responded to both waves (2017 and 2018) of the organizational survey. We included responses from 37 cohort 1 hospices and 34 cohort 2 hospices.

\(^{37}\) Source: Comparison hospice organizational survey, wave 1, fielded November 2017-June 2018. We included responses from 139 comparison hospices.

\(^{38}\) We surveyed cohort 2 hospices as they began planning for MCCM implementation, and again a year later.
### Exhibit 3.6  Cohort 2 Hospices Implemented Fewer Changes than They Expected in Their Business/Clinical Operations

<table>
<thead>
<tr>
<th>Operation/Process</th>
<th>Anticipated Changes</th>
<th>Actual Changes Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collection/Reporting</td>
<td>93.8%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Marketing/Public Relations</td>
<td>90.6%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Patient Intake Processes</td>
<td>90.6%</td>
<td>24.2%</td>
</tr>
<tr>
<td>Billing/Finance</td>
<td>84.4%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Patient Care Protocols</td>
<td>81.3%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Medical Records</td>
<td>71.9%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>65.6%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Coordination of DME</td>
<td>56.3%</td>
<td>12.1%</td>
</tr>
</tbody>
</table>

Notes:
- For cohort 2 hospices that answered both waves (n = 34), we compared what they anticipated would be necessary to prepare for MCCM (wave 1, 2017) with what actually occurred (wave 2, 2018).
- DME = durable medical equipment, QAPI = quality assurance and performance improvement.
3. HOW DO HOSPICES IMPLEMENT MCCM?

3.2 MCCM LEADERSHIP AND STAFFING

3.2.1 Leadership

A flexible, innovative, and independent leader (i.e., a champion), with dedicated time and deep interest in the model was a critical factor for successful implementation, according to case study interviewees. A champion could fulfill multiple roles including care coordination, marketing, liaising between the care team and community providers, intake and assessment, delivery of services, and general oversight of the model, as discussed during several case studies. Hospices often identified champions who were registered nurses, case or clinical managers, or social workers. In addition to leading the MCCM implementation effort, these individuals worked with the interdisciplinary team to coordinate care and ensure that the hospice staff executed the care plans appropriately. Other examples of champions included several referring providers, a health system executive who is actively supporting the model, and a marketing department director.

3.2.2 Staffing Approaches

Hospices leveraged interdisciplinary teams for MCCM, with a registered nurse and/or a social worker delivering a majority of services, as discussed during case study interviews. Chaplains, aides, and volunteers also provided services through the model. Care teams worked across MCCM and other palliative care and hospice programs, integrating services and staff, and redefining staff roles and responsibilities to align with the model.

Approximately two-thirds of hospices made no staffing changes for MCCM (neither hired nor reassigned staff), as shown in Exhibit 3.7. Most of those that did reassign staff were cohort 2 hospices, with one-third reassigning registered nurses, registered nurse care coordinators/case managers, and social workers. Most MCCM hospices integrated their existing hospice or palliative care staff into MCCM roles, rather than hiring new staff specifically for the model, in particular sharing a care coordinator across MCCM and MHB, as shown in Exhibit 3.8. Most hospices told us they did not have enough MCCM enrollees to...
justify new hiring, and it was more financially advantageous to repurpose existing staff and reconfigure care teams to absorb MCCM beneficiaries. A few hospices used their palliative care teams to implement MCCM because the two are similar and MCCM is an “easy” addition for nursing and support staff who understand palliative services. A few others told us they would hire staff if enrollment increases substantially.

Staff turnover can be a significant issue for many hospices, and turnover in MCCM leadership can especially affect continuity in implementation efforts. A modest degree of turnover in MCCM leadership occurred between 2017 and 2018, with approximately 24 percent of cohort 1 and 18 percent of cohort 2 hospices experiencing a change in MCCM leadership during the preceding year. Only a few hospices noted they had undergone a leadership change, and told us that the turnover was problematic for their MCCM implementation.

**Exhibit 3.7 Most Hospices Did Not Hire or Reassign Staff for MCCM**

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.
Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. Percentages add up to 100 within a cohort and staff type (e.g., RN). Categories are mutually exclusive.
RN = registered nurse.
3. HOW DO HOSPICES IMPLEMENT MCCM?

Exhibit 3.8  Hospices Often Shared Care Coordinators between MCCM and the Medicare Hospice Benefit

<table>
<thead>
<tr>
<th>Percentage of Hospices</th>
<th>Dedicated to MCCM Only</th>
<th>Shared with Hospices' Medicare Hospice Benefit Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 Hospices</td>
<td>21.6%</td>
<td>78.4%</td>
</tr>
<tr>
<td>Cohort 2 Hospices</td>
<td>8.8%</td>
<td>91.2%</td>
</tr>
</tbody>
</table>

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.
Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices.

3.3 HEALTH INFORMATION TECHNOLOGY USED IN MCCM

Hospices use various technologies to track and report MCCM activities, and to communicate with beneficiaries and providers across the care team.

For more information on coordinating care through electronic health records, see Section 4.4.

Hospices use their electronic health records and paper health records to communicate with other members of the care team, as shown in Exhibit 3.9. They create detailed narrative notes that the entire care team can access, including on-call staff, and communicate with each other by calling, texting, and sending messages through secure applications or email.
3. HOW DO HOSPICES IMPLEMENT MCCM?

Exhibit 3.9  **MCCM Hospices Predominantly Used Electronic Health Record Systems**

- Approximately 70 percent of MCCM hospices used electronic health records.
- Approximately 30 percent of MCCM hospices used a mix of electronic and paper health records.
- Few MCCM hospices relied solely on paper medical records.

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.

Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. Data were not different by cohort or survey period (2017 and 2018).

Many hospices modified their electronic health records to deliver care to MCCM beneficiaries and to streamline documentation via the MCCM portal. Examples of electronic health record modifications include:

- Clearly differentiating between beneficiaries enrolled in MCCM and beneficiaries enrolled in other palliative care programs
- Building an MCCM-specific module that mirrors the MCCM portal
- Adding new fields to capture MCCM-required quality and monitoring data, such as screenings and treatments outlined in Section 6
- Developing care plan templates to help staff document care for MCCM beneficiaries and to document MCCM-specific assessments

Interviewees from MCCM hospices unanimously agreed that electronic health record changes were essential for effective model implementation. A few hospices installed a new electronic health record or integrated with another health system and adopted its electronic health record. Those hospices did not make electronic health record changes because of the model, but because the changes made it easier for staff to screen beneficiaries for MCCM eligibility and understand enrollees' utilization across the health system, including home health, inpatient, and outpatient care. Electronic health record integration also gave staff full access to physicians' visit notes for the first time in some hospices, which was very useful for the care team. A cohort 2 hospice that withdrew from MCCM told us they had faced challenges when their parent health system transitioned.
3. HOW DO HOSPICES IMPLEMENT MCCM?

3.4 MCCM QUALITY AND PERFORMANCE MONITORING AND REPORTING

The Centers for Medicare & Medicaid Services (CMS) uses the service and activity data entered by hospices into the MCCM portal to monitor MCCM quality and performance. Some MCCM hospices also use these data to track their own performance in the model.

Hospices often track quality data across all Medicare beneficiaries and other patients, rather than separately for MCCM or for their other required programs. Several hospices told us specifically they do not track quality performance data specifically for MCCM due to a lack of resources and appropriate technology. However, more than 73 percent of cohort 1 hospices and 87 percent of cohort 2 hospices indicated that they plan to incorporate MCCM measures into their hospice’s formal QAPI program in the future.

Many hospices we visited reported an improved experience with the MCCM portal after CMS updated it on January 1, 2018. Most hospices said they designated one staff person to enter data into the MCCM portal, and two hospices told us that staff enter their own data and find the portal easy to use. A few hospices added an MCCM-specific module that mirrors the MCCM portal for ease of documentation and reporting. A few hospices mentioned that data entry in the portal is duplicative and time-consuming, but most agree that the revised portal is more straightforward, and less time-consuming and burdensome than it was before the upgrade. An interviewee from a cohort 1 hospice offered, “I like [the MCCM portal] a lot better and it’s a lot quicker … uploads are much better now.” A cohort 2 hospice shared that the hospice received assistance with the MCCM portal from a cohort 1 hospice that uses the same electronic health record.

39 The MCCM portal is a secure online website through which participating hospices enter information on the services provided to MCCM enrollees, what staff (by title) provided those services, and other information about enrollees’ clinical and social support characteristics. This information is used to construct performance and quality measures that describe the outcomes of MCCM.

40 MCCM-required quality metrics include advance care planning; bowel regimen initiation (regarding opioid treatment) and outcomes; dyspnea (shortness of breath) screening, treatment, and outcomes; pain screening, management, and outcomes; screening and follow up for psychological and emotional needs; and spiritual and religious discussion. See Exhibit E.3 in Appendix E for measure specifications.

3.5 STAFF TRAINING AND MCCM IMPLEMENTATION SUPPORT

3.5.1 Staff Training Sources, Audiences, and Topics

MCCM hospices use various sources to train their staff, both from the hospice itself and from CMS and its MCCM implementation contractor. Nearly two-thirds of cohort 1 hospices used internal organizational resources to train their staff about MCCM eligibility, marketing, and outreach; coordination of palliative care and life-prolonging treatment; delivery of clinical services in the home; quality assurance; and performance improvement. Cohort 2 hospices initially anticipated providing the majority of training themselves, but more than 25 percent took advantage of training from CMS and its implementation contractor on topics related to MCCM eligibility, marketing and outreach, enrollment strategies, and billing practices; and using the MCCM portal.42

Cohort 2 hospices conducted training sessions to address different topics. Some of the topics included the differences between MCCM and MHB, how to identify eligible beneficiaries for the model, coordination of palliative and life-prolonging treatment, and delivery of services in the home. Staff of various disciplines across hospices were trained on the hallmarks and requirements of MCCM. These disciplines included nurses, social workers, hospice directors, chaplains, aides, home health agency intake coordinators, therapy staff, palliative care staff, hospice leadership, business development staff, and on-call staff.

Several hospices trained their staff about the continuum of services between MCCM and MHB, and one cohort 2 hospice told us they cross-trained all hospice staff to care for MCCM beneficiaries to support the seamless integration of the model into their hospice operations. A few cohort 2 hospices we visited offered staff little or no formal training on MCCM, and just briefly introduced the model during a staff meeting. Some hospices told us they provided ongoing training as they assign new staff to the model, but others reduced their training efforts over time. Hospice staff shared that they did not conduct many training sessions on an ongoing basis, perhaps due to the hospice staff gaining MCCM implementation experience.

Innovations

Marketing MCCM Internally to Increase Awareness, Knowledge, and Use of the Model

One cohort 2 hospice marketed MCCM services internally throughout the organization by creating an educational video for hospice staff that explains the model. Another cohort 2 hospice learned about MCCM approaches from a cohort 1 hospice, and leveraged the cohort 1 training resources to train staff in the cohort 2 hospice.

For more information on the provider and content of training activities, see Appendix J, Exhibit J.5.
All hospices received training from CMS’s implementation contractor about how to enter data and navigate the MCCM portal. One hospice told us that they found this very helpful, especially after CMS updated the portal with new functionality (i.e., the revised portal). The hospice used a train-the-trainer approach to share this information with other staff.

The hospices we visited reported some challenges in training staff to distinguish between MHB and MCCM services, which caused frustration among staff trying to learn the model. In response, CMS created a brochure that explains these differences.

### 3.5.2 Implementation Support Activities

CMS and its MCCM implementation contractor provide activities to support hospices’ implementation of MCCM and problem-solve challenges that MCCM hospices encounter, as shown in Exhibit 3.10. Learning activities include the enrollment innovation affinity group sessions held early in the model (2016-2017), in-person training (once for each cohort), web-based training and informational sessions, and peer-based virtual sessions. Additionally, each hospice is assigned a CMS project officer who provides a direct connection to CMS and helps the hospice when it encounters challenges in billing and understanding MCCM’s requirements, as well as help with a variety of other topics. After learning events, participants provide feedback on the event’s usefulness, their satisfaction with the event, and suggest areas for improvement. CMS and its implementation contractor review the post-event survey data and incorporate the critical feedback when planning subsequent activities.

**Enrollment Innovation Affinity Group**

In 2016 and 2017, selected cohort 1 hospices participated in the MCCM Enrollment Innovation Affinity Group. Through nine small-group sessions, these cohort 1 hospices discussed successful strategies for recruitment and enrollment in MCCM, identified challenges and barriers to the existing process, and tested other strategies through a process improvement model—Plan, Do, Study, Act. Participation in the affinity group remained high throughout the activity, with an average of 83 percent of invited hospices participating in each session.

**In-Person Training Sessions**

During a cohort’s planning phase (6 months prior to enrolling beneficiaries—July-December 2015 for cohort 1 and July-December 2017 for cohort 2), CMS offered in-person training sessions for each individual cohort. Participation at these events was high—96 percent of active cohort 1 hospices participated in the September 2015 training session, and 78 percent of active cohort 2 hospices participated in the October 2017 training session. The lower cohort 2 participation rate may have been due to some hospices in cohorts 1 and 2 sharing a parent organization that may have elected not to send additional staff to the training session in Baltimore.
Exhibit 3.10 Implementation Support Increasingly Emphasized Peer-to-Peer Learning Opportunities for MCCM Hospices

Hospice participants rated the events highly, noting their usefulness for sharing resources with each other and planning for the upcoming implementation, as shown in Exhibit 3.11.
Exhibit 3.11 Participants Reported High Satisfaction and Usefulness of In-Person Training Sessions Conducted Prior to Enrolling Beneficiaries

<table>
<thead>
<tr>
<th>Percent of Participants</th>
<th>Satisfaction</th>
<th>Usefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 In-Person Training Session, September 2015 (n = 179)</td>
<td>92.0%</td>
<td>98.0%</td>
</tr>
<tr>
<td>Cohort 2 In-Person Training Session, October 2017 (n = 81)</td>
<td>92.0%</td>
<td>99.0%</td>
</tr>
</tbody>
</table>

Sources: MCCM Implementation Contractor Post-Event Summary Reports for In-Person Meetings on September 28, 2015 and October 5-6, 2017.

Training and Informational Webinars

Support provided through webinars—virtual meetings conducted through a web-based software—included:

- **Training sessions**, which were focused on a particular topic and a specific audience—cohort 1, cohort 2, or both cohorts. Topics included using the MCCM portal, marketing and outreach strategies, understanding the hospice’s quarterly report,\(^{43}\) billing, and Medicare administrative contractors.

- **Informational sessions and office hours** provided opportunities for hospice staff to ask implementation contractor staff and CMS staff targeted questions on a specific topic.

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\(^{43}\) The implementation contractor develops quarterly reports for each individual MCCM hospice, detailing data the hospice reported in the MCCM portal; and MCCM enrollees’ claims data from the Chronic Conditions Data Warehouse Virtual Research Data Center, sometimes referred to as the Chronic Conditions Warehouse. The hospice-level reports are also analyzed in aggregate to document findings across both cohorts.
While participation in the webinars\textsuperscript{44} declined over time from 99 percent for January 1-December 31, 2017 to 54 percent for January 1-October 31, 2018, ratings of satisfaction and usefulness increased over time, indicating that the webinars may have been better targeted to specific audiences, as shown in Exhibit 3.12.

\textit{Exhibit 3.12 Participants Rated Training Webinar Content as Useful and Were Satisfied over Time}

<table>
<thead>
<tr>
<th>Quarter Events Held</th>
<th>Number of Events Held in Quarter</th>
<th>Percentage of Participants Satisfied</th>
<th>Percentage of Participants Noting Content Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2015</td>
<td>4</td>
<td>88.5%</td>
<td>91.1%</td>
</tr>
<tr>
<td>Q4 2015</td>
<td>3</td>
<td>79.6%</td>
<td>81.5%</td>
</tr>
<tr>
<td>Q1 2016</td>
<td>1</td>
<td>53.9%</td>
<td>69.3%</td>
</tr>
<tr>
<td>Q2 2016</td>
<td>2</td>
<td>79.1%</td>
<td>82.9%</td>
</tr>
<tr>
<td>Q1 2017</td>
<td>2</td>
<td>89.5%</td>
<td>94.7%</td>
</tr>
<tr>
<td>Q2 2017</td>
<td>3</td>
<td>86.1%</td>
<td>93.1%</td>
</tr>
<tr>
<td>Q3 2017</td>
<td>4</td>
<td>88.9%</td>
<td>94.5%</td>
</tr>
<tr>
<td>Q4 2017</td>
<td>5</td>
<td>90.8%</td>
<td>95.4%</td>
</tr>
<tr>
<td>Q1 2018</td>
<td>2</td>
<td>82.3%</td>
<td>91.2%</td>
</tr>
<tr>
<td>Q2 2018</td>
<td>1</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>\textbf{Total events}</td>
<td>\textbf{27}</td>
<td>\textbf{88.5%}</td>
<td>\textbf{91.1%}</td>
</tr>
</tbody>
</table>


Note: The data in this exhibit are restricted to webinars focused on training MCCM hospices on different aspects of the model. This analysis does not include office hours and other informational webinar sessions, or peer-based virtual sessions.

We averaged participants' positive ratings (strongly agree/agree, very/somewhat, excellent/good) for the following information requested from training session participants. Questions or comments where respondents would cite their agreement with the specific comment changed over time, as detailed below. The data elements in each of the categories were combined to create an overall view of satisfaction and usefulness of the webinar events.

Satisfaction-related information and questions included:
- Please rate your overall satisfaction with this event.
- What is your overall rating of this presentation?
- How satisfied are you?
- Overall, how helpful did you find this event?

Usefulness-related questions or comments included:
- How relevant and meaningful was the information presented to your implementation of MCCM?
- How useful (relevant, actionable, and meaningful) was the information presented to your implementation of MCCM (one event)?
- The content presented in this webinar will be a useful resource to support our implementation of [our award project/MCCM].

\textsuperscript{44} Participation in events was measured by the number of hospices attending out of the total number of hospices active in the model at that time. Measuring web-based participation is difficult, due in part to challenges in attributing a phone number to a specific participant or hospice, and because participants might not call in until after attendance was taken.
Positive reviews about the pace and information shared during the webinars were consistently high and reached a peak in the first quarter of 2018, as shown in Exhibit 3.13. The two webinars conducted in the peak quarter were the 2018 launch, which included a discussion on the differences between MCCM and MHB, and how the services work together to provide a continuum of care at the end of life.

Future reports will continue to analyze the association among participant ratings, target audience, and topics discussed.

**Exhibit 3.13 Sustained Positive Reviews about the Pace and Level of Information Shared in the Webinars**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Pace of Presentation Just Right</th>
<th>Quantity of Information Just Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3Y2017 (4 events, n = 107)</td>
<td>81.0%</td>
<td>75.2%</td>
</tr>
<tr>
<td>Q4Y2017 (5 events, n = 110)</td>
<td>82.1%</td>
<td>81.3%</td>
</tr>
<tr>
<td>Q1Y2018 (2 events, n = 71)</td>
<td>89.1%</td>
<td>84.9%</td>
</tr>
<tr>
<td>Q2Y2018 (1 event, n = 22)</td>
<td>81.8%</td>
<td>68.2%</td>
</tr>
</tbody>
</table>


Note: Participants at implementation support events were asked to respond to a post-event survey, which included two ratings starting in Q3Y2017: (1) if the pace of the presentation was too fast, just right, or too slow; and (2) if the quantity of information was overwhelming, just right, or too light. The exhibit displays the middle response for each question. Data are not available for analysis and reporting prior to July 19, 2017 and after May 16, 2018 due to changes in the questions asked of participants in the post-event survey. The “n” accounts for the number of participant responses for all events conducted in the quarter.
Attendees also rated the mode and content of the webinars. Some hospice interviewees told us the question-and-answer sessions CMS offers were particularly helpful, but others found the timing of the webinars inconvenient. A few hospices we visited mentioned that the webinars were usually held at times that did not align with their workday (e.g., in the morning) or were held during their internal standing interdisciplinary group meetings, which cannot be rescheduled. Hospices shared techniques that addressed these attendance challenges, including:

- Previewing the webinar topics and assigning the most appropriate staff person to attend
- Asking one or two hospice staff to attend each webinar and then disseminate the information to the rest of the team at a more convenient time

Additionally, the MCCM portal, which MCCM hospices can access, hosts audio recordings of training and informational webinars.

**Peer-Based Virtual Sessions**

Learning through peer-based virtual sessions allows hospices to share with each other “real life” examples of implementation facilitators, challenges, and solutions. In these virtual sessions, both cohorts of hospices, along with CMS and the implementation contractor, review data and guidance, and guest speakers from MCCM hospices discuss their experiences, so that participants learn from each other (their peers). As with webinars, attendance at peer-based virtual sessions decreased over time—cohort 1 and cohort 2 hospices that attended averaged 48 percent for January 1-December 31, 2017 and 27 percent for January 1-October 31, 2018. Survey data regarding participant satisfaction with these activities are not available.

**Support from CMS Project Officers**

CMS assigned each MCCM hospice a project officer at the agency to serve as a point of contact, answer questions, and help hospices understand the model’s requirements. Targeted one-on-one support from project officers is the most highly regarded form of support CMS offers in the model. Many hospices in both cohorts were quick to cite the project officers as offering timely problem-solving solutions when implementation challenges arise.

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45 Participation in peer-based virtual sessions was measured by the number of hospices attending out of the total number of hospices active in the model at that time.
arose. Hospices told us that their project officers answer questions about staffing and services, integrating MCCM with home health programs, and navigating billing issues.

**Future Learning Activities**
During site visits, hospices suggested new areas for learning that would help with their ongoing implementation of MCCM, as listed in the text box below. CMS has since offered new resources that address some of these suggestions.

### Topics for Future Learning Activities that MCCM Hospices Suggested

**Implementation Guidance**
- How to engage with hospitals and home health agencies
- How to integrate homemaker services and train home aides for MCCM
- How to support homemaker services, such as help with cleaning, within the current reimbursement policy
- Best practices for helping beneficiaries articulate their end-of-life goals and treatment preferences
- Detailed billing and information technology guidance
- Clear descriptions of successful MCCM implementation, including best practices for staffing

**Connection between Model Structure and Intended Outcomes**
- How the MCCM structure promotes model goals, and whether MCCM is achieving intended outcomes
- How the model meets beneficiary needs
- Whether the model is achieving more timely transitions to MHB

**Mitigating Enrollment Challenges**
- Examples of how MCCM hospices in high Medicare-managed care areas successfully enroll beneficiaries
- Examples of MCCM hospices with high enrollment, and how this was achieved

### 3.6 MARKETING MCCM TO REFERRAL SOURCES AND BENEFICIARIES
Marketing campaigns must identify the benefits of MCCM services to the right audiences, at the right time, and in the best way. Hospices revised and improved their marketing and educational efforts based on early experiences in the model. Nearly 37 percent of cohort 1 hospices and nearly 46 percent of cohort 2 hospices changed their marketing efforts between 2017 and 2018. Among the most common marketing changes that cohort 1 hospices made were targeting different audiences, and modifying the marketing messages and timing of activities.
3. HOW DO HOSPICES IMPLEMENT MCCM?

3.6.1 Marketing Personnel

MCCM hospices usually assign an individual or a small team the responsibility for MCCM marketing. This individual (or small team) works with the marketing and sales department, and often markets other service lines as well as MCCM. Marketing responsibilities usually include organizing “lunch and learn” meetings with community providers, engaging with existing referral sources, and creating marketing materials to highlight features of the model. At one hospice, the marketing staff explained that the MCCM clinical manager joins them on marketing visits to providers, where she serves as the clinical “face” of the model and explains the differences between MCCM and MHB, and how each serves beneficiaries.

3.6.2 Timing of Marketing Activities

Marketing MCCM during the six-month planning phase, before both cohorts’ official launch dates, supported early enrollment. Hospices used this time to expand awareness of the model and MCCM services to different target audiences, including community providers, and beneficiaries and their caregivers. Building awareness of MCCM through marketing messages takes time; therefore, it was important for MCCM hospices to start these campaigns and outreach efforts early and sustain them over time.

Overall, 45 percent of responding cohort 1 hospices initiated marketing efforts for MCCM before their official start date, and the remainder began marketing within three months. Eighty-five percent of cohort 2 respondents initially planned to begin their marketing efforts before their cohort start date, but only 67 percent did so, as shown in Exhibit 3.14. Cohort 2 hospices started their advance marketing earlier than cohort 1 hospices, which may reflect the lessons learned that cohort 1 communicated to cohort 2.

Most hospices we visited reported some marketing efforts before their official start date, and these hospices all experienced early success in enrolling multiple beneficiaries in the model. We will continue to explore the relationship between enrollment effectiveness and marketing, as well as other implementation approaches, in future evaluation reports.

The Value of Clinical Managers

“The MCCM clinical manager delivers and coordinates the care of all MCCM beneficiaries and brings in the hospice’s chaplain, social worker, or home health aides as needed. She wears multiple hats in supporting the model, from delivering care, to tracking down documentation so that MCCM claims can be submitted, to marketing.”

—Hospice leadership, cohort 1
3.6.3 Marketing to Target Audiences

Most hospices used their existing referral networks, and their health system or hospital partners’ palliative care departments, as the starting place for MCCM marketing. Others relied on pre-existing relationships with outside partners (such as a home health agency that they already used for referrals to their MHB services) for an initial referral boost.

Hospices in both cohorts initially focused their marketing efforts on certain types of providers, primarily physicians (oncologists, internal medicine providers, and family practitioners), social workers, discharge planners, and palliative care teams, whom they believed would play an important role in coordinating transitions for beneficiaries near the end of life, as shown in Exhibit 3.15. Hospices conducted marketing in the settings where the majority of referring providers (oncologists, internal medicine providers, and family practitioners) work. For example, hospitals and physician offices have been the most productive settings for marketing to physicians. Hospices we visited told us they gradually extended their marketing efforts to reach new community providers, with the goal of expanding referrals and enrolling more beneficiaries.
Few MCCM hospices focused (or planned to focus) their initial marketing efforts on beneficiaries and families, but this marketing increased over time. By late 2018, more than 80 percent of cohort 2 hospices and more than 70 percent of cohort 1 hospices were marketing directly to beneficiaries and/or caregivers.

**Exhibit 3.15 MCCM Marketing Efforts Targeted a Variety of Audiences**

Hospices reported that compelling marketing materials are essential for raising awareness about the model, and that they used specific messages and communications mechanisms depending on the target audience. Both cohorts indicated that their messages focused on the hallmarks of MCCM, including that beneficiaries could continue treatment, and that MCCM provides symptom management and additional beneficiary and family support, as shown in **Exhibit 3.16**. Hospices used language and terms that resonated with the target audience, for example, referring to “beneficiaries” as “patients” and ability to continue “treatment.”
Hospices indicated that the messages they used most in their early marketing efforts were that MCCM offers additional beneficiary and caregiver support, and coordination with other medical professionals; the focus of their messages changed slightly over time.

Hospices, particularly cohort 1 hospices, indicated that they developed many of their marketing messages after overcoming barriers identified through early participation in MCCM, for example, as they learned what messages resonated with which target audience. Hospices shared examples of MCCM benefits that they highlighted in their marketing materials to illustrate the target messages presented in Exhibit 3.16, including:

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### Exhibit 3.16 Marketing Messages Focused on Continued Access to Life-Prolonging Treatment, Symptom Management, and Support

<table>
<thead>
<tr>
<th>Focus of Marketing Messages</th>
<th>Cohort 1 Hospices</th>
<th>Cohort 2 Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help with Disease and Symptom Management</td>
<td>83.8%</td>
<td>76.5%</td>
</tr>
<tr>
<td>Support When Making Complex Medical Decisions</td>
<td>85.3%</td>
<td>82.4%</td>
</tr>
<tr>
<td>Additional Patient and Family Support</td>
<td>86.5%</td>
<td>75.7%</td>
</tr>
<tr>
<td>Coordination of Care with Other Medical Professionals</td>
<td>83.8%</td>
<td>79.4%</td>
</tr>
<tr>
<td>24/7 Access to Hospice Staff</td>
<td>91.9%</td>
<td>85.3%</td>
</tr>
</tbody>
</table>

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.

Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. Categories in the columns are not mutually exclusive—hospices could indicate multiple key features used to describe MCCM benefits to potential enrollees and/or their caregivers.

CHF = congestive heart failure, COPD = chronic obstructive pulmonary disease, HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome, 24/7 = twenty-four hours a day, seven days a week.

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**STORIES FROM THE FIELD**

**MCCM Fills a Service Gap**

“A hospice’s community liaison recounted oncologists ‘jumping’ at the opportunity of MCCM because the model closely fits their patients’ needs. MCCM is marketed as a stepping stone to hospice that helps beneficiaries.”

—Marketing Coordinator, cohort 1
3. HOW DO HOSPICES IMPLEMENT MCCM?

- Describing the model as a bridge for beneficiaries who need hospice services but want to continue to have access to treatment for cancer, congestive heart failure, chronic obstructive pulmonary disease, and human immunodeficiency virus/acquired immunodeficiency syndrome; and describing MCCM as hospice "light," pre-hospice, or as an option for individuals who are receiving palliative care but need additional supportive services. Many hospices noted that this is an effective message for both referring physicians and potential enrollees.

- Emphasizing that MCCM allows beneficiaries to maintain their treatment relationship with their community providers. One hospice staff interviewee told us that many MCCM enrollees have very strong relationships with their primary care physicians and the model maintains that relationship while adding supportive services. She said referring providers appreciate being able to continue treating the beneficiary, while the MCCM hospice meets the beneficiary's other needs.

- Framing MCCM as a "pilot" or a "clinical trial," particularly to referring providers. The use of this concept enhanced provider buy-in and reduced frustration when a referred beneficiary was ineligible for the model, because clinical trials often use eligibility restrictions to enroll patients. This strategy protected the relationship between a hospice and referring physicians.

- Highlighting beneficiary stories to emphasize how MCCM supports beneficiaries and caregivers, meets their needs, and improves their quality of life.

Including beneficiary and caregiver stories in marketing materials was a key change between 2017 and 2018. Features of the model, such as twenty-four hours a day, seven days a week access and care coordination, were de-emphasized in marketing materials over time. Hospices shared that they changed the focus of their messages based on lessons learned during early efforts and as they refreshed messages and tailored these to the target audience.
3.6.5 Marketing Strategies

Hospices discussed several strategies to efficiently market MCCM to referring providers. Most hospices used one-on-one meetings and “lunch and learn” sessions (with the hospice sponsoring the lunch) to explain the model directly to clinicians. Many hospices used brochures, including a CMS-provided brochure. One hospice we interviewed used the CMS logo on their MCCM brochures as a way to authenticate the model’s legitimacy and increase provider buy-in.

Many hospices incorporated MCCM into existing marketing efforts of other offered service lines, which reduced confusion and clarified delineations between MCCM and other service lines. Hospice staff told us this approach reassured clinicians that beneficiaries will receive the services that best meet their individual needs.

3.7 MCCM REFERRAL SOURCES AND PROCESS

3.7.1 Referral Sources

Referrals to MCCM can come from a variety of sources, including specialty physicians, word of mouth, and community-based providers. Hospices tailor their marketing efforts based on the type of referral source, as discussed in Section 3.6.

The types of specialty physicians who referred beneficiaries to MCCM did not change from 2016-2017 to 2017-2018. Oncologists referred one-third of the beneficiaries MCCM hospices enrolled (37 percent), followed by internal medicine and family practice physicians (26 and 25 percent, respectively). No other specialty referred more than 10 percent of MCCM enrollees. Cohort 2 hospices had more enrollees referred by palliative care specialists than did cohort 1 (cohort 2: 7 percent, cohort 1: 2 percent), and had about half as many

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46 Data from 2016 to 2017 cover dates from January 1, 2016 to June 30, 2017; and data from 2017 to 2018 cover dates from July 1, 2017 to June 30, 2018. The primary referring providers for cohort 1 hospices were oncologists (39 percent), internal medicine (29 percent), and family practitioners (24 percent). The primary referring providers for cohort 2 hospices included these three specialists, but in a different order: oncologists (31 percent), family practitioners (28 percent), and internal medicine (15 percent).
enrollees who were referred by internal medicine providers (cohort 2: 15 percent, cohort 1: 29 percent).

Some hospices encountered physician resistance to MCCM, particularly from cardiologists and pulmonologists, who did not see the potential benefits of the model for their beneficiaries. This was due to the variable nature of congestive heart failure and chronic obstructive pulmonary disease trajectories, which are harder to predict than the trajectory for cancer. The hospice marketing teams countered this resistance by explaining that enrollees have twenty-four hours day, seven days a week access to an on-call registered nurse, which may help to prevent unnecessary emergency department visits and re-hospitalizations.

Referring health care providers told us that they were more likely to increase the volume of referrals after having 1 beneficiary successfully enrolled in the model, especially if that first beneficiary had a good experience with MCCM. We therefore expected to see the volume of referrals increasing as providers gained more experience with the model, which we saw to some extent. While the vast majority of providers (81 percent) referred just 1 beneficiary who enrolled, as shown in Exhibit 3.17, there was improvement in the percentages of providers referring more than 1 enrollee as the model has progressed. These data do not reflect all referrals, only beneficiaries who eventually enrolled in MCCM. As additional enrollment occurs, we will continue to analyze whether the referral patterns change.

Data reported by the hospice in the MCCM portal includes only referrals for those that enroll in MCCM; hospices are not required to document all referrals to MCCM.
3. HOW DO HOSPICES IMPLEMENT MCCM?

Exhibit 3.17 Most Referring Providers Referred Only One Enrolled Beneficiary, with Improvements over Time

![Bar chart showing percentage of providers referring 1 to 5+ enrollees]


Note: This exhibit displays analysis of 2,591 MCCM enrollees who enrolled through June 30, 2018 and 1,885 referring health care providers; 16 enrollees have no data on the referring provider. We defined the percent of provider referrals as the number of MCCM enrollees referred by the total number of physicians who referred one or more enrollees.

Most of the referring providers we talked with shared that they were impressed with the services MCCM hospices provided and were confident that the care delivered prevented unnecessary visits to the doctor and hospital, reducing not only the time beneficiaries spent dealing with health challenges but also, potentially, health care costs. In addition to reducing unnecessary care, beneficiaries’ participation in MCCM helps facilitate transitions to hospice for some who might otherwise never considered it.

At the same time, several hospices became concerned that MCCM would damage their existing referral networks. For example, they worried they might have a halt or decline in referrals from a provider if several of his/her referrals were deemed ineligible for the

STORIES FROM THE FIELD

MCCM Is a Success

“[MCCM] is something I totally believe in and buy into. In short words, it is a success. We are fortunate to have this at our hospital, and many other doctors have never heard of this program. I am so used to this now, I cannot think of a time without it.”

—Referring Oncologist, cohort 1
model. One interviewee suggested that denied referrals reflect poorly on the hospice and can damage its credibility with referring clinicians; hospices can reframe the model as a “clinical trial” or “pilot” to reduce these concerns.

When hospice staff have an MCCM referral that is ineligible for the model, they strive to identify a more appropriate service line to meet the beneficiary’s needs. MCCM hospices work to meet beneficiaries’ needs through their other service lines, and follow up with referring clinicians to offer other options for beneficiaries who were found ineligible for MCCM. A few hospices we visited mentioned following up with individuals who were not eligible for MCCM; for example, one hospice’s MCCM clinical manager engaged with these beneficiaries and their families to explain the benefits of hospice care. Hospice staff consider this a worthwhile investment to expand awareness and understanding of hospice care, and encourage beneficiaries to make use of appropriate home health and MHB services, even if they were not eligible for MCCM.

### 3.7.2 Referral Process

MCCM hospices strive to respond to referrals in a timely manner and choose different approaches to do this. Through centralized intake, all individuals referred to the hospice are sent to a single portal, phone number, or system; and then the hospice staff assess the referral and assign him/her to a specific hospice service line or lines—MCCM, hospice, home health, palliative care. Alternatively, providers can refer beneficiaries to a specific service line at the hospice and provide a direct connection to the responsible hospice team member(s). The centralized intake line can be more comprehensive in identifying services for the referred beneficiary, but the specific service line referral could be seen as more individualized and tailored, from a beneficiary perspective.

Most cohort 1 hospices relied on centralized referral and intake to guide each beneficiary to the most appropriate service line provided by the hospice, as shown in Exhibit 3.18. Most cohort 2 hospices, in contrast, relied on the referral source to specify the preferred service line for the beneficiary. We will examine the differences between cohort 1 and cohort 2 hospices, as well as other methods of referring and assessing beneficiaries, during our site visits and interviews in future years and report on this in later evaluation reports.

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48 Hospices need to act expeditiously because their patients are dying. Although there is no requirement for MCCM, under the MHB, hospices must submit a Notice of Election to their Medicare administrative contractor within five days of admission. Under the MHB, hospices regularly determine eligibility and report enrollment within days.
Exhibit 3.18  **Cohort 1 Hospices Relied More on Centralized Intake to Identify Appropriate Service Lines for Beneficiaries; Cohort 2 Hospices Relied More on Recommendations from the Referral Source**

MCCM hospice staff explained that when a beneficiary enrolls in MCCM, an intake assessment is completed, the beneficiary is educated about the model and available services, and a care plan is developed.

For more information on encounters and services received by beneficiaries, see **Sections 4.1-4.5**.
3.8 COST AND SUSTAINABILITY OF MCCM

Most hospices we visited told us that the cost of implementing MCCM in their organizations was greater than the MCCM per beneficiary per month payment. They questioned the sustainability of the model within the current payment structure. They mentioned costs related to infrastructure, health, information technology, and other investments; as well as ongoing costs for services and care provided by the range of staff (e.g., chaplains, social workers, certified nursing assistants, registered nurses, central hospice, administrative).

Many hospices that withdrew from the model told us that the number of beneficiaries who were eligible and enrolled was insufficient to offset the costs of recruiting beneficiaries, confirming eligibility, setting up the infrastructure, providing services across disciplines, and entering data into the MCCM portal. For example, a withdrawn cohort 1 hospice explained that attending webinars, using the portal, marketing MCCM to referring providers and beneficiaries, and calling physicians to confirm eligibility takes the equivalent of one full-time employee, but the MCCM payments are inadequate to cover the costs of a new employee’s salary and benefits. Several hospices told us that despite financial impacts and insufficient payment to cover their costs, they continue to participate in order to provide feedback to CMS and test the model’s potential to improve the quality of care.

A few hospices told us that billing issues and delayed payments were less of a problem in 2018 than in 2017, and that the billing process was going more smoothly now that CMS had revised the claims process. Data collected by CMS’s implementation contractor confirm this improvement, with 52 billing issues among cohort 1 hospices in 2017, and only 14 billing issues among cohort 1 and cohort 2 hospices combined in 2018.

A small number of hospices (16 percent in cohort 1 and 11 percent in cohort 2) said they used resources to supplement the MCCM per beneficiary per month reimbursement, as shown in Exhibit 3.19. The most common financial sources included existing donations, new fundraising, and grants.
Exhibit 3.19 Few Hospices Used Supplemental Funds to Support MCCM

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.

Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. We conducted chi-square tests to determine statistically significant differences. Differences were not statistically significant at the 10% level using a chi-square test.
MCCM hospices overwhelmingly believed that MCCM is positively impacting beneficiary care by improving support for beneficiaries and caregivers, and coordinating care between the hospice team and community providers. Over 70 percent of hospices reported that MCCM affected the following services and activities:\(^49,50\):

- Disease and symptom management
- Support provided to beneficiaries and caregivers
- Coordination of care among the referring providers and MCCM staff

Hospices also identified challenges to implementing MCCM during the model test and concerns about sustaining the delivery of MCCM services after the scheduled end of the model on December 31, 2020. Across both cohorts, the primary challenge identified by MCCM hospices was that the eligibility criteria, even after it was relaxed, restricts access to MCCM for certain beneficiaries who might benefit from the model. Additionally, both cohorts shared similar responses for the second challenge that the monthly per beneficiary per month is not commensurate with the costs of providing MCCM services.\(^51\)

The perceived impact of MCCM, the cost of providing MCCM services, and sustainability plans by MCCM hospices will be explored in future reports.

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\(^{49}\) These data were reported by cohort 1 (n = 37) and cohort 2 (n = 34) hospices during wave 2 of the organizational survey that was fielded in October-December 2018. Our analytic sample was limited to hospices that responded to both waves 1 and 2 of the survey. We provide additional analysis of hospice-perceived impacts of MCCM on care of beneficiaries in Appendix J, Exhibit J.12.

\(^{50}\) We did not observe cross-cohort differences in hospices’ perceptions of the positive impacts of disease and symptom management and support provided to beneficiaries and caregivers. Compared to cohort 1, however, cohort 2 perceived relatively more positive impacts of coordination of care among referring providers and MCCM staff (73 percent versus 83 percent). However, the difference was not statistically significant at the p < 0.10 level.

\(^{51}\) Source: Cohorts 1 and 2 organizational survey, wave 2, fielded October-December 2018. Information is from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. We provide additional analysis in Appendix J, Exhibit J.13.
3.9 IMPLEMENTATION CHALLENGES TO MCCM

3.9.1 External Challenges

Hospices continued to cite communication between MCCM hospices and referring providers as challenges in 2018. Hospices we interviewed welcomed CMS’s changes to MCCM eligibility criteria, but the requirements are still a barrier to enrollment for many participating hospices.

Hospices reported that they continue to encounter skepticism from hospitals and community providers about the model. Some physicians believe that the model will limit the level of health care that they can provide. Some oncologists resist MCCM because they tend to focus on extending life as long as possible, until all options are exhausted. They may not want or know how to have the palliative care or supportive care discussion, as it is counter to their medical training.

As was true in 2017, hospices described challenges in obtaining medical orders for MCCM enrollees, especially prescriptions for opioids. Hospices also reported that they seek to persuade home health agencies to continue to provide necessary services once their patient enrollees in MCCM. Hospices reported that some home health agencies do not view MCCM enrollees as their responsibility. Home health agencies’ perspectives may reflect a lack of understanding of the more limited scope of the model’s services or the differences between MCCM and the MHB. Hospices did not report this problem when working with their own home health agencies. MCCM hospices also reported challenges in the timely delivery of durable medical equipment and supplies for enrollees (i.e., services hospices do not provide under MCCM but that beneficiaries need).

Hospices asked CMS for training materials they could use to validate the authenticity of the model and mitigate these challenges. In September 2018, CMS offered a Home Health Agency Fact Sheet in response to this request. In the coming year, we will interview hospices about the use and effectiveness of this new resource.
3. HOW DO HOSPICES IMPLEMENT MCCM?

3.9.2 Internal Challenges

A few hospices described a disconnect between hospice leadership and front-line staff. For example, a cohort 1 hospice told us their staff struggled to understand the differences among their palliative care, MCCM, and MHB service lines. At a cohort 2 hospice that held many training sessions, case managers we interviewed were unfamiliar with the hospice’s on-call services, and did not know whether MCCM enrollees used these services. The case managers preferred to give out their personal cell phone numbers for beneficiaries to call after hours. At another cohort 2 hospice, staff noted that their training was too narrow and role-specific, leading different staff to have a different understanding of the model. In one hospice, staff told us “everyone is hearing something different,” and described general confusion about the role of the nurse case manager in providing telephone and in-home support to MCCM enrollees.

A few hospices told us they face considerable challenges in customizing their electronic health record to flag MCCM beneficiaries, without which MCCM enrollees (and MCCM-specific data) are not immediately visible to clinicians. One hospice explained that the certification of terminal illness is in a standardized hospice-centric format, with a field labeled “Hospice Attending,” even though MCCM enrollees have not yet elected MHB. As a result, hospice staff may be uncertain whether their hospice has enrolled the beneficiary in MCCM or MHB.

3.10 CONCLUSION

In this section, we discussed approaches that hospices took to prepare for and implement MCCM. We identified differences between the two cohorts in their affiliations with other programs and models; organizational characteristics; marketing and referral activities and processes; and hospice staff, beneficiary, and caregiver perspectives.

Implementing MCCM services depends on the flexibility of clinical and business processes, the agility of staff to take on new and different roles, and having an innovative leader to champion and manage MCCM. Hospices noted challenges implementing the model and enrolling beneficiaries. Some hospices noted that monthly per beneficiary payments were insufficient to cover the costs of operating MCCM and satisfying participation requirements. Even with the relaxation of eligibility criteria, hospices perceived enrollment challenges, particularly surrounding the reputational effects of denied referrals and competition from their own palliative care programs.

To address these types of challenges, hospices expanded their marketing efforts to raise awareness and understanding of the model. Hospices reported that these efforts increased referrals and enrollment. Affiliations with palliative care programs and other providers also contribute to effective implementation and higher enrollment. Finally, training and support offered by the MCCM hospice itself and by CMS are helping hospices implement the model and document performance and clinical measures.
In future reports, we will continue to gather and analyze information about how organizational, staff, and leadership structures influence implementation processes and outcomes, and how MCCM hospices improve their implementation approaches over time. We will also examine the impact on hospice implementation of MCCM characteristics such as hospice size, ownership, chain affiliation, and location. Finally, we will capture plans by hospices for sustaining MCCM after the model ends.
Beneficiary Story

The beneficiary, a former biochemist, was diagnosed with stage 4 breast cancer nine years ago and is adamant about pursuing treatment. The beneficiary enrolled in a clinical trial for a new drug as a possible treatment, and developed diabetes from taking the drug. While the beneficiary knew there was a risk of drug-induced diabetes, as explained in the consent form, she said no one was monitoring her insulin levels during the trial, and that she did not get help with managing her new condition. The beneficiary was receiving chemotherapy treatment until she had her cardiac aorta valve replaced last year. Now she is in a cardiac rehabilitation program and receives weekly paracentesis, which takes her days to recover.

Prior to MCCM, the beneficiary had a private duty caretaker, an occupational therapist, and a physical therapist, as well as six other community providers and specialists, none of whom coordinated her care. She takes pride in coordinating her own care, but lately has been feeling overwhelmed. Her physician told her about palliative care when she was first diagnosed with cancer, but she thought palliative care was hospice and so refused the services. After she learned that palliative care is different, she became more open to the idea. When her physician told her the benefits of MCCM and that it would allow her to continue seeking treatment, she agreed to enroll.

The beneficiary has been on MCCM for a few months and receives services from the MCCM nurse, who also provides hospice services outside of MCCM. She does not want any other MCCM services, and has not needed any equipment. The MCCM nurse supports the beneficiary in coordinating her own care and is beginning to take over more of this role from the beneficiary. The nurse can see that care coordination tasks give the beneficiary a sense of purpose and control, and does not want to take over this role until the beneficiary is ready. The MCCM nurse connected the beneficiary with a registered nutritionist who helps the beneficiary manage a low sodium, low carbohydrate, and low sugar diet to help control her diabetes.

When asked about the model, the beneficiary said, “My specialists look at only one thing, but my MCCM nurse looks at the whole picture. I am so glad I didn’t push [my doctor] and ended up with my MCCM nurse. Palliative care services have enabled me to stay ahead of the pain.”

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52 This beneficiary story is an actual story given by an MCCM enrollee during a site visit. The story is not a composite, and represents a typical MCCM enrollee the qualitative data collection team interacts with during in-person case studies. We maintain confidentiality by omitting the beneficiary’s name, age, ethnicity, and geographic location.

53 The National Cancer Institute defines paracentesis as “a procedure in which a thin needle or tube is put into the abdomen to remove fluid from the peritoneal cavity (the space within the abdomen that contains the intestines, the stomach, and the liver).” Retrieved on September 6, 2019 from https://www.cancer.gov/publications/dictionaries/cancer-terms/def/paracentesis.
4. What Elements of Care Do MCCM Enrollees Receive?

**Key Takeaways about MCCM Encounters and Services**

- MCCM provides enrollees with a wide array of beneficial services. Comprehensive assessments ensure that hospice staff have complete information with which to create individualized care plans and provide appropriate service. Once enrolled in MCCM, beneficiaries quickly began to receive services and then met with MCCM staff multiple times per month.

- Almost 78 percent of MCCM enrollees received an initial assessment, as of June 30, 2018. Over 80 percent of those eligible (based on their length of enrollment in MCCM) received a 5-day comprehensive assessment, and 67 percent received a 15-day comprehensive assessment. *(Section 4.1)*

- Most MCCM encounters (75 percent) were conducted in person; the remaining encounters were by telephone or teleconference (25 percent) or, infrequently, online (less than 1 percent). *(Section 4.1)*

- Enrollees had, on average, 10 encounters per month with MCCM staff, including 3.1 encounters per month with registered nurses/licensed practical nurses, 3.1 encounters per month with care coordinators, and 2.3 encounters per month with social workers. Enrollees had less than 1 encounter per month, on average (0.8 encounters), with hospice aides and 0.7 encounters per month with all other types of providers. *(Section 4.1)*

- Over 90 percent of enrollees received advance care planning services, 84 percent received care management services, and 46 percent engaged in shared decision making with MCCM staff. *(Section 4.1—see Exhibit 4.5)*

- MCCM enrollees with cancer tended to receive services for their terminal condition that could potentially be life-prolonging while enrolled in MCCM. Of the 1,526 MCCM enrollees with cancer, the majority (71 percent) had at least 1 office visit where the provider’s specialty was oncology (i.e., either medical oncology or radiation oncology), while enrolled in MCCM. *(Section 4.2)*

- Overall, 43 percent of beneficiaries received services under the Medicare home health benefit while enrolled in MCCM and receiving services under the model. Cohort 1 had a higher percentage of enrollees receiving home health services than cohort 2 (46 percent versus 33 percent). Among those receiving home health services, cohort 1 enrollees had more home health visits, on average, than did cohort 2 enrollees (5.3 versus 4.0). *(Section 4.3)*
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

The Medicare Care Choices Model (MCCM)\(^{54}\) provides eligible beneficiaries with care coordination\(^{55}\) and supportive care,\(^{56}\) including nursing services, medical social services,\(^{57}\) and aide services.\(^{58}\) Each MCCM enrollee must have a plan of care that addresses his or her individual needs. The Centers for Medicare & Medicaid Services (CMS) encourages MCCM hospices to use shared decision making principles to plan, coordinate, and deliver care. Engagement in shared decision making is central to the achievement of MCCM objectives. Shared decision making helps to ensure that enrollees receive as much information as they desire about their medical conditions and prognoses, and that hospice staff maintain an understanding of enrollees’ goals as the illness advances to ensure that treatment remains goal-concordant.

In this section, we discuss the types and level of care received under the model; how participating hospices delivered this care; and the other Medicare-covered, non-MCCM services enrollees received. For example, MCCM enrollees can receive potentially life-prolonging care for their terminal condition, unlike in the MHB. MCCM enrollees can also receive home health services while enrolled in MCCM. We discuss care coordination activities between MCCM hospices and community providers serving MCCM enrollees.

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\(^{54}\) For a graphic demonstrating the six hallmarks of the model, see Exhibit 1.1; for additional information, see Appendix A. For information on the services provided under MCCM in contrast to the Medicare hospice benefit (MHB) and the Medicare home health benefit, see Exhibit 1.3.

\(^{55}\) Care coordination is the organization of beneficiary care activities and the sharing of information among all staff involved in the patient’s care to provide safer and more-effective care.

\(^{56}\) Supportive care involves helping beneficiaries obtain non-medical services, such as transportation or dependent care, to enable the beneficiary to access medical care.

\(^{57}\) Medical social services support treatment, through assessment of the beneficiary’s social and emotional responses to the need for care or treatment, the beneficiary’s home situation, and financial resources.

\(^{58}\) Hospices train their aides to provide personal care services such as bathing and grooming.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.1 TYPES OF CARE RECEIVED BY MCCM ENROLLEES

MCCM hospices should provide comprehensive assessments, case management,59 and other services defined by the beneficiary’s plan of care to each enrollee. Other services include assistance taking medications, wound care, and nutritional support.60 MCCM hospices should ensure access to supportive services, such as symptom management, social and emotional support, and bereavement counseling to the family members and caregivers of deceased enrollees. This section explores the extent to which MCCM enrollees receive the model’s services as intended. As feasible and appropriate, we compare findings across cohort 1 and cohort 2 hospices, and changes over time to understand how time and implementation context may influence service delivery.61

4.1.1 MCCM Encounters and Services

Nurses, social workers, home health aides, chaplains, counselors, therapists, pharmacists, and volunteers deliver care under MCCM. We use the following two types of measures to describe the delivery of MCCM encounters and services. Appendix J.4 provides additional detail about service delivery patterns that we describe in this section.

**MCCM Encounters:** Any recorded action by an individual provider to or for an MCCM enrollee or caregiver.62

**MCCM Services:** Direct care or care coordination provided during an encounter. A provider may perform multiple services during a single encounter. For example, a care coordinator may conduct both a caregiver conference and advance care planning in the same encounter; and in a separate encounter for the same beneficiary, a nurse may provide wound care and discuss case management needs.

Once enrolled in MCCM, most beneficiaries quickly began to receive services. MCCM enrollees (or their caregivers) received an average of three services per encounter. The average time until the first encounter was 2.4 days after MCCM enrollment (median of one

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59 Case management involves continuous oversight of a beneficiary’s care. It includes care coordination, which ensures that appropriate providers treat the beneficiary and get the information they need to provide suitable care, in a timely manner.

60 Nutritional support provides assistance to beneficiaries who cannot get enough nourishment from eating or drinking.

61 CMS made substantial updates to the MCCM portal, which collects data about services, on January 1, 2018, limiting the comparability of services delivered before and after that date.

62 Note that interdisciplinary group meetings are not interactions between beneficiaries/caregivers and MCCM providers, and therefore are not included in the encounter counts.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

Hospice staff delivered care frequently to most enrollees. However, 16 percent of enrollees experienced gaps of 4 weeks or longer between MCCM encounters. Gaps in service typically occurred when the individual’s condition stabilized and there was no need for a visit or the beneficiary refused a visit. To be eligible for the $400 MCCM per beneficiary per month payment, at least one encounter must occur during the month. Case study data suggested that some MCCM enrollees moved outside of the hospice’s service area temporarily to visit a relative or friend or take a vacation, and received no MCCM care during that time. Finally, it is possible that some of these MCCM enrollees left the model, but the discharge form had yet to be entered into the MCCM portal. We will continue to monitor this trend in future reports.

Exhibit 4.1  Beneficiaries Quickly Received MCCM Services upon Enrollment

<table>
<thead>
<tr>
<th>Measure of Enrollees’ Experience Receiving MCCM Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total MCCM enrollees</strong></td>
</tr>
<tr>
<td>2,591</td>
</tr>
<tr>
<td><strong>Average time to enrollee’s first encounter</strong></td>
</tr>
<tr>
<td>2.4 days</td>
</tr>
<tr>
<td><strong>Percentage of enrollees with an encounter within one week of enrolling</strong></td>
</tr>
<tr>
<td><strong>Percentage of enrollees with a gap of four weeks or more between encounters</strong></td>
</tr>
</tbody>
</table>

Source: MCCM portal data, January 1, 2016-June 30, 2018. We based the analysis on 2,591 MCCM enrollees.
CMS requires that participating hospices make MCCM services available twenty-four hours a day, seven days a week (24/7). Several hospices reported little or no use of their triage telephone number after hours, and told us that beneficiaries and caregivers prefer calling their MCCM nurse directly, using the nurse’s personal telephone number.

4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.1.2 Comprehensive Assessments

Comprehensive assessments ensure that hospice staff have the complete information they need to create individualized care plans and provide appropriate services. During comprehensive assessments, MCCM staff evaluate an enrollee’s functional status; and screen for symptoms such as pain, shortness of breath, and psychological and emotional needs.

Ninety-four percent of enrolled beneficiaries across both cohorts had at least one required assessment on time, signifying that hospices completed that aspect of MCCM care appropriately. Cohort 2 hospices had a higher rate of providing initial, five-day, and subsequent comprehensive assessments than did cohort 1 hospices, as summarized in Exhibit 4.2.

Value of 24/7 Services

“Beneficiaries have expressed sincere appreciation of 24/7 availability to support. We have been able to reduce hospitalizations.”

—MCCM Coordinator, cohort 1

“It’s unbelievable. To be able to call a nurse and talk to them rather than having to wait four or five hours in the emergency department. So much more comfortable and convenient. It’s nice to have [the nurse] who has common sense and can help out. It’s nice to have someone to call and not pull our hair out.”

—Caregiver, cohort 2

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64 Caregiver and family needs for bereavement and emotional support are assessed in bereavement counseling, and are not included in comprehensive assessments.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

Exhibit 4.2  Cohort 2 Hospices Completed a Higher Percentage of Comprehensive Assessments than Did Cohort 1 Hospices

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>All MCCM Hospices</th>
<th>Cohort 1 Hospices</th>
<th>Cohort 2 Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enrollees Eligible</td>
<td>Percent Assessed</td>
<td>Enrollees Eligible</td>
</tr>
<tr>
<td>Initial (48 hours)</td>
<td>1,052</td>
<td>77.9%</td>
<td>542</td>
</tr>
<tr>
<td>CA (5 days)***</td>
<td>1,006</td>
<td>80.9%</td>
<td>524</td>
</tr>
<tr>
<td>Subsequent CA (15 days)</td>
<td>893</td>
<td>66.6%</td>
<td>467</td>
</tr>
</tbody>
</table>

Note: This exhibit displays analysis of 1,052 MCCM enrollees. Data documenting CAs are available only for beneficiaries who enrolled in MCCM between January 1, 2018 and June 30, 2018. To be eligible for a CA, the beneficiary must be enrolled in MCCM for at least 5 days. To be eligible for at least one subsequent CA, the beneficiary must be enrolled in MCCM for at least 14 days. We used a chi-square test to identify differences across cohorts for each type of assessment, with statistical significance at the 10% (*), 5% (**), and 1% (***), and levels. We provide additional analysis in Appendix J, Exhibit J.14.

CA = comprehensive assessment.

Given the important role of comprehensive assessments in promoting timely and appropriate care, we explored how many enrollees did not receive 1 or more of these time-defined assessments versus how many did receive assessments. A total of 493 MCCM enrollees (19 percent) missed at least 1 assessment for which they were eligible based on the number of days enrolled. Approximately, one-quarter of enrollees received 1 assessment and only 10 percent received 2 assessments. This pattern suggests that most beneficiaries receive at least 1 assessment but that hospices can improve to ensure that a greater percentage of MCCM enrollees receive all assessments.

Additional findings (shown in Appendix J, Exhibit J.14) indicate no differences in diagnosis, age, gender, or race between those receiving all comprehensive assessments and those missing one or more.

4.1.3 Interdisciplinary Group Meetings

CMS requires MCCM hospices to hold interdisciplinary group (also known as interdisciplinary team) meetings, initially to discuss a new enrollee’s assessment results and service needs, and then to review the enrollee’s plan of care,65 “as the patient’s

65  The interdisciplinary group is a team that ensures the MCCM enrollee receives care that is holistic. The interdisciplinary group comprises physicians, nurses, social workers, and counselors. During the interdisciplinary group meeting, the team reviews the patient’s condition and updates the care plan, if needed. During the team meeting, staff review multiple patients within their caseload. Interdisciplinary group meetings are also a core element of hospice care in MHB, offering an important opportunity to communicate and collaborate across disciplines. See Wittenberg-Lyles, E,
needs change or every 15 calendar days, whichever comes first.” Hospice staff participate in the interdisciplinary group meetings, which occur weekly or every other week. These meetings occur in the hospice setting and beneficiaries and family members typically do not attend.

Hospices in both cohorts succeeded in conducting interdisciplinary group meetings and holding them in compliance with the expected schedule. Over 80 percent of beneficiaries who were enrolled for at least 1 month in MCCM had an interdisciplinary group meeting recorded. Enrollees at cohort 2 hospices had their first interdisciplinary group meeting slightly earlier than those at cohort 1 hospices (9.5 days and 11.2 days, respectively), as reported by the hospices. However, both cohorts, on average, held interdisciplinary group meetings in compliance with the expected schedule.

### 4.1.4 Encounters and Services, by Provider Type

MCCM hospices deployed a variety of staff to care for enrollees and to provide the array of services that MCCM enrollees need. Our analysis of encounters by provider type, shown in Exhibit 4.3, was consistent with model requirements. Care coordinators provided nearly one-third of all MCCM encounters (31 percent), followed by registered nurses and licensed practical nurses (22 percent), social workers (20 percent), and aides (17 percent). Chaplains, volunteers, and other types of professionals combined provided the remaining 10 percent of MCCM encounters. Hospice physicians and nurse practitioners provided less than 1 percent of MCCM encounters. A few encounters were also provided by music therapists, nutritional counselors, pharmacists, or pet therapists; but none provided by art therapists. The rates by provider type are consistent with the model requirements and reflect the care teams that hospices have assembled to implement MCCM.


Based on analysis of 763 beneficiaries enrolled for at least 1 month in MCCM after January 1, 2018, when CMS revised the MCCM portal to record interdisciplinary group meetings. Using a chi-square test, we found this difference across cohorts was not statistically significant at the 10-percent level.

The encounter measure includes care delivered by physicians and nurse practitioners employed by or under contract with the MCCM hospice. This measure does not include office visits that MCCM beneficiaries continue to have with their community practitioners, billed under Part B, while enrolled in MCCM. Unlike MHB, MCCM offers access to treatment for a terminal condition. Under MHB, a beneficiary cannot receive services from his or her community providers, so the beneficiary would receive services and treatment directly from the hospice physician or nurse.
On average, each MCCM encounter included 3 services, with about half of the encounters having 1 or 2 services, and the most complex encounter having 12 services. Care coordinators, social workers, and nurses (registered nurses and licensed practical nurses) each provided an average of 3 to 4 services during each encounter with MCCM enrollees.

### Exhibit 4.3 Most MCCM Encounters Were with Care Coordinators, Nurses, and Social Workers, and Involved Three Services per Encounter

<table>
<thead>
<tr>
<th>Type of Provider</th>
<th>Percentage of MCCM Encounters</th>
<th>Total MCCM Encounters</th>
<th>Average Number of Services per MCCM Encounter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care coordinator</td>
<td>31.4%</td>
<td>14,605</td>
<td>3.8</td>
</tr>
<tr>
<td>Registered/licensed practical nurse</td>
<td>22.0%</td>
<td>10,220</td>
<td>3.3</td>
</tr>
<tr>
<td>Social worker</td>
<td>20.3%</td>
<td>9,407</td>
<td>3.3</td>
</tr>
<tr>
<td>Aide</td>
<td>17.0%</td>
<td>7,874</td>
<td>1.4</td>
</tr>
<tr>
<td>Chaplain</td>
<td>6.1%</td>
<td>2,823</td>
<td>2.3</td>
</tr>
<tr>
<td>Volunteer</td>
<td>1.9%</td>
<td>862</td>
<td>1.7</td>
</tr>
<tr>
<td>All other</td>
<td>1.5%</td>
<td>650</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>46,441</strong></td>
<td><strong>3.0</strong></td>
</tr>
</tbody>
</table>


Note: This exhibit displays analysis of 2,591 MCCM enrollees. An “encounter” is a meeting, whether in person or by telephone, between an MCCM enrollee or caregiver and a health care provider. “All other” includes hospice physician, pharmacist, nutritional counselor, bereavement counselor, other spiritual counselor, art therapist, music therapist, massage therapist, pet therapist, additional therapist, and administrative/non-clinical staff. We provide additional analysis in Appendix J, Exhibit J.16.

Totals may not sum due to rounding.

### 4.1.5 Enrollees with Encounters, by Provider Type

MCCM hospices provide access to many different types of providers and multidisciplinary teams, which benefit enrollee care. Most enrollees (or their caregivers) had encounters with a care coordinator (78 percent), a registered nurse/licensed practical nurse (67 percent), or a social worker (70 percent), as shown in Exhibit 4.4. Almost one-third (31 percent) had encounters with a chaplain, a large increase over the 19 percent reported in Annual Report 1. This increase may reflect higher-accuracy data reporting. Roughly, 1 in 5 enrollees (21 percent) had an encounter with an aide. Encounters with other types of providers were infrequent, as shown in Appendix J, Exhibit J.17. For example, only 46 (2 percent) had an encounter with a hospice physician; the low rate may be expected as beneficiaries continue to seek outside health care for their conditions and thus do not need to see the

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69 We found no differences in the number of services per encounter by cohort, with cohort 1 hospices providing 2.2 services per encounter since January 1, 2018, compared to 2.3 by cohort 2 hospices over the same period.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

The array of encounters was similar for enrollees served by hospices in the two cohorts. Enrollees served by cohort 2 hospices were slightly more likely to have an encounter with a care coordinator than those served by cohort 1 hospices (85 and 77 percent, respectively), or with a social worker (72 percent versus 70 percent). However, cohort 2 enrollees were less likely to have an encounter with a chaplain than those served by cohort 1 hospices (22 and 33 percent, respectively). Although it is not clear why these differences exist, we will continue to monitor the data to see whether they persist, and determine whether we can explain these differences using information learned through our case studies.

**Exhibit 4.4  Most MCCM Enrollees Had Encounters with Care Coordinators, Nurses, and Social Workers**

<table>
<thead>
<tr>
<th>Type of Provider</th>
<th>Percentage of MCCM Enrollees Having an Encounter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All MCCM Enrollees (n = 2,591)</td>
</tr>
<tr>
<td>Care coordinator***</td>
<td>78.4%</td>
</tr>
<tr>
<td>Registered/licensed practical nurse</td>
<td>66.8%</td>
</tr>
<tr>
<td>Social worker</td>
<td>70.1%</td>
</tr>
<tr>
<td>Aide**</td>
<td>21.0%</td>
</tr>
<tr>
<td>Chaplain***</td>
<td>30.8%</td>
</tr>
<tr>
<td>Volunteer***</td>
<td>7.1%</td>
</tr>
<tr>
<td>All other</td>
<td>10.6%</td>
</tr>
</tbody>
</table>


Note: This exhibit displays analysis of 2,591 MCCM enrollees. An “encounter” is a meeting, whether in person or by telephone, between an MCCM enrollee or caregiver and a health care provider. “All other” includes hospice physician, pharmacist, nutritional counselor, bereavement counselor, other spiritual counselor, art therapist, music therapist, massage therapist, pet therapist, additional therapist, and administrative/non-clinical staff. We used a chi-square test to identify differences across cohorts for each type of MCCM provider, with statistical significance at the 10% (*), 5% (**), and 1% (*** ) levels. We provide additional analysis in Appendix J, Exhibit J.17.

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70  Under MHB, but not MCCM, hospices provide care related to the beneficiary’s terminal condition, including physician services, medications, durable medical equipment, and physical, occupational, and speech therapy, as needed.

71  Using a chi-square test, we found the care coordinator differences to be significant at the 1% level. The social worker differences were not significant, even at the 10% level.

72  Using a chi-square test, we found the chaplain differences to be significant at the 1% level.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.1.6 Enrollees with Encounters, by MCCM Service Type

Hospices provide many kinds of services to meet the diverse needs of their MCCM enrollees. The most common type of services were advance care planning (93 percent of enrollees), care management (84 percent), and beneficiary and family education (83 percent), as shown in Exhibit 4.5. Cohort 2 hospices provided services at lower rates than cohort 1 hospices, perhaps reflecting the fact that cohort 2 hospices had been active for less than 6 months during the measurement period. Following changes in the documentation of service delivery in the MCCM portal in January of 2018, cohort 2 hospices appeared more likely to deliver the more coordinated, person-centered care that is central to meeting the model’s objectives: active listening, care coordination, and shared decision making. We will continue to monitor these services to the degree to which they reflect differences in organization and model implementation across cohorts, or reflect changes in documentation practices.

During the case studies, we asked caregivers about the additional support MCCM provides, and most were pleased with the services. They offered examples such as hospice staff serving as a liaison between the beneficiary/caregiver and their team of physicians, aides supporting activities of daily living (clothing, bathing, etc.), and simply knowing that additional support is available if needed.

About half (52 percent) of MCCM enrollees participating in the model after January 1, 2018 received active listening services, most (84 percent) received care coordination, and almost half (46 percent) participated in shared decision making, as shown in Exhibit 4.5. Hospices reported that only a small proportion of enrollee caregivers received bereavement support services (4 percent), which aim to help them endure the grief that follows the loss of a loved one. The small proportion of enrollee caregivers receiving this service reflects the fact that the service targets caregivers of deceased enrollees, who constitute a fraction of all enrollees and may not be offered or be aware of the service.

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73 Active listening is a technique used in counseling that requires the listener to concentrate on the speaker, rather than passively listening; and working to understand, respond to, and remember what the speaker said.

74 Analyses of active listening, care coordination, and shared decision making were limited to the 1,344 beneficiaries who enrolled after the portal changed in January 2018, when hospices could report these services. These enrollees had six months or less of enrollment, and some were still receiving care under the model, whereas others had transitioned to MHB or died.
### Exhibit 4.5 Most MCCM Enrollees Received Advance Care Planning, Care Management, Education, and Symptom Management Services

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>All MCCM Enrollees (n = 2,591)</th>
<th>Cohort 1 Enrollees (n = 2,081)</th>
<th>Cohort 2 Enrollees (n = 510)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance care planning**</td>
<td>92.8%</td>
<td>93.3%</td>
<td>90.8%</td>
</tr>
<tr>
<td>Care management***</td>
<td>84.2%</td>
<td>87.7%</td>
<td>70.2%</td>
</tr>
<tr>
<td>Beneficiary and family education***</td>
<td>83.1%</td>
<td>84.3%</td>
<td>78.0%</td>
</tr>
<tr>
<td>Symptom management*</td>
<td>68.4%</td>
<td>67.6%</td>
<td>72.0%</td>
</tr>
<tr>
<td>Counseling: Psychological or emotional***</td>
<td>64.2%</td>
<td>67.9%</td>
<td>49.0%</td>
</tr>
<tr>
<td>Family conference***</td>
<td>54.3%</td>
<td>57.7%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Transitional planning***</td>
<td>42.5%</td>
<td>45.7%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Counseling: Spiritual***</td>
<td>37.7%</td>
<td>44.5%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Other*</td>
<td>37.5%</td>
<td>38.3%</td>
<td>34.1%</td>
</tr>
<tr>
<td>Medication administration</td>
<td>26.1%</td>
<td>26.1%</td>
<td>26.1%</td>
</tr>
<tr>
<td>Wound care</td>
<td>11.0%</td>
<td>11.3%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Bereavement support***</td>
<td>3.7%</td>
<td>3.2%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Counseling: Nutritional</td>
<td>1.5%</td>
<td>1.7%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Service (updated)a</th>
<th>(n = 1,344)</th>
<th>(n = 834)</th>
<th>(n = 510)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active listening***</td>
<td>51.7%</td>
<td>47.6%</td>
<td>56.1%</td>
</tr>
<tr>
<td>Care coordination***</td>
<td>84.2%</td>
<td>81.0%</td>
<td>87.6%</td>
</tr>
<tr>
<td>Shared decision making***</td>
<td>45.8%</td>
<td>41.7%</td>
<td>50.2%</td>
</tr>
</tbody>
</table>


Note: This exhibit displays analysis of hospice-reported delivery of MCCM services to 2,591 MCCM beneficiaries enrolled between January 1, 2016 and June 30, 2018. Hospices may provide multiple services during a single encounter, and each cell in the table indicates the percentage of enrollees with a particular MCCM service. “Counseling: Psychological or emotional” includes “family support” and “volunteer companionship.” “Counseling: Nutritional” and “Bereavement support” include any service provided by a nutritional counselor or a bereavement counselor, respectively. The “Other” category includes three types of comprehensive assessments, which are described in Section 4.1.2; homemaker services (of which very few were recorded); and services recorded in the “other” category of the service type checklist. We included the service type of “family support” and “volunteer companionship” in order to include services reported in the original portal, which had no service type of “counseling.” The revised portal, released on January 1, 2018, has service type “counseling” and counseling type “psychological/emotional.” We used a chi-square test to identify differences across cohorts for each type of MCCM service, with statistical significance at the 10% (*), 5% (**), and 1% (***). levels.

—a Hospices began reporting services in this panel of the exhibit on January 1, 2018. The sample sizes in this row represent the subset of enrollees who were alive at the time that hospices began reporting.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.1.7 MCCM Encounters per Enrollee per Month

Hospice staff have a high level of interaction with MCCM enrollees. Enrollees had 10 encounters per month, on average, with a median of 4.4 encounters per month. Some MCCM enrollees had more encounters than other MCCM enrollees.\(^\text{75}\) Care coordinators and nurses each engaged in 3.1 encounters per month, on average, as shown in Exhibit 4.6. On average, social workers engaged in 2.3 encounters per month, and aides in less than 1 (0.8) encounter per month. All other providers, combined, engaged in 0.7 encounters per month with the enrollee on average.

Exhibit 4.6  MCCM Enrollees Had an Average of 10 Encounters per Month, Primarily Provided by Nurses, Care Coordinators, and Social Workers

<table>
<thead>
<tr>
<th>Type of Provider</th>
<th>Average Number of Encounters Per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse (RN/LPN)</td>
<td>3.1</td>
</tr>
<tr>
<td>Care Coordinator</td>
<td>3.1</td>
</tr>
<tr>
<td>Social Worker</td>
<td>2.3</td>
</tr>
<tr>
<td>Aide</td>
<td>0.8</td>
</tr>
<tr>
<td>All Other Providers</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Note: This exhibit displays analysis of 2,591 MCCM enrollees. We provide additional analysis in Appendix J, Exhibit J.18. LPN = licensed practical nurse, RN = registered nurse.

\(^\text{75}\) In part, this is because we defined MCCM encounters on a per month basis to better understand the frequency of visits for an extended period of time. If a beneficiary was enrolled for less than one month, we extrapolated from the person’s encounters to estimate how many the person would have had in that month. Encounters of an enrollee with a short stay in MCCM appear somewhat larger on a per month basis.
Enrollees with cancer (58 percent of all enrollees) and human immunodeficiency virus/acquired immunodeficiency syndrome (less than 1 percent of all enrollees) had slightly more encounters per month, on average (8.3), than did enrollees with other conditions, as seen in Exhibit 4.7. Enrollees with chronic obstructive pulmonary disease had 6.7 encounters per month, while those with congestive heart failure had 6.9 encounters per month. These results may reflect the fact that beneficiaries with cancer have greater care needs than beneficiaries with other diagnoses. We will continue to explore what is driving these differences (see Section 2.2 for more information on the variation in MCCM diagnoses).

Enrollees who were independent and needed no assistance with daily living activities had the most encounters per month on average (9.3), while those who were disabled or needed some assistance had just 7.1 and 6.8 encounters per month, respectively, as seen in Exhibit 4.7. Potentially, those who are functionally disabled have other sources of support they can rely on outside of MCCM staff. Enrollees’ encounters per month tended to decline over time as hospices addressed their needs, discussed below in Section 4.1.8. This observation may explain the unexpected finding that enrollees who were assessed as independent at the time of MCCM enrollment had more MCCM encounters than those who were assessed as needing more assistance. Further, the limited cohort 2 enrollees meeting the functionally disabled criteria and their high number of services may skew the average and explain the large number of encounters per month for these enrollees in cohort 2. We will continue to monitor encounters by functional status to determine whether these trends hold over time as enrollment increases. 77

76 More information on encounters per month is available in Appendix E.

77 Not all MCCM enrollees had information on their functional status recorded in the MCCM portal. Missing functional status may be due in part to changes in the data collection process when the MCCM portal was revised, effective January 1, 2018. Hospices did not record functional status in the MCCM portal for 30 percent of MCCM enrollees admitted to the model after January 1, 2018.
Exhibit 4.7  Monthly Number of MCCM Encounters Varied by Diagnosis and Functional Status


Note: This exhibit displays analysis of 2,591 MCCM enrollees. There were 132 MCCM enrollees missing diagnosis information, and 345 MCCM enrollees missing functional status information. Functional status is the first recorded functional status, whether at screening (for beneficiaries who enrolled prior to January 1, 2018) or during an encounter (after January 1, 2018).

4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.1.8  MCCM Length of Enrollment and Encounters over Time

MCCM hospices provided different rates of encounters with their MCCM enrollees depending on the length of the beneficiary’s enrollment in MCCM (see Section 5.1.1). Beneficiaries enrolled in MCCM longer had fewer encounters per month than those with a shorter length of enrollment. About one-third (38 percent) of those enrolled in MCCM for less than 1 month had an average of 17.2 encounters per month. Beneficiaries enrolled for 30-59 days had about 8.2 encounters per month, on average, during their 1 to 2 months of enrollment. As the enrollment duration increased, encounters per month declined slowly but consistently, as shown in Exhibit 4.8.

These findings suggest that there were different types of beneficiaries in MCCM: those who enrolled for just a few weeks before transition to MHB or death and had a relatively high number of encounters, and those who entered MCCM several months before MHB transition or death and needed fewer encounters each month. This pattern is very similar to what we previously reported in Annual Report 1.

Exhibit 4.8  Number of Encounters per Month Decreased as Length of MCCM Enrollment Increased

![Graph showing the number of encounters per month decreased as the length of MCCM enrollment increased.](image)


Note: This exhibit displays analysis of 2,591 MCCM enrollees and includes recorded encounters occurring from January 1, 2016 to June 30, 2018. “Encounter” refers to a meeting between an MCCM enrollee or caregiver and a health care provider.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.1.9 Mode of MCCM Encounters and Recipients

MCCM hospices provided services and encounters through a variety of modes and with different recipients, as the hospices worked to meet the needs of both enrollees and their family members.78

- **Mode**: Hospices conducted 75 percent of all MCCM encounters in person or, infrequently, online (less than 1 percent). Hospices conducted the rest by telephone or teleconference (25 percent). We found no statistically significant differences in the rates between cohorts.

- **Recipients**: Most (92 percent) of MCCM encounters directly involved the enrolled beneficiary. Approximately one-third of encounters (36 percent) involved family members, and 8 percent involved caregivers.79 Encounters with a caregiver were sometimes conducted with the enrollee present, and sometimes with the caregiver alone (e.g., bereavement counseling).

4.1.10 Respite Care

MCCM hospices offer non-medical, in-home respite services for short periods, as needed by enrollees’ caregivers.80 These respite services were rarely used (0.3 percent of all MCCM encounters). It is not clear whether this is because caregivers did not want or request respite services, or because they were unaware of the services. We will continue to monitor the provision of respite services in MCCM portal data, and as a topic in future case studies.

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78 Detailed information about encounters, such as the percentage of services provided to family members, caregivers, and enrollees; and the rate of services by each type of provider by cohort, appear in Appendix J, Exhibits J.16-J.20.

79 Hospices can provide an encounter to multiple parties. Additionally, a single person could be classified as both a family member and a caregiver.

80 MCCM respite care allows a staff member (e.g., an aide) or volunteer to be in the enrollee’s home to provide the usual caregiver with a brief respite. This is different from MHB respite care, which places the beneficiary in an inpatient facility overnight for caregiver respite.
4.2 LIFE-PROLONGING TREATMENT WHILE ENROLLED IN MCCM

A key feature of MCCM is that enrollees can receive potentially life-prolonging treatment for their terminal condition while also accessing palliative care services from the MCCM hospice.\textsuperscript{81} It is therefore important to understand whether beneficiaries receive treatment that is consistent with their informed preferences while enrolled in MCCM. We initially examined life-prolonging treatments for cancer patients; we will expand our analyses to other diagnoses for future reports.

MCCM enrollees with cancer tended to receive services that could potentially be life prolonging while they were enrolled in MCCM. Of the 1,526 MCCM enrollees with cancer,\textsuperscript{82} 71 percent had at least 1 visit with an oncologist (either a medical oncologist or a radiation oncologist) while enrolled in MCCM. This varied by the length of MCCM enrollment, as shown in Exhibit 4.9. Administrative data alone cannot reveal whether oncologists provided care that attempted to extend life or was palliative (e.g., radiation therapy to reduce pain from bone metastases). We know that cancer patients who enrolled in MCCM for a brief period were less likely to see an oncologist while enrolled, perhaps because they were actively dying and could not benefit from seeing an oncologist. Among those who did see an oncologist after enrolling in MCCM, the number of visits with their oncologist declined over time. This is generally consistent with our survey finding (discussed in Section 6.2) that bereaved family members and caregivers indicated that MCCM enrollees received treatment for their terminal illnesses for as long as they wished.

\textit{Exhibit 4.9  Oncology Visits Increased with Duration of MCCM Enrollment}

<table>
<thead>
<tr>
<th>Length of MCCM Enrollment</th>
<th>Percentage of Enrollees with at Least One Oncology Visit While in MCCM</th>
<th>Average Number of Visits per Month among Enrollees with at Least One Oncology Visit While in MCCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-30 days</td>
<td>52.9%</td>
<td>6.1</td>
</tr>
<tr>
<td>31-60 days</td>
<td>74.9%</td>
<td>3.7</td>
</tr>
<tr>
<td>61+ days</td>
<td>81.8%</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Note: This exhibit displays analysis of 1,526 MCCM enrollees with cancer who enrolled in MCCM prior to June 30, 2018.

\textsuperscript{81} This differs from MHB, where beneficiaries cannot receive treatment for their terminal condition while accessing palliative or supportive services.

\textsuperscript{82} We counted enrollees with any diagnosis of cancer on the MCCM portal as having cancer (and potentially receiving oncology care).
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.3 HOME HEALTH CARE OVERLAP WITH MCCM SERVICES

MCCM enrollees can also receive services under the Medicare home health benefit when medically necessary, while enrolled in the model, as described in Exhibit 1.2 in Section 1.1. Because home health services may duplicate those provided under MCCM, CMS expects that the MCCM hospice and home health agency will work together to coordinate care to avoid any redundancy.83 However, these home health services may overlap with the services provided under MCCM. Of the 2,591 beneficiaries who enrolled in MCCM before June 30, 2018, 43 percent received home health care during a portion of their MCCM enrollment.

During the time beneficiaries were enrolled in MCCM and using home health care, they received an average of 5.2 home health visits per month, with 44 percent of visits for skilled nursing and 34 percent of visits for physical therapy, as shown in Exhibit 4.10. Visits for physical, occupational, and speech therapies made up 48 percent of home health visits. The remaining 9 percent of home health visits involved services that MCCM also covers (nursing, aide, and medical social services), which potentially could have been provided by the MCCM hospice rather than by a home health agency.84

83 Additionally, the Medicare Administrative Contract for the MCCM hospice will review a 20 percent sample of overlapping MCCM and home health cases to ensure the services best benefit the patient.

84 These results are consistent with Annual Report 1, which showed that nearly 40 percent of the MCCM enrollees who died prior to June 30, 2017 received home health care for some portion of their MCCM enrollment. However, in Annual Report 1, home health agencies provided fewer visits, on average, to MCCM enrollees (4.1 home health visits per month versus 5.2 per month in Annual Report 2).
Cohort 1 had a higher percentage of enrollees receiving home health services than did cohort 2 (46 percent versus 33 percent). This difference was significant at the 1% level using a chi-square test. Cohort 1 enrollees who received home health care had more home health visits, on average, than those in cohort 2 (5.3 visits per month versus 4.0). This could in part reflect the shorter tenure of cohort 2 hospices in the model (six months) than cohort 1 (18 months), as hospices learned to coordinate with home health agencies. We will continue to monitor MCCM and home health care utilization to understand this overlap, and whether the results continue to vary by cohort.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

4.4 COORDINATION AND INFORMATION SHARING

Communication with physicians, hospital staff, and other health care providers facilitates coordination of care, which is a hallmark of MCCM. Many hospices shared that they use formal communication mechanisms of electronic health record documentation, emails, and phone calls to provide updates to other non-MCCM providers. A few MCCM hospices shared that they had only limited communications with community providers.

Several MCCM clinical and nurse managers noted that care coordination is time-consuming, and one noted that she spends substantially more time coordinating the care of her MCCM beneficiaries than she would with a typical hospice patient, since they are still receiving treatment for their terminal conditions. Caregivers of MCCM enrollees who transitioned to MHB indicated that the MCCM team “always” (61 percent) or “usually” (27 percent) seemed informed and up-to-date about the enrollee’s treatment from non-MCCM providers.

Additionally, if MCCM hospices know when their enrollees visited an emergency department or a hospital admission occurs, they can provide more-appropriate and more-timely follow-up. More than 80 percent of cohort 1 hospices and more than 60 percent of cohort 2 hospices indicated that they know when a hospital admission occurs, but only about half of them know when their enrollee visits an emergency department, as shown in Exhibit 4.11. Most often, MCCM hospices learn about an emergency department visit or hospitalization when told by the enrollee or caregiver. Less than half learn about the admission from hospital staff and even fewer hear from emergency department staff when an MCCM enrollee visits the emergency department. Very few hospices have automated systems that alert them when an enrollee seeks hospital care. Incomplete information about enrollees’ use of emergency departments and hospital services may impair the ability of MCCM hospices to support care transitions, complete medication reconciliation, and provide other necessary services.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

**Exhibit 4.11 Most MCCM Hospices Learned about Emergency Department Visits/Hospitalizations from Beneficiaries and Caregivers, Not from Medical Staff or Automated Alerts**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Cohort 1 Hospices (n = 37)</th>
<th>Cohort 2 Hospices (n = 34)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospice knows an MCCM enrollee was admitted to ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>81.1%</td>
<td>61.8%</td>
</tr>
<tr>
<td>ED</td>
<td>56.8%</td>
<td>52.9%</td>
</tr>
<tr>
<td>Of hospices that know an MCCM enrollee was admitted to ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call from beneficiary/caregiver</td>
<td>80.0%</td>
<td>90.5%</td>
</tr>
<tr>
<td>Call from hospital/ED staff</td>
<td>50.0%</td>
<td>47.6%</td>
</tr>
<tr>
<td>Automatic notification from electronic health record</td>
<td>16.7%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Other</td>
<td>30.0%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Of hospices that know an MCCM enrollee was admitted to an ED, they received this information from ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call from beneficiary/caregiver</td>
<td>71.4%</td>
<td>94.4%</td>
</tr>
<tr>
<td>Call from hospital/ED staff</td>
<td>47.6%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Automatic notification from electronic health record</td>
<td>19.0%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Other</td>
<td>19.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.
Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. Hospices could select multiple responses for each item.
ED = emergency department.

MCCM hospices typically have some access to other providers’ electronic health records, as shown in **Exhibit 4.12**. It is most common for hospices to have access to hospital electronic health records (over 80 percent), followed by palliative care program electronic health records (over 70 percent). Access to electronic records was more limited for inpatient rehabilitation facilities (less than 40 percent), settings that MCCM hospices do not typically affiliate with and that may use only paper records. More cohort 1 hospices than cohort 2 hospices have full access to hospitals’ electronic health records, but cohort 2 hospices have greater access to home health agencies’ electronic health records.
4. WHAT ELEMENTS OF CARE DO MCCM ENROLLEES RECEIVE?

Exhibit 4.12 MCCM Hospices Typically Had Some Access to Other Providers’ Electronic Health Records, Especially Hospital Electronic Health Records

<table>
<thead>
<tr>
<th>Type of Provider</th>
<th>Full Access</th>
<th>Some Access</th>
<th>No Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>Cohort 1: 37.1%</td>
<td>Cohort 2: 26.5%</td>
<td>Cohort 1: 14.3%</td>
</tr>
<tr>
<td>Rehabilitation Facility</td>
<td>Cohort 1: 10.0%</td>
<td>Cohort 2: 13.3%</td>
<td></td>
</tr>
<tr>
<td>Palliative Care Program</td>
<td>Cohort 1: 22.6%</td>
<td>Cohort 2: 3.0%</td>
<td></td>
</tr>
<tr>
<td>Nursing Facility/Skilled Nursing Facility</td>
<td>Cohort 1: 3.2%</td>
<td>Cohort 2: 0%</td>
<td></td>
</tr>
<tr>
<td>Home Health Agency</td>
<td>Cohort 1: 22.6%</td>
<td>Cohort 2: 13.3%</td>
<td></td>
</tr>
<tr>
<td>Physician Practice</td>
<td>Cohort 1: 42.4%</td>
<td>Cohort 2: 42.4%</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Cohorts 1 and 2 organizational surveys, wave 2, fielded October-December 2018.
Note: This exhibit displays information from hospices that responded to both waves (2017 and 2018) of the organizational survey. We include responses from 37 cohort 1 hospices and 34 cohort 2 hospices. Responses are mutually exclusive by provider type.

4.5 CONCLUSION

In this section, we discussed the type of care covered and accessed under MCCM, including nursing services, medical social services, and aide services. We also discussed the services accessed through other Medicare providers while enrolled in MCCM, including oncology care and the Medicare home health benefit. Finally, we described how MCCM hospices coordinate care with other providers, and share and receive information about MCCM enrollees.

MCCM enrollees had, on average, 10 encounters per month. To best meet the needs of enrollees, most MCCM encounters were conducted in person (75 percent), with nearly all of the rest conducted by telephone (25 percent). Most MCCM enrollees had encounters with a care coordinator (78 percent), a registered nurse/licensed practical nurse (67 percent), or a social worker (70 percent). Over 90 percent of enrollees received advance care planning services, 84 percent received care coordination, and 46 percent engaged in shared decision making with MCCM hospice staff.
One important component of the care that hospices provided under MCCM is the comprehensive assessments. Comprehensive assessments ensure that hospice staff have the complete information they need to create individualized care plans and provide appropriate services. During comprehensive assessments, MCCM staff evaluate an enrollee’s functional status, and screen for symptoms such as pain, shortness of breath, and psychological and emotional needs. While 94 percent of MCCM enrollees had at least 1 required assessment on time, 19 percent did not receive or have a record of an assessment when they were due. We will continue to monitor completion and documentation of the different assessments as MCCM hospices gain experience in this care process. We documented some variation by cohort related to the rates of comprehensive assessments and interdisciplinary group meetings, and other slight difference in types of services provided between cohort 1 and cohort 2. We will monitor these trends to determine whether the two cohorts continue to differ in the services they provide to enrollees.

In addition to encounters and services under the model, MCCM enrollees, as intended, used health care services outside of MCCM to access care for their terminal condition. Among MCCM enrollees with a qualifying diagnosis of cancer, those who enrolled in MCCM for a shorter length of time were less likely to see an oncologist while enrolled in MCCM than those enrolled for a month or longer. We will continue to use administrative data to explore the receipt of potentially life-prolonging treatment when beneficiaries enroll in MCCM.

We also examined home health care services provided to MCCM enrollees, which may indicate overlapping or redundant service provision. Of the 2,591 beneficiaries who enrolled in MCCM before June 30, 2018, 43 percent received home health care that overlapped with a portion of their MCCM enrollment. During the time that they were using both home health care and MCCM, these enrollees received an average of 5.2 home health visits per month, some of which the MCCM hospice could have instead provided.

The addition of cohort 2 in the model allows us to continue to identify variation in how hospices implement MCCM, and new data elements in the MCCM portal offer insight about services such as interdisciplinary group meetings, assessments, and counseling. Another year of data will provide a fuller picture of the model, and the care that MCCM enrollees receive.
5. What Do We Know about Transitions from MCCM to MHB?

**Key Takeaways about the Transition from MCCM to MHB**

- MCCM offers supportive services that may ease the transition to MHB. The majority of MCCM enrollees (83 percent) transitioned to MHB prior to death. MCCM decedents spent, on average, 78 days in MCCM, followed by 37 days in MHB prior to death. *(Section 5.1)*

- From 2016 to 2018, the overall rate of transition from MCCM to MHB remained largely the same. However, the proportion of decedents transitioning to MHB in the last 2 days of life increased from 7 percent to 12 percent. Just 1 or 2 days of full hospice care at the end of life is generally considered poor-quality care compared to being enrolled in hospice for a longer time, or at least represents an insufficient length of time to manage a dying person’s symptoms. However, this delayed entry to MHB may reflect that MCCM enrollees were receiving adequate supportive care through the model, and that some beneficiaries may not have enrolled in MHB had they not first enrolled in MCCM. *(Section 5.1)*

- MCCM decedents with a primary diagnosis of cancer transitioned to MHB an average of 67 days after enrollment, which is sooner than decedents with COPD or CHF, who transitioned an average of 101 and 118 days after MCCM enrollment, respectively. The difference in the MHB transfer rate reflects the disease trajectory of cancer versus COPD and CHF, since these diseases have a less-predictable course. *(Section 5.1)*

- Approximately 90 percent of caregivers for MCCM decedents who transitioned to MHB indicated that the MHB transition happened at the right time, and that the beneficiary and caregivers were involved as much as he or she wanted to be in the MHB decision. Also 91 percent indicated there was no pressure from the hospice’s MCCM team on the MCCM enrollees to transition to MHB. Caregivers for decedents not enrolled in MCCM (comparison beneficiaries) had similar experiences of shared decision making about MHB. *(Section 5.1)*

- Some MCCM decedents never transitioned to MHB. Seventeen percent of the 245 MCCM decedents who did not transition to MHB died during the performance period; the remaining 84 percent stayed in MCCM until death. Hospices indicated that the most common reasons that MCCM enrollees did not transition to MHB were a rapid decline in the enrollee’s condition (i.e., no time for transition to MHB), the beneficiaries’ or caregivers’ desire to continue life-prolonging treatment for the terminal condition, and enrollees or their caregivers not wanting to “give up,” which they believed occurs when electing MHB. *(Section 5.2)*
The Medicare Care Choices Model (MCCM) is an option for beneficiaries who are not yet ready to forgo treatment for their terminal condition, as required for admission into the Medicare hospice benefit (MHB). An important evaluation focus is whether MCCM facilitates the transition to the MHB earlier in the disease trajectory, so that beneficiaries have time to benefit from the full range of hospice services. This section describes what we know about MCCM and its relationship to MHB.

### 5.1 TRANSITION FROM MCCM TO MHB AND DURATION TO DEATH

A stated goal of MCCM is to increase access to supportive care services provided by hospices. More than four out of five MCCM enrollees eventually transitioned to MHB, most within the same hospice that provided their MCCM care. In the sections that follow, we explore the rate of transition to MHB, the timing of that transition, beneficiaries’ and caregivers’ decisions to transfer, and hospice staff perspectives about the transitions of MCCM enrollees to MHB.

#### 5.1.1 Length of MCCM Enrollment

Among enrollees discharged from MCCM, most remained in the model long enough for hospices to clarify and explain MCCM and MHB, and to help beneficiaries and their caregivers understand the hospice philosophy. Enrollees spent an average of 92 days in MCCM prior to discharge. Eighty-three percent of MCCM enrollees transitioned to MHB prior to death. This group of MCCM enrollees who transitioned to MHB averaged 113 days between MCCM enrollment and death.

The duration of MCCM enrollment varied for beneficiaries with and without cancer diagnoses, as shown in Exhibit 5.1. Roughly 40 percent of beneficiaries with cancer enrolled in MCCM for one month or less compared to roughly 30 percent of those diagnosed with chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), or human immunodeficiency virus/acquired immunodeficiency syndrome.  

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86 Of note, MHB also has a bimodal distribution, with high percentages of short and long enrollment periods. During federal fiscal year 2014, 26 percent of MHB enrollment periods were 7 days or less and 19 percent were 181 days or more. (Abt Associates. 2015. Medicare Hospice Payment Reform: Analysis of How the Medicare Hospice Benefit is Used. Retrieved on June 3, 2019 from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/Hospice/Downloads/December-2015-Technical-Report.pdf.)
Overall, beneficiaries with cancer were enrolled in MCCM for a shorter period of time compared to those with other diagnoses. In the future, we will explore why discharged beneficiaries with cancer spend shorter amounts of time enrolled in MCCM, and how these differences in enrollment duration may relate to cross-diagnosis differences in disease trajectories.

**Exhibit 5.1 Beneficiaries with Cancer and Discharged from MCCM Spent Fewer Days Enrolled than Their Counterparts with Non-Cancer Diagnoses**

![Graph showing proportions of MCCM enrollees by number of days enrolled]

Sources: Medicare claims data, Master Beneficiary Summary File, and MCCM portal data, January 1, 2016-June 30, 2018. Note: This exhibit displays analysis of Medicare beneficiaries enrolled in MCCM on or prior to June 30, 2018, with recorded dates of discharge from MCCM (total all MCCM enrollees, n = 1,972; MCCM enrollees with cancer diagnosis, n = 1,230; MCCM enrollees with non-cancer diagnosis, n = 639; missing diagnosis and excluded from analysis, n = 103). The sample includes enrollees who were discharged from MCCM, whether or not they died before June 30, 2018. CHF = congestive heart failure, COPD = chronic obstructive pulmonary disease, HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome.

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87 Exhibit 2.13 shows the proportions of diagnoses. The majority of all MCCM enrollees (58 percent, n = 2,591) had cancer listed as a primary diagnosis.
Regardless of the duration of their MCCM enrollments, beneficiaries with cancer were 13 to 23 percentage points more likely to transition from MCCM to MHB compared to their counterparts with other diagnoses, as shown in Exhibit 5.2. This lower transition for non-cancer diagnoses may reflect the ability of MCCM hospices to meet the needs of non-cancer patients more adequately.

**Exhibit 5.2** Beneficiaries Discharged from MCCM with Cancer Were More Likely to Transition to the Medicare Hospice Benefit than Those with Other Diagnoses, Regardless of Duration of MCCM Enrollment

![Percentage of MCCM Enrollees Electing MHB](chart)

Sources: Medicare claims data, Master Beneficiary Summary File, and MCCM portal data, January 1, 2016-June 30, 2018.

Note: This exhibit displays analysis of Medicare beneficiaries enrolled in MCCM on or prior to June 30, 2018, with recorded dates of discharge from MCCM (total all MCCM enrollees, n = 1,972; MCCM enrollees with cancer diagnosis, n = 1,230; MCCM enrollees with non-cancer diagnosis, n= 639; missing diagnosis and excluded from analysis, n = 103). The sample includes enrollees who were discharged from MCCM, whether or not they died before June 30, 2018.

5. WHAT DO WE KNOW ABOUT TRANSITIONS FROM MCCM TO MHB?

**Provider Variation**

As the time that MCCM has been in operation increases, so too does the possibility that beneficiaries will be enrolled in MCCM for longer periods of time. We found some variation across hospices in the length of enrollment in MCCM, as shown in Exhibit 5.3.

**Exhibit 5.3  Cohort 1 and Cohort 2 Hospices Varied in Their Average Length of MCCM Enrollment**

![Chart showing percentage of hospices by average length of MCCM enrollment]

Sources: Master Beneficiary Summary File and MCCM portal data, January 1, 2016-June 30, 2018.

Note: This exhibit displays analysis of MCCM beneficiaries enrolled in MCCM on or prior to June 30, 2018, with recorded dates of discharge from MCCM (total all MCCM enrollees, n = 1,972; cohort 1 enrollees, n = 1,695; cohort 2 enrollees, n = 321). The sample includes enrollees who were discharged from MCCM, whether or not they died before June 30, 2018.

MCCM discharges cared for by cohort 1 hospices had more months of potential enrollment (up to 30 months) than discharges cared for by cohort 2 hospices (up to 6 months), simply because cohort 2 started later.88 Because cohort 2 hospices only had up to 6 months of data for which to examine enrollment, we compared average enrollment duration for each cohort to assess whether the average was being driven more by time enrolled in MCCM as opposed to differences between the cohorts. We analyzed average enrollment duration for an equivalent 6-month period after the start date for each cohort, and found less variation

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88 Cohort 1 hospices started enrollment on January 1, 2016, and Cohort 2 hospices started enrollment on January 1, 2018.
between cohort 1 and cohort 2 in average enrollment duration, which is displayed in Exhibit 5.4.

**Exhibit 5.4**  **Cohort 1 and Cohort 2 Hospices Varied Less in Average Length of MCCM Enrollment during the First Six Months of MCCM Implementation**

<table>
<thead>
<tr>
<th>Average Length of MCCM Enrollment, in Days</th>
<th>Percentage of Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-29 days</td>
<td>50.0%</td>
</tr>
<tr>
<td>30-59 days</td>
<td>43.0%</td>
</tr>
<tr>
<td>60-89 days</td>
<td>44.8%</td>
</tr>
<tr>
<td>90-179 days</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Sources: Master Beneficiary Summary File and MCCM portal data, January 1, 2016-June 30, 2018.

Note: This exhibit displays analysis of MCCM beneficiaries enrolled in MCCM on or prior to June 30, 2018, with recorded dates of discharge from MCCM (total all MCCM enrollees, n = 735; cohort 1 enrollees, n = 225; cohort 2 enrollees, n = 510). The sample includes enrollees who were discharged from MCCM, whether or not they died before June 30, 2018. This exhibit examines only data from the first 6 months of MCCM implementation for each cohort.

In the future, we will examine other features of hospices with shorter versus longer enrollment durations.
5. WHAT DO WE KNOW ABOUT TRANSITIONS FROM MCCM TO MHB?

5.1.2 Timing of Transitions from MCCM to MHB

Most beneficiaries who enrolled in MCCM for multiple months eventually transitioned to MHB. To characterize transitions from MCCM to MHB, we analyzed a subgroup of 1,461 MCCM enrollees who died before June 30, 2018, and calculated the number who entered MHB and when the MHB admission occurred. We found that:

- The average beneficiary enrolled in MCCM 113 days prior to death; this compares to an average of 89 days reported in Annual Report 1. The increase is partly due to a longer observation period, through June 2018, for Annual Report 2. However, it is difficult to ascertain whether the increased enrollment length results from any changes in MCCM implementation, or whether the increased length is due to variation in individual disease trajectories. We plan to explore these differences in future reports.

- Eighty-three percent of MCCM enrollees transitioned to MHB prior to death; the same percentage shown in Annual Report 1.

- Transition to MHB occurred, on average, approximately 11 weeks after MCCM enrollment (78 days) and 5 weeks (37 days) prior to death.

The Medicare Payment Advisory Commission reports that nationwide only half of Medicare beneficiaries elect MHB prior to death. The rates of transition from MCCM to MHB exceed

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89 Here we report that 83 percent of MCCM enrollees transitioned to MHB prior to death, which is slightly different than the 80.6 percent we reported in Section 2.2.3. The percentages were calculated using MCCM portal data. We base estimates in Section 5 on hospice claims, and include transition to MHB for any enrollee using MHB after MCCM enrollment. Claims data permit us to determine MHB enrollment status and transition to MHB in a standardized way. Documentation of MHB enrollment status in the portal is reported by MCCM hospice staff who may not have knowledge of or consistently record the location and status of enrollees after they leave MCCM.

90 For these analyses, one of the 1,462 MCCM decedents is omitted due to an inconsistent death date in Medicare Enrollment Data (recorded as occurring before MHB election), leaving a total analytic sample of 1,461.


92 Although the difference in MHB election rates between all Medicare decedents and MCCM decedents is substantial, we caution that the totality of Medicare decedents is not an appropriate matched sample for the MCCM decedents analyzed. Therefore, it is premature to draw direct comparisons at this stage of the evaluation.
this rate. These above-average rates have been nearly constant since the model began: 84 percent among 2016 MCCM decedents, 83 percent among 2017 decedents, and 83 percent among 2018 decedents.

Although the overall rates of transition to MHB among MCCM decedents changed little over time, MCCM enrollees were more likely to wait until they were actively dying (i.e., the last two days of life) before transitioning to MHB, as shown in Exhibit 5.5. Just one or two days of full hospice care at the end of life is usually considered poor care because it represents an insufficient length of time to manage a dying person’s symptoms. It is also worth noting that some MCCM decedents might not have enrolled in MHB without first experiencing MCCM. For them, even one or two days of MHB is an improvement over none at all. Additionally, we know little about the impact of such short MHB experiences for MCCM decedents, who were already receiving numerous supportive services prior to transitioning to MHB. It is possible that MCCM was meeting many enrollees’ needs, and beneficiaries (and caregivers) saw little reason to transition to MHB. We will continue to monitor these trends and collect qualitative information about experiences with transitions from MCCM to MHB.

Exhibit 5.5 Over Time, MCCM Decedents Were Increasingly Likely to Transition to the Medicare Hospice Benefit in the Last Two Days of Life

Sources: Medicare claims data, Master Beneficiary Summary File, and MCCM portal data, January 1, 2016-June 30, 2018.
Note: This exhibit displays analysis of 1,217 MCCM enrollees who died prior to June 30, 2018 and had transitioned to MHB prior to death. We assigned beneficiaries to categories based on the year of their death.
MHB = Medicare hospice benefit.

5. WHAT DO WE KNOW ABOUT TRANSITIONS FROM MCCM TO MHB?

To explore any differences in MHB admissions related to diagnosis or medical complexity, we examined the average survival (in days) from the date of MCCM enrollment to the date of death; and the rate of MHB transition, by primary diagnosis, functional status, and dual eligibility status, as shown in Exhibit 5.6.94 Highlights include the following:

- **Diagnosis:** On average, MCCM decedents with cancer transitioned to MHB 66.5 days after enrolling in MCCM, which was 34.5 days sooner than enrollees with COPD (101.0 days from MCCM enrollment to MHB transition) and 51.6 days sooner than enrollees with CHF (118.1 days until MHB transition).95 These different results could be because cancer patients were more seriously ill when they enrolled in MCCM, and may reflect the more unpredictable disease trajectory for COPD and CHF. The typical cancer trajectory involves progressive illness despite treatment, and functional decline96 that leads to death. By contrast, non-cancer disease trajectories involve prolonged periods of functional dependency, with hospice referrals triggered by an infection or, in the case of CHF, cardiac arrhythmia, neither of which are easy to predict. It is harder to identify the appropriate time to make the transition to MHB for beneficiaries with CHF or COPD than for those dying from cancer.

- **Functional status97:** MCCM decedents who were functionally independent at MCCM enrollment had the briefest durations in MCCM (60.8 days) and MHB (31.1 days), possibly because they needed less support and therefore waited longer to enroll in either the model or hospice. MCCM beneficiaries who were disabled at initial enrollment (the lowest functional status category) had an average of 96.0 days in MCCM and 42.7 days in MHB, which may seem counterintuitive (those with the poorest functional status might be presumed to be further along in their disease trajectory and closer to death). Not every dying person, however, becomes functionally dependent months before death—some remain functionally independent until the last days or weeks of life. It is possible that those with good function wait longer to enroll, and are actually closer to death when they finally do enroll. It is also possible that disabled individuals are stable at that level and do not deteriorate quickly (i.e., live longer with support from MCCM and MHB, and other sources of support).

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94 The proportion of MCCM beneficiaries by dual-eligibility status is available in Exhibit 2.12, and the proportions of primary diagnosis and functional status are available in Exhibit 2.13.

95 The 3 MCCM decedents with human immunodeficiency virus/acquired immunodeficiency syndrome transitioned after 33 days, on average, but this sample size is too small for meaningful comparisons.


97 Hospices initially recorded functional status in the MCCM portal only once, at MCCM enrollment. After the portal update on January 1, 2018, hospices could record and update functional status during repeated encounters over the course of MCCM enrollment. For those who enrolled after the portal update, we used the first recorded functional status.
5. WHAT DO WE KNOW ABOUT TRANSITIONS FROM MCCM TO MHB?

- **Medicare-Medicaid dual eligibility**: MCCM decedents who were dually eligible for Medicare and Medicaid stayed enrolled longer in MCCM (112.7 days) and MHB (41.7 days) than those who were not dually eligible for Medicare and Medicaid (74.3 days in MCCM and 36.3 days in MHB). Beneficiaries who are dually eligible for Medicare and Medicaid are often sicker and poorer than the non-dually eligible. Dual-eligibles may enroll earlier in MCCM to acquire supportive services that they otherwise might not receive. We will continue to monitor this relationship in future reports.

**Exhibit 5.6  Length of Enrollment in MCCM Prior to Transition to Medicare Hospice Benefit Varied by Primary Diagnosis, Functional Status, and Dual Eligibility**

<table>
<thead>
<tr>
<th>Primary Diagnosis</th>
<th>MCCM Enrollment to Hospice Start</th>
<th>Hospice Start to Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>77.5</td>
<td>36.7</td>
</tr>
<tr>
<td>Cancer</td>
<td>66.5</td>
<td>34.1</td>
</tr>
<tr>
<td>COPD</td>
<td>101.0</td>
<td>52.2</td>
</tr>
<tr>
<td>CHF</td>
<td>118.1</td>
<td>39.8</td>
</tr>
<tr>
<td>HIV</td>
<td>33.0</td>
<td>52.0</td>
</tr>
<tr>
<td><strong>Functional Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>60.8</td>
<td>31.1</td>
</tr>
<tr>
<td>Needs some assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent, frequent care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disabled</td>
<td>90.8</td>
<td>42.7</td>
</tr>
<tr>
<td><strong>Dual Eligible</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual eligible: No</td>
<td>74.3</td>
<td>36.3</td>
</tr>
<tr>
<td>Dual eligible: Yes</td>
<td>112.7</td>
<td>41.7</td>
</tr>
</tbody>
</table>

Sources: Medicare claims data, Master Beneficiary Summary File, and MCCM portal data, January 1, 2016–June 30, 2018. Note: This exhibit displays analysis of 1,217 MCCM decedents who later transitioned to MHB, among the 1,462 MCCM decedents who died prior to June 30, 2018 (excluding 1 apparent error in recorded date of death). Columns for “missing” subcategories (e.g., no primary diagnosis listed in the portal) are omitted from the category breakdowns, but are included in the “All” row at the top of the figure. Diagnosis information is missing for 74 MCCM decedents and functional status information is missing for 175 MCCM decedents. We provide additional analysis in Appendix J, Exhibit J.21.

5.1.3 Shared Decision Making Regarding Enrollment in MHB

Caregivers generally reported satisfaction with the timing of MHB enrollment and the way the beneficiary made this decision. This was true for caregivers of both MCCM decedents and comparison beneficiaries (who never enrolled in MCCM). For MCCM decedents who transitioned to MHB, 9 out of 10 caregivers indicated that:

- Their MCCM enrollee made the decision to elect MHB at the right time.
- Their MCCM enrollee continued to receive life-prolonging treatment for as long as he or she wanted.
- They were involved as much as they wanted to be in decision making about MHB.
- The MCCM or hospice team did not pressure the MCCM enrollee to elect MHB.

Caregivers of MCCM decedents were slightly less likely than caregivers of decedents enrolled in MCCM comparison hospices to report that a member of MCCM or the hospice team discussed MHB benefits just "the right amount" (90 percent versus 95 percent). Caregivers of MCCM decedents were also slightly less likely than caregivers of decedents enrolled in MCCM comparison hospices to report that the decision was made without pressure from the hospice team (91 percent versus 96 percent).  

98 In both instances, the differences in caregiver response between MCCM decedents and comparisons were significant at the 10-percent level.

99 The ability to detect differences between the groups is limited, due to the small sample sizes, as described in more detail in Appendix I.6.
### Exhibit 5.7  Caregivers Reported that Decisions to Enroll in Hospice Were Made at the Right Time and without Pressure

<table>
<thead>
<tr>
<th>Decision Description</th>
<th>MCCM + MHB</th>
<th>Comparisons in MCCM Hospices</th>
<th>Comparisons in Matched Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td>A member of the MCCM program team/hospice team talked with the patient or family</td>
<td>89.6%</td>
<td>[VALUE]*</td>
<td>90.1%</td>
</tr>
<tr>
<td>about the reasons for enrolling or not enrolling in hospice (% right amount)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A member of the MCCM program team/hospice team allowed the patient or family to</td>
<td>87.9%</td>
<td>89.7%</td>
<td>89.8%</td>
</tr>
<tr>
<td>ask as many questions as they wanted about enrolling in full hospice care (% yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>definitely)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The patient or family were involved as much as they would have wanted to be in the</td>
<td>91.2%</td>
<td>92.3%</td>
<td>89.4%</td>
</tr>
<tr>
<td>decision to enroll in hospice (% yes definitely)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The decision to enroll in hospice was made free of pressure from the MCCM program</td>
<td>90.7%</td>
<td>[VALUE]</td>
<td>88.3%</td>
</tr>
<tr>
<td>team/hospice team (% yes definitely)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The decision to enroll in hospice was made at the right time (% yes definitely)</td>
<td>91.9%</td>
<td>92.4%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Caregiver Experience of Care Survey, October 2017-June 2018.

Note: This exhibit displays caregivers' responses for MCCM decedents and comparison beneficiaries who died between October 2017 and June 2018 in 56 MCCM hospices and 30 matched hospices for which there were completed surveys. Sample size for each respondent category differed: MCCM + MHB, n = 210; comparisons in MCCM hospices, n = 128; comparisons in matched hospices, n = 104. Significance is reported from a linear regression model, including case-mix adjustors (response percentile, beneficiary age at death, payer for hospice care, primary diagnosis, duration of final episode of hospice care, caregiver-respondent age and education, relationship of caregiver-respondent to deceased beneficiary, language, setting of care), with MCCM + MHB as the reference group, with statistical significance at the 10% (*) level. We provide additional analysis in Appendix J, Exhibit J.22. MHB = Medicare hospice benefit.
5.1.4 Reasons for Transitioning to MHB

Information about the reasons that beneficiaries transition to MHB can offer insights into the care MCCM enrollees require and any perceived boundaries of the care provided by MCCM. MCCM enrollees were generally satisfied with their care in the model, but transitioned because their care needs evolved. Caregivers provided the following reasons for enrollees’ transitions to MHB, in response to an open-ended question on the caregiver survey:

- General decline in the beneficiary’s condition and/or disease progression (103 of 173 comments).
- Beneficiary needed more care than what MCCM could provide (42 of 173 comments). These services included medication management and assistance such as mobility, breathing, hydration, feeding, and wound care.
- Treatment was no longer working (29 of 173 comments). Twenty-five comments noted that the beneficiary wanted to stop active treatment or was willing to accept that he or she was dying and ready for MHB.
- Physicians or other medical providers either directly recommended the switch to MHB or counseled the beneficiary in a way that influenced this decision (27 of 173 comments).

5.1.5 MCCM Provider Perspectives on Transitions from MCCM to MHB

MCCM hospice staff told us that MCCM facilitates the transition to MHB, and they feel strongly that maintaining staff continuity from MCCM to MHB eases transitions for beneficiaries. They accomplish this by having one or more staff members from MCCM remain on the beneficiary’s care team after the transition to MHB. The initial trust gained during the MCCM experience is key to helping enrollees transition to MHB sooner than they might otherwise without these relationships.

**Transition Preparation Process**

The process of preparing beneficiaries for MHB starts early, soon after enrollment in MCCM, by explaining what services are available through MHB. This education happens when beneficiaries are not in a crisis mode (which is common when beneficiaries elect MHB in the last days of life); and allows time to establish rapport, explain MHB, and offer an array of support services. Most of the hospice staff we interviewed explained that simply discussing service options (MCCM and MHB) leads to conversations about goals of care for beneficiaries who might not otherwise consider what they want at the end of life.

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**Helping Beneficiaries Accept MHB**

“As long as you’re honest with them [the beneficiary], it helps them be honest with themselves on where they are in their disease process. The doctor can tell them, but they have to accept and feel that for themselves. Chemotherapy is making them feel worse without any kind of benefit, but they have to take that journey to find out and exhaust their options, and this program [MCCM] gives them the opportunity to experience that. Patients feel helpless when you put them right in the hospice box.”

—Nurse Case Manager, cohort 2
Continuity of Care

Several MCCM hospices told us about their strategies to ensure care continuity as a beneficiary transitions from MCCM to MHB. A few hospices ask their MCCM clinical managers to maintain relationships and informal contacts with beneficiaries after MHB admission (including for those who use unaffiliated hospices) to ease their anxiety and provide an added level of comfort. A few other MCCM hospices offer volunteer and case management services to any MCCM-eligible beneficiary, whether or not they enrolled in the model, to help them understand the benefits of MHB. Another hospice offers supplemental services such as massage, aromatherapy, and music therapy to beneficiaries starting in MCCM and continuing into MHB, to avoid the abrupt discontinuation of services upon entry to MHB.

5.2 MCCM DECEDENTS WHO DO NOT TRANSITION TO MHB

Among the 1,462 MCCM decedents who died, 83 percent (1,217 enrollees) transitioned from MCCM to MHB. Among the 245 remaining MCCM decedents, 17 percent (40 enrollees) withdrew from MCCM and died without any recorded transition to MHB; and 84 percent (205 enrollees) of MCCM decedents remained in MCCM until death, without transitioning to MHB. These beneficiaries might have died suddenly from an acute event (before they were able to transition to MHB), or they might have not wanted to give up the option of treatment for their terminal illness.

5.2.1 Reasons for Not Transitioning to MHB

Caregivers of MCCM decedents provided multiple reasons for not transitioning to MHB, in response to open-ended questions on the caregiver survey:

- Death came unexpectedly or too quickly to arrange for MHB (14 of 30 comments). In some cases, this was due to a sudden decline in the enrollee’s condition; in other cases, the enrollee and/or their caregiver did not consider enrolling in MHB until so late in the process that the hospice could not arrange care in time.
- The enrollee was not ready to “give up,” still had things to do, or could not accept death (6 of 30 comments).
- The enrollee preferred to continue with medical treatment or to continue to receive treatment from his or her medical doctor(s) (5 of 30 comments).
- MCCM provides services to beneficiaries who otherwise might not choose MHB, as discussed in Section 1.1. A few caregivers indicated that MCCM services met the

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100 These individuals lacked both an MCCM discharge date and an MHB claim (after MCCM enrollment). It is possible that they disenrolled from MCCM but the hospice did not record their discharge date in the MCCM portal. For these 205 enrollees, however, over 90 percent had an MCCM encounter recorded within 30 days of death, which suggests that they remained enrolled in MCCM continuously until their death.
beneficiary’s needs and MHB was not necessary, or that the caregivers wanted their family members to continue to receive life-prolonging treatment for their diseases.

- Hospice staff offered similar explanations for some MCCM decedents not making the transition to MHB, particularly beneficiaries they felt would not have elected MHB at all, but that MCCM could adequately serve. Several hospice staff mentioned that MCCM is an opportunity to serve beneficiaries who are not receptive to MHB.

Staff from several hospices explained that their MCCM enrollees are not transitioning to MHB because the services they receive in MCCM are largely the same as in MHB, and adequately meet their needs. Some of their MCCM enrollees prefer to continue life-prolonging treatment and never elect MHB.

### 5.3 CONCLUSION

MCCM helps introduce people to hospice care, which may facilitate transitions to MHB. In this section, we described transitions (or lack thereof) from MCCM to MHB.

More than 80 percent of MCCM decedents eventually transitioned to MHB, after an average of 11 weeks in MCCM, and about 5 weeks prior to death. Approximately 90 percent of caregivers for MCCM decedents who transitioned to MHB indicated that the transition happened at the right time, the beneficiary or caregiver was involved as much as he or she wanted to be in the MHB decision, and the beneficiary made the decision free of pressure from the MCCM team. The same staff who work with MCCM enrollees are often also involved in providing care under MHB, which further eases the transition.

Of the 245 MCCM decedents who did not transition to MHB (17 percent), 84 percent remained in MCCM until death. The most common reasons that MCCM decedents did not transition to MHB were a rapid decline in the enrollee’s condition, enrollees or caregivers not wanting to “give up,” and the desire to continue life-prolonging treatment for the terminal condition.

Additional data and future analyses will help us better understand the timing of the transition from MCCM to MHB, and the perspectives of beneficiaries and caregivers regarding the transition process.
Beneficiary Story

One night 11 years ago, the beneficiary, a former writer, went to bed and woke up with abdominal pain. The next day, she was diagnosed with colon cancer. She underwent multiple surgeries and was in the hospital for 1 month. The community provider gave her a life expectancy of 3 years, and now she is in her eleventh year.

The beneficiary refers to MCCM as a pre-hospice program and is not bothered by the term “hospice.” When she enrolled in the model, she had someone from her MCCM care team visiting every day. Now she receives in-person nursing services every other week and telephone calls during the weeks she does not see the nurse in person. She is an active member of her church, and particularly enjoys and values speaking with the MCCM chaplain. She receives oncology treatments twice a week, and the members of her church community have organized transportation to her appointments, in addition to helping her around the house. She also receives services from the Meals on Wheels program and says the delivery people are quite kind.

The beneficiary first heard about MCCM from a benefits counselor at the oncology clinic. The counselor explained MCCM and the beneficiary immediately liked the concept because someone would visit her in person and she lives alone. She considered moving closer to her family for them to help her, but decided it was not feasible to move. She has been with MCCM for 2 months, and her MCCM nurse helps coordinate her care. She feels the level of services she receives is sufficient. She has the hospice’s after-hours telephone number available but has not had to use it. She has a walker and cane, but did not receive this equipment through the model. She manages her own medications and will write down the medication names in order to track what she takes; the MCCM nurse also reviews the medications. The beneficiary knows that her MCCM nurse and community provider are in communication with one another. The beneficiary sees her community provider about every 6 weeks, but can see him more often if needed. There are also staff at the oncology clinic that she can see.

When asked whether the beneficiary has any feedback about MCCM she would like to share with Medicare, she responded, “They need to go forward with this program. People need to be supported and talked to; some people don’t have anyone to talk to. I would highly recommend this [the model].” She feels the hospice is helping her and appreciates the services she receives.

This beneficiary story is an actual story given by an MCCM enrollee during a site visit. The story is not a composite, and represents a typical MCCM enrollee the qualitative data collection team interacts with during in-person case studies. We maintain confidentiality by omitting the beneficiary’s name, age, ethnicity, and geographic location.
6. How Does MCCM Affect the Quality of Care Experienced by MCCM Enrollees and Their Caregivers?

Key Takeaways about the Effect of MCCM on Care Experiences

- The majority of MCCM hospices screened all or almost all enrollees for pain and shortness of breath. Of the MCCM enrollees assessed as having pain or shortness of breath, MCCM nurses judged that palliation was sufficient for pain in 91 percent of encounters and for shortness of breath in 97 percent of encounters. (Section 6.1)

- There is room for improvement in screening for and addressing emotional and spiritual needs. For example, 8 MCCM hospices with at least 10 enrollees screened fewer than 90 percent of enrollees for emotional concerns, and 13 MCCM hospices with at least 10 enrollees screened fewer than 90 percent of enrollees for spiritual concerns. (Section 6.1)

- MCCM hospice staff spoke with 77 percent of beneficiaries and/or caregivers about their goals of care within the first week of MCCM enrollment. MCCM hospice staff conducted advance care planning discussions with over 95 percent of MCCM enrollees, helping to avoid unwanted hospitalizations and ensure more seamless transitions to care provided under MHB. (Section 6.2)

- Caregivers’ ratings of MCCM enrollee quality of life were similar (an average of 8.8 out of a possible 10) to those for comparison beneficiaries in MHB. (Section 6.2)

- Caregivers of MCCM enrollees who transitioned to MHB prior to death reported care consistent with enrollees’ goals and services that met enrollees’ needs, and rated MCCM highly overall (9.1 out of a possible 10). (Section 6.2.1)
The Medicare Care Choices Model (MCCM) aims to promote high-quality, person- and family-centered care for seriously ill and dying enrollees. Care delivered through MCCM should meet proven standards and markers that include screening, treatment, and palliative care to manage symptoms; and advance care planning to ensure care is consistent with enrollees’ goals and wishes. Understanding beneficiary and caregiver care experiences is important in assessing the value and quality of MCCM, especially because people differ in their preferences for different types and intensity of care, and in their desire for shared decision making. This section discusses several measures of quality related to screening and symptom management, shared decision making and advance care planning, improvement of quality over time, and the avoidance of potentially burdensome care at the end of life.

### 6.1 SCREENING AND SYMPTOM MANAGEMENT

MCCM hospice teams are expected to screen enrollees for shortness of breath, pain, and emotional well-being; and discuss spiritual concerns with enrollees and their caregivers. Hospice teams should then document symptoms and concerns; initiate treatment, as appropriate; and monitor whether the treatment was effective.

#### 6.1.1 Screening for Symptoms and Concerns

Overall, MCCM hospices screened enrollees for symptoms and concerns at high rates, as shown in Exhibit 6.1. MCCM staff screened the vast majority of MCCM enrollees for shortness of breath (97 percent), pain (96 percent), and emotional well-being (95 percent). Hospice staff spoke with an average of 91 percent of MCCM enrollees and/or their family members about spiritual/religious
concerns. At the same time, a small number of hospices screened enrollees for these problems at substantially lower rates: 8 hospices screened fewer than 90 percent of enrollees for emotional concerns, and 13 MCCM hospices screened fewer than 90 percent of enrollees for spiritual concerns.

**Exhibit 6.1 Screening MCCM Enrollees for Shortness of Breath, Pain, Emotional Well-Being, and Spiritual Concerns Varied by Hospice**


Note: This exhibit displays results of analyses of beneficiaries enrolled in MCCM for at least 7 days and eligible for screening between January 1, 2016 and June 30, 2018 from hospices with at least 10 MCCM enrollees. We used the 7 or more days of MCCM enrollment to allow time needed to document multiple types of screenings. To reliably compare screening practices across hospices, we included only hospices that had at least 10 enrollees with data reported on the analyzed measure. Each screening practice that we analyzed included a different subset of MCCM enrollees:

- For symptoms that should be screened and treated at every encounter, we examined encounter-level data for the following:
  - Screening for shortness of breath in 9,190 encounters for 2,067 MCCM enrollees
  - Screening for pain in 9,256 encounters for 2,058 MCCM enrollees

102 See Exhibit 6.1 for source and notes. For each of these metrics, data were analyzed for 78 hospices, but only a subset of those hospices (and their beneficiaries and encounters) met the criteria for the measures described in the exhibit.
An “encounter” is a meeting, whether in person or by telephone, between an MCCM enrollee or caregiver and a health care provider.

- For symptoms that should be screened and treated at least once, we examined beneficiary-level data for the following:
  - Screening for emotional well-being in 8,107 encounters for 1,983 MCCM enrollees
  - Whether staff spoke with MCCM enrollees and/or family members about religious/spiritual concerns in 10,346 encounters for 2,057 enrollees

We applied eligibility criteria that are specific to each type of screening, as discussed in Appendix E.2. We excluded encounters where a beneficiary or caregiver provided a clinically valid reason for not responding. Differences in these criteria contributed to the variation in the number of hospices and beneficiaries we examined.

6.1.2 Symptom Management

After screening, hospices should provide care to treat symptoms identified through screening. MCCM hospice staff reported that beneficiaries received effective management for shortness of breath and pain. Further, staff reported that treatment was effective more than 90 percent of the time, as shown in Exhibit 6.2, indicating a high quality of care for symptom management.

While ratings of palliation of symptoms were above 90 percent, there is still some room for improvement—particularly in the alleviation of pain. The use of opioids to palliate pain and shortness of breath may cause constipation. Prudent medical practice recommends initiating opioid medication and a bowel regime to manage opioid-induced constipation. MCCM staff reported managing constipation in nearly all (98 percent) for bowel regimen initiated or continued) of the 519 MCCM enrollees they started on opioid medication, again indicating high-quality care.

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Appreciation of Families of MCCM and Hospice Activities

“Both the Special Program [MCCM] and hospice are very helpful and very upfront with helping us with his condition. They worked quickly upon the assessment of his state to get him inpatient hospice. Everyone at both levels we were in contact with was professional and compassionate.”

—Caregiver of MCCM enrollee who transitioned to MHB
6. HOW DOES MCCM AFFECT THE QUALITY OF CARE EXPERIENCED BY MCCM ENROLLEES AND THEIR CAREGIVERS?

Exhibit 6.2  MCCM Hospices Addressed Nearly All MCCM Enrollees’ Symptoms

Note: This exhibit displays results of analyses of beneficiaries enrolled in MCCM for at least 7 days and eligible for screening between January 1, 2016 and June 30, 2018 in hospices with at least 10 MCCM enrollees. We used the 7 or more days of MCCM enrollment to allow time needed to document multiple types of screenings. To reliably compare screening practices across hospices, we included only hospices that had at least 10 enrollees with data reported on the analyzed measure. Each management practice that we analyzed included a different subset of MCCM enrollees:

- For symptoms that should be screened and treated at every encounter, we examined encounter-level data for the following:
  - Treatment for shortness of breath in 647 encounters for MCCM enrollees with this symptom in 70 hospices
  - Treatment for pain in 1,936 encounters for MCCM enrollees with this symptom in 72 hospices
  An “encounter” is a meeting, whether in person or by telephone, between an MCCM enrollee or caregiver and a health care provider.

- For symptoms that should be screened and treated at least once, we examined beneficiary-level data for the following:
  - Treatment of emotional concerns for 88 MCCM enrollees in 51 hospices
  - Initiation or continuation of a bowel regimen for 519 MCCM enrollees in 61 hospices.

We applied eligibility criteria that are specific to each type of screening, as discussed in Appendix E.2. We excluded encounters where a beneficiary or caregiver provided a clinically valid reason for not responding.

6.1.3 Care Experiences Following Transition to the Medicare Hospice Benefit

Caregiver-reported care experiences with hospice care for MCCM enrollees who transitioned to the Medicare hospice benefit (MHB) were excellent and generally similar to those of caregivers of comparison beneficiaries, as shown in Exhibit 6.3, with regard to how well the hospice team:

- Communicated with caregivers
- Provided help in a timely manner
6. HOW DOES MCCM AFFECT THE QUALITY OF CARE EXPERIENCED BY MCCM ENROLLEES AND THEIR CAREGIVERS?

- Treated beneficiary with respect
- Provided help for pain and symptoms
- Provided emotional and spiritual support
- Trained family members/caregivers to care for the beneficiary

**Exhibit 6.3 Caregivers of MCCM Enrollees Who Elected the Medicare Hospice Benefit Reported Very Good Care Experiences**

<table>
<thead>
<tr>
<th>Category</th>
<th>MCCM + MHB</th>
<th>Comparisons in MCCM Hospices</th>
<th>Comparisons in Matched Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication with family</td>
<td>84.3%</td>
<td>84.1%</td>
<td>80.4%</td>
</tr>
<tr>
<td>Getting timely help</td>
<td>77.1%</td>
<td>74.0%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Treating beneficiary with respect</td>
<td>75.1%</td>
<td>80.3%</td>
<td>74.7%</td>
</tr>
<tr>
<td>Help for pain and symptoms</td>
<td>75.1%</td>
<td>80.3%</td>
<td>74.7%</td>
</tr>
<tr>
<td>Emotional and spiritual support</td>
<td>75.1%</td>
<td>80.3%</td>
<td>74.7%</td>
</tr>
<tr>
<td>Training family to care for beneficiary</td>
<td>76.6%</td>
<td>[VALUE]</td>
<td>78.1%</td>
</tr>
<tr>
<td>Overall rating of the hospice</td>
<td>83.7%</td>
<td>89.6%</td>
<td>83.1%</td>
</tr>
<tr>
<td>Willingness to recommend the hospice</td>
<td>85.6%</td>
<td>90.6%</td>
<td>80.6%</td>
</tr>
</tbody>
</table>

Source: Caregiver Experience of Care Survey, October 2017-June 2018.

Note: This exhibit displays responses for MCCM enrollees and comparison beneficiaries who died between October 2017 and June 2018 in 56 MCCM hospices and 30 matched hospices for which there were completed surveys. Sample size for each respondent category differed: MCCM + MHB, n = 210; comparisons in MCCM hospices, n = 128; comparisons in matched hospices, n = 104. We report significance using a linear regression model, including case-mix adjusters (response percentile, beneficiary age at death, payer for hospice care (i.e., Medicare in combination with other payers), primary diagnosis, duration of final episode of hospice care, caregiver-respondent age and education, relationship of caregiver-respondent to deceased beneficiary, language, setting of care), with MCCM + MHB as the reference group. We found no statistically significant differences.

MHB = Medicare hospice benefit.
6.2 SHARED DECISION MAKING AND ADVANCE CARE PLANNING

Shared decision making and advance care planning involve discussing and documenting beneficiaries’ wishes about end-of-life care, and are hallmarks of MCCM. Since medical events may leave a beneficiary unable to make or express treatment decisions, advance care planning is important to help the seriously ill person and his or her caregiver state their wishes about future care interventions.

MCCM hospice teams provided opportunities to discuss and document beneficiary preferences, as demonstrated by these two findings:

- MCCM hospice staff spoke with 77 percent of beneficiaries and/or caregivers about their goals of care within the first week of MCCM enrollment.
- MCCM hospice staff spoke with 95 percent of enrollees and/or family members about advance care planning prior to discharge from MCCM.

MCCM enrollees and their caregivers valued these opportunities, for example:

- Several beneficiaries and caregivers shared through case study interviews their appreciation with the services provided by MCCM hospices, noting that the hospices helped initiate/facilitate end-of-life conversations.
- Caregivers of 210 MCCM enrollees who transitioned to MHB rated the quality of life of enrollees as high during the time they were receiving care under the model (8.8 out of a possible 10). These ratings are slightly better than ratings from caregivers of eligible, but not enrolled, comparison beneficiaries (8.4 out of a possible 10 for caregivers of non-MCCM beneficiaries served by both MCCM hospices and matched hospices responding to our caregiver survey).

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103 From Appendix A, “Shared decision making is a process of communication, deliberation, and decision making that includes sharing information with the beneficiary that outlines treatment options, including harms, benefits, and alternatives. It also elicits and supports the beneficiary’s values and preferences. Shared decision making encompasses person-centered care, and is an interactive and meaningful dialogue between the beneficiary and their care providers, based on the best medical evidence, tailored to the beneficiary’s conditions, values, and preferences.” The National Institutes of Health defines advance care planning as the process of discussing and documenting the type of health care one would want if unable to speak for one’s self. See https://www.nia.nih.gov/health/caregiving/advance-care-planning.
In seriously ill persons with a prognosis of six months or less, effective shared decision making clarifies the individual’s preferences for resuscitation and further hospitalization. Do not resuscitate and/or do not hospitalize orders contained in medical records document beneficiary preferences. Often discussions about enrollees’ goals of care led to execution and clarification of do not resuscitate and/or do not hospitalize preferences. Between January 1, 2018 and June 30, 2018, cohort 2 hospices wrote more do not resuscitate orders for their enrollees (23 percent) than cohort 1 hospices (5 percent).

Hospices with larger MCCM enrollee populations were quite effective at holding and documenting advance care planning discussions with enrollees—most held advance care planning discussions with at least 90 percent of their enrollees, as shown in Exhibit 6.4.

**Exhibit 6.4** Most MCCM Hospices Spoke with 90 Percent or More of Their MCCM Enrollees and/or Family Members about Advance Care Planning


Note: This exhibit displays results of an analysis of 2,342 beneficiaries enrolled in MCCM for at least 7 days between January 1, 2016 and June 30, 2018 in 32 hospices that had at least 10 MCCM enrollees. We used the 7 or more days of MCCM enrollment to allow time needed to document multiple types of screenings. To reliably compare screening practices across hospices, we included only hospices that had at least 10 enrollees with data reported on the analyzed measure. We excluded encounters where a beneficiary or caregiver provided a clinically valid reason for not responding.
6.2.1 Care Experiences of MCCM Decedents

MCCM enrollees generally had positive experiences in the model. Likewise, caregivers of MCCM decedents who transitioned to MHB gave high marks to MCCM (9.1 out of a possible 10), and most indicated that they would recommend the model to friends and family members. Together these findings suggest that the model is succeeding in delivering person-centered care.

Caregivers of MCCM decedents who transitioned to MHB indicated that the MCCM team “always” (61 percent) or “usually” (27 percent) seemed informed and up-to-date about the enrollee’s treatment from non-MCCM providers. This indicates a good sharing of records and coordination between MCCM hospices and other providers, which is a hallmark of MCCM.

Caregivers also rated MCCM highly on a range of measures related to the alignment of services with beneficiary preferences:

- Caregivers (80 percent) reported that the MCCM team “definitely” spoke to the beneficiary and caregiver about the types of care or services the beneficiary wanted.
- Caregivers (85 percent) reported that MCCM “definitely” provided care that respected the beneficiary’s wishes.
- Caregivers (91 percent) reported that the beneficiary “definitely” continued to receive treatment for as long as he or she wanted.

MCCM enrollees who transitioned to MHB and comparison beneficiaries received care that aligned with their preferences, as shown in Exhibit 6.5.\(^{104}\)

\(^{104}\) The ability to detect differences between the groups is limited due to the small sample sizes, as described in more detail in Appendix I.6.
6. HOW DOES MCCM AFFECT THE QUALITY OF CARE EXPERIENCED BY MCCM ENROLLEES AND THEIR CAREGIVERS?

**Exhibit 6.5  Caregivers Reported Consistency of Care with the Beneficiary’s Wishes**

<table>
<thead>
<tr>
<th>Caregivers Reported</th>
<th>MCCM+MHB</th>
<th>Comparisons in MCCM Hospices</th>
<th>Comparisons in Matched Hospices</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCM/hospice team spoke to patient or family about what types of care or services beneficiary wanted (% yes definitely)</td>
<td>79.9%</td>
<td>80.6%</td>
<td>78.4%</td>
</tr>
<tr>
<td>MCCM/hospice team provided care that respected the beneficiary’s wishes (% yes definitely)</td>
<td>85.2%</td>
<td>92.5%*</td>
<td>91.3%</td>
</tr>
<tr>
<td>MCCM/hospice team did anything that went AGAINST the beneficiary’s wishes (% yes definitely)</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Beneficiary continued to receive treatment for his or her terminal illness for as long as he or she wanted (% yes definitely)</td>
<td>91.3%</td>
<td>91.2%</td>
<td>93.1%</td>
</tr>
</tbody>
</table>

Source: Caregiver Experience of Care Survey, October 2017-June 2018.
Note: This exhibit displays responses for MCCM decedents and comparison beneficiaries who died between October 2017 and June 2018 in 56 MCCM hospices and 30 matched hospices for which there were completed surveys. Sample size for each respondent category differed: MCCM + MHB (n = 210); comparisons in MCCM hospices (n = 128); comparisons in matched hospices (n = 104). We report significance using a linear regression model, including case-mix adjusters (response percentile, beneficiary age at death, payer for hospice care (i.e., Medicare in combination with other payers), primary diagnosis, duration of final episode of hospice care, caregiver-respondent age and education, relationship of caregiver-respondent to deceased beneficiary, language, setting of care), with MCCM + MHB enrollees as the reference group; with statistical significance at the 10%(*) level. We provide additional analysis in Appendix J, Exhibit J.23.

MHB = Medicare hospice benefit.

6.3 IMPROVEMENT IN QUALITY OF CARE OVER TIME

We examined markers of high-quality care in MCCM over time to assess whether hospices were improving in their delivery of quality care. Screening for and addressing pain improved over time in MCCM hospices, as shown in **Exhibit 6.6**, which shows two points in time for cohort 1 hospices (first 4 months of 2016 versus first 4 months of 2018). MCCM staff improved their screening for pain from 89 percent of enrollee encounters in 2016 to 98 percent of encounters in 2018. However, MCCM staff reported that the effectiveness of pain treatment declined from 100 percent of enrollees with pain who had effective palliation in 2016, to 89 percent in 2018. Advance care planning also improved from 91 percent to 98...
percent. We will continue to monitor these findings to identify the changes, the reasons for the changes, and the impact of the changes.

**Exhibit 6.6** Changes in Staff-Reported Pain Screening and Advance Care Planning for MCCM Enrollees Improved over Time, but Effective Pain Palliation Declined over Time (Cohort 1 Hospices during First Four Months of 2016 versus 2018)


Note: The analysis examined cohort 1 hospices that enrolled MCCM beneficiaries between January 1, 2016 and April 30, 2016, contrasted with MCCM beneficiaries enrolled by cohort 1 hospices between January 1, 2018 and April 30, 2018. All MCCM enrollees had 7 or more days of enrollment. We used the 7 or more days of MCCM enrollment to allow time needed to document multiple types of screenings. Specific data analyzed included:

- At the encounter level, since these are symptoms to be screened and treated at every encounter:
  - Screening for pain reflects 311 encounters in 29 hospices in 2016, and 1,500 encounters in 34 hospices in 2018.
  - Effectiveness of pain palliation reflects 43 encounters from 26 hospices in 2016 where an MCCM enrollee reported pain, compared to the 185 encounters from 29 hospices in 2018 where an MCCM enrollee reported pain.

  An “encounter” is a meeting, whether in person or by telephone, between an MCCM enrollee or caregiver and a health care provider.

- At the beneficiary level, since this activity should be conducted for each beneficiary at least once:

We applied eligibility criteria that are specific to each type of screening, as discussed in Appendix E.2. We also excluded encounters where a beneficiary or caregiver provided a clinically valid reason for not responding.
6.4 POTENTIALLY BURDENSOME CARE

Transitions from home to hospital may be burdensome for dying persons and for their families during the final hours or days of life. Recent research shows that transitions in the last days of life, even to MHB, are associated with lower family member perceptions of the quality of end-of-life care.\(^{105}\)

To understand transitions of MCCM enrollees, we analyzed three measures\(^{106}\):

- MHB use in the last 2 days of life
- Intensive care unit use in the last 30 days of life
- Death occurred in a hospital

MCCM decedents had a slightly higher rate of MHB transition in the last 2 days of life than did MCCM-eligible decedents not in MCCM, as shown in Exhibit 6.7, and discussed in greater detail in Section 5.1.\(^{107}\) In contrast, MCCM enrollees were less likely to die in a hospital than were comparison beneficiaries, and less likely to use an intensive care unit in the last 30 days of life.

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\(^{106}\) In the National Health and Aging Trends study, bereaved family members reported higher unmet needs and a lower rating of the quality of care when there was a health care transition in the last 3 days of life. The National Quality Forum endorsed 2 quality measures for persons with cancer that examine intensive care unit use in the last 30 days of life and dying in the hospital, with lower rates indicating a better quality of care. (Makaroun LK, Teno JM, Freedman VA, Kasper JD, Gozalo P, Mor V. (2018). Late transitions and bereaved family member perceptions of quality of end-of-life care. *Journal of the American Geriatrics Society*. Epub 2018/07/05. doi: 10.1111/jgs.15455. PubMed PMID: 29972587.)

\(^{107}\) We do not adjust these results for potential differences in beneficiary characteristics, disease prognosis, and case mix. Future reports will include results from analyses using a matched comparison group.
Exhibit 6.7  Few MCCM Decedents Experienced Potentially Burdensome Care

<table>
<thead>
<tr>
<th>Type of Care Pattern</th>
<th>Percentage of Decedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospice in Last Two Days of Life</td>
<td>7.8% (MCCM) 6.6% (Other)</td>
</tr>
<tr>
<td>ICU Use in Last 30 Days of Life</td>
<td>9.8% (MCCM) 23.3% (Other)</td>
</tr>
<tr>
<td>Death Occurred in a Hospital</td>
<td>9.8% (MCCM) 26.8% (Other)</td>
</tr>
</tbody>
</table>

Sources: Medicare claims data and MCCM portal data, January 1, 2016-June 30, 2018.
Note: This exhibit includes analysis of 1,462 MCCM decedents enrolled in 75 MCCM hospices from January 1, 2016 to June 30, 2018, and who died on or before June 30, 2018, compared with 70,345 MCCM-eligible decedents from 236 matched comparison hospices’ service areas. Note that the comparison group is not matched at the beneficiary level and the analysis is unadjusted. As such, cross-group differences should not be interpreted as impacts of the model. ICU = intensive care unit.
6.5 CONCLUSION

In this section, we showed that MCCM enrollees and their caregivers received high-quality, person-centered care, as measured by consistently high rates of screening for symptoms and symptom palliation. MCCM hospices provided screenings and treatment for shortness of breath and pain (over 90 percent across all metrics), and were attentive to the bowel symptoms that can accompany the use of opioids to treat pain. Caregivers of MCCM decedents rated the model highly on quality of care and quality of life. Over 90 percent of MCCM hospice teams spoke with enrollees and family members about care goals and advance care planning. Nonetheless, the results also indicate that hospices can make improvements in screening for emotional well-being and in speaking to MCCM enrollees and/or family members about religious or spiritual concerns.

Better symptom management, shared decision making, and less burdensome care at the end of life contribute to beneficiary well-being overall and better end-of-life experiences. As hospices continue to participate in MCCM and additional beneficiaries enroll in the model, we will continue to assess care delivery and enrollee data to evaluate how MCCM affects the quality of care and the quality of life for enrollees and their caregivers.
7. Lessons Learned and Next Steps

Key Takeaways from this Report

- Maturation and evolution of MCCM over time was associated with increased beneficiary enrollment, expanded care delivery, and positive participant experience.
- Participating hospices differed in the ease and effectiveness of their implementation process. These differences may account for variation in MCCM enrollment and service delivery.
- MCCM beneficiaries and caregivers received services consistent with a high quality of care and high quality of life at the end of life, and reported satisfaction with MCCM.
- MCCM may offer a bridge to MHB; as well as counseling, symptom management, and supportive care for beneficiaries who might otherwise not have access to those services.

The Centers for Medicare & Medicaid Services (CMS) designed the Medicare Care Choices Model (MCCM) to test the effect of allowing eligible beneficiaries the option to receive supportive services from participating hospices, while also continuing coverage for treatment of their terminal condition through fee-for-service Medicare. This second report of the MCCM evaluation presents findings from descriptive analyses focused on a broad array of topics.

Fewer hospices withdrew from MCCM in 2018 than in 2017 after CMS relaxed eligibility requirements. The apparent stabilization may be due, in part, to learning activities that CMS offered to support hospices’ implementation of the model. Strong organizational leadership, well-defined teams, and clear communication facilitated MCCM implementation. Prior experience with a palliative care program or a similar activity was advantageous for rapid MCCM implementation, because staff were familiar with the goals of both supportive services and treatment for serious illnesses. On the other hand, several hospices with low MCCM enrollment noted that palliative care programs competed with MCCM, limiting enrollment in the model. For hospices that remained in the model and with the addition of cohort 2 hospices on January 1, 2018, enrollment in MCCM increased substantially. Yet by 2018, eight hospices accounted for roughly half of all enrollment in MCCM.

MCCM beneficiaries and caregivers reported a high quality of care and a high quality of life at the end of life. Hospice staff generally expressed high levels of satisfaction with the concept of the model, despite concerns about payment, model requirements, and MCCM-
required reporting. MCCM hospice staff effectively screened and managed enrollees’ symptoms, and addressed advance care planning and goals of care. As a result, caregivers for MCCM enrollees were generally satisfied with the model. These findings suggest that MCCM provided access to supportive services for beneficiaries who otherwise might not have used them. Additionally, MCCM appeared to serve as a bridge to enrollment in Medicare hospice benefit (MHB), with most MCCM enrollees (83 percent) transitioning to MHB on or more months prior to death. Hospice staff, beneficiaries, and caregivers all said that MCCM helped individuals become more familiar and comfortable with the idea of hospice care, and this assistance may have eased the transition to MHB.

In future evaluation reports, we will continue to monitor enrollment, use of health care services, and satisfaction with the model. We will also examine hospice organizational structure and MCCM implementation, and how these factors influence enrollment and care delivery. We will measure the impact of MCCM on Medicare utilization and expenditures by comparing beneficiaries who enrolled in the model with a matched comparison group of similar beneficiaries who did not enroll.