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Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model

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Physician-Focused Payment Model Technical Advisory Committee
c/o Assistant Secretary of Planning and Evaluation, Room 415F
U.S. Department of Health and Human Services
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Washington, D.C. 20201
PTAC@hhs.gov

RE: Letter of Support-- Advanced Care Model (ACM)

Dear Committee Members,

On behalf of the Coalition to Transform Advanced Care, we would like to express our utmost support for the accompanying proposal re-submission, the *Advanced Care Model Service Delivery and Advanced Alternative Payment Model* for consideration for a Physician Focused Payment Model. Today, many individuals with advanced illness receive care that is fragmented, uncoordinated, or inadequate to meet their growing needs and personal wishes. The ACM is specifically designed to meet these needs by "breaking down a range of silos between 'curative' and palliative care, between professional groups to foster interdisciplinary practice, and between traditional medical and social services" (IOM Report: *Dying in America*).

On September 7th, the Physician-Focused Payment Model Technical Advisory Committee (PTAC) provided very thoughtful feedback on the Advanced Care Model and afforded us the opportunity to resubmit a revised version of the Advanced Care Model. In the time since, we have worked diligently, drawing upon the experience of our entire planning team in serving individuals with advanced illness, to further refine a model that addresses the important issues and considerations raised by the Preliminary Review Team and the larger PTAC. In particular, this submission provides updates to the beneficiary notification process, payment structure (pay for quality bonus funded by savings and shared loss with cap amounts instead of shared risk with quality threshold) and pay-for-quality measures that align with established QPP and CMMI models.

We thank you for the opportunity to re-submit our proposal and for your consideration of its merits. We look forward to the opportunity to work with you on behalf of our members to ensure all Americans with advanced illness, especially the sickest and most vulnerable, receive comprehensive, high-quality, person- and family-centered care that is consistent with the goals and values and honors their dignity.

Sincerely,

Tom Koutsoumpas,
C-TAC Co-Chair

Khue Nguyen,
C-TAC Innovations COO

INTRODUCTION

Abstract: Building from successful, scalable advanced illness and community-based palliative care programs, the Coalition to Transform Advanced Care (C-TAC) proposes an advanced illness care and advanced alternative payment model, the Advanced Care Model (ACM), for a Physician-Focused Payment Model.

The Advanced Care Model provides a population health management approach for the advanced illness population, focused on the last year of life. The expected impact for ACM beneficiaries are improvements in (1) patient and family engagement, (2) shared-decision making among patients, families and their physicians, (3) coordinated care that aligns with patient preferences, (4) symptom management, (5) prevention of avoidable and unwanted hospitalizations or low-value treatment, and (6) prevention of unwanted futile care at the end of life.

The ACM integrates with existing APMs and contributes to their success. By creating an integrative model that is focused on a high-cost and high-need population, the ACM provides a mechanism to risk-stratify a broader Medicare population, specifies effective care interventions and creates additional financial incentives for existing APMs. In addition, the ACM will offer multiple pathways for organizations to incrementally add risk by participating in the ACM as a new AAPM or as a layer within the MSSP. Primary care providers and specialists can participate in the ACM APM for physician-focused payment incentives under the Quality Payment Program. Furthermore, the ACM meets the requirements for an advanced APM, with the potential to qualify participating palliative care providers and specialists.

The ACM meets these outcomes by delivering and ensuring comprehensive, person-centered care management; multidisciplinary team-based care; concurrent curative and palliative treatment; care coordination across all care providers and settings; comprehensive advance care planning; shared decision making with patient, family, and providers; and 24/7 access to clinical support. ACM services continue until the beneficiary dies, enrolls in hospice, moves outside the service area or chooses to dis-enroll from the ACM.

The goals of the ACM payment structure are (1) to pay for improvement in quality at equal or lowered cost, (2) to convert palliative care provider's fee schedule to a team-based, population health payment structure that rewards quality, (3) to create additional incentives through advanced APM status for broad participation of non-palliative care specialties involved in the care of advanced illness, (4) to utilize a pay-for-quality payment structure that incentivizes quality, and (5) to set appropriate incentives and financial risk. Ultimately, the ACM is a much-needed, innovative advanced APM, specifically designed to improve quality for a highly vulnerable population with advanced illness.

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I. BACKGROUND AND MODEL OVERVIEW

As Baby Boomers age, a growing number will eventually experience *advanced illness,* when one or more chronic conditions become serious enough that general health and functioning begin to decline and chances of recovery diminish, a process that continues to the end of life.[1] Although the advanced illness population contains only about four percent of Medicare beneficiaries, it accounts for 25% of annual Medicare expenditures.[2] In 2014, these patients' mean per capita utilization over the last six months of life totaled 8.4 days in the hospital, 9.4 days in SNF, 8 home health visits and 23.3 days in hospice. On average, each beneficiary saw 10.5 different physicians.[3] Of the 2.6 million people who died in the U.S. in 2014, 2.1 million, or 8 out of 10, were people on Medicare, making Medicare the largest insurer of medical care provided to those with advanced illness.[4]

This care is not just costly, but largely inconsistent with patients' values and preferences. Although most seriously ill patients would prefer to stay in the safety and comfort of their homes near the end of life, many are forced to cycle through a revolving door of repeated hospitalizations.[5] Hospice, originally intended to support patients at home through their last months, now often consists of a few days of home-based care preceding death, tacked onto the end of a long siege of intensive inpatient treatment.[6] Other care models have been proposed to remedy this, but none have yet been successful. The Medicare Care Choices Model (MCCM), for example, has had challenges enrolling patients far enough upstream because it requires enrollees to be hospice-eligible, whereas many are not clinically or emotionally ready.

The National Academy of Medicine, in its landmark study, *Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life,* calls for breaking down a range of silos between 'curative' and palliative care, among professionals (e.g., to foster interdisciplinary practice), and between traditional medical and social services.[7] The Advanced Care Model (ACM) proposed here is designed to meet all these goals, as it bridges primary care and specialty providers, coordinates and supports a smooth progression from disease-modifying treatment toward a more palliative approach, and moves the focus of care for late-stage chronic illness out of the hospital and into the patient's home and community.

The ACM achieves these goals through a population health care delivery model and an advanced alternative-value-based payment model that is accountable for quality at reduced or equal total health care expenditures for Medicare beneficiaries with chronic-illness in the last year of life. The ACM care delivery structure includes a network of participating physicians and other eligible clinicians, and team-based care provided across all major care settings, encompassing palliative care providers, registered nurses, licensed social workers, and others. The ACM replaces and expands palliative care providers' payment for evaluation and management (E&M) services with a PMPM with downside risk for total cost of care and upside bonus for quality with set maximum payment and loss amounts. Additionally, the ACM encourages all-payer voluntary participation and strengthens other APMs through payment model integration or coordination. Ultimately, the ACM is a much-needed, innovative advanced APM, specifically designed to improve quality for a highly vulnerable population, those with advanced illness.

ACM Target Population: Beneficiaries with Advanced Illness

While patients with greater than one-year prognosis may benefit from additional APMs, the ACM is specifically designed to address the critical gap in care for advanced illness, focusing on

the last twelve months of life. The intensity of the ACM services and the payment levels, including quality incentives, are tailored to this patient population. The focus on the last 12 months of life allows the ACM to define an appropriate episode expenditure (see Appendix B. Analysis of Payment Spending Target Methodologies). Furthermore, the ACM reflects a recognition that a maximum 12-month duration for the PMPM could create an undesirable financial incentive to discharge patients or reduce the intensity of ACM services. To address such a concern and preserve budget neutrality, the PMPM may extend beyond 12 months, but all PMPM payments are counted when determining the total cost of care. Over time and with experience, we foresee that the ACM payment episode ultimately could be extended beyond the last 12 months, with potentially lower PMPM payments for services upstream.

Identification of patients with advanced illness is foundational for assessing and meeting their healthcare needs.[8][9][10][11] However, many healthcare providers feel ill-equipped to identify patients approaching terminal illness who are in need of interventions.[1][2] Communicating to patients and their families that the patient has entered what is expected to be the last year of life is also very difficult for many providers.[13] Focusing on this gap, improving identification and implementing needed services to fill the care gap is a crucial first step for this vulnerable population.[14] The ACM patient identification criteria utilize the most up-to-date research and best practices currently being implemented by the leading advanced care programs across the country to identify patients with advanced illness who are likely to be in their last year of life.

When used in isolation, single disease-centered tools have been shown to have low prognostic capacity,[15][16][17][18] [19][20][21] specifically within geriatric populations with multiple chronic conditions.[22] However, two comprehensive systematic reviews of MEDLINE databases (n=457) confirm that combinations of acute care utilization,[23][24][25][26] functional status,[27][28][29][30] and nutritional status.[31][32][33][34][35] can accurately signal advanced illness across both cancer and non-cancer diagnoses.[36][37] In addition, 3 performance scales are also found to be adjunct to the indicators above: the Eastern Cooperative Oncology Group (ECOG) Performance Status,[38] the Karnofsky Performance Scale (KPS)[39] and the Palliative Performance Status (PPS).[40]

Used collectively, these criteria enhance accuracy and provide objective guidance for ACM's participating physicians and other referring clinicians on timely identification of advanced illness. The references listed in this section, including the systematic reviews of MEDLINE databases (Salpeter 2011, 2012), the Textbook of Palliative Medicine and Supportive Care,[41] and the evidence-based practice guideline *Palliative Care for Adults*,[42] support the specific clinical criteria values and ranges laid out in the ACM patient identification criteria (**Table 1**).

To further validate and enhance accurate identification of beneficiaries with advanced illness, the surprise question is used in addition to the objective criteria described above. The surprise question has been shown to be more prognostic of patient death than age, cancer stage, cancer type, or time since diagnosis and a very useful tool to aid in the systematic identification of patients at a high risk of death.[43] 93% of providers felt that the surprise question is an appropriate trigger to identify those patients approaching the end of life.[44] In another study, survival prognosis by providers using the surprise question and survival at one year correlated significantly.[45] The combination of accuracy and simplicity makes the surprise question an important tool for identifying patient selection.[46]

Together, the objective clinical criteria combined with the surprise question help balance both accuracy and comprehensiveness of advanced illness identification and align with the most recent research and best practices being implemented across the country.

Table 1: Description of ACM Criteria

1. Acute Care Utilization	***2. Functional Decline***	***3. Nutritional Decline***	***4. Performance Scale***	***Validation via Surprise Question***
2 hospitalizations in the last 12 months or 1 ER visit & 1 hospitalization in the last 6 months or 2 ER visits in the last 3 months	New, irreversible dependence in at least 1 ADL in the last 3 months	Involuntary lean body weight loss ≥5% in the last 3 months	PPS ≤60 or KPS ≤60 or ECOG ≥3	Would you be surprised if the patient died in the next 12 months?

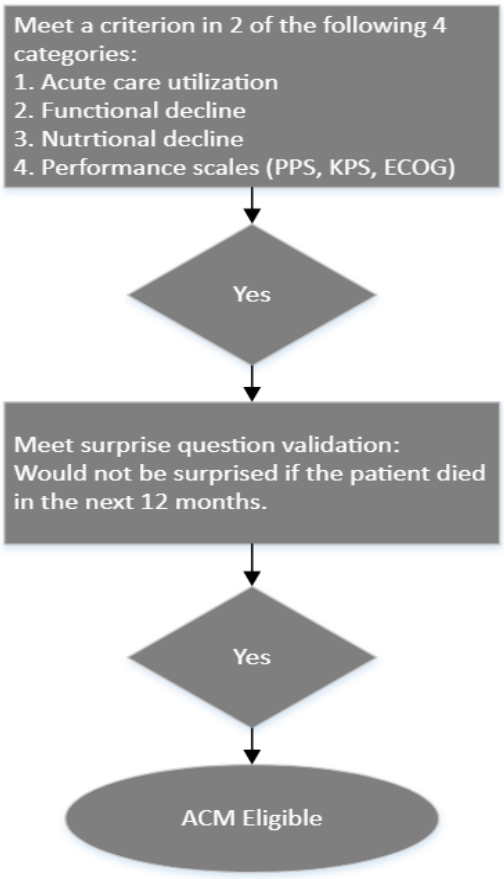


Figure A. ACM Eligibility Determination Process

Beneficiaries are eligible for the ACM if they meet a criterion in two of the four component categories (Acute Care Utilization, Functional Status, Nutritional Status or Performance Scales) followed by validation with the surprise question, as illustrated in **Figure A**.

Appendix G provides further evidence to support the application of the ACM criteria (Sutter AIM & Aspire).

ACM Care Delivery Model: Patient's Perspective

The ACM is envisioned with the patient's perspective in mind. The ACM's enhanced package of care delivery services is patient-centered, reflecting engagement with the patient and the patient's choices, preferences, and values. These enhanced ACM services embody a "team of teams" approach, employing interdisciplinary teams that can function across inpatient, outpatient and home settings. As detailed below, the *ACM's interdisciplinary team* is charged with providing

comprehensive, person-centered care management including *personalized and evolving concurrent "curative" and palliative services*, *systematic advance care planning*, *patient and family engagement*, and *24/7 access to a clinician*.

- *The ACM interdisciplinary care team* must include a provider with board-certified palliative care expertise, a registered nurse and a licensed social worker, and may include other clinicians practicing within their scope of licensure as well as non-clinicians.
- *Comprehensive care management* is defined as care coordination and case management of the beneficiary's *total* healthcare needs, both curative and palliative, encompassing all services including physicians and other eligible clinicians, hospital, post-acute, and social services.
- *Systematic advance care planning* is defined as a person-centered, ongoing process in which patients, their families, and their healthcare providers reflect on the patient's goals, values, and beliefs, discuss how they should inform current and future medical care, and ultimately, use this information to accurately document future health care choices, after an exploration of the patient and caregiver's knowledge, fears, hopes, and needs.[47] Specifically, the advance care planning should be initiated and routinely revisited, at the beneficiary's own pace and systematically engages with all key stakeholders including the beneficiaries, their families and their treating providers.
- *Personalized and evolving concurrent curative and palliative services* are defined as the ongoing provision of palliative/comfort-based care as well as coordination and promotion of evidence-based disease-modifying treatments that align with the patient's evolving personal preferences.
- *Patient and family engagement* is defined as shared decision-making between the advanced illness beneficiary/caregivers/family and the ACM care team in designing and implementing the ACM care plan.

After identification, discussion of advanced illness, and referral by a clinician involved in the beneficiary's health care, the beneficiary would receive a face-to-face visit by an ACM clinician to assess eligibility and provide notification of ACM services. The notification provides transparency about the ACM to beneficiaries. The beneficiary notification would include an explanation of the ACM services and payment structure, a description of advanced illness and ACM eligibility criteria (including prognosis), the possible impact on beneficiary care, a statement that the beneficiary retains the right to opt out and freedom of choice regarding providers and services, an explanation of how patients can access care records and claims data, a statement that all existing Medicare beneficiary protections continue to be available to the beneficiary, and a list of providers and suppliers of the ACM entity. Upon confirmation of eligibility by the ACM clinician to the referring provider, the beneficiary is enrolled in the ACM unless the beneficiary chooses to opt out of the services. Enrollment status would be communicated to the beneficiary's primary care providers and active specialists, assuring these physicians an ongoing role in directing the beneficiary's care.

Within 14 days of enrollment, the beneficiary will have received advance care planning services by the ACM team that would include exploration of goals, values and preferences and continued discussions of disease process and prognosis (**Table 2. Quality Measures**). Early discussion of patient's possible prognosis is important in facilitating patients and their families' planning for their future care. Research shows that most patients have preferences for how they want to be treated and how their affairs are to be settled.[484950] Successful advance care planning ultimately

gives beneficiaries and their family greater control, and less distress and decision-making conflict.[51] Furthermore, a plan to address advanced illness care progression can further prevent triggering events in the patient's life that can lead to rapid decline.[52]

ACM services would be provided on an ongoing basis through a mixture of face-to-face and telephonic encounters that would be proactively deployed based on beneficiaries' current and anticipated needs. The ACM care team would coordinate care with the beneficiary's regular physicians and episodic providers such as hospital or home health care. During the ACM care, beneficiaries may choose to discontinue ACM services if they wish. In addition, beneficiaries may continue to access traditional services under their Medicare benefit and patient choice is maintained. ACM services would continue until the beneficiary dies, is enrolled in hospice, dis-enrolls, or moves outside the ACM entity's service area.

ACM Care Model: Health Care Provider's Perspective

The ACM is available to a wide range of Medicare provider entities (primary care physicians and specialists, hospitals, health systems, hospices, home health and others), providing new opportunities for organizations that have not been central to the Medicare Shared Savings Program. Furthermore, the ACM is designed to support physician engagement regardless of participation status.

The ACM care delivery structure consists of two core components: (1) participating physicians and other eligible clinicians and (2) the interdisciplinary team. Advanced illness patients of participating physicians and other eligible clinicians are eligible for the ACM services. The participating providers and other eligible clinicians may include primary care and specialists who are involved in the patient's care, and participants can be added on an ongoing quarterly basis. The interdisciplinary team is responsible for the implementation of the ACM care delivery services.

Advanced illness patients are identified through referral from participating physicians and other eligible clinicians, as well as by other health care clinicians involved in the patient's care. Also, the ACM interdisciplinary care team can collaborate and assist health care providers involved in the beneficiary's care in their identification process. Eligibility is confirmed by the participating physicians and other eligible clinicians by validating with the surprise question, in addition to the presence of other quantified clinical eligibility criteria.

Primary care providers and active treating physicians are informed of the ACM enrollment status. Regardless of their participation status, these providers will continue to have full control over how they choose to care for their patients and how they choose to interact with the ACM interdisciplinary team and be involved in the services offered, including comprehensive care management, concurrent care and advance care planning (see **Appendix M: Beneficiary and Provider User Journeys**).

ACM services continue until the beneficiary dies, enrolls in hospice, moves outside the service area or chooses to discontinue the ACM because they no longer have advanced illness or no longer want the service as covered in detail below:

- **Discharge Process to Hospice:** The beneficiary and family members will have had multiple conversations, with one another and their health care team, regarding the hospice benefit. The beneficiary will have chosen to elect hospice through shared-decision making with their physicians and the ACM team. The beneficiary will have been notified that the ACM team has coordinated the arrangements for hospice care with the

beneficiary's choice of hospice provider, and that the ACM care program will end when hospice care begins. The discharge process is completed once the beneficiary is enrolled in hospice. The beneficiary will have given information about how to re-enter the ACM program if they no longer want or need hospice.

- **Discharge Process When Patient Moves Outside of the Service Area:** The beneficiary will have been notified by the ACM team that the ACM service will end and that the ACM patient records have been shared with their new PCP. Also, the beneficiary will have received a list of recommendations by the ACM team about any other ACM or similar programs in the patient's new service area and steps to take with their new care team to support a smooth transition.
- **Discharge Process When Patient Chooses to Discontinue the ACM because they no longer have advanced illness or no longer want the service:** The beneficiary will have participated in shared decision making with their physicians and the ACM team to reach determination that their condition has improved and they no longer have advanced illness and or no longer want the ACM services. The beneficiary will have been notified by the ACM team that the ACM services will end and that the ACM care summary have been shared with their PCP and active specialists. The beneficiary will have received a list of recommendations by the ACM team of steps to take to maintain their health and when to consider re-accessing the ACM care in the future.

II. SCOPE OF PROPOSED PFPM

The ACM is a new advanced APM, specifically designed to improve quality and cost outcomes for advanced illness and end-of-life care. The ACM is available to a wide range of Medicare provider entities (physician practices, hospitals, health systems, hospices, home health and others). In addition, the ACM supports collaboration with other ancillary organizations such as health plans, care management and telehealth providers, EMT services and social service organizations. The ACM entity must meet the following requirements:

1. The entity must be a Medicare provider
2. The entity must have a system for administering billing/financial transactions for the ACM APM between the ACM entity and CMS,
3. The entity must have a system to distribute payments, or shared risks between the ACM entity and participating physicians, other eligible professionals, and/or other health care organizations,
4. The entity must have a data system to generate and submit the necessary reports required by the ACM and to share reports generated from the ACM entity and CMS to participating physicians, eligible professionals, and/or other health care organizations,
5. The entity must have appropriate licenses to deliver the ACM services, either directly or under arrangements with other providers,
6. The entity must have a defined network of participating physicians and other eligible professionals with a reasonable projected advanced illness patient volume to operate the ACM services
7. The entity must demonstrate feasibility of the ACM entity, participating physicians, other eligible professionals and/or other health care organizations to assume financial risk and be accountable for quality, and

8. The entity must satisfy, directly or through arrangements, all ACM service and operational requirements.

Impact of the ACM on Physician or Other Eligible Clinicians

The ACM promotes broad participation across diverse physician practices, including employed, independent, and small physician practices. First, most medical specialties are involved in advanced illness care and therefore are able to participate in the ACM. In fact, advanced illness beneficiaries on average see 10.5 different physicians.[53] These physicians, across multiple specialties, can furnish the ACM care delivery services directly or participate in an ACM entity that furnishes these services. Second, the ACM physician participation requirements are streamlined, with only three requirements: commitment to identifying advanced illness patients, agreement to coordinate with the ACM interdisciplinary care team, and agreement regarding overlap of ACM services for attributed beneficiaries in other CMMI models. Finally, physicians and other eligible clinicians receive significant benefits for ACM participation. Physicians receive additional expertise and assistance in improving care for their advanced illness patients including comprehensive care management, concurrent care support, and systematic advance care planning.

Additionally, participating physicians may qualify for advanced APM (AAPM) incentives. AAPM participation is possible for certain medical specialists including palliative care providers, oncologists, cardiologists, pulmonologists, nephrologists and others who traditionally have a high proportion of advanced illness patients in their Medicare patient panels. In addition, the ACM proposes a new *partial AAPM incentive payment* for providers that enroll the majority of their advanced illness eligible beneficiaries in the ACM including primary care and other medical specialties (e.g. endocrinology) that traditionally manage large populations of highly prevalent chronic illness over time. We believe this concept is consistent with and would advance the goals described in the QPP rule, and would help ensure that the ACM's focused approach on patients with advanced illness does not make it unnecessarily difficult for participants to reach their AAPM threshold. Likewise, the proposal for a partial AAPM incentive payment seeks to balance the size of any incentive payment with the proportion of the overall Medicare FFS population served—while at the same time, encourages adoption of the model, particularly by clinicians in smaller groups or with fewer AAPM opportunities (see Section IV).

Role of Independent or Small Physician Practices

Independent or small physician practices have the same opportunity to participate in the ACM similarly to their colleagues in large, employed multispecialty practices, due to the streamlined participation requirements. Further, the ACM proposes a consortium structure consistent with the QPP virtual group to support small physician practices to participate in an ACM. The consortium ACM structure by definition consists of an aggregation of two or more small ACM sub-entities that, by themselves, do not have sufficient ACM patient volume. The consortium is an agreement between sub-entities to participate in the ACM in aggregation. The consortium structure would support specialty focused and physician-led ACM entities, such as an oncology or cardiology-focused ACM consortium.

Providers Interested in the ACM

The ACM is designed to attract new health care organizations looking to transition from volume to value, and is designed to create significant, focused Triple Aim opportunities for those already invested in population health and alternative payment models. The ACM can be implemented

within a wide variety of provider organizations that can fulfill the ACM requirements, including ACOs, hospitals, IAH practices, medical groups (IPAs & CINs), home health agencies, hospices and others. Ancillary organizations such as health plans, care management and telehealth providers, EMT services and social service organizations may also participate, in partnership with a qualified provider entity. A preliminary CTAC survey indicates that leading integrated health care systems, hospices, stand-alone home-base palliative care provider, ACOs, and national and regional health plans are interested in participation. **Appendix K** provides a representative list of interested organizations that spanned 40 states and $150 billion in revenues.

ACM Experience with Other Payers & Expected Spillover Impact on Medicaid, CHIP, TRICARE/VA, and Private Health Spending

The ACM has been tested widely in the Medicare Advantage Program, despite modest volume (only 3 out of 10 advanced illness Medicare beneficiaries are in the Medicare Advantage Program, divided among multiple health plans). [54] The top national health plans, with significant MA members, have invested heavily in services similar to the ACM, including Aetna, United, Cigna, Humana and Anthem. [55] For example, Aetna's Compassionate Care Program has delivered advanced illness care management services to Aetna's members since 2004. Compassionate Care has delivered significant, consistent and sustainable outcomes for over a decade: 82% hospice election rate, 81% decrease in acute days, 86% decrease in ICU days, high member and family satisfaction, and a total cost reduction of more than $12,000 per member.[56] As another example, Aspire Health, formed to scale services similar to the ACM for health plans and other risk-bearing entities, has served more than 60,000 Medicare Advantage members through successful contracts with 20 Medicare Advantage health plans, including all five of the nation's largest health plans. Aspire Health's internally-reported outcomes include a 50% reduction in hospitalizations, 75% hospice election rate, hospice mean length of stay (LOS) of 78 days and a median LOS of 41 days, and total cost reduction of over $10,000 per member. In addition, over 95% of patients would recommend this service to a friend.

These MA successes suggest an extraordinary opportunity for the Medicare FFS Program. The ACM would provide a direct pathway for providers seeking an effective bridge from volume to value-based care (CMMI HCIA High-Risk, High-Cost Portfolio)[57]. Given the overwhelming concentration of advanced illness in the Medicare FFS program, the ACM has the potential to create a significant positive spillover effect on quality and cost outcomes for the entire U.S. advanced illness population, including MA health plans, duals and private health spending.

ACM Medicare FFS Population

According to the Dartmouth Atlas, there were over one million chronically ill Medicare decedents in 2014. These individuals, representing the target ACM population, account for 25% of Medicare costs, nearly the size of the entire Medicare Advantage population. If the ACM initially enrolls 20% of the target population, the ACM would affect 5% of Medicare FFS costs. With an average annual patient volume of 400 per ACM entity, this would equate to 550 ACM participant organizations (entities). This estimate is conservative; in comparison, the MCCM program (available to hospices only) is open to about 150,000 beneficiaries, roughly 10% of the ACM projected volume, and yet, it attracted over 140 participating organizations. The ACM is available to the full spectrum of provider organizations, encompasses a target population 10 times greater than that of the MCCM, and incorporates a compelling pay for quality payment structure that rewards performance.

Patient Benefit

The ACM's focus on person-centered care is designed to fill unmet needs and improve person and family-centered experience and outcomes. Under the ACM, beneficiaries receive enhanced and needed care delivery services in addition to usual care. Beneficiaries and their family caregiver will receive comprehensive care coordination and case management support, patient and family engagement with ongoing advance care planning in the comfort of their home, and personalized and customized concurrent disease modifying and comfort care that aligns with their goals. Beneficiaries, caregivers and their family members will have access to a dedicated interdisciplinary care team that will follow their care into the home and support transitions across care settings. The expected impacts for beneficiaries are improvements in (1) patient and family engagement, (2) shared-decision making among patients, their caregivers, families and their physicians, (3) coordinated care that aligns with patient preferences, (4) symptom management, (5) prevention of avoidable and unwanted hospitalizations or low-value treatment, and (6) prevention of unwanted futile care at the end of life.

Patient Protection

The ACM is a person-centered, compassionate and proactive response to current care that may be driven by misaligned financial incentives, providers' reluctance to refer for palliative and hospice care, and a lack of support to help patients and families prepare for advanced and terminal illness. In this regard, the ACM has been designed to first, protect patients and family members and second, enhance quality outcomes that are meaningful to beneficiaries and their family members. We described in the ACM Model Overview deficiencies in the current state of advanced illness care for Medicare FFS beneficiaries: (1) increased fragmentation among treating providers, (2) lack of mechanisms to promote integration between disease-modifying and palliative care, and (3) unwanted hospitalizations and treatments at the end-of-life when Americans prioritize having their wishes for care followed and being comfortable at the end of life.[5859] The ACM care delivery addresses these gaps in care by providing comprehensive care coordination and case management support, patient and family engagement with ongoing advance care planning in the comfort of their home, and personalized and customized concurrent disease modifying and comfort care that aligns with their goals:

- The beneficiary benefits from the ACM, as described above, are improvements in patient protection and reduction in negative patient outcomes.
- Provider's attitudinal reluctance to having advance care planning conversations is addressed through the addition of coordinated concurrent care driven by systematic advance care planning. Providers are provided with choices on level of ACM participation, from non-participation to participation to full ownership of the ACM, paving a path for providers to address barriers to palliative and hospice care.[60]
- Finally, the ACM's pay-for-quality payment structure is designed to directly align payment incentives with the ACM care delivery-led solutions to improving patient protection and reducing patient harm. Primarily, ACM entities are paid based on improvement in patient- and caregiver-centered experience and outcomes that enhance patient protection and reduce negative patient outcomes. Secondarily, the ACM provides streamlined requirements for treating physicians' participation that provides advanced APM incentives, in full or partial based on patient volume. Additional layers of patient protection in the payment design include (1) the upside-only quality payment for the first two years before shared loss is applied, (2) the quality performance affects both quality

bonus payment as well as the shared loss, where higher quality scores result in a lower shared loss rate, and (3) maximum cap amount for total payment and losses to moderate financial incentives and risk.

Impact on Medicare Spending

The ACM is expected to reduce Medicare spending as a direct result of improved care coordination and increased patient- and caregiver experience and outcomes. These improvement in the quality of care ultimately reduces high variation in unwanted and avoidable hospital acute care or low value treatment, unwanted futile care, and late referrals to hospice. CMMI's HCIA testing of the Sutter AIM program demonstrates these results: increased self-management confidence, improved self-management of health behavior, improved physician communication, reduction in hospitalizations by 76 events per quarter per 1,000 patients, and decreased Medicare expenditures by $5,985 per quarter per patient.[61]

III. QUALITY AND COST

Care Delivery Improvement to Improve Quality and Achieve Savings

The ACM has been shown to increase quality and to reduce total cost of care.[62] The ACM's focus on person-centered care is designed to fill unmet needs and improve person-, caregiver- and family-centered experiences and outcomes. Under the ACM, beneficiaries receive enhanced and relevant care delivery services in addition to usual care. These enhanced care delivery services for beneficiaries and their family caregivers are comprehensive care coordination and case management support, patient and family engagement with ongoing advance care planning in the comfort of their home, personalized, customized concurrent disease modifying and comfort care that aligns with their goals, and 24/7 clinician access.

Beneficiaries, caregivers and their family members will have access to a dedicated interdisciplinary care team that will follow their care into the home and support transitions across care settings. The expected impacts for beneficiaries are improvements in (1) patient and family engagement, (2) shared-decision making among patients, their caregivers, families and their physicians, (3) coordinated care that aligns with patient preferences, (4) symptom management, (5) prevention of avoidable and unwanted hospitalizations or low-value treatment, (6) prevention of unwanted futile care at the end of life, and (7) prevention of ineffective, suboptimal hospice care associated with very short hospice length of stay.

In addition, the ACM provides needed care coordination services and palliative care expertise to primary care providers and specialists. With ACM's interdisciplinary care team, primary care providers and specialists' care delivery burden for advanced illness is reduced. For example, physicians may initiate advance care planning discussions with a patient during an office visit, then hand off to the ACM team to continue the discussion at home, where they can elicit and document patient values and preferences. The team then ensures the patient returns to the office, where shared decision-making can yield actionable physician orders. This team-based approach is more humane than expecting seriously ill patients to make multiple trips to the office, while also leveraging physician time and reducing caregiver burden.

Barriers and Risks to Model's Success and Mitigation Strategies

Providers may desire assistance in setting up the care delivery model, data reporting systems, and training for the care team. Technical assistance resources already exist in the field (e.g. CAPC, AAHPM, NHPCO, ELNEC, Sojourn, California State Palliative Care Institute, Vital Talk,

Respecting Choices, CTAC Innovations). Downstream training of additional workforce will be stimulated by a formalized ACM program.

Pay for Quality Structure

The ACM pay-for-quality structure holds participants accountable to quality performance that focuses on improvement in person- and family -centered experience and outcomes. Medicare expenditures are expected to be reduced as a result of improved care coordination; better symptom management; reduced avoidable, unwanted hospitalizations and unwanted futile care; and reduced ineffective, suboptimal hospice care associated with very short hospice length of stay. Under the pay-for-quality structure, the ACM entity will be eligible for quality-based bonus payment above the PMPM that must be funded by shared savings. The shared loss rate also would be impacted by quality performance, as higher quality will result in a lower shared loss rate.

The pay-for-quality program focuses fully on person- and family-centered experiences and outcomes, clinical process and effectiveness, and critical care access parameters. Pay-for-quality measures were selected based on the following criteria:

1. Priority is given to person- and caregiver-centered experience and outcomes
2. Clinical process measures must have high correlation to quality outcomes or create a high standard of patient safety
3. Payment measures must be validated by CMS

The resulting proposed pay for quality measures reflects established CMS measures for the Quality Payment Program and or alternative payment models (**Table 2**). Innovative measures are proposed for CMS to field test before they are added for payment in year 3; these innovative measures are derived from current ACM programs that are based on literature on patient-engagement, and caregiver assessment post hospice. Furthermore, there are current efforts being led by NCQA and the National Consensus Project to create new national quality standards for home-based advanced illness care, and we recommend that these quality standards be incorporated into the quality program when the standards are published (likely in 2018 or 2019).

Table 2. ACM Proposed Measures

Measure	Measure Source	Frequency	Reference
Pay for Quality Measures			
Access Domain			
1. ACM Team Visit within 48 hours of hospital discharge	EHR/Claims	Hospital discharge	IAH
2. Timeliness of Care: While your family member was in the ACM, when you or your family member asked for help from the ACM team, how often did you get help as soon as you needed it?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	CAHPS Hospice Survey, ACO

3. Getting Help for Symptoms: Pain: Did your family member get as much help with pain as he or she needed?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	CAHPS Hospice Survey, ACO
4. Getting Help for Symptoms: Anxiety and Sadness: How often did your family member get the help he or she needed from the ACM team for feelings of anxiety or sadness?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	CAHPS Hospice Survey, ACO
5. Getting Help for Symptoms: Trouble breathing: How often did your family member get the help he or she needed for trouble breathing?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	CAHPS Hospice Survey, ACO
Clinical Process/Effectiveness Domain			
6. Timeliness of advance care planning: Yes/No Measure Description: Advance care planning conversation with patient and or their health care agent representative must include exploration of goals, values and preferences and discussion of disease process and prognosis within 14 days of enrollment.	EHR documentation or Registry	14 days after enrollment	QPP, IAH, MCCM
7. Medication Reconciliation Post-Discharge	EHR/Claims	Hospital discharge	QPP, ACO, CPC+, IAH
8. Proportion of patients who died and who were admitted to the ICU in the last 30 days of life	Claims	End of Episode	QPP, OCM
9. Proportion of patients who died who were admitted to hospice for 3 days or more	Claims	End of Episode	QPP, OCM
Person-and Caregiver-Centered Experiences and Outcomes Domain			
10. *Minimum Quality Standard Measure*: ACM provider attestation that patient's care plan is consistent with preferences: Yes/No	EHR documentation or Registry	1 month & discharge	IAH, MCCM (Modified CAHPS)
11a. Effective Communication Composite: How often did this provider explain things in a way that was easy to understand?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	QPP, ACO, CPC+
11b. Effective Communication Composite: How often did the ACM team listen carefully to you when you talked with them about problems with your care or condition?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	QPP, ACO, CPC+

11c. Effective Communication Composite: How often did this provider show respect for what you had to say?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	QPP, CPC+, ACO
12. Care Coordination: How often did the provider (ACM team) seem informed and up-to-date about the care you got from specialists?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	QPP, CPC+, ACO
13. Patient overall satisfaction: Using any number from 0 to 10, where 0 is the worst care possible and 10 is the best care possible, what number would you use to rate the care that you received from the ACM team?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	QPP, CPC+, ACO
Survey Testing Years 1-2; **Pay for Quality Year 3**			
Person-and Caregiver-Centered Experiences and Outcomes Domain			
14a. Patient Engagement Composite: How often did you feel you have the support that you needed from the ACM team to help you make decisions about your care?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	Related CAHPS
14b. Patient Engagement Composite: How often did you feel confident about how to manage your health conditions?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	Modified NQF-endorsed PAM
15. Shared Decision Making: Were you able to make decisions without feeling pressured by the ACM team to make decisions you did not want?	ACM Beneficiary and Family Caregiver Survey	1 month & discharge	Modified CAHPS Hospice Survey
16. Caregiver Support Composite Score *(To be field tested by CMS)**	Family Evaluation of ACM	End of Episode	Modified CAHPS Hospice Survey; National Study of Caregiving Survey (NSOC)[6364]
17. Quality of Care Transitions from ACM to Hospice Composite Score *(To be field tested by CMS)**	Family Evaluation of ACM	End of Episode	Modified Hospice CAHPS

* See survey examples in **Appendix J**

Data from Multiple Sources

The ACM leverages data from claims, EHR and beneficiary and caregiver survey to populate the quality measures. We propose that CMS provide an ACM data registry for data reporting and aggregation.

EHR Data Sharing Between Physicians and Other Clinicians

The ACM is required to document ACM care delivery services through an EHR. Data sharing between physicians and other clinicians with the ACM is encouraged, to improve the efficiency of care coordination. Furthermore, ACM entity should participate in a regional or state health information exchange to increase access to the ACM care plans across provider sectors including physicians, hospitals, and post-acute care providers.

Monitoring and Auditing

The ACM monitoring program provides additional quality assurance in addition to the pay for quality program. The monitoring program will be operated by CMS and analyze for outliers in specific areas to ensure model integrity and enhanced patient protection. Specific areas for outlier analyses are:

1. The level of ACM services provided to ACM beneficiaries, including face-to-face visits in the home, hospital, and SNFs and discipline types. To operationalize this analysis, we propose that CMS provide an ACM claim code identification for submission of care activities through the Medicare claims system or alternative, for the ACM entity to submit EHR files to a CMS ACM registry
2. Proportion of enrolled beneficiaries over projected volume based on historical trend.
3. Differences in patient characteristics between enrolled and non-enrolled advanced illness
4. Hospice enrollment and length of stay for ACM beneficiaries
5. Characteristics of hospice vs. non-hospice ACM beneficiaries
6. Proportion of ACM enrollees with more than 12 months of enrollment
7. Differences in patient characteristics between ACM enrollees with more than 12 months of enrollment vs. ACM enrollees with12 months or less of enrollment
8. All-cause Unplanned Admissions for ACM beneficiaries
9. Ambulatory Sensitive Condition Acute Composite for ACM beneficiaries

The outlier analyses would assume that ACM entities would exhibit a normal distribution in the aforementioned areas, and identify outliers, which are deemed "unlikely" based on mean and standard deviation. The outlier analysis would be at the broad episode grouping level from the 11 ACM diagnosis categories such as heart, pulmonary or cancer conditions **(Appendix F).** Episode-level analyses would also be warranted for certain performance areas, especially for area 8 and 9.

Additionally, ACM entity are required to submit a yearly operational plan that delineates participating providers and contractors, how the ACM services will be provided including care guidelines, staffing plan including training, patient identification and notification process, performance management plan, physician engagement plan, risks and barriers mitigation plan, and financial risk management plan. ACM entities that are outliers in one or more areas would trigger an audit. Below average quality performers under the ACM pay for quality structure would also trigger an audit. A remediation period would ensue for any identified issue and the ACM entity is required to leave the program if a positive trend is not achieved within 6 months and significant improvement within a year.

IV. PAYMENT METHODOLOGY

ACM Payment Structure

The goals of the ACM payment structure are (1) to pay for improvement in quality at equal or lower cost, (2) to convert palliative care provider's fee schedule to a team-based, population health payment structure that rewards quality, (3) to create additional incentives through advanced APM status for broad participation of non-palliative care specialties involved in the care of advanced illness, (4) to utilize a pay-for-quality payment structure that incentivizes quality, and (5) to set moderate incentives and financial risk to minimize potential for perverse incentives, such as stinting on treatment.

As detailed below, the proposed ACM payment structure is a non-tiered PMPM with downside risk for total cost of care and upside bonus for quality, subject to maximum payment and loss amounts. This payment replaces the palliative care provider FFS payment. The payment structure would have the following components:

1. Wage-adjusted $400 PMPM of indefinite duration, to be included in ACM episode costs.
2. Quality bonus payment funded by savings pool, subject to a maximum bonus of $250 PMPM; CMS will keep a proportion of savings when the quality bonus payment rate is less than 100% and all savings in excess of $250 PMPM
3. Minimum quality standard: full performance on minimum quality standard measure (score of 10 in measure 10) plus percentile score of 30 or below for each measure will receive a 0 score
4. 40-60% shared loss rate based on quality performance and minimum quality standard, maximum loss rate of $100 PMPM; CMS will partially share the loss up to $100 PMPM and all losses in excess of this amount
    - High quality performers are subject to lower shared loss rate if the minimum quality standard threshold is met
    - ACM entity that does not meet the minimum quality standard is subject to the highest shared loss rate (60%)
    - The share loss rate based on quality performance is as follows:

Quality Multiplier	Shared-loss Rate
80-100%	0.4
60-79%	0.5
Less than 60%	0.6

5. 4% minimum shared savings/loss rate: bonus payment would trigger if savings is at least 4% of the spending target, the bonus payment is based on the full savings amount; similarly, shared loss rate would trigger if the excess spending is at least 4% of the spending target, the shared loss rate is based on the full loss amount.
6. Upside quality bonus payment in years 1-2; shared loss in year 3
7. Remediation period for low quality performer or when expenditure is significantly higher than expected amount; ACM entity will be required to leave the program if corrective actions do not show positive trends within 6 months and significant improvement within a year.
8. Payment would replace ACM entity's palliative care provider E&M, Chronic Care Management, Complex Chronic Care Management, Transitional Care Management, and Advance Care Planning payments

9. Quality bonus payment or shared loss is based on the total cost of care for the last 12 months of life, which includes all ACM payments for decedents regardless of whether those ACM payments are received in the last 12 months of life

In designing the ACM payment structure, we considered various alternatives, such as a quality bonus without a savings requirement and shared savings with a quality threshold (**see analysis of payment model options in Appendix A).** In doing so, we applied the following criteria to determine the most appropriate and effective payment model for advanced illness care:

1. Covers upfront direct care delivery cost
2. Provides opportunity for additional revenue for program investment
3. Incentivizes quality
4. Is budget neutral or reduces Medicare expenditures
5. Protects against gaming and perverse incentives

The proposed non-tiered PMPM with downside risk for total cost of care and upside bonus for quality, funded by shared savings with maximum payment and loss was selected because this structure meets all 5 payment criteria above. A predetermined total payment rate based on quality performance such as CPC+ is a promising alternative that is not feasible as a starting payment model, but rather could be a second-generation payment option once national implementation and benchmarking is available to determine specific quality improvement threshold levels. Under this structure, appropriate utilization benchmarks would need to be added to quality payment measures at a level that would be budget neutral or reduce Medicare expenditures. With national implementation, robust benchmarking data will be generated to determine utilization targets that correlate with high quality.

The wage-adjusted PMPM will be counted towards the ACM episode expenditure. While the ACM focuses on care needs that are specific to advanced illness as they approach the end-of-life and designs evidence-based clinical criteria to identify this population, we recognize that any method of patient identification for this population will be inherently imprecise and, therefore, must design the model to account for this. Therefore, once a beneficiary is determined to be eligible and enrolls in the ACM, the ACM entity has access to PMPM payment to support the ACM services for as long as the beneficiary remains in the ACM program.

As stated above in the Model Overview, beneficiary can choose to pause or discontinue the ACM services if they wish. The ACM entity, however, in that case, remains accountable for a beneficiary's last 12 month of life cost if the ACM beneficiary is served by the ACM entity at any point during the ACM beneficiary's last 12 months of life. We believe creating PMPM duration flexibility while accounting for the full PMPM payment (regardless of whether the PMPM payment occurs in the last 12 months of a beneficiary's life) within the ACM episode achieves multiple goals including: (1) providing additional protection so vulnerable patients who live longer than 12 months continue to be provided the ACM services; (2) incentivizing ACM entities to identify appropriate patients (as all PMPM fees they receive will be counted in the reconciliation for which they are at risk); and (3) protecting Medicare from excessive financial risk, as providers will still be responsible and at risk for the entire cost of the PMPM they receive. Furthermore, outlier analyses of PMPM use beyond 12 months will provide a monitoring mechanism as well as an ability to further elucidate additional ways that the payment could be adjusted in future years such as extension of the episode's benchmarking longer than the last 12 months of life.

While the PMPM payment is designed to reimburse for average direct costs for ACM clinical services, the quality-based bonus would reimburse for ACM investment costs including infrastructure and program management costs, and provide modest incentives for ACM participation. The ACM Pay for Quality structure utilizes established CMS measures for the Quality Payment Program and/or alternative payment models. The scoring system of the quality measures is as follows, with an example of the payment calculation provided in **Appendix D**:

1. ACM entities that do not score 10 on the minimum quality standard (measure 10) are not eligible to receive a quality bonus payment, regardless of their performance on other quality measures.
2. 4% minimum shared savings/loss rate: bonus payment would trigger if savings is at least 4% of the spending target, the bonus payment is based on the full savings amount; similarly, shared loss rate would trigger if the excess spending is at least 4% of the spending target, the shared loss rate is based on the full loss amount.
3. Pay for Quality Score is a percentile score. Scores for multiple timeframes such as at month 1 and discharge will be averaged (see additional scoring details in **Appendix C**)
4. The quality multiplier will be calculated as the average percentile score of all the quality scores, which will then be converted from percentile to percent.
5. Bonus Amount= Quality Multiplier* Quality Bonus Pool, up to the maximum bonus amount of $250 PMPM
6. Quality Scoring System:
    - Full performance on Minimum Quality Standard Measure 10= 10 points
    - Score for remaining 12 pay-for-quality measures will be based on percentile performance as follows:
        - 95^{th} percentile=10
        - $90\text{-}94^{th}$ percentile= 9
        - $80\text{-}89^{th}$ percentile= 8, and so on
        - 30^{th} percentile or less=0
    - Benchmark would be established by year 3, at which point scoring will be based a trended historical benchmark.
    - Percentile scoring would be adjusted at the regional level
    - The survey population is all enrollees were a representative health care agent is identified or the enrollee is able to communicate directly with the care team. The proportion of eligible enrollees will be monitored.

Spending Target for Pay for Quality Bonus or Shared Loss Pool

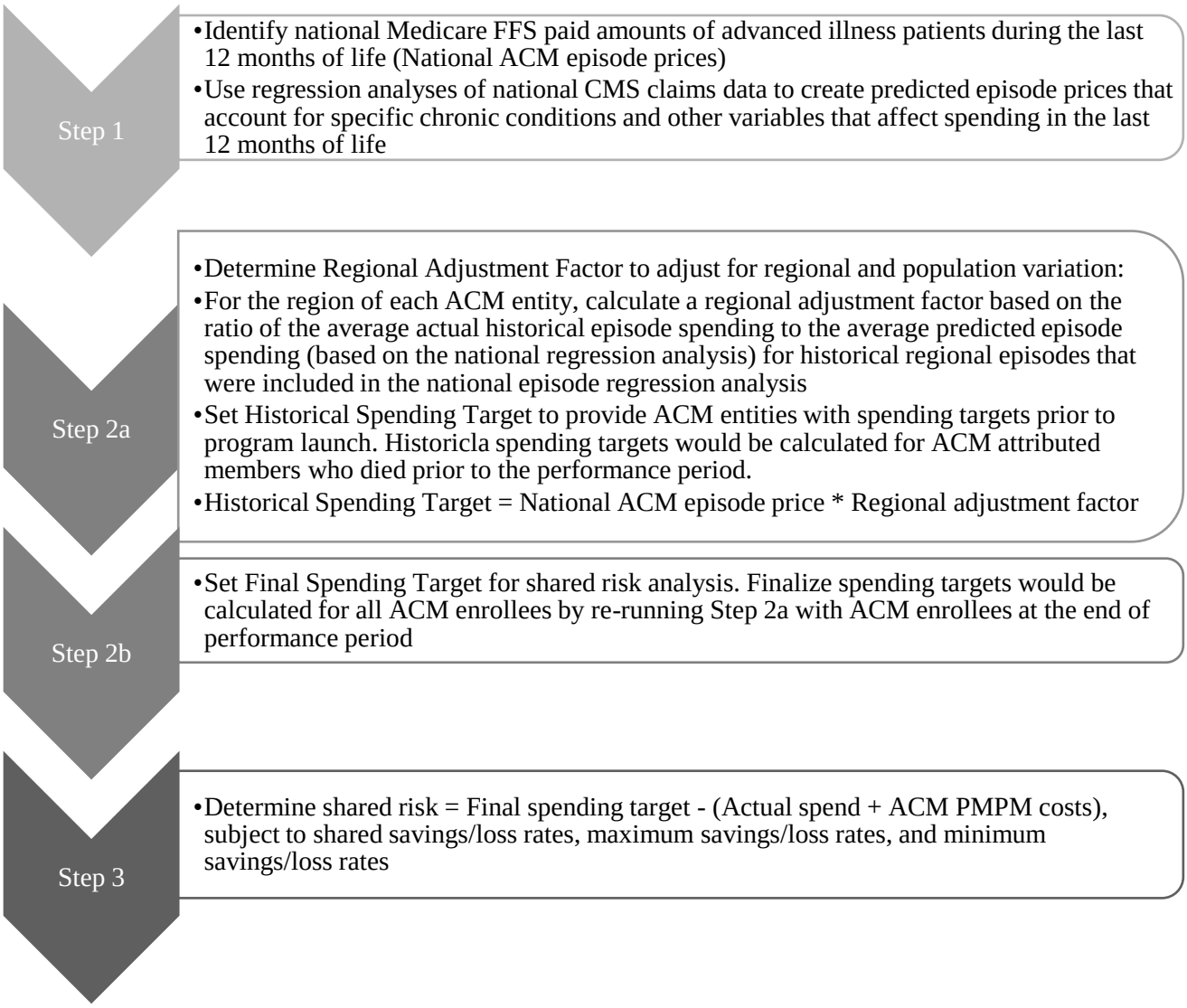
In designing the spending target methodology, we analyzed various risk adjustment methods and propose episode-based regression analysis modeling to determine the risk adjustments **(see Appendix B).** This method was selected due to its superior performance on the following selection criteria:

1. Provides accurate spending estimates that reflect the expected cost for performance year ACM episodes
2. Is feasible to support national implementation
3. Provides upfront transparency on risk-adjustment
4. Provides upfront initial estimates of spending targets

The proposed ACM episode-based regression analysis modeling is based on the CMMI independent evaluation of the HCIA Sutter AIM program where dependent variables for ACM episode costs have been tested and lessons learned from MA-sponsored ACM programs **(see detailed step-by-step calculations of the spending target methodology in Appendix E)**. The episode-based regression analysis modeling consists of the following components:

A. The ACM episode is defined as the last 12 months of life for beneficiaries with one of the 11 defined serious chronic conditions in **Appendix F**, associated with a high 1-year mortality risk that accounts for more than 90% of Medicare FFS decedents
B. 3-years of historical ACM episodes, trended forward and adjusted for growth will be used to determine the spending target
C. Step 1 is to identify national Medicare FFS average prices of advanced illness patients during the last 12 months of life (National ACM Episode Prices) using regression analyses of national CMS claims data
D. Step 2 is to determine regional adjustments
E. Step 3 is to determine ACM bonus payment or shared loss amount

ACM Payment Methodology Overview



Role of Physicians and Other Eligible Clinicians in the ACM

The patient's primary care provider and specialists may relate to the program in two different scenarios: as participating or non-participating providers. Upon enrollment, the ACM entity will notify the beneficiary's primary care and active specialists of enrollment. Regardless of the provider's participation status with the ACM, advanced illness beneficiaries have no change to the choices and services available to them. Furthermore, the ACM team will interact with the patient's treating providers to deliver the ACM services including comprehensive care coordination regardless of the treating provider's participation status. Provider participation is predetermined at the start of a performance period and can be updated on a quarterly basis. The participating treating providers have the following distinguishing elements in the ACM:

(1) The participating PCPs and or specialists' enrolled advanced illness population is attributed to the ACM entity
(2) The participating PCPs and or specialists are committed to the ACM quality goals

(3) The participating PCPs and or specialists are committed to working with the ACM to assist in patient identification,
(4) The participating PCPs and or specialists, by virtue of their collaboration, can access the QPP APM incentives,
(5) The participating PCPs and or specialists may participate in additional payment or shared risk from the ACM APM, by establishing such arrangement(s) with the ACM entity
(6) The participating PCPs and or specialists may clinically integrate with the ACM entity as deemed appropriate between the participating treating providers and the ACM
(7) The participating PCPs and or specialists decide whether to overlap the ACM with existing CMMI models

By participating in the ACM, providers may access incentives associated with an AAPM under the Quality Payment Program. Alternatively, we propose a partial AAPM incentive for remaining providers. Under the partial Advanced APM incentive, providers with a high advanced illness enrollment (75%) would have access to the 5% bonus payment for their advanced illness professional fees. This arrangement would provide the appropriate incentives to primary care providers who are active in the ACM care, but have a very small proportion of advanced illness in their overall Medicare population. In this regard, we believe this concept is consistent with and would advance the goals described in the QPP rule, and would help ensure that the ACM's focused approach on patients with advanced illness does not make it unnecessarily difficult for participants to reach their AAPM thresholds. Likewise, the proposal for a partial AAPM incentive payment seeks to balance the size of any incentive payment with the proportion of the Medicare FFS population being cared for in the ACM—while at the same time, encourages adoption of the model particularly by clinicians practicing in smaller groups and or those that may have fewer AAPM opportunities.

Rationales for ACM Payment Model in Place of Current CMMI Models

The ACM is designed to enroll new beneficiaries that are not already attributed to existing APMs. The ACM is the only APM to fully address the unique needs and opportunities in advanced illness care. The ACM targets the advanced illness population and specifies a set of proven interventions. The ACM payment model is also specifically aligned with the ACM goals, with sufficient upfront payment to support the ACM interventions and pay-for-quality incentives designed to maximize the Triple Aim outcomes for the selected population.

Furthermore, there are significant barriers in current CMMI models that touch the ACM patient population. For example, the MCCM model captures only a subset of the advance illness population, limits provider participation to only hospice providers, and does not tie payment to quality. Similarly, advanced illness represents only 4% or so of the MSSP and CPC+ programs beneficiaries, making it very challenging for these programs to shift attention from the broad population to invest extensively in advanced illness care. The IAH program provides high potential for advanced illness care improvement. However, this program is fairly small with no upfront PMPM payment support. Therefore, the ACM has the opportunity to strengthen these existing models in addition to targeting new provider participation.

Coordination of Overlap with Other CMMI Models

The ACM can strengthen other APMs when the ACM operates concurrently with these models for overlapping beneficiaries. In the MSSP program, the ACM can operate as a layered program,

creating focus on the subset of advanced illness beneficiaries. The MSSP would receive upfront ACM payment while shared risk would be calculated at the MSSP level. The layered concurrent ACM-MSSP approach would support the MSSP Track 1 migration gradually to two-sided risk through targeted downside risk for the ACM population. For other models with the exception of the MCCM, as beneficiaries develop advanced illness, providers have the option to access the ACM concurrently and adjustment for the overlap would be made so that payment or recoupment are not counted twice, analogous to the OCM model overlap structure. Shared savings or loss would be calculated for the existing model. The amount would be prorated for the duration of overlap and added to the ACM actual expenditure. For the MCCM, the provider will make a predetermined decision to participate in either the ACM or MCCM model.

Regulatory Waivers to Support the ACM Payment Model

Section 1115A(d)(1) of the Social Security Act (Act) authorizes the Secretary of Health and Human Services (Secretary) to waive certain specified fraud and abuse laws as may be necessary solely for purposes of carrying out testing by the Center for Medicare & Medicaid Innovation (Innovation Center) of certain innovative payment and service delivery models. We request careful review and consideration of waivers consistent with those that have been granted for models of the Innovation Center including the Next Generation Accountable Care Organization Model (the Next Generation ACO Model) and the Oncology Care Model (OCM).

V. VALUE OVER VOLUME

The ACM incentivizes clinicians to provide more home-based care for their sickest and most vulnerable patients, and dis-incentivizes avoidable, unwanted recurring hospitalizations for these patients. This reduces overall healthcare costs because it moves the focus of care from the hospital, the most expensive care setting, to the patient's home, where care delivery is more cost-effective and person-centered. The ACM AAPM provides both financial and nonfinancial incentives to providers to change the way they practice.

Financial Incentives to Deliver High-Value Health Care

Financial incentives include PMPM reimbursement and pay for quality bonus for the ACM entity. The upfront payment supports the direct care delivery cost of the interdisciplinary care team. The pay-for-quality bonus for higher quality person-centered care is a trade-off for forgone revenue associated with hospitalization and ICU care. The most potent driver of treatment volume and costs in the care of advanced illness is hospitalization, particularly over the 3 months prior to death as admissions become longer and more frequent. Many of these hospital stays can be prevented through education, advance care planning and shared decision making that allow fully informed patients to stay at home through the end of life. The high probability of savings encourages providers to accept the alternative payment model and promotes the success of ACOs and other existing APMs.

The ACM can also reduce costs at the practice level. Providers must find new ways to care for the large and growing number of patients with late-stage chronic illness. Using home-based teams enables existing providers to manage their sickest and most vulnerable patients at home, allowing the group to avoid the cost of augmenting clinical and office staff and disrupting practice workflow. Furthermore, participating providers have the potential for additional payment incentives associated with AAPM participation.

Non-Financial Incentives to Deliver High-Value Health Care

Nonfinancial incentives provided by the ACM center on the interdisciplinary team, which enables participating physicians and other providers to participate in care at home without having to do multiple house calls themselves. ACM team members act as the physician's eyes, ears and hands through face-to-face and virtual visits at the patient's residence. Team members are also trained to manage pain and other symptoms, and actively collaborate, within limits of their license, with recommendations to physicians who may lack training and experience in palliative care. Team input to physicians provides invaluable information about the patient's home environment, family and caregiver stressors and other non-medical determinants of health. A survey of physicians using the ACM showed that over ¾ reported that the intervention reduced their workload.[65]

Prior Experiences with the Use of These Financial and Non-Financial Incentives

The planning team for this proposal has had extensive experience in the use of these incentives. For example, the Sutter AIM program is a broad-scale implementation of a 24-hospital integrated system in Northern California over a 20-county footprint, which includes both metropolitan and rural areas, supported by the CMMI HCIA. The AIM program participates in value-based contracts for commercial, Medicare Advantage, Medicaid and Duals health plans. The value-based contracts include pay for quality bonus associated with reduction in hospitalizations, in addition to quality and clinical process outcomes. The program engages with employed and independent physicians. Northwell Health's House Calls Program is a leading IAH program that serves advanced illness beneficiaries, between 30-40% of its census. The IAH program is a shared-savings program. Priority Health is a regional health plan in the northeast that contracts with home-based primary care providers through value-based contracts based on quality and hospital utilization performance. Aspire Health is a national home-based palliative care provider with value-based shared savings contracts that has served over 60,000 advanced illness patients through regional and national health plans and MSSPs.

VI. FLEXIBILITY

The ACM is flexible in several ways. First, the model is open to a broad range of providers who can demonstrate capability and relevant experience to be successful with the ACM requirements. Examples of ACM-eligible entities include physician groups, CINs, ACOs, hospitals, hospices, and home health agencies. Second, the ACM proposes a consortium structure to support simple aggregation of small physician practices that can span state borders. Third, ACM entities have flexibility over how they organize the entity as well as distribute payments among participating providers and contractors. Fourth, the ACM services are available to a broad range of advanced illness beneficiaries, including cancer and non-cancer disease as well as geriatric frailty in rural or metropolitan areas across social-economic and ethnic backgrounds. The ACM therefore can be applied to multispecialty practices or specific specialties such as primary care or cardiology. Lastly, there are various degrees of ACM implementation: (1) standalone new APM, (2) part of MSSP and or (3) overlap with another model such as OCM or CPC+ or IAH.

VII. ABILITY TO BE EVALUATED

Evaluation of the Impact of the ACM on Defined Measures

The ACM is expected to improve (1) patient and family engagement, (2) shared-decision making among patient, family and their physicians, (3) coordinated care that aligns with patient preferences, and (4) symptom management while also reduce (5) avoidable and unwanted

hospitalizations or low-value treatment, (6) unwanted futile aggressive care at the end of life, (7) ineffective, suboptimal end-of-life hospice care and (8) Medicare expenditures. Impact #1-4 will be evaluated for the advanced illness population that receives the ACM through ACM provider reporting and beneficiary and family caregiver surveys. Performance on these measures will be scored by percentiles among participants initially and performance targets will be set over time (by year 3) to promote ongoing improvement or maintenance of high performance. Impact #5-8 are claims-based and therefore will be evaluated against usual care using the risk-adjustment method outlined for the spending target determination.

Evaluable Goals for Population, ACM Entity and Individual Physicians

The evaluable goal for the ACM advanced illness population is to achieve high quality of care defined by person- and caregiver-centered experience and outcomes, clinical effectiveness and care access. The evaluable goal for the ACM entity is to achieve high quality performance at equal or reduced total health care cost. The evaluable goal for the individual physician is to achieve high quality of care for their advanced illness patients and to contribute positively to the ACM entity overall performance and its roles in strengthening other APMs.

Additional Evaluation Opportunity

CMS could also conduct additional prospective evaluations of patient- and caregiver-reported experience and outcomes for ACM beneficiaries compared to usual care. A prospective control group could be constructed by applying the patient identification criteria and apply the ACM patient and caregiver survey to an advanced illness cohort under usual care. This additional analysis could also measure the survival time of those in the intervention group compared to the control group. C-TAC would be committed to working with partners to conduct this additional evaluation if the ACM is approved.

VIII. INTEGRATION AND CARE COORDINATION

ACM implementation creates a fully integrated delivery structure that provides seamless care to beneficiaries with advanced illness across major clinical dimensions: (1) space, from inpatient through ambulatory to home settings; (2) time, from onset of advanced illness through disease progression to the end of life; and (3) treatment, from intensive disease-modifying treatment through palliation to hospice. Comprehensive care coordination is accomplished through the following processes:

- Furnishing high-impact interdisciplinary team visits in hospital, office/clinic and home
- Providing comprehensive transitional and post-acute care
- Establishing efficient and reliable handoff processes among teams and settings
- Facilitating advance care planning over time, at the patient's own pace, in all settings
- Eliminating unwanted or duplicative visits and interventions
- Employing standardized, proactive telemanagement procedures
- Ensuring effective and timely communication across all clinical settings
- Engaging principal primary and specialty physicians as core members of the clinical team
- Helping patient and family navigate among disparate providers
- Educating and supporting patients, family members and caregivers in self-management
- Assuring adequate family and caregiver support to minimize hospital and SNF transfers
- Extending the reach of palliative care from hospitals into the home and community

- Optimizing EHR to serve as a reliable communications channel among clinical settings
- Integrating facility and community social services into the clinical workflow

The ACM is supported by participating physicians who assist in patient identification and referral to the ACM, and a palliative care provider-directed interdisciplinary care team of nurses, social workers and other clinicians and non-clinicians. A core function of the ACM is to ensure that explicit and well-documented care plans are in place for all beneficiaries, and to reconcile all input from PCPs, specialists and hospitalists so that orders, medications, appointments and other critical elements are unified into a single plan of care that is easily understood by patients, family members and caregivers so that they can understand how best to navigate their own complex and unique systems of care. This unified care plan is documented in the medical record and transmitted to all involved clinicians to ensure all needed services are delivered in a coordinated manner across inpatient, ambulatory, home and long-term care settings. Physician participation in the ACM is supported through enhanced incentives available under the QPP for AAPM participation. Coordination and integration with other APMs is also a distinguishing feature of the ACM (see Payment Methodology).

IX. PATIENT CHOICE

The ACM enhances patient choices for Medicare FFS beneficiaries. The ACM care delivery model is designed to promote patient choice in a fragmented care delivery system. Core ACM services include care coordination across care settings and services, comprehensive advance care planning and symptom management support. These interventions are designed to help beneficiaries receive the care that they want and need. When these interventions are implemented, population health outcomes of reduced hospitalizations and appropriate increased hospice use are achieved. This does not imply that uniform outcomes are expected, and some patients may continue to have repeated hospitalizations and may never utilize hospice care. Nevertheless, regardless of socio-economic, clinical or geographic differences, beneficiaries can expect to receive services that target their unique needs and preferences. To ensure that individualized care needs are addressed, ACM quality metrics are designed for the beneficiary or their family caregiver representative rather than ACM clinicians (see Section II).

X. PATIENT SAFETY

The ACM prevents harm and promotes patient safety in several ways. For example, because home-based care allows the team to assess and manage both clinical and social determinants of health in real time, changes in patient status can be monitored closely, avoiding crises that often lead to ER visits and hospital admissions. In addition, medical errors are avoided as the ACM team coordinates visits with the primary physician and multiple specialists, tracking their recommendations so that orders, medications and other critical elements may be reconciled and understood by patients, families and caregivers.

However, because the ACM supports a natural transition from disease-modifying treatment toward care based on comfort, it promotes patient safety in a more fundamental way. Although prevailing wisdom and community standards of practice tend to support increasingly aggressive treatment as disease advances, evidence is accumulating that this approach can produce negative effects for patients. Meta-analyses of controlled trials show that once patients reach the advanced stage of chronic illness, most disease-modifying treatments (with rare exceptions, such as beta blockers in advanced systolic heart failure) do not prolong survival, and death occurs rapidly and

predictably in most cases.[66,67] In contrast, early palliative care or hospice enrollment has been shown to prolong life by months on average compared to standard treatment in advanced illness.[68,69] The ACM may therefore promote patient safety to a greater degree compared to persistent pursuit of traditional treatment.

XI. HEALTH INFORMATION TECHNOLOGY

The ACM requires participating entities to utilize an EHR. Care coordination and care management are central interventions of the ACM. The communication and sharing of care plans between the ACM and the beneficiary's usual care team can be optimized through the electronic platform. Furthermore, we propose that CMS provide an ACM encounter code. This code would allow ACM entities to submit their electronic care encounters, including ACM care plans, to the CMS claims system. The electronic care encounter would contain clinical information that can be used to calculate new metrics for the ACM program. These include clinical eligibility information for each enrollee and care process activities such as advance care planning and ACM patient encounter within 48 hours of hospital discharge. Given that the ACM can be operated by provider entities other than physician practices, we ask that CMS consider the use of non-certified EHR to be qualified for Advanced APM designation. We anticipate that telehealth technology, secured texting; videoconferencing and use for registry and/or health information exchange solutions will be leveraged to maximize efficiency of the ACM. Finally, the ACM entity must follow patient privacy laws and requirements.

XII. SUPPLEMENTAL INFORMATION

The following supporting information is provided in the appendices: Appendix A: Analyses of Spending Target Methodologies Considered for ACM; Appendix B: ACM Payment Methodology Analysis; Appendix C: Pay for Quality Measure Scoring; Appendix D: Pay for Quality Bonus Payment Example; Appendix E: Detailed Step-By-Step ACM Spending Target Determination; Appendix F: ACM Proposed Diagnoses For Diagnosis-Based Spending Target Determination; Appendix G: Experience With ACM Eligibility Criteria; Appendix H: Additional Description Of The Relationship Between Physicians And Other Eligible Clinicians Within The ACM ; Appendix I: Example Of Partial And Full AAPM Determination Under The ACM; Appendix J: Draft Of Additional Innovative Family Evaluation Of ACM Survey Measures To Be Field Tested By ACM; Appendix K: Representative Organizations Interested In ACM Implementation; Appendix L: Beneficiary Notification & Comparisons To Other Models; Appendix M: Beneficiary And Provider User Journeys; Appendix N: Acknowledgements; Appendix O: ACM Proposal Bibliography.

APPENDIX A: ACM PAYMENT METHODOLOGY ANALYSIS

Goals:

- Pay for improvement in quality at equal or lowered cost (Quality and Cost)
- Convert palliative care provider's fee schedule to a team-based, population heath payment structure that rewards quality (Payment Methodology)
- Advanced APM status to create incentives for non-palliative care specialties involved in chronic disease care to enhance care coordination (Payment Methodology)
- Pay-for-quality payment structure that incentivizes high quality and reduction in suboptimal care (Value over Volume & Patient Safety)
- Modest incentives and financial risk to minimize potential for perverse incentives (Patient Safety)

Criteria for effective payment model:

- Cover upfront direct care delivery cost
- Provide opportunity for additional revenue for program investment
- Incentivize quality
- Ensure neutral or positive financial return to CMS
- Protect against gaming and perverse incentives

Solution:

Non-tiered PMPM with downside risk for total cost of care and upside bonus for quality with set maximum savings and loss amount that replaces palliative care provider FFS payment:

- Wage-adjusted $400 PMPM, to be included in episode expenditure
- Quality bonus payment funded by savings pool, upper limit of $250 PMPM; CMS will keep a proportion of savings when the quality bonus payment rate is less than 100% and all the savings in excess of $250 PMPM
- Minimum quality standard
- 40-60% shared loss rate based on quality performance and minimum quality standard, maximum loss rate of $100 PMPM; CMS will partially share the loss up to $100 PMPM and all losses in excess of this amount
- 4% minimum shared savings/loss rate: bonus payment would trigger if savings is at least 4% of the spending target, the bonus payment is based on the full savings amount; similarly, shared loss rate would trigger if the excess spending is at least 4% of the spending target, the shared loss rate is based on the full loss amount.
- Upside quality bonus payment in years 1-2; shared loss in year 3
- Remediation period for low quality performer or when actual expenditure is significantly higher than expected amount; ACM entity will be required to leave the program if corrective actions do not show positive trends within 6 months and significant improvement within a year.
- Payment would replace ACM entity's palliative care provider E&M, Chronic Care Management, Complex Chronic Care Management, Transitional Care Management, and Advance Care Planning payments

- Quality bonus payment or shared loss is based on total cost of care, last 12 months of life, which includes all ACM payments for decedents regardless of whether those ACM payments are received in the last 12 months of life

Analyses:

Direct Cost of Care Payment

PMPM vs. tiered PMPM vs. Set Upfront Fee: The PMPM rate represents the average monthly cost over the ACM episode for the advanced illness population for services furnished by providers in the ACM entity. The experience of current advanced illness care programs (Sutter, Aspire, Trinity, Northwell and others) suggest wage-adjusted $400 PMPM is the minimum amount necessary to cover the average direct monthly clinical costs of the ACM services. The average rate gives ACM entity flexibility over how to tailor care based on multiple factors including clinical, environmental and coping factors. A tiered PMPM rate that changes in clinical acuity can lead to reactive rather than proactive management since the tiered structure implies that more services should only be deployed with higher clinical acuity only. A set upfront fee that could be paid annually is more cumbersome to implement, as reconciliation is needed at the end of the episode to adjust for different episode lengths.

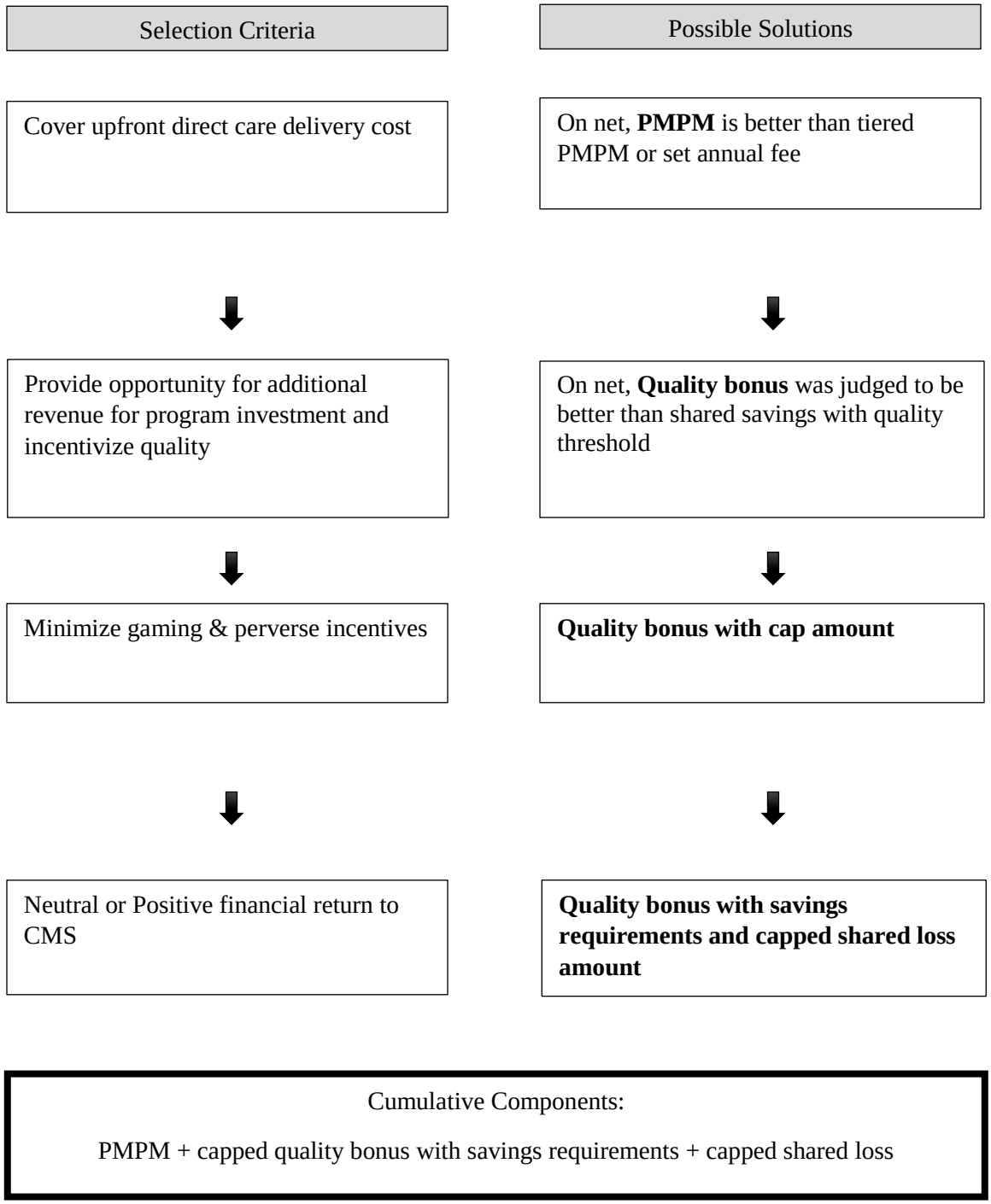
Capped Quality Bonus Payments vs. Shared Savings Payments

Quality bonus payments and shared savings payments have similar underlying payment architecture. Both methods utilize savings generated from lower than expected spending. However, the quality bonus payments are oriented towards payment based on quality performance. On the other hand, shared savings payments are oriented towards rewarding savings based on minimum quality performance. Therefore, the quality bonus payment structure is better aligned with the goal of protecting beneficiaries against gaming and perverse incentives, especially when quality measures are focused on patient centered experience and outcomes rather than utilization. Beneficiary protection is further enhanced when the incentives and shared loss rates are modest, through defined cap amounts rather than percentage of health care expenditures.

Downside Risk

A pay-for quality model with only upside payment and no downside risk does not incentivize quality fully since APM experience shows higher provider commitment in two-sided risk arrangements over one-sided risk arrangements (Hospital Readmission Reduction Program vs. Hospital Value-Based Purchasing Program). Furthermore, upside risk does not ensure a neutral or positive CMS financial return on investment.

We use the following decision tree to weigh the different payment design options against the selection criteria to reach the best payment structure:



Summary:

We propose a two-part payment methodology that incorporates:

- A non-tiered PMPM of $400, and
- An upside bonus for quality funded by shared savings and downside risk (the latter beginning in year 3). The quality bonus would be capped at $250 PMPM and the loss amount would be capped at $100 PMPM.

This approach provides upfront direct cost reimbursement for ACM services, provides opportunity for additional revenue for program investment, ensures neutral or positive financial return to CMS, incentivizes quality, and protects against gaming and perverse incentives.

A predetermined total payment rate based on quality performance such as CPC+ is not feasible as a starting payment model. Rather, such an approach could be implemented in later years of the model or as an extension of ACM after national implementation and benchmarking is available to determine whether the proposed approach successfully improves quality and reduces expenditures. If a predetermined total payment rate were implemented, the rate would be set based on both quality and utilization benchmarks.

APPENDIX B: ANALYSES OF SPENDING TARGET METHODOLOGIES CONSIDERED FOR ACM

Goal:

- To set an accurate spending target to determine the ACM quality bonus payment or shared loss amount

Criteria:

- Must provide accurate spending estimates that reflect the expected cost for performance year ACM episodes
- Must be feasible to support national implementation
- Must provide upfront transparency on risk-adjustment
- Must provide upfront initial estimates of spending targets

Analysis of Methodologies Considered

Prospective Claims-Based Adjustment

Method 1: Utilize claims to define ACM episodes and comparison episodes prospectively and apply CMS-HCC Prospective Risk Adjustment Model

Strengths: Widely used CMS APM risk-adjustment methodology

Limitations:

1. Claim-based criteria currently do not identify the majority of patients with advanced chronic illnesses and a life expectancy of a year or less, but rather only a subset of the population.

   Supporting Data: Aetna Compassionate Care's established proprietary claim-based algorithm is able to identify less than 50% of chronic illness decedents. Aspire Health, which contracts with numerous health plans, reports similar findings. Current innovations shared with CTAC through machine-based learning algorithms are unable to exceed the 50% identification threshold. These proprietary claims-based algorithms are complex, where each algorithm may target a specific condition with certain specific comorbidities and or complications, in addition to data patterns identified through machine-based learnings.

2. Health care expenditures for advanced chronic illness rise exponentially in the final months of life compared to the prior year; risk adjustments using only prior year variables are not sufficient in predicting expenditure changes that occur specifically in the last year of life.

   Supporting Data: HCIA Sutter AIM supplemental analysis attempted to identify prospective patients by matching patient characteristics between a prospective control group and program enrollees. The prospectively identified control group had

significantly lower mortality rate, which indicates that claims-based data is unable to prospectively differentiate patients who are likely to die within a year. As a result of inaccurate patient matching, the associated cost estimates were underestimated. Sutter's internal analyses utilizing prospective propensity score matching found similar results.

Method 2: Utilize claims to define ACM episodes and comparison episodes prospectively and apply HHS-HCC Concurrent Risk Adjustment Model

Strength: Alternative HHS risk-adjustment method that minimizes patient selection bias and utilizes concurrent year risk factors.

Limitation: Above limitation remains regarding lack of sufficient ability to identify advanced illness patients prospectively.

Future Opportunity: As more specific clinical data is added to CMS claims data such as functional status or more specific disease staging, there would be an opportunity to revisit a prospective claims-based algorithm as a viable option. However, even if comparison episodes are identified prospectively, spending targets would still not be known until the end of a performance year, when episode spending is able to be calculated.

Propensity Matching

Method: Utilize propensity scores to match ACM patients with non-ACM decedents retrospectively to construct a similar comparison group and to determine the spending targets. Given the issues with prospective identification and predicting 1-year mortality, propensity scores used to match patients would need to be constructed retrospectively on a population of decedents.

Strength: Propensity matching provides a highly specific form of retrospective patient matching that ensures a balance between the ACM population and comparison group on all observable characteristics used to construct propensity scores.

Limitations:

1. Propensity matching is a labor-intensive approach that is challenging to scale nationally. Propensity matching would be conducted for each ACM entity for each performance period. Additionally, it has proven challenging to implement in other CMS demonstrations. For example, the Centers for Medicare and Medicaid Services (CMS) used propensity score matching in its Independence at Home (IAH) demonstration. After identifying potential issues with the initial matching algorithm, CMS revised the IAH matching methodology, which changed results for participants and led to concerns by participants.

2. The spending target would not be determined until the end of the performance period. Because of the aforementioned issues with prospectively predicting 1-year mortality, the comparison group would need to be constructed retrospectively from a population of decedents. Moreover, spending for comparison group episodes would not be known until the end of the performance period.

3. Covariates for the propensity score could change from one performance period to the next, depending on the salient characteristics of the ACM beneficiaries in a given performance year. Changes in the ACM beneficiary population would also change the weights associated with each of the covariates from year to year, even if the covariates included in the matching algorithm remain constant. Both of these outcomes would reduce transparency and would make this approach more complex and difficult to explain to ACM entities.

Future Opportunity: Propensity matching can be utilized as an additional method for program evaluation. Propensity matching can be used to validate the ACM spending target methodology by comparing savings estimates under each methodology. We expect only small differences between the methodologies. During program evaluation, if noticeable differences in spending estimates between the two methods are found, there would be an opportunity to refine the spending targets. These refinements, if any, may reflect additional patient characteristics that are not detectable through claims-based variables, but can be identified through ACM patient assessments. Adjustments can be added for these additional clinical measures through ongoing ACM program implementation.

Solution: Episode-based Regression

Method: Utilize regression analyses of prior advanced illness care episodes to determine risk adjusted spending targets based on a set of variables that affect spending during the last year of life. Prior advanced care episodes would be identified applying a claims-based algorithm to Medicare FFS beneficiaries who died during a historical period, as described in the proposal.

Strengths:

1. This method produces a reasonable spending estimate. Supporting Data: The Sutter HCIA independent evaluation utilizes retrospective patient matching to determine a baseline population and spending. Regression analyses would utilize the same variables to calculate the risk-adjustment score associated with each variable and combinations. Another recent study of the Sutter AIM program found that AIM enrollees were fairly similar to a comparison pool identified using claims-based algorithms, even before applying any matching techniques.[1]

2. This method is transparent since risk adjustment variables are defined, and CMS could provide participants with the results of the regression analyses in conjunction with the initial spending target estimates.

3. This method provides an initial upfront spending estimate that would be reconciled at the end of the performance year to reflect actual enrollment.

4. This method can be scaled nationally since the method is a one-time set-up with periodic refinements to account for new variables associated with new data.

[1] SEK Sudat, A Franco, AR Pressman, et al. Impact of home-based, patient-centered support for people with advanced illness in an open health system: A retrospective claims analysis of health expenditures, utilization, and quality of care at end of life. Palliative Med.; Article first published online: June 7, 2017. https://doi.org/10.1177/0269216317711824.

Limitations: This retrospective risk adjustment method does not account for patient selection bias to the same degree as retrospective propensity matching. Patient selection bias is also possible with the proposed ACM patient identification process, which incorporates criteria that are not currently captured in claims data, such as clinical factors and the "surprise question." However, this latter bias should work against ACM participants and in CMS's favor as the additional clinical criteria required for ACM beneficiaries has been shown to select a more expensive cohort than the observable claims-based criteria alone.[2] In addition, we attempt to account for this potential bias in several ways.

First, we expect that ACM entities will not be motivated to avoid higher acuity patients. Because these patients are likely to be at high risk for utilization of high cost and potentially avoidable services, such as inpatient admission, there is likely to be a high opportunity to improve beneficiary care and also reduce expenditures. This result has been demonstrated by current ACM examples (Sutter, Aspire, Trinity, Northwell). Second, in order the meet the necessary patient or payment thresholds to be classified as AAPM Qualified Participants (QPs), participating providers will likely be motivated to identify as many appropriate patients as possible. Lastly, it would be challenging for ACM entity to cherry-pick patients intentionally since the ACM entity is required to enroll eligible referrals. Once enrolled, the ACM entity is accountable to performance even if the beneficiary decides to discontinue services.

In summary, we provide a comparison of the three spending target methodologies against the 4 selection criteria (accurate spending estimate, feasible national implementation, upfront transparency on risk-adjustments and initial spending target, and upfront spending estimate) as shown in **Table A-1**. We select episode-based regression as the best method that meets all 4 criteria. Prospective claim-based risk adjustment is ruled out since it does not provide accurate spending estimate. Propensity matching is rule-out as it is inferior to episode-based regression due to lack of national implementation feasibility, upfront transparency on risk-adjustments and upfront spending estimate.

Table A-1: Comparison of Spending Target Methodologies Against Selection Criteria

	Selection Criteria			
Spending Target Methodology	Accurate spending estimate	Feasible national implementation	Upfront transparency on risk-adjustments	Upfront spending estimate
Prospective claim-based risk-adjustment	-	+	+	+
Propensity Matching	+	-	-	-
Episode-based Regression Analysis	+	+	+	+

[2] SEK Sudat, et. Al. Impact of home-based, patient-centered support for people with advanced illness in an open health system: A retrospective claims analysis of health expenditures, utilization, and quality of care at end of life. Palliative Med.; Article first published online: June 7, 2017. https://doi.org/10.1177/0269216317711824.

APPENDIX C: PAY FOR QUALITY MEASURE SCORING

In **Table C-1**, there are 3 different response schemes for survey and provider reporting measures for Pay for Quality Measures. The points associated with each response schemes are shown below:

1. Never; Sometimes, Usually, Always
    a. Never=0 points
    b. Sometimes=3.333
    c. Usually=6.666
    d. Always= 10 points
2. No; Yes
    a. No= 0 points
    b. Yes=10 points
3. No; Yes somewhat; Yes definitely
    a. No= 0 points
    b. Yes somewhat= 5 points
    c. Yes definitely= 10 points

Furthermore, the raw survey numerical scores will be converted to percentile score, where the 30^{th} percentile or less is score as 0.

Table C-1: Quality Measure Responses

Measure	Frequency	Responses
Pay for Quality Measures, Year 1		
1. ACM Team Visit within 48 hours of hospital discharge	Hospital discharge	No; Yes
2. Timeliness of Care: While your family member was in the ACM, when you or your family member asked for help from the ACM team, how often did you get help as soon as you needed it?	1 month & discharge	Never; Sometimes, Usually, Always
3. Getting Help for Symptoms: Pain: Did your family member get as much help with pain as he or she needed?	1 month & discharge	No; Yes somewhat; Yes definitely
4. Getting Help for Symptoms: Anxiety and Sadness: How often did your family member get the help he or she needed from the ACM team for feelings of anxiety or sadness?	1 month & discharge	Never; Sometimes, Usually, Always

5. Getting Help for Symptoms: Trouble breathing: How often did your family member get the help he or she needed for trouble breathing?	1 month & discharge	Never; Sometimes, Usually, Always
6. Timeliness of advance care planning: Yes/No Measure Description: Advance care planning conversation with patient and or their health care agent representative must include exploration of goals, values and preferences and discussion of disease process and prognosis within 14 days of enrollment.	1 month	No; Yes
7. Medication Reconciliation Post-Discharge	Hospital discharge	No; Yes
8. Proportion of patients who died and who were admitted to the ICU in the last 30 days of life	End of Episode	Numerical
9. Proportion of patients who died who were admitted to hospice for 3 days or more	End of Episode	Numerical
10. *Minimum Quality Standard Measure*: ACM provider attestation that patient's care plan is consistent with preferences: Yes/No	1 month & discharge	No; Yes
11a. Effective Communication Composite: How often did this provider explain things in a way that was easy to understand?	1 month & discharge	Never; Sometimes, Usually, Always
11b. Effective Communication Composite: How often did the ACM team listen carefully to you when you talked with them about problems with your care or condition?	1 month & discharge	Never; Sometimes, Usually, Always
11c. Effective Communication Composite: How often did this provider show respect for what you had to say?	1 month & discharge	Never; Sometimes, Usually, Always
12. Care Coordination: How often did the provider (ACM team) seem informed and up-to-date about the care you got from specialists?	1 month & discharge	Never; Sometimes, Usually, Always
13. Patient overall satisfaction: Using any number from 0 to 10, where 0 is the worst care possible and 10 is the best care possible, what number would you use to rate the care that you received from the ACM team?	1 month & discharge	Numerical
Additional Pay for Quality Measures to be Added in Year 3, after Field Test		

14a. Patient Engagement Composite: How often did you feel you have the support that you needed from the ACM team to help you make decisions about your care?	1 month & discharge	Numerical
14b. Patient Engagement Composite: How often did you feel confident about how to manage your health conditions?	1 month & discharge	
15. Shared Decision Making: Were you able to make decisions without feeling pressured by the ACM team to make decisions you did not want?	1 month & discharge	
16. Caregiver Support Composite Score *(To be field tested by CMS)**	End of Episode	
17. Quality of Care Transitions from ACM to Hospice Composite Score *(To be field tested by CMS)**	End of Episode	

* See survey examples in **Appendix J**

APPENDIX D: PAY FOR QUALITY BONUS PAYMENT EXAMPLE

I. Quality Score Multiplier Example: **Table D-1** illustrates examples of individual measure score and calculation of the quality score multiplier. The example calculation demonstrates the scoring system of each measure, where a raw score is calculated (column 2) and converted to percentile score (column 3). Percentile score of 30 or below is equal to 0. The final quality multiplier is the average of the total percentile score, converted to percent. In this example, the entity meets the minimum quality standard, score of 10, in measure 10.

Table D-1. Example of Measure Scores

Measure	Raw Measure Score	Percentile Score
1	86%	80th
2	6.7	60th
3	5.5	50th
4	6.7	60th
5	6.7	80th
6	9	80th
7	80	90th
8	20%	60th
9	10%	60th
10	10	Meets minimum requirement
11	6.7	80th
12	6.7	60th
13	6.7	70th
Quality Multiplier= Average Percentile Score= 63thpercentile= 63%		

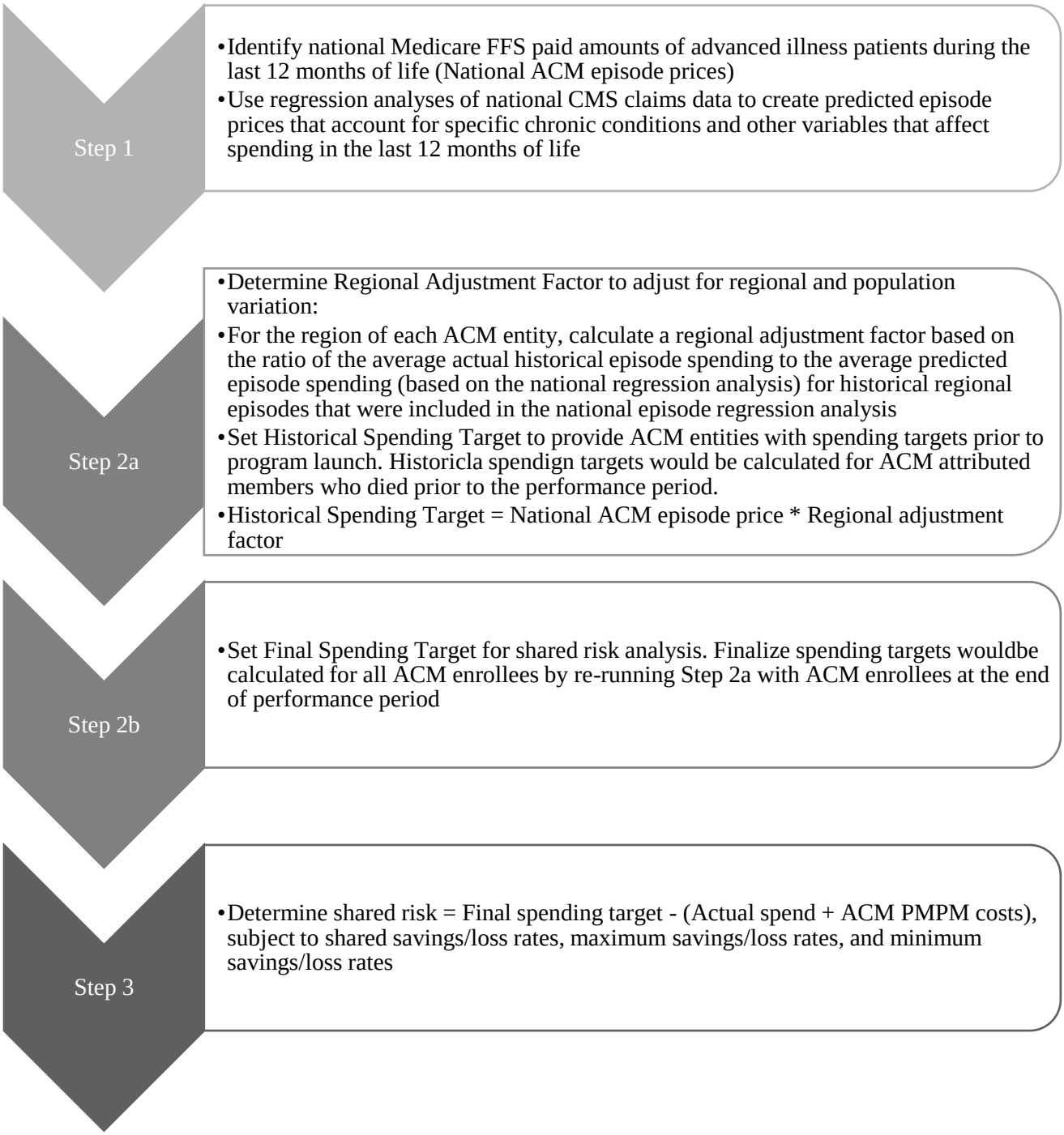
II. Performance-Based Payment Calculation Example: **Table D-2** illustrates the initial expenditure estimates (Step E), reconciled expenditure target (Step H), and final performance based payment (Step P). In this example, the ACM entity has a savings pool that is greater than the 4% minimum savings, and a total quality bonus payment cap of $150,000.

Table D-2: Example of Pay for Quality Payment Calculations

	Analysis Step	Result
A	Sum of Baseline Episode Expenditure	$10,000,000
B	Adjustment for Trend	1.02
C	Adjustment for Novel Therapies	1.005
D	Geographic Adjustment	1.01
E	Initial Expenditure Estimates (A*B*C*D)	$10,353,510
F	Reconciled Enrolled Episode Expenditure	$4,000,000
G	Adjustments (B*C*D)	1.02*1.005*1.01
H	Expected Reconciled Expenditure after Adjustments (F*B*C*D)	$4,141,404
I	Actual Expenditure	$3,600,000
J	4% Minimum Savings	0.04
K	Minimum Savings Amount (J*H)	$165,656
L	Bonus Pool Amount (H-I); amount must be ≥K)	$541,404
M	Quality Score Multiplier (Table D-1)	63%
N	Quality Bonus Payment without Cap (M*L)	$341,085
0	Apply $250 PMPM Cap Amount (Completed ACM episodes*total PMPMs associated with these episodes; example assumes $150,000)	$150,000
P	Final Quality Bonus Payment with Cap Amount (Amount O if O≥N)	$150,000

APPENDIX E: DETAILED STEP-BY-STEP ACM SPENDING TARGET DETERMINATION

ACM Payment Methodology Overview



Step 1: National ACM Episode Price

Step 1: Identify national Medicare FFS average prices of advanced illness patients during the last 12 months of life (National ACM Episode Prices) using regression analyses of national CMS claims data
Data Source: National historical Medicare FFS claims (Part A & B); include part D if feasible. Part A & B spending amounts would be normalized using the CMS Payment Standardization Methodology to eliminate geographic differences in Medicare payment rates.[3] Similar to the CMS Oncology Care Model (OCM), Part D spending amounts could be limited to non-capitated payments, namely 80% of the Gross Drug Cost Above Out-of-Pocket Threshold and Low-Income Subsidies.
Population: The goal is to include as many decedents who had chronic illness as possible in the historical regression analysis. Specifically, we propose including all decedents who had one or more of the 11 chronic illness diagnoses in Appendix F (as determined by an individual having at least 3 claims in the last 12 months of life for any of the individual 11 diagnoses). The 11 diagnosis categories consist of the 9 chronic conditions from the Dartmouth Atlas that represent 90% of decedents plus other nervous system diseases (such as ALS and MS) and HIV/AIDs.
Benchmark Timeframe: The goal is to use multiple years of data to increase the sample size but also to weigh recent data more heavily in order to reflect recent national trends. Specifically, we propose to construct 12-month episodes for beneficiaries who die during a 3-year historical period, which will require analyzing four years of claims data that cover 36 rolling 12-month periods. For the regression analysis, we will weigh more recent episodes more heavily, with weights of 60% for episodes ending in the most recent year, 30% for episodes ending in the second most recent year, and 10% for episodes ending in the third most recent year.
Analysis: Using a methodology similar to the CMMI independent evaluation of the HCIA Sutter Aim Program, conduct a regression analysis to determine average price estimates based on national CMS FFS data. The independent variable in the analysis would be total Medicare paid amount in the last 12 months of life. Spending in episodes in the first two years of the historical benchmark timeframe would be trended to the final year based on changes in average paid amount in the last 12 months of life for each chronic condition. Dependent variables in the regression would include: **1.** Primary Diagnosis: The primary diagnosis would be one of the 11 diagnosis categories from Appendix F. The primary diagnosis would be determined by the diagnosis category that appeared on the highest frequency of claims for an individual patient in the last 12 months of life. **2.** Individual Comorbidities: 11 diagnosis categories from **Appendix F** plus hip fracture (M80, M84, S32, S72, S79) and anemia (D50-D53, D55-59, D60-D64) as determined by an individual having three or more claims for each of the individual diagnoses

[3] http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228. Accessed 8/24/2017.

during the last 12 months of life
3. Hierarchical Condition Category (HCC) score during the last 12 months of life
4. Total Medicare cost during months 13 to 24 prior to death
5. Hospitalizations during months 13 to 24 prior to death
6. ED visits during months 13 to 24 prior to death
7. SNF days during months 13 to 24 prior to death
8. Home health episodes during months 13 to 24 prior to death
9. Dual-status during the last 12 months of life
10. Age at death
11. Gender
12. Part D coverage, if Part D spending is included

- Spending in the last 12 months of life would be capped at the 95th percentile of spending for each of the primary chronic conditions
- Exclude significant new treatments from analysis, identifying new treatments as currently identified in the Bundled Payments for Care Improvement (BPCI) Initiative models

Output:

- Target National ACM Episode Price for each decedent; this information could be presented through an episode pricing table based on primary diagnosis with adjustment factors for each of the other factors listed above

Step 2: Regional Adjustments & Spending Target

Steps 2a: Determine regional and ACM entity-level adjustments

Step 2a: Determine regional ACM adjustment factor

- Regional adjustment factor = average actual regional spending in last 12 months of life / average predicted spending in the last 12 months of life from regression analysis
- The population used to calculate the adjustment factor would be all beneficiaries who died in each region and who were included in the national regression analysis (i.e. had at least one of the 11 chronic illness diagnoses listed in **Appendix F**)
- Patients would be attributed to a primary diagnosis in **Appendix F** based on the diagnosis category that appeared on the highest frequency of claims for an individual patient in the last 12 months of life.
- Like with the regression analysis in Step 1, multiple years of data would be used to increase the sample size while weighing recent data more heavily in order to reflect recent national trends. Specifically, we propose to construct 12-month episodes for beneficiaries who die during three years of historical data and applying the same weights as in the regression analysis. CMS should define regional parameters based on its current best practices, such as using the MSSP regional definitions or each Hospital Referral Region (HRR).
- We propose using national ACM episode prices generated by the national regression analysis as the basis for regional adjustment rather than conducting regional regression analysis to determine regional ACM episode prices because advanced illness represents

a small subset of the overall Medicare population and the national dataset would provide more data to determine the adjustment factors. That said, CMS may consider performing regional regression analysis to determine the regional episode price if it determines that there is sufficient data for all US regions.

- Historical spending targets would be calculated for ACM attributed members who died prior to the performance period using the formula National ACM Episode Price * Regional Adjustment Factor * Trend Factor and summed across all historical episodes
- Attributed decedents would be all decedents with two or more evaluation and management (E&M) claims with a diagnosis code for one of the diagnosis categories in **Appendix F** that are billed by any of the individual ACM providers (e.g. primary care physicians or specialists) that are part of the ACM entity in their last 12 months of life.
- ACM entities would receive claims-level and beneficiary-level information, including the assigned historical episode price for all attributed historical episodes.

Step 2b: Set final spending target

- The final spending targets would be calculated for each ACM enrolled member who died using the formula National ACM Episode Price * Regional Adjustment Factor * Trend Factor and summed across all enrolled members
- The adjustment factors would be calculated from the historical episodes and would not be recalculated in this step
- The trend factor would capture changes in Medicare payment rates that occurred between the end of the historical benchmark timeframe and the performance year. It could be calculated similar to the update factors in CJR[4]
- ACM enrolled members would be all members for whom the ACM received a PMPM payment who had passed away
- As with the initial regression analysis, spending in the last 12 months of life would be capped at the 95th percentile nationally for each of the primary chronic conditions
- As with the initial regression analysis, new treatments would be excluded from the analysis, identifying new treatments as currently identified in BPCI

[4] See CJR Final Rule update factor methodology (80 FR 226 73341 – 73346. Available at: https://www.gpo.gov/fdsys/pkg/FR-2015-11-24/pdf/2015-29438.pdf. Accessed 8/24/2017.

Step 3: ACM Pay for Quality Performance Analysis

Step a. ACM Pay for Quality Performance Analysis, at the end of the performance year

Shared Risk Performance: Final Spending Target - (Actual Spend for ACM Enrollees in Last 12 Months of Life + ACM PMPM Costs for All Deceased Enrollees)

- The final spending target would be the sum of the individual spending targets for each ACM attributed enrollee who died
- The actual spend in the last 12 months of life would be the total spend in the last 12 months of life (Part A and B as well as part D if the latter was included in the regression in Step 1) for each ACM attributed enrolled who died
- ACM PMPM costs would be the sum of all PMPM payments to the ACM entity for enrolled members who had died and were included in the reconciliation; PMPM payments would be included in the ACM PMPM costs regardless of whether those PMPM payments were received in the last 12 months of decedents' lives; the PMPM payments for ACM enrollees who were still alive would not be included in the shared risk performance analysis until those members passed away

Payment To / From ACM Entity: Determine the payment to or from the ACM entity by applying the ACM Pay for Quality payment model rules as follows:

1. Wage-adjusted $400 PMPM, to be included in ACM episode costs.
2. Quality bonus payment funded by savings pool, upper limit of $250 PMPM; CMS will keep a proportion of savings when the quality bonus payment rate is less than 100% and all the savings in excess of $250 PMPM
3. Minimum quality standard
4. 40-60% shared loss rate based on quality performance and minimum quality standard, maximum loss rate of $100 PMPM; CMS will partially share the loss up to $100 PMPM and all losses in excess of this amount
5. 4% minimum shared savings/loss rate: bonus payment would trigger if savings is at least 4% of the spending target, the bonus payment is based on the full savings amount; similarly, shared loss rate would trigger if the excess spending is at least 4% of the spending target, the shared loss rate is based on the full loss amount.
6. Upside quality bonus payment in years 1-2; shared loss in year 3
7. Remediation period for low quality performer; ACM entity will be required to leave the program if corrective actions do not show positive trends within 6 months and significant improvement within a year.
8. Payment would replace ACM entity's palliative care provider E&M, Chronic Care Management, Complex Chronic Care Management, Transitional Care Management, and Advance Care Planning payments
9. Quality bonus payment or shared loss is based on total cost of care, last 12 months of life, which includes all ACM payments for decedents regardless of whether those ACM payments are received in the last 12 months of life

APPENDIX F: ACM PROPOSED DIAGNOSES FOR DIAGNOSIS-BASED SPENDING TARGET DETERMINATION

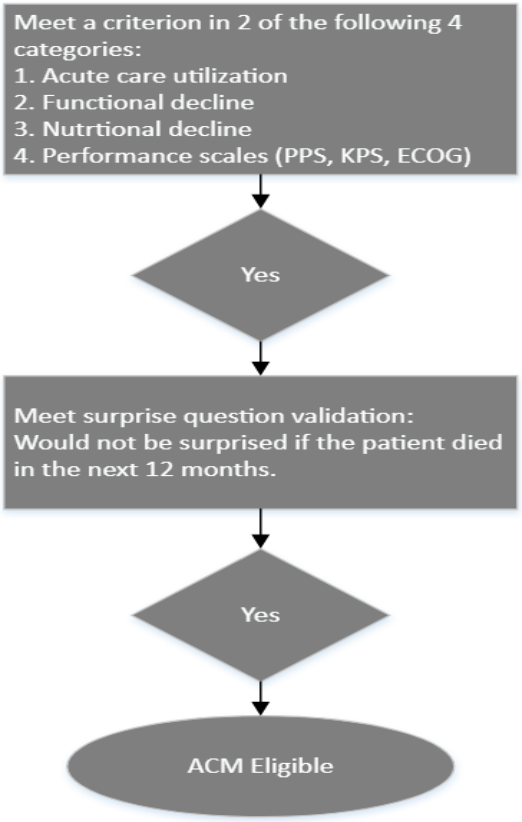
Condition Category	ICD 10 CM Codes	Exclusions
Malignant Neoplasm*	C00-C14, C15-C26, C30, C41, C43-58, C60-75, C7A-C7B, C76-96	
Diabetes w. End Organ Damage*	E08, E10, E11, E13	E08.319, E08.32X-E.08.33X, E08.41, E08.51, E08.65-E08.9, E10.319-E10.339, E10.41, E10.64-10.9, E11.319-E11.339, E11.51, E11.620, E11.64-E11.9, E13.319-E13.339, E13.41, E13.51, E13.64-13.9
Alzheimer's Disease*	G30.1-30.9	
Other Nervous System Diseases: Inflammatory & Other Degenerative Conditions	G10, G20, G21, G23, G35-G37, G60-65	
Heart Failure & Other Heart Diseases*	I01, I05-I09, I11-I12, I21-28, I 31-52, I60-63, I65-I69, I71-73	I13.10
Cerebrovascular Diseases*	I60-I63, I65	
Peripheral Vascular Diseases*	I71-I82, I85	I73.00, I73.8, I73.9, I80
Pulmonary Diseases*	J43, J44	
Liver Failure & Other Diseases*	K72-K74, K75.9, K76	K73.8, K73.9, K76.0, K76.1, K76.9
Kidney Failure*	N18	N18.1-N18.3, N18.9
HIV/AIDS	B20	

APPENDIX G: EXPERIENCE WITH ACM ELIGIBILITY CRITERIA

Evidence indicates the accuracy of the ACM eligibility approach to be even higher than the high level of accuracy (88%) shown by the most successful HCIA round one program, as detailed below.

The components of the ACM patient identification and eligibility criteria are

1. Acute Care Utilization,
2. Functional Decline,
3. Nutritional Decline,
4. Performance Scale,
5. Surprise Question Validation

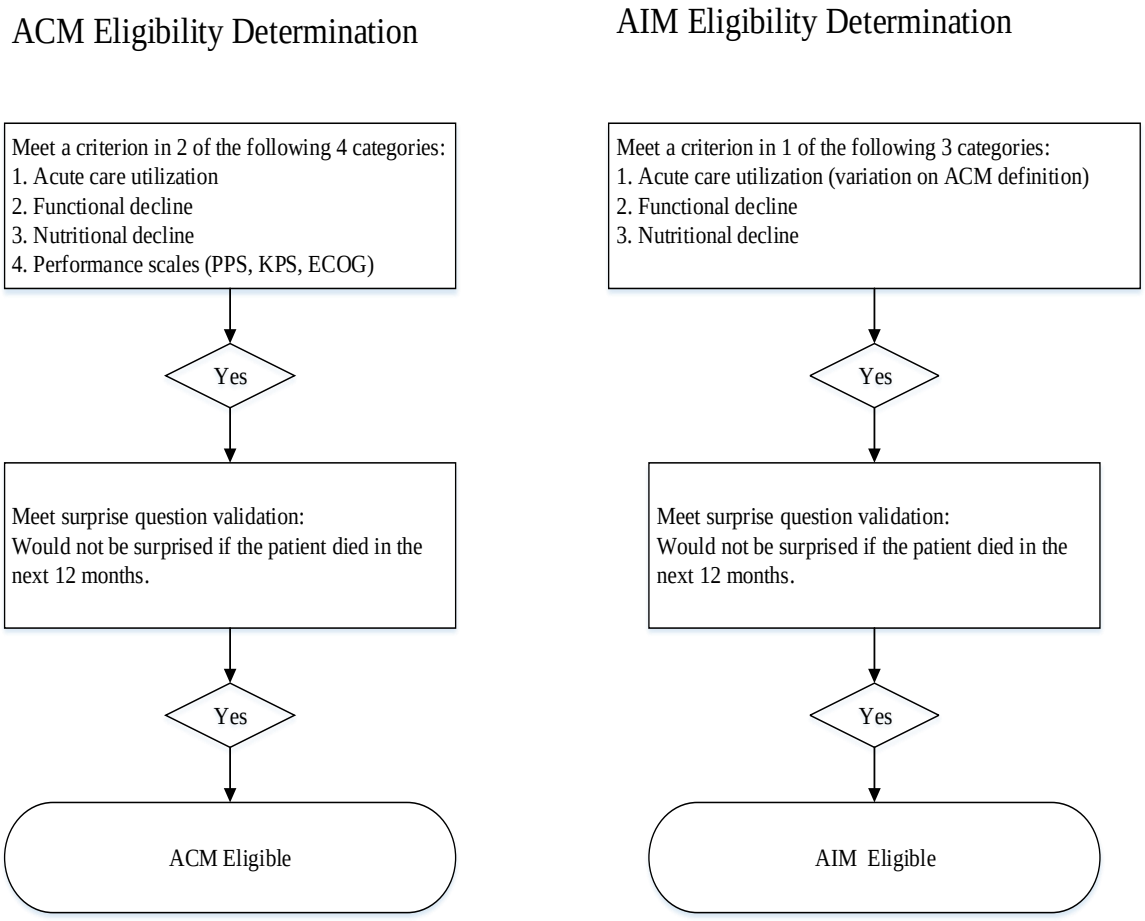


The beneficiary is eligible for the ACM if they meet the criterion in two of the four component categories (Acute Care Utilization, Functional Status, Nutritional Status or Performance Scales) followed by validation with the surprise question, as illustrated in **Figure G-1.**

Figure G-1. ACM Eligibility Determination Process

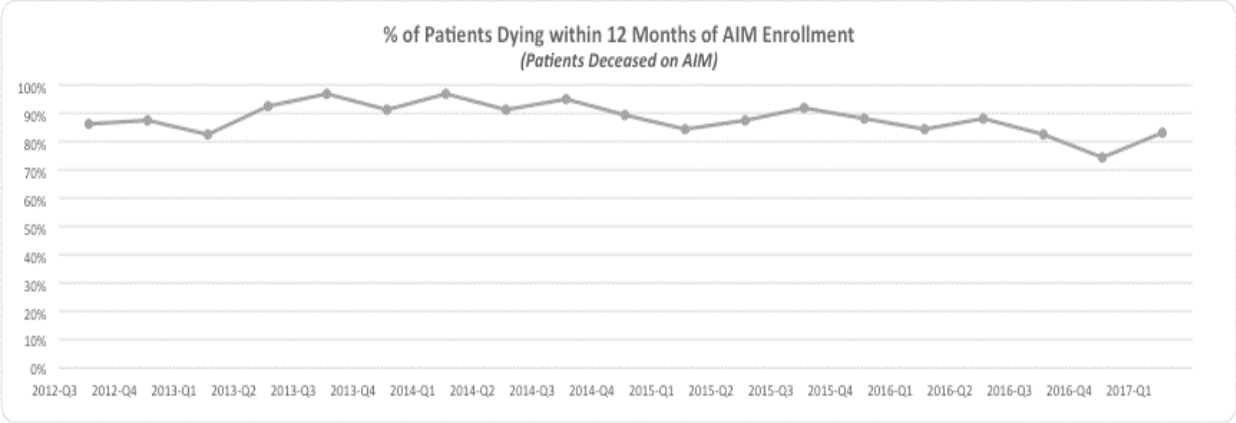
The HCIA Sutter AIM program, which demonstrated effectiveness through a large and diverse health system, utilizes similar criteria, but is less strict than what we propose. Eligibility under the Sutter AIM Model is determined by combining one criterion from three ACM categories with the surprise question. This model utilizes the ACM functional and nutritional criteria and some variations on the acute care utilization category: 2 or more hospitalizations in the last 6 months or 2 or more ED visits in the last 3 months. **Figure G-2** shows the comparison between the ACM and AIM eligibility criteria.

Figure G-2. ACM and AIM Eligibility Criteria



From July 2012 to March 2017, the AIM program served and discharged 14, 832 patients. The program also underwent a dramatic expansion to test scalability for the HCIA. Despite the extraordinary expansion, the accuracy of the clinical predictions remained relatively stable. 88% of AIM patients died within 12 months of enrollment. Only 6.8% of patients were discharged because their conditions have improved significantly that they no longer qualify for the program. **Figure G-3** shows the accuracy of the AIM eligibility criteria during the 5-year time frame. The ACM criteria are even more conservative than the AIM criteria.

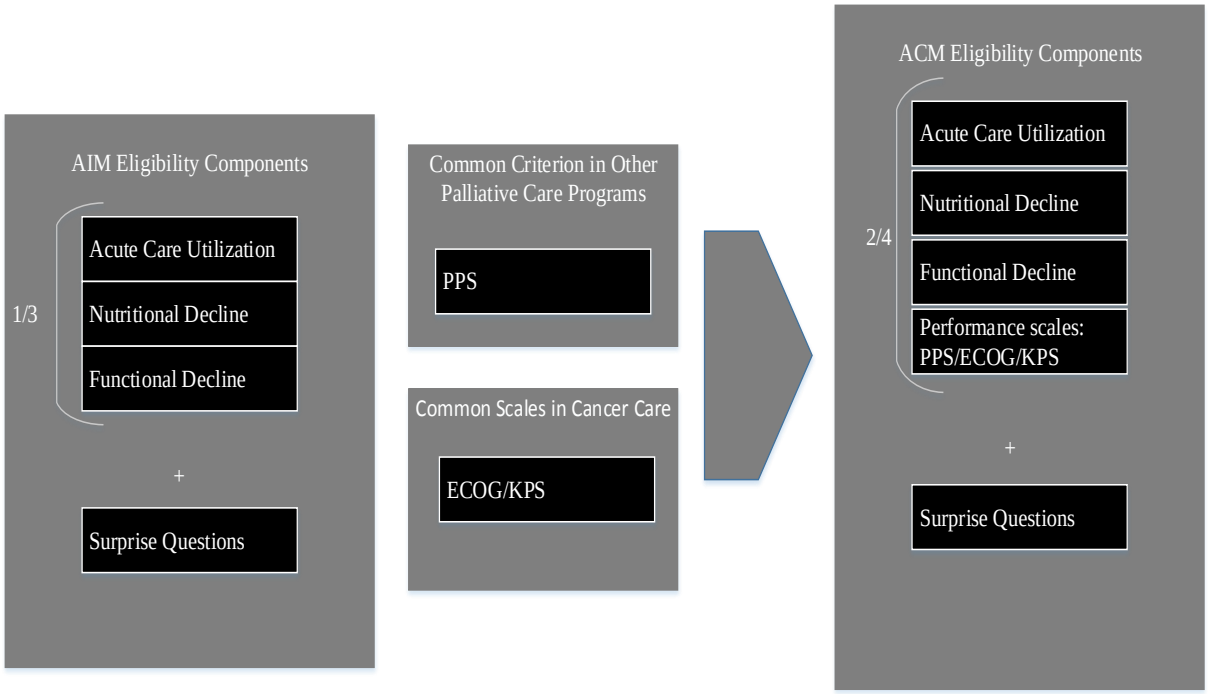
Figure G-3. Accuracy of AIM Criteria for 1-year Prognosis



Aspire Health is another large program that applies the ACM services. To assist in this report, Aspire ran an analysis on a sample of more than 1,000 patients using criteria from 2 of the 5 ACM eligibility categories: acute care utilization and PPS performance score. The Aspire Model shows that this combination produces a 1-year mortality rate of 51%. Thus, the PPS scale or equivalents (KPS/ECOG) provides a strong additional criterion.

The ACM eligibility determination process builds on the successful Sutter Health AIM model and provides additional criterion component that are widely used by other similar models (Performance Scales). The ACM combines tested criteria and is stricter in the eligibility determination process to increase the accuracy of the 1-year prognosis over time (Figure G-4).

Figure G-4. ACM Criteria Context

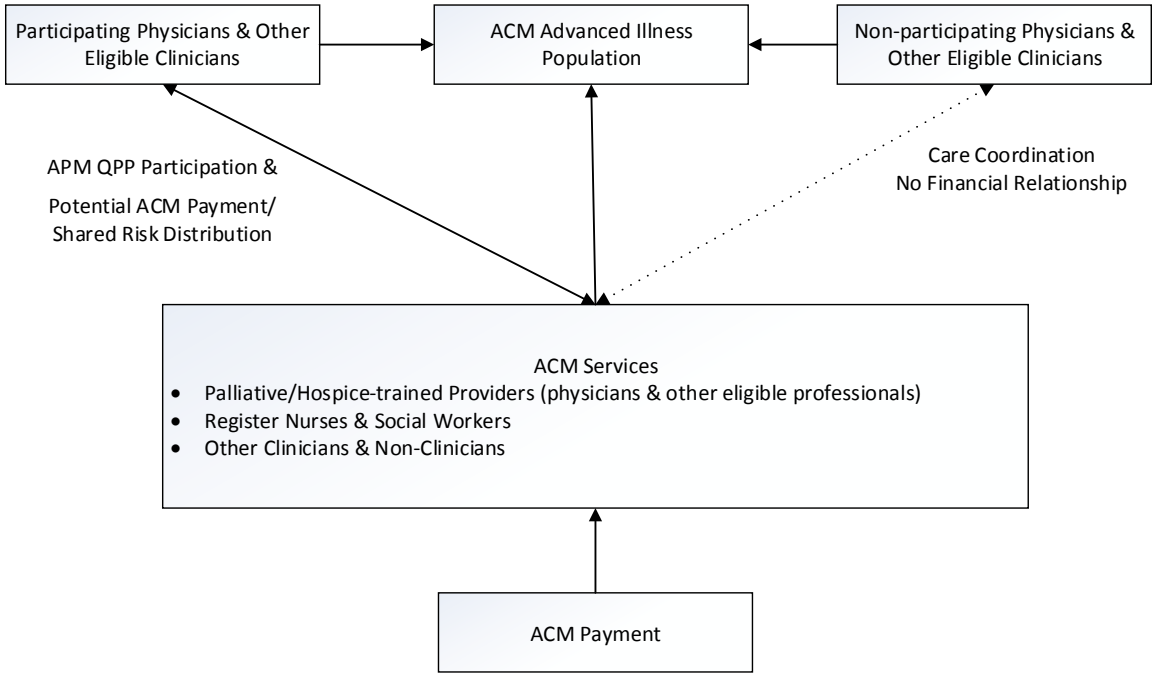


APPENDIX H: ADDITIONAL DESCRIPTION OF THE RELATIONSHIP BETWEEN PHYSICIANS AND OTHER ELIGIBLE CLINICIANS WITHIN THE ACM

The ACM would replace FFS E&M payments for palliative care providers only. These providers will be pre-identified by the ACM entity, and they will not bill for E&M payments during the ACM enrollment.

Other providers such as primary care and other specialists will continue to access the payments that are available for them. The ACM will coordinate with the patient's providers, including participating and non-participating providers. By virtue of participating in the ACM, participating providers such as primary care or treating specialists, will gain the added benefits associated with participating in an advanced APM in the QPP. Additionally, the ACM entity may share risks with these providers (**Figure H-1**).

Figure H-1. Relationship Between Physicians and Other Eligible Clinicians within the ACM

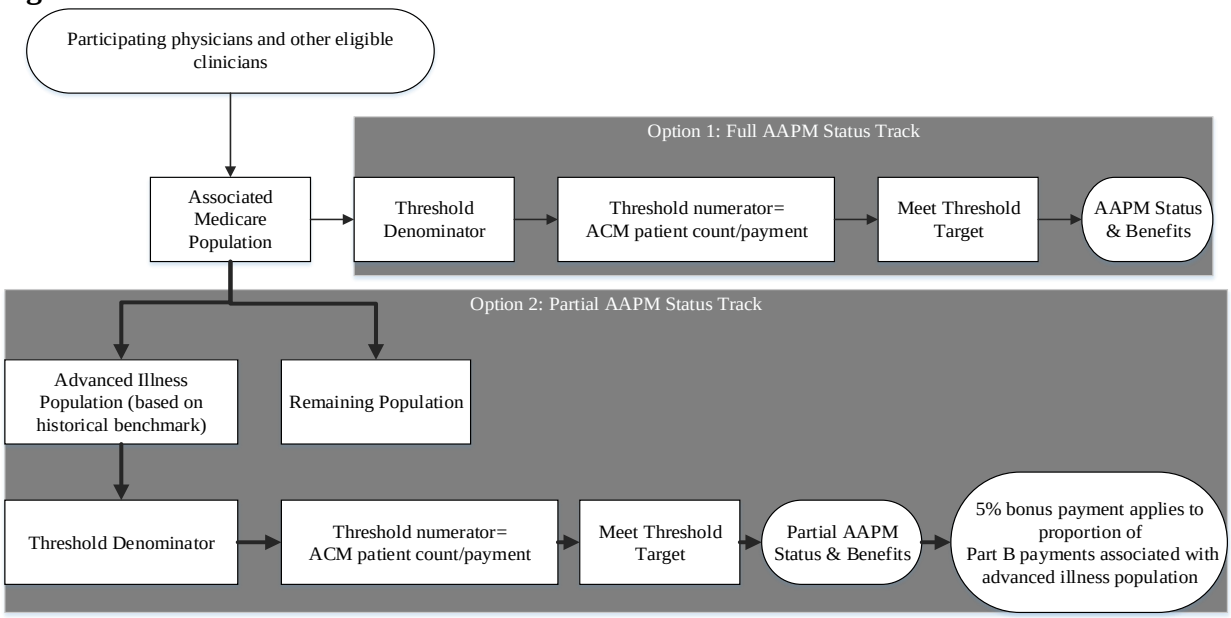


APPENDIX I: EXAMPLE OF PARTIAL AND FULL AAPM DETERMINATION UNDER THE ACM

We believe a partial AAPM fits within the MACRA's rules and provisions. MACRA defines the denominator for the QP threshold to be based on "attribution-eligible population". In the case of an ACO, the attribution-eligible population is the Medicare FFS population. In the case of the OCM, the attribution-eligible population is the subset of Medicare FFS cancer patients that meet the OCM eligibility criteria rather than all Medicare FFS cancer patients. The ACM population represents only about 4% of the Medicare population. If we use the ACM population as the denominator, then the ACM would provide a short-cut for physicians to achieve AAPM status, by simply aligning and focusing on the ACM as the sole APM effort. We believe such an approach would run counter to the threshold requirement whose goal is to incentivize QPs to expand the attributed population. Therefore, we propose two possible ways to define the denominator populations that are consistent with the QP threshold definitions and provide a balanced path for physicians and other eligible clinicians: full or partial AAPM status and benefits.

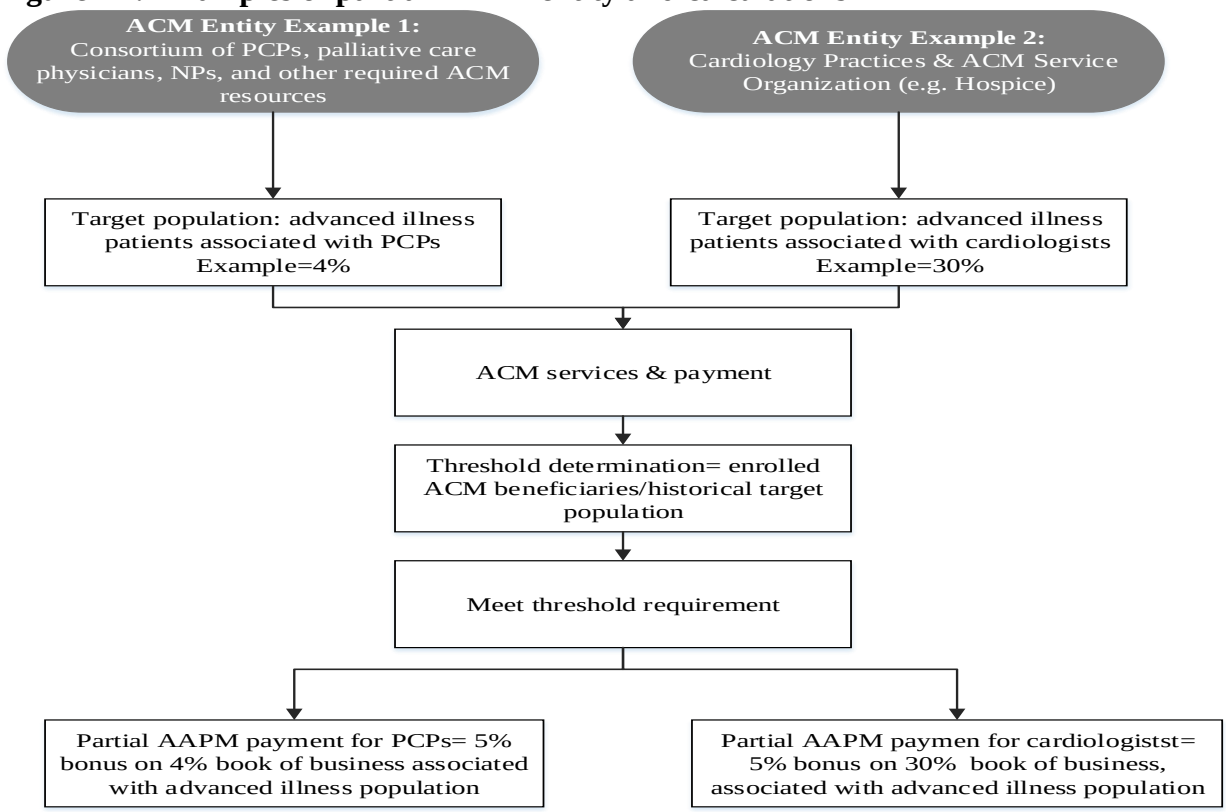
In the full AAPM definition, the ACM threshold denominator represents the Entity or clinician's overall Medicare FFS population. In the partial AAPM status, we propose that the denominator is based on the ACM eligible population only. In this scenario, if the appropriate threshold proportion is achieved, then the individual QP or Entity would have partial AAPM status and benefits. Quality reporting requirements could be partially waived and financial incentives proportionally applied. For example, the 5% AAPM bonus payment could be applied to the advanced care proportion (patient count or part B payment) of the overall Medicare FFS business (**Figure I-1**) vs. the overall Medicare FFS business.

Figure I-1. Full and Partial AAPM Determinations



We anticipate that the ACM partial AAPM option would be utilized for individual QP or Entity where the ACM is the only AAPM. We provide two examples of ACM Entities that may utilize the ACM partial AAPM, as shown in **Figure I-2.**

Figure I-2. Examples of partial AAPM entity and calculations



APPENDIX J: DRAFT OF ADDITIONAL INNOVATIVE FAMILY EVALUATION OF ACM SURVEY MEASURES TO BE FIELD TESTED BY CMS

DRAFT: Family Evaluation of ACM Survey:
Caregiver Support Composite Score with Survey Questions to be field by CMS

1	While your family was in the ACM, how often did you feel that the ACM asks about your emotional and physical health? A. Never B. Sometimes C. Usually D. Always
2	While your family member was in the ACM, how much emotional support did you get from the ACM team? A. Never B. Sometimes C. Usually D. Always
3	Did the ACM team give you the training you needed about how to help your family member with their medications and follow-up care? A. Never B. Sometimes C. Usually D. Always
4	How often did the ACM team listen carefully to you when you talked with them about problems with your family member's ACM care? A. Never B. Sometimes C. Usually D. Always
5	While your family member was in the ACM care, how often did anyone from the ACM team give you confusing or contradictory information about your family member's condition or care? A. Never B. Sometimes C. Usually D. Always
6	While your family member was in the ACM, how often did you feel that the ACM team really cared about your family member? A. Never B. Sometimes C. Usually D. Always
7	While your family member was in the ACM care, how much emotional support did you get from the ACM team? A. Never B. Sometimes C. Usually D. Always
8	While your family member was in the ACM, how often did the ACM team listen carefully to you? A. Never B. Sometimes C. Usually D. Always

Quality of Transitions from ACM to Hospice Survey & Composite Score to be field by CMS

If family member enrolled in hospice, please answer the following questions:

9 Was your family member or representative health care agent able to make decisions about hospice care without feeling pressured by the ACM team to make decisions they did not want?

A. Never B. Sometimes C. Usually D. Always

10 Using any number from 0 to 10, where 0 is the worst care possible and 10 is the best care possible, what number would you use to rate the guidance that you and your family member received about hospice care?

- o 0 Worst care possible provided by the ACM team
- o 1
- o 2
- o 3
- o 4
- o 5
- o 6
- o 7
- o 8
- o 9
- o 10 Best care possible provided by the ACM team

11 Using any number from 0 to 10, where 0 is the worst care possible and 10 is the best care possible, what number would you use to rate the support that you and your family member receive during the transition from ACM to hospice?

- o 0 Worst care possible provided by the ACM team
- o 1
- o 2
- o 3
- o 4
- o 5
- o 6
- o 7
- o 8
- o 9
- o 10 Best care possible provided by the ACM team

APPENDIX K: REPRESENTATIVE ORGANIZATIONS INTERESTED IN ACM IMPLEMENTATION

Organization Name	Type of Organization	Geography	Revenue*	Hospitals	Physicians	Populations
Aspire Health	Physician Group	19 States and DC				20,000 Advanced Illness MA Lives
ProHEALTH Care	Physician Group	NYC Metro Area	$500M		800	
Evolent Health	MSO	National	$49M			1.2 Million Care Management Members
Community Hospice	Hospice	Northeast Florida	$100M			
Hope West	Hospice	Western Colorado (5 counties)	$37M			
Compassus	Hospice	31 states, 164 locations				
UPMC	Health System & Health Plan	Western Pennsylvania	$10B	25	3,600	3 Million MA Lives
Sharp Health	Health System & Health Plan	San Diego	$3B	7	2,900	
Spectrum Health	Health System	Michigan	$5B	12	3,200	
Sutter Health	Health System & Health Plan	N. California	$10B	25	5,300	
Texas Health	Health System	North Central Texas (16 counties)	$4B	24	5,500	

Ochsner Health	Health System	SE Louisiana	$3B	30	1,100	
Allina Health	Health System	Minnesota/ Western Wisc	$4B	12	6,000	
Trinity Health	Health System	22 states	$16B	93	5,300	
Northwell Health	Health System	New York	$9B	21	2,700	
Aetna	Health Plan	National	$63B			1.2 Million MA Lives
Blue Shield CA	Health Plan	California	$13B			1.8 Million MA Lives
Priority Health	Health Plan	Michigan	$3B	115	34,000	750,000 Total Lives

*Based on publicly available information

APPENDIX L: BENEFICIARY NOTIFICATION & COMPARISONS TO OTHER MODELS

In designing its notification process, the ACM took other CMMI models with overlapping advanced illness population, including Independence at Home (IAH) and Medicare Care Choices Model, into careful consideration to create an extremely thorough enrollment process to ensure patient safety and choice. We believe that appropriate beneficiary notification should do all of the following:

- Explain the model, the ACM services and how it may or may not impact their care.
- Furnish the patient with a personalized description and conversation around their advanced illness and eligibility criteria
- Inform patients that they retain freedom of choice to choose providers and services.
- Explain how patients can access care records and claims data through an available patient portal and through sharing access to care-givers to their electronic health information.
- Advise patients that all standard Medicare beneficiary protections remain in place, including the ability to report concerns of substandard care to Quality Improvement Organizations (QIO)
- Explain the ACM's structure and the existence of the financial arrangement/payment structure
- Provide a list of providers and suppliers of the ACM entity and explain the right to opt out.

Comparison of Beneficiary Notification Processes							
Category	ACM	MCCM	IAH	EPM	OCM	Hospice	ACOs *(MSSP and Next Generation)*
Timing of Notification	Pre-enrollment	Within 3 days of Enrollment	Pre-enrollment	Upon admission	Enrollment	Notice of Election (NOE) (which must be followed by notice to its Medicare contractor within 5 calendar days after the effective date of the election statement)	At Point of Care
Details: Must explain model and services and possible affect for beneficiary care	Pre-enrollment	Once a hospice eligible patient, who meets the Model's criteria stated in the RFA, signs and agrees to participate in this Model, then the hospice will conduct a comprehensive assessment that follows the hospice CoPs (42 CFR 418.54). The hospice must also complete the initial discussion and related documents to achieve patient-centered goals within 3 days of enrolling a beneficiary into this Model	Beneficiaries will receive general notification about the program and what it means for their care.	Upon admission	Enrollment	Content of election statement. The election statement must include the following: (1) Identification of the particular hospice and of the attending physician that will provide care to the individual. The individual or representative must acknowledge that the identified attending physician was his or her choice. (2) The individual's or representative's acknowledgement that he or she has been given a full understanding of the palliative rather than curative nature of hospice care, as it relates to the individual's terminal illness. (3) Acknowledgement that certain Medicare services, as set forth in paragraph	No – beneficiary notification includes that their ACO providers are participating in the Shared Savings Program and of the opportunity to decline data sharing to the ACO
Explanation around diagnosis/prognosis-related eligibility criteria	Pre-enrollment		None	None	None		None
Freedom of Choice to choose providers and services	Pre-enrollment	None	None	Upon admission	Enrollment		None
Advise patients that Medicare	Pre-enrollment	None	None	Upon admission	Enrollment		None

beneficiary protections remain in place						(d) of this section, are waived by the election. (4) The effective date of the election, which may be the first day of hospice care or a later date, but may be no earlier than the date of the election statement. (5) The signature of the individual or representative.	
Financial arrangement structure	Pre-enrollment	None	None	Upon admission	Enrollment		Yes – notification is carried out when an ACO posts signs in its facilities, and in settings in which beneficiaries receive primary care services, by making standardized written notices available upon request
Providers and suppliers within entity	Pre-enrollment	None	None	Upon admission	None		None
Right to opt out	Pre-enrollment	None	None		None		None, not of the Shared Savings Program; right to opt out of data sharing to the ACO
Data sharing	Pre-enrollment	None	None	Upon admission	None		At point of care; via posted sign or upon request of beneficiary, a copy of standardized letter with the information provided in the poster
Explanation of how patients can access care records and claims data	Pre-enrollment	None	None	Upon admission	None		None

APPENDIX M: BENEFICIARY AND PROVIDER USER JOURNEYS

Beneficiary User Journey	
START	Beneficiary is identified by clinician involved in their health care as having advanced illness.
	↓
Pre-enrollment	Beneficiary discusses advanced illness with clinician involved in their health care and is referred to the ACM.
	↓
	Beneficiary receives assessment by ACM clinician to confirm eligibility.
	↓
	Beneficiary receives ACM Notification which includes: an explanation of the ACM services and payment structure, description of advanced illness and eligibility criteria (including prognosis), possible impact on beneficiary care, statement that the beneficiary retains freedom of choice to choose providers and services, explanation of how patients can access care records and claims data, statement that all existing Medicare beneficiary protections continue to be available to the beneficiary, a list of providers and suppliers of the ACM entity and the right to opt out.
	↓
Enrollment	Beneficiary is enrolled in the ACM unless he/she chooses to opt out of the services.
	↓
Within the first 14 days	Beneficiary begins advance care planning with ACM clinician which includes exploration of goals, values and preferences and continued discussions of disease process and prognosis.
	↓
Care Transition and Care Coordination	Beneficiary receives ACM services, including review of their advance care plan, on an ongoing basis through a mixture of face-to-face and telephonic encounters that would be proactively deployed based on needs.
	↓
	Beneficiary may choose to pause or discontinue ACM services as they wish. Beneficiaries may receive ACM services until beneficiary dies, is enrolled in hospice, disenrolls, or moves outside the ACM entity's service area.

Primary Care Providers and Specialist Journey	
START	Identify patient as having advanced illness. ↓
Pre-enrollment	Discuss advanced illness with patient. ↓ Make a referral to the ACM team ↓ Receive communication by the ACM team, confirming eligibility status ↓
Payment starts	Receive confirmation of ACM enrollment and how ACM team will provide ongoing support and resources to PCP and specialists in their care for the patient ↓
Within the first 14 days	Receive electronic copy of the ACM care plan on their advanced care planning status with patient. ↓
Care Transition and Care Coordination	Receive updates about the ACM assessment, care plan, other services such as alert about hospitalization, regular communication, consultation and facilitation of follow-up care/treatment/diagnostic tests for patient ↓ Receive information about next level of care and coordination with ACM and patient/family on shared decision-making about next steps: hospice or discontinuation of ACM services

Discharge Process to Hospice: The beneficiary and family members will have had multiple conversations, with one another and their health care team, regarding the hospice benefit. The beneficiary will have chosen to elect hospice through shared-decision making with their physicians and the ACM team. The beneficiary will have been notified that the ACM team has coordinated the arrangements for hospice care with the beneficiary's choice of hospice provider, and that the ACM care program will end when hospice care begins. The discharge process is completed once the beneficiary is enrolled in hospice. The beneficiary will have given information about how to re-enter the ACM program if they no longer want or need hospice.

Discharge Process When Patient Moves Outside of the Service Area: The beneficiary will have been notified by the ACM team that the ACM service will end and that the ACM patient records have been shared with their new PCP. Also, the beneficiary will have received a list of recommendations by the ACM team about any other ACM or similar programs in the patient's new service area and steps to take with their new care team to support a smooth transition.

Discharge Process When Patient Chooses to Discontinue the ACM because they no longer have advanced illness or no longer want the service: The beneficiary will have participated in shared decision making with their physicians and the ACM team to reach determination that their condition has improved and they no longer have advanced illness and or no longer want the ACM services. The beneficiary will have been notified by the ACM team that the ACM services will end and that the ACM care summary have been shared with their PCP and active specialists. The beneficiary will have received a list of recommendations by the ACM team of steps to take to maintain their health and when to consider re-accessing the ACM care in the future.

APPENDIX N: ACKNOWLEDGEMENTS

The ACM was designed with the invaluable input of innovators and health care leaders. We would like to acknowledge the planning committee for their dedications to ensure the ACM represents the collective knowledge of advanced care models across the U.S. These planning members include:

- C-TAC: Khue Nguyen, Brad Stuart, Tom Koutsoumpas, Randy Krakauer, Gary Bacher, and Mark Sterling;
- Aetna: Alena Baquet-Simpson;
- Aspire Health: Brad Smith;
- Northwell Health: Kristofer Smith;
- Priority Health: Greg Gadbois;
- Sutter Health: Lori Bishop, Beth Mahler and Monique Reese;

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