

THE ADVANCED CARE PROJECT

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Executive Summary

The Advanced Care Project, co-sponsored by the Coalition to Transform Advanced Care (C-TAC) and the AHIP Foundation, has convened innovators from health systems and health plans to develop: a clinical model of care for patients and families living with advanced illness; a payment model framework that supports the transition from fee-for-service (FFS) toward performance- and risk-based reimbursement; and the identification of key considerations and issues related to operationalizing an advanced care program. This Report provides a summary of the clinical and payment model findings and outlines next steps for the Project, which include:

1. Using the report as a vehicle to share best practices to encourage the development and implementation of advanced care models;
2. Developing a framework and details for alternative payment approaches (outlined in this report) that enable an environment conducive to implementing successful advanced care models and provide a transitional pathway from FFS care;
3. Identifying, categorizing and, where necessary, developing metrics to support the payment model and encourage performance improvement with a significant focus on the development of quality and care experience measures; and
4. Bringing attention to key planning and structural considerations important to operationalizing an advanced care model, taking into account regulatory guidelines and other issues.

Today, as the Baby Boomer generation begins to age and more Americans begin to live longer than in previous generations, many individuals will experience some form of serious or *advanced illness* during later stages in life. Advanced illness occurs when one or more conditions become serious enough that general health and functioning begin to decline with little chance of recovery, a process that extends to the end-of-life. Unfortunately, many individuals in this population receive care that is fragmented, uncoordinated, or inadequate to meet their growing needs and personal wishes.

In response to the shortcomings of traditional care for the growing population of patients with advanced illness, pioneering provider groups and health plans have created innovative models to coordinate treatment and palliation, unify fragmented providers and settings, and move the focus of care for late-stage chronic illness out of the hospital and into the home and community (see Appendix for these models). These innovators have come together to formulate a more standardized clinical model that is now commonly termed “Advanced Care” that can be implemented in various communities and care settings.

Advanced care creates a continuum between intensive medical management of complex chronic illness, palliative care and hospice, and promotes appropriate use of these services. It assures that intensive management can continue if needed, but that comfort measures and those aimed at supporting psychosocial needs are also provided. Advanced care helps ensure good clinical outcomes, supports personal choice, prevents unwanted procedures and hospitalizations, and makes the care of serious illness more affordable, as illustrated by data from health systems like Sutter Health¹ and health plans like Aetna².

Through continuous education, planning and shared decision-making, advanced care provides an avenue for the direct participation of patients and family caregivers in developing their own unique, personalized care plan. At the same time, advanced care provides the integrated package of services that patients and families want, such as assistance with navigation through the complex healthcare network, palliation of symptoms, psychosocial, spiritual and culturally sensitive care, and home-based and community support.

This Report provides a framework for advanced care constructed out of best practices drawn from leading programs across the US. The ultimate goal of the Advanced Care Project is to disseminate this framework to encourage adoption and implementation of advanced care models that boost quality, support choice, and increase affordability of care for all Americans with advanced illness along with their families, caregivers and clinicians. Moving forward with such a model of care will help unify and strengthen our healthcare system and help make Medicare more sustainable for future generations.

Background

Our health care system's fragmented approach to the treatment of chronic illness extracts a heavy toll from some of its sickest and most vulnerable patients and their families. Change has been slow to arrive, particularly in certain areas of the country. Wide regional variations in quality, utilization and cost of care for patients with serious chronic diseases have been reported for decades.³

Barriers to improvement do not stem from a lack of new ideas. For several decades, palliative care consultation services have grown steadily in hospitals to better serve patients with advanced illness. Many innovative models, a few of which have already received Center for Medicare and Medicaid Innovation (CMMI) support, have produced scalable, replicable and sustainable solutions that interface and collaborate with palliative

care, incorporating it into a care management system that integrates inpatient, ambulatory, home and community settings over time. The challenge now is to spread and test these new models in a coordinated fashion to develop nationally recognized models of clinical care and payment that can be widely adopted by providers and payers, including Medicare.

Advanced Illness: Challenges and Responses

People suffering from advanced illness — multiple chronic conditions with declining function and poor prospects for full recovery — often fall through the cracks in current programs and providers. Like complex care patients, people with advanced illness have multiple chronic conditions, but their decline in health and function is more pronounced, may be faster, and in many cases irreversible. Patients are not the only ones that need additional support. Family caregivers also have increasingly expanded roles and responsibilities in caring for those with advanced illness. During the last year of an ill person's life, family care averages nearly 66 hours per week.⁴ There is insufficient training and support for this shift of medical care from the nurse to the family caregiver. In many cases, caregivers have had no training to perform these tasks and have had to learn on their own.⁵ A recent report issued a call for collective action across all professions to support family caregivers.⁶

Our health system has generally not done well in providing patients with advanced illness and those not yet ready or qualified for hospice with a path that gives them the broad levels of coordinated support that they need to maintain independence at home or in the community. Most of these people are not yet eligible for hospice, and many who do qualify are reluctant to enroll, or their physicians are unwilling to refer them.⁷ Palliative care has taken hold in most large hospitals and is beginning to become more common outside the hospital. However, a recognized, widely available operational clinical intervention integrating inpatient, ambulatory, home and community settings does not yet exist. Likewise, a nationally recognized model that includes both disease-modifying treatment and palliative care, along with transition management, longitudinal advance care planning, and an integrated set of medical benefits and social service supports remains yet to be developed.

Advanced Care: Creating a New Continuum of Care

The Institute of Medicine (IOM)'s 2014 Report, *Dying in America: Improving Quality and Honoring Individual Preferences near the End of Life*, calls for “breaking down a range of

silos, for example, between “curative” and palliative care, between professional groups so as to foster interdisciplinary practice, and between traditional medical and social services...” in order to provide high quality, coordinated care delivery for individuals and their families throughout the course of illness. In line with the IOM Report, **Advanced Care** fills a void in the continuum of clinical services available to patients with advanced chronic illness:

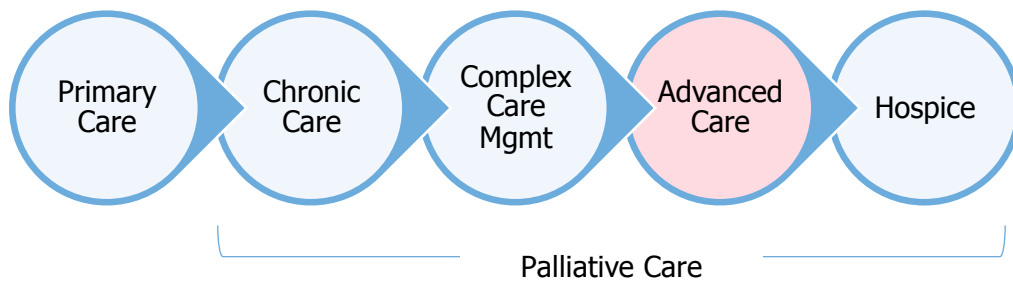


Figure 1. This diagram illustrates how modes of care can evolve along the spectrum of chronic illness progression. Hospice is defined by Medicare regulations and palliative care is a philosophy of care and medical specialty that relieves suffering at any stage of illness. The other components are broad categories of care that often overlap. Primary care physicians, for instance, may provide chronic care along with preventive and other services. Similarly, advanced care is not a service line or a specialty, but rather a framework that can help fill care gaps and provide a common structure for transitional care models that may differ in various clinical and cultural settings.

Advanced care is designed to interface and actively collaborate with care delivery lines, upstream and downstream (see Figure 1), including:

Service Line	Interface with Advanced Care
<p>Complex care management, sometimes called “hot spotting,”⁸ targets patients with chronic illness who undergo frequent emergency visits and hospitalizations when their condition(s) may not be optimally managed. The goals of complex care management are to help patients recover from acute clinical downturns and also to reduce the frequency and severity of these episodes. Patients receive more focused and intensive medical management than they would</p>	<p>Provides framework to identify and provide person-centered care for the subset of complex management patients who need advanced illness services (e.g., palliative care, advance care planning). Interventions used in complex care management and advanced care management are often similar in structure. However, advanced care management often involves a more</p>

<p>through normal doctor visits.</p> <p>Although those with complex conditions may ultimately go into decline, this population characteristic is not necessarily defining of a complex care population. As such, advanced illness may be a feature of some complex care models, however these attributes are not usually emphasized.</p>	<p>intensive set of interventions such as providing for a greater number of visits and broader range of supports in the home.</p>
<p>Palliative care is “an approach that improves quality of life of patients and their families...through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other symptoms and other problems, physical, psychosocial and spiritual.”⁹</p> <p>Palliative care is embedded in chronic care, complex case management, advanced illness care and hospice care, providing “an extra layer of support.”¹⁰ As a medical subspecialty, palliative care is generally provided through physicians or advanced-practice nurses and often team members from other disciplines.</p> <p>Palliative care consultation services are now available in a majority of large hospitals, especially academic centers, but according to the IOM recent report, <i>Dying in America</i>, many of these have been “developing unsystematically, and so at present lack standardization with respect to management processes, services, and methods of integration with other health services.”</p>	<p>Applies palliative care systematically in the home and community, integrating it with existing services – both social and medical – in all settings in order to provide an individualized blend of advance care planning, disease-modifying/"curative" treatment, and palliation.</p>
<p>Hospice is an integrated, interdisciplinary team-based, capitated Medicare benefit, that provides pain and symptom management along with psychosocial, spiritual support for patients</p>	<p>Advanced care implementation promotes optimal use of hospice, by encouraging earlier adoption and enrollment into hospice in appropriate</p>

<p>and families living with a terminal illness. To enroll in the hospice benefit, patients must have a life expectancy of six months or less assuming the disease runs its normal course, and they must forego “any Medicare services that are related to the treatment of the terminal condition for which hospice care was elected”.¹¹</p> <p>Recently, CMS launched the Medicare Care Choices Model (MCCM) that would allow Medicare beneficiaries who qualify for hospice care to concurrently receive the palliative and supportive care services offered through hospice along with the treatments offered by their curative care providers. This demonstration project allows individuals to receive a more complete, comprehensive array of care options and gives them greater choice in determining treatment outcomes. However, the MCCM applies only to patients who are already eligible for hospice, not to those who are still engaged in treatment.</p>	<p>cases.</p>
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The **Advanced Care framework** facilitates integration of existing service lines (as referenced above) for patients, across multiple dimensions. In its ideal application, a “team of teams” approach coordinates care across clinical settings and over time. Specially trained, physician-directed interdisciplinary teams operate in hospitals, physician practices, homes and the community. These teams connect with patients, families and each other in real time through electronic health records (EHR), if available, and sophisticated telephone management. Integrated health systems are equipped to put these assets in place or to retrain existing care managers, but non-integrated provider groups, e.g. medical groups, home health agencies or others, can also deploy them. In non-integrated settings the model could be operated through partnerships that function to integrate and coordinate care. This arrangement would support new payment structures (e.g. shared savings and/or shared risk).

Advanced care integrates healthcare operations in order to:

- Target the high-risk, high- need advanced illness population (3-4% of Medicare beneficiaries);
- Provide comprehensive transitional and post-acute care;
- Establish reliable and efficient handoff processes among teams and settings;
- Furnish interdisciplinary high-impact visits in hospital, office/clinic and home;
- Employ proactive telemanagement;
- Promote effective and timely communication across all clinical settings;
- Engage the personal physician (primary care and/or specialist) as a core member of the team;
- Deliver advance care planning over time at the person’s own pace and in their preferred setting;
- Educate, counsel and support individuals, families and caregivers in self-management;
- Extend the reach of palliative care into the community;
- Optimize electronic medical record or care management systems; and
- Facilitate the integration of social and clinical services.

The Advanced Care Framework

A. Guiding Principles

Participants in the Advanced Care Project (ACP) have adopted five consensus principles of care:

- ***The eligible population is defined:*** Individuals progress into a stage of advanced illness when their clinical condition becomes resistant to treatment and they experience clinical decline. Clinical decline and its progression are observable, definable and measurable.

- ***Personal values drive care decisions.*** Care decisions in advanced illness should be primarily driven by the values, goals and preferences of the individual who is ill and family members. These values, goals and preferences should be elicited and documented in a continuous process as illness evolves. This process should respect the dignity of individuals who are ill and maximize their choices. Specific efforts should be employed to help patients and *their families* explore and clarify the goals and values that are most important to them at this critical time in their lives. In addition, clinical information, care planning, decision aides and clinicians' opinions should be used as educational tools to facilitate shared decision-making. Finally, it is crucial that these efforts support thoughtful and in-depth discussions between the patient and those closest to the patient as well as between the patient and the care team.
- ***Care management promotes system and social services integration.*** People with advanced illness undergo treatment in discontinuous episodes by multiple specialists in separate care settings. From 2003 to 2007, for example, there was a sharp increase in the number of patients who saw ten or more physicians in the last two years of life.¹² Care management of advanced illness should coordinate and integrate care and provide support across settings to minimize unwanted and/or duplicative interventions, aid in navigation among disparate providers, and maximize support for ill persons and their caregivers. It should also focus on integrating social supports and services available in the community and that are often critical for those with advanced illness and their families and caregivers.
- ***Population management supports risk-bearing care models.*** Advanced care is a population-based approach. Outcomes and services are measured and valued at a population level rather than just service encounters between individual clinicians and patients. This population management strategy should promote collaboration and synergy with other evolving care models, including Patient-Centered Medical Homes (PCMH), accountable care organizations (ACOs) Medicare Advantage, and other risk-based or global payment/capitated models
- ***Operational design promotes workforce efficiency.*** Advanced care employs multidisciplinary teams, leveraging the work of clinicians and care extenders such as physician assistants and nurse practitioners. This approach maximizes scarce resources and drives efficiency. It also engages and supports primary physicians in the care of their sickest patients, a factor that correlates with success in prior Medicare demonstrations.¹³

These Framework principles are expanded into operational elements in Figure 2:

Figure 2: Operationalizing Advanced Care

<p>Population Definition</p> <ul style="list-style-type: none"> • Describe the population of people with chronic conditions, declining function and poor prospects for full recovery. • Design a reliable and proactive identification process that operates through referrals and/or by predictive modeling using administrative-level claims and clinical data. • Select and enroll patients that have a high probability of benefiting from intervention, i.e. those with advanced illness. • Formulate discharge criteria to ensure continuity of care and to distinguish population and services from other benefits or health care services. 		
<p>Intervention Principles</p> <ul style="list-style-type: none"> • Serve “people” before “patients.” Many people with advanced illness want to avoid being patients. Define value, business model and metrics accordingly. • Personal goals drive clinical goals. Shift engagement process to ensure personal relationships lead clinical relationships. To aid personal orientation, develop staff competencies in communication (e.g. health literacy) and engagement (e.g. conflict resolution and motivational interviewing). Care planning should first focus on the goals and values of the person with advanced illness rather than on the goals and values of treatment of the person’s disease. It is only with this approach that informed consent of the person is possible. • Focus on personal preference as free, informed choice among all available options for care. 		
<p>Care Management</p> <ul style="list-style-type: none"> • Coordinate care across all clinical settings, over time as condition progresses, via communication in real time • Move focus of care from hospital to home/community • Provide care management through interdisciplinary 	<p>Advance Care Planning</p> <ul style="list-style-type: none"> • Promote advance care planning through continuing conversations over time, at ill person’s pace, in 	<p>Treatment and Palliation</p> <ul style="list-style-type: none"> • Develop individualized care plan driven by personal preference and clinical/psychosocial/spiritual needs. • Provide customized blend of disease-modifying treatment + palliative care

<p>teams supervised by an engaged leading physician</p> <ul style="list-style-type: none"> • Implement collaborative care coordination: engage individual, family, caregivers, physicians and other clinicians, other care managers, and community partners e.g. public agencies, churches, and community navigators 	<p>safety and comfort of home</p> <ul style="list-style-type: none"> • Ensure that preferences for care are communicated, documented, available and followed by clinicians at all points of care 	<ul style="list-style-type: none"> • “Tune” treatment to preferred level of symptom control • Alter care plan as preferences evolve through illness progression
<p>Environment:</p> <p>Take advantage of existing or developing operational and financial innovation. Collaborate where possible such as through the use of clinical integration networks (CIN’s), post-acute networks, ambulatory and home-based palliative care, complex case management, patient-centered medical homes, and collaborative networks that coordinate healthcare, public health and social services.</p>		
<p>Messaging and Communication:</p> <ul style="list-style-type: none"> • Prioritize active, positive messaging and communication, (e.g. “advanced care”) that implies active, value-driven engagement with clinicians and the public. 		
<p>Payment Model:</p> <ul style="list-style-type: none"> • Align incentives and provide a bridge from fee-for-service toward risk-based, performance-based and value-based reimbursement consistent with broader payment reform efforts. 		



<p>Evaluation</p> <ul style="list-style-type: none"> • Standardize process and outcome metrics such as personal experience of care, clinical outcomes and cost • Implement measures that help guide implementation to help improve effectiveness of interventions
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B. Advanced Illness Metrics

Evidence supporting high-value advanced care must be developed and reported in a consistent manner in order to improve performance and to justify reimbursement from multiple payers. Additionally, a solid knowledge base of the impact of advanced care on quality, care and cost must be created. An initial set of metrics of structure, process and outcome for advanced care is proposed to stimulate dialogue and development activities. Further elaboration will be needed to specify metrics to facilitate collaborative learning, develop and test payment models, and strengthen the knowledge base. The ACP will prioritize development and testing of new metrics on person-centered *quality and care experience* while at the same time, promoting common reporting of available metrics such as those in the recent Institute of Medicine’s report, *Vital Signs* (2015)¹⁴.

Initial Proposed Metrics

Structure	Process	Outcomes
<ul style="list-style-type: none"> • Use of an electronic data management system to proactively track patient care statuses (including tracking of ESAS and PPS scores and PHQ9 and FAST scores). • Communication with physicians through Electronic Health Records (EHR) • Frequency of Advanced Care service encounters by discipline and site of care • Use of mobile apps to support patients and family caregivers 	<ul style="list-style-type: none"> ▪ Documentation of individual goals, values, preferences, quality of life, and social and non-medical needs with updates in regular patient encounters • Documentation of care coordination activities between providers and sites of care • Documentation of informed decisions and how they align with individual’s preferences and values with updates in regular patient encounters • Documentation in care plan of symptom 	<ul style="list-style-type: none"> • Patient quality of life, and patient-reported outcomes measures – including functional status • Family caregiver quality of life • Caregiver burnout/support • Patient and family care experience • Care consistent with documented preferences • Hospital days in the last 12 months of life, by month • ICU days in the last 12 months of life, by month • 30-day readmissions

	<p>management status, anticipatory plan for home safety, description of social network and support system, and other domains with updates in regular patient encounters</p>	<p>rate in the last 12 months of life, by month</p> <ul style="list-style-type: none"> • Hospice transfer rate and Length of Stay (LOS) • Program cost in the last 12 months of life, by month • Total cost of care in the last 12 months of life, by month • Place of death (e.g., hospital versus the home)
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As our knowledge base on measurement is further enhanced and refined, we expect to adopt a framework that seeks to group, classify, and evaluate metrics in relation to their effectiveness in:

- Encouraging and enabling performance improvement;
- Enabling value & population based payment;
- Promoting quality measurement and associated monitoring; and
- Engaging patients and consumers as well promoting changes in our health care system’s institutional and professional constructs that supports patient and person centered care

Measures would be evaluated in relation to the evidence supporting them, their effectiveness and feasibility of implementation (near and short-term), taking into account the availability of data and the desire to minimize burden in data gathering.

C. Population Definition

Advanced care is appropriate for any member of the population with advanced illness. These individuals have four defining attributes, each associated with specific factors identified through clinical trials:^{15 16}

- The person is in functional decline that is unlikely to reverse and life expectancy is limited;
- Medical condition/s have become increasingly resistant to treatment, although treatment may continue;
- Disease-modifying treatment may not increase life expectancy but may cause discomfort;
- The nature of the decline is such that the person effected does or is likely soon to benefit from closing gaps in care that can avoid unnecessary and frequent hospital admissions or emergency room visits; and
- Preference-driven supportive care alone may provide equal or longer survival.

Descriptive criteria used to define the advanced illness population are of two types:

- General clinical criteria can be used in any clinical setting. Together with clinical judgment, they can support referral to advanced care services, and they can also help stimulate discussions about personal preferences and shared decision-making.
- Disease-specific, detailed clinical criteria are accessible from medical records, electronic health records and specialty medical services. They consist of specific clinical events, laboratory values, imaging studies and other clinical findings. An emerging trend is the use of algorithms and predictive modeling to quickly identify those likely to benefit from an advanced care model.

As highlighted in the case studies included with this report, there are different methods for defining the population. How the population is defined also helps determine the appropriateness of different interventions in the care of those falling within the defined population. As results are compared across advanced care models, it will be important to consider potential differences in the included population to assess any difference in results.

Outlined below are illustrative details concerning how specific clinical criteria can be considered and incorporated as part of the process of defining the population covered in an advanced care model.

Evidence Base for Defining the Advanced Illness Population

Meta-analyses of controlled trials^{15 16} have developed clinical criteria for identifying the advanced illness population. These criteria describe a seriously ill cohort for whom advanced care can increase both quality and affordability of care. Selecting a seriously ill cohort for intervention is important. Many participants in previous Medicare demonstrations failed to improve outcomes because they did not target patients who were sufficiently ill enough to benefit from intervention.¹³

Once chronic illness reaches the advanced stages, as defined here, it becomes increasingly resistant to disease modifying treatment across all diagnostic groups.^{15 16} With a few notable exceptions such as beta-blockers in advanced systolic heart failure, disease-modifying treatment in very late-stage illness on average does not prolong survival. In fact, supportive care alone may help seriously ill patients live longer than they would with standard treatment.^{17 18 19} Therefore, shifting the focus of care from hospital to home, assuming that this is what the patient wants, can increase quality of care.

General Clinical Criteria

These descriptors are familiar to any clinician who cares for seriously ill patients. As criteria to identify patients with advanced illness, they are intuitive to physicians, mid-level practitioners, nurses, and social workers.

Recurrent or extensive disease	<ul style="list-style-type: none">Advanced stages of: heart failure, chronic obstructive pulmonary disease (COPD), cancer, coronary artery disease, chronic kidney disease, peripheral vascular disease, diabetes, chronic liver disease, dementia, autoimmune disease, neurological/neuromuscular disease, others;Widespread metastasis, lab abnormalities, and/or multiple diagnosis-related ER visits & hospitalizations
Active functional or nutritional decline	<ul style="list-style-type: none">Karnovsky Performance Status (KPS), ECOG scores, Activities of Daily Living (ADLs)Involuntary weight loss, reduced intake, cachexia
Supplemental Factors	<ul style="list-style-type: none">Comorbid illnessAdvanced age

	<ul style="list-style-type: none"> • Eligibility for hospice but reluctance to enroll on the part of patient or physician • Lack of social support or networks
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Predictive Modeling

Predictive modeling offers an alternative way to identify the target population, or it may be applied in conjunction with or to supplement referral criteria. The method involves use of electronically reportable data variables that can correlate to clinical criteria. Clinician verification is needed to confirm eligibility. Common variables often include patterns of past hospitalization and ER use, diagnoses, and age. The LACE+ index tool is an example of a tool that could be used to develop a standardized predictive analytic instrument. LACE, an index to predict early death or unplanned readmission after hospital discharge, uses **L**ength of stay, **A**cuity of admission, **C**omorbidities measured by the Charlson comorbidity index²⁰ score, and **E**mergency department use. LACE+ index²¹ incorporates the addition of patient age and gender; teaching status of discharge hospital; acute diagnoses, procedures and number of days that alternative care performed during index admission; and number of elective and urgent admission in the year before index admission.

Operationalizing Population Definition

General clinical criteria can be used to identify the core population eligible for advanced care interventions. The population identification process should be reliable and consistent to ensure that individuals who would benefit from advanced care are identified and exclude those who would benefit more from other population health services. This level of specificity is critical for program evaluation and determining eligibility for reimbursement.

Important operational steps include:

- Create an eligibility tool with explicit criteria;
- Set up program enrollment and discharge criteria;
- Identify roles and steps for eligibility determination;
- Engage clinicians in the identification process;

- Apply the identification process in diverse settings to maximize capture rate; including: hospitals, physician offices, home health agencies, long term care facilities;
- Implement a review or QA/PI process and track findings; and
- Develop a registry to track both identified and enrolled populations.

While programs differ many establishing advanced care models seek to include people in the program that may be two to three years from end of life. A common goal across programs is to provide access to advanced care at a stage that is sufficiently “upstream” from end of life such that the program affords an opportunity to significantly improve quality of life and to help avoid unnecessary acute spells and accidents resulting in hospitalization or emergency room use.

D. Care Delivery Structure and Process

Evidence Base for the Advanced Care Clinical Model

The advanced care approach employs care management principles from tested chronic care and care transition models to knit together existing service lines (e.g., palliative and hospice care, disease modifying treatment) to meet the unique needs of seriously ill patients and their families. A short description of some of the programs from which these principles are derived is provided below.

Community-Based Advance Care Planning: Respecting Choices®, originally developed at Gundersen Health System in La Crosse, WI; now applied internationally, uses established principles of learning theory to engage people with serious illness to increase them and their surrogates’ understanding of their own values and goals and to apply this enhanced awareness to the advance care planning process. Randomized trials^{22 23} have shown that the intervention: 1) helps selected surrogates to better know values and goals of the person for whom they may have to exercise substituted judgment; 2) works for people of diverse cultures, age and educational levels; 3) is highly valued by patients and surrogates; and 4) prepares patients and surrogates to make better decisions when they are needed as illness progresses to its advanced stages. The advanced care clinical model ensures that the delivery system provides care that is completely aligned with preferences that have been elicited and documented through the community-based advance care planning process.

Patient-Centered Medical Home (PCMH) and Chronic Illness Management: Wagner, author of a seminal article²⁴ on chronic care management, summarized eight specific changes required of medical practices to become PCMHs.²⁵ These principles include: 1) engaged leadership; 2) effective quality improvement strategy; 3) empanelment of individual patients with specific providers and care teams; 4) continuous team-based relationships; 5) evidence-based care; 6) organized, patient-centered interactions; 7) enhanced access, and 8) coordinated care. All of these practices are used in designing and implementing the advanced care model, which uses multidisciplinary teams that integrate primary and specialty care, patient/family/caregiver self-management, and decision support for the individual and clinicians using evidence-based guidelines.

Hospice Care: While advanced care models serve a broader population not yet eligible for hospice, it incorporates many of the features of the hospice model such as: person-centeredness, provided by an interdisciplinary team, and includes services such as pain and symptom management, psychosocial support, and spiritual care.

Palliative Care: Chronic care alone is not sufficient for comprehensive management of advanced illness. Because members of this population lie at the far end of the trajectory of chronic illness, principles of chronic care management must be extended to include important elements of palliative and end-of-life care. The National Quality Forum's National Framework and Preferred Practices²⁶ for palliative care include many elements of the advanced care approach.

The advanced care model employs a customized mix of disease modifying and palliative care, driven by clinical indication and patient preference and evolving with illness progression and the changing individual choices. This evolution of care is fueled by continuous education, as well as comprehensive advanced care planning. Advanced care engages family and caregivers, includes psychosocial and spiritual care, and provides home-based and community support.

Care Transitions: By utilizing Coleman's²⁷ and Naylor's²⁸ practices on managing transitions of high-risk patients from hospital to home, advanced care supports individuals through transitions among multiple care sites, evolving preferences, and modes of care. Advanced care also emphasizes the three critical elements needed to prevent 30-, 60- and 90-day readmissions: nurse-led teams, close collaboration with primary physicians, and home visits shortly after discharge.²⁹

Building Care Model Operations

The Advanced Care Model incorporates key components of population health. Common elements include proactive identification of the target population, multidisciplinary team care management, delivery of services through direct and virtual encounters, emphasis of care coordination, close partnership with physicians, collaboration with health plans and other payers, and leveraging electronic medical records. Advanced care can be considered a specialized population health management program. The model must fully utilize common population health components as well as integrate them with palliative care and advance care planning to become a unified care management system.

The Advanced Care Model can be implemented flexibly in a wide variety of health care settings. The effort may be led by an integrated health system, a hospital system, health plan, physician group, or home-based provider, e.g., home health or hospice. In non-integrated settings the model could be implemented and operated through partnerships wherein each entity has accountability for a core component of the delivery model and risk is shared. In an ACO structure, the health plan could furnish administrative and data support and telephonic case management while a physician group provides office and clinic-based care, a home health agency provides home-based palliative care, and a hospital furnishes inpatient palliative care.

Type of Organization	Core set-up components
Health System	<ul style="list-style-type: none"> • Support coordination between hospitals, physicians, and home-based care providers • Help ensure maximal use is made of home-based care providers and/or embedded care managers, along with associated care management infrastructure
Hospital Group	<ul style="list-style-type: none"> • Build out home visit and telephonic care management capabilities • Partner with community-based physicians and home-based care providers (e.g. home health and hospice)
Medical Group	<ul style="list-style-type: none"> • Build out home visit and telephonic care management capabilities • Health Plan may provide case management services for Medical Group • Partner with hospitals to provide inpatient care management • Partner with home-based providers (e.g. home health and hospice)
Home Health	<ul style="list-style-type: none"> • Partner with community-based physicians

or Hospice	<ul style="list-style-type: none"> • Build out telephonic care management capability and expand on its home visit capabilities • Partner with hospitals to provide inpatient care management • Create safeguards against home health or hospice referral inducement
Health Plan or Public Payer	<ul style="list-style-type: none"> • Help create sustainable payment approaches that create an environment that supports collaboration and aligns incentives to complement the clinical/care coordination model • Provide case managers to members and to medical groups where desired & appropriate Data capabilities/Informatics

A growing area of importance is in the planning and structuring involved in successfully operationalizing an advanced care model. This involves attention to regulatory and licensure/certification issues – such as those related to providing care in the home – and attention to the resources available to connect and coordinate information across those participating in the advanced care model.

Care Delivery Structure: The advanced care delivery structure is designed to integrate and direct existing care delivery towards a coordinated and targeted care system that supports meeting the unique needs of the advanced illness patient population. In this structure, there is a dedicated advanced care team that is responsible for driving interventions and integrating them seamlessly with the usual care structure.

Extending the current care team capacity

The team collaborates with primary and specialty physicians to become their “eyes, ears and hands” in home and community through face-to-face visits and telemanagement. The patient’s current clinicians welcome this approach because it adds to their capacity to “own” and manage their patient’s care and avoids costly and inefficient changes in their own operations to cope with growing numbers of patients with advanced chronic illness.

Advanced care teams can create, augment and/or support new interdisciplinary team structures that have enabled PCMHs to improve quality and reduce costs. Existing teams can be repurposed and trained to meet the clinical and psychosocial needs of the population with advanced illness. Surveys of physicians responding to advanced illness models show that these clinicians see significant benefits, not only for their patients, but also for their practices; a majority report that their workload decreased as a result of the

intervention.²⁹ By leveraging increasingly scarce clinician time, energy, and expertise, these teams can help deal with the developing workforce challenges posed by the rapidly growing cohort of seniors with advanced chronic illness.

Composition, training and deployment

Advanced care team members are deployed to all major care settings, including hospitals, medical groups, long-term care, home and community. This can be accomplished by repurposing and retraining existing care management staff or through de novo team development. The advanced care team is multidisciplinary, consisting at minimum of nurses and social workers with physician oversight. Team members are recruited carefully on the basis of experience and attitudes regarding difficult conversations, symptom management and end-of-life transitions. The team is oriented and trained in core competencies of advanced illness care including in-depth communication, motivational interviewing, conflict resolution, advance care planning, integrating palliative and chronic illness care, and care management, and utilizes documentation that is standardized to avoid variation. The focus is on helping patients clarify their own values and goals through reflection over time, often revealing preferences they were unaware of before.

There are multiple ways to structure this team. The design should be driven by natural focal points for ease of set-up and to reduce overlap in functions with the goal of maximizing structural simplicity. For example, this team could be a specialized team in a population health structure or an expansion of a palliative care program. The division of functions between members of the team should be driven by areas of expertise, availability of resources in the marketplace, and level of team organization.

Care Processes: Teams deliver the following interventions across clinical settings and over time:

- Advance care planning: re-iterative, personalized engagement and decision support through the entire trajectory of advanced illness, including the following elements:
 - Comprehensive understanding of the individual through the progression of illness;
 - Close connection to family caregivers and physicians actively engaged in care delivery;
 - Sharing of understandable information about illness and care options;

- Eliciting individual awareness of personal values, goals, tradeoffs and other important determinants of care preference;
 - Facilitation of shared decision making between physicians and patients along with their families faced with advance illness;
 - Reconciliation of expectations and understanding between the patient, and those directly involved in care decisions;
 - Standardized documentation and communication of care decisions to all participants in care delivery; and
 - Regular review to stay current with changes in condition and preferences.
- Care management: a proactive process of coordination and integration among all providers to ensure care is of high quality and aligned with the individual's preferences. Care management requires detailed and frequent communication with providers to ensure the person's care needs and preferences are addressed. Safe transition between care sites, access to and understanding medications and resources for self-care, consistency in care plans between providers, and proactive support to prevent crises are all important elements and help highlight the importance of integrating social services and community resources.
 - Integration of disease-modifying treatment and palliation: a dynamic medical management approach driven by the advance care planning process which includes a customized blend of curative and palliative intervention delivers treatment interventions, such as intravenous antibiotics in the home while maintaining the highest level of comfort.
 - Reconciliation of various care plans among PCPs, hospitalists and specialists so that medications, appointments and other critical elements are integrated together in a unified plan of care, documented in the medical record and communicated to all involved clinicians caring for the patient and, that can be used to help the ill individual navigate through their own unique and complex system of care.

The advanced care team ensures that these processes are delivered in a coordinated manner across inpatient, ambulatory, home and long-term care settings. The team may deliver these services directly or through co-management partnership with other providers and teams in the usual care structure. Services are provided continuously until

the patient dies, moves out of the service area or enrolls in a separate system of care such as hospice.

Documentation and Communication Tools: The advanced care model uses the same communication tools as any population health program. Providers become familiar with care processes for advanced illness as they utilize this care plan and interact repeatedly with the care management team. Thus, this documentation tool, which promotes care coordination is both a record of progress through advanced illness care processes and a communication tool among providers. Ideally, the care plan documentation template is integrated with an electronic medical record or shared clinical registry. Other care tools include service-triggered instruments, such as patient identification alerts or hospitalization alerts that enable the team to intervene proactively during the early days of an inpatient stay. In addition, protocols standardize handoff procedures and care guidelines to ensure service reliability for critical aspects of care. Decision-making and documentation tools are also used, including state-specific physician orders for life-sustaining treatment (POLST), health literacy-specific handouts on advanced diseases and advance care planning tools.

E. Next Steps: Payment Model and Quality Metrics

Payment Model Principles

To support further development of a payment model framework, the Advanced Care Project (ACP) has been convening payers and providers to develop consensus on principles such as those outlined above, and lay the foundation for designing a pro forma payment model simulator tool. The tool would depict the relationship of variables and standard assumptions across care settings as they relate to expenses, benefits, and revenues, in order to help create a generally recognized and accepted but flexible analytic framework to aid in payment model design. The tool would seek to show sensitivity of results to changes in assumptions or approaches allowing for experimentation, and help simulate how incentives can be aligned to help provide a bridge from existing payment systems to one that is increasingly tied to value and performance and risk-based methods, consistent with broader payment reform efforts.

The Payment Model should encourage high quality, patient-driven, coordinated care by:

- Offering incentives to coordinate care, improve quality, and respect personal preferences regarding various therapies and site of care, aligned across the full range of settings and providers.
- Promoting operational integration and care coordination across acute, post-acute and long-term care settings. This could be easily achieved in the more flexible environment of population-based approaches to care and coverage.

The Payment Model should augment broader health system transformation efforts by:

- Reinforcing new models supported by evidence that they are effective and easily adoptable and sustainable. This is likely to lower transaction costs, confusion and complexity by leveraging emerging knowledge and infrastructure.
- Providing a bridge to population- and risk-based models. While movement away from fee-for-service toward new reimbursement that incentivizes high-value care may take time to accomplish, the Payment Model for advanced care should support a roadmap to transition over time to shared risk and population-based models based on the provider's readiness (which can vary over a period of years).
- Supporting different payment systems, including traditional Medicare, Medicare Advantage, Medicaid and commercial payers.
- Aligning discussion and collaboration among health plans, public payers, and providers. Initiatives to adopt common quality measures would lower transaction costs and promote adoption of new clinical delivery models. The Payment Model should also be capable of independent implementation and be sustainable.

An important conceptual point in this regard is that payment to support advanced care models need not necessitate the development of new models. Rather, it can entail the adaption of existing models to reflect the advanced care population. As an example, one approach consistent with these principles is reflected in the concept of “blended payments” that might use components such as the following:

- Existing fee-for-service payment arrangements (to support broad provider participation)

- Pre-paid, care management fees tied to specific care delivery capabilities for targeted individuals with advanced illness (to ensure sufficient investment in the capacity and tools necessary to deliver best practice advanced care); and
- Value-based or population-based components that integrate attainment of quality and outcomes goals

Consistent with the principles outlined above in the early stages of population management, the Patient-Centered Medical Home (PCMH) model provides a potential framework for a payment model. This is not to suggest that the advanced care model should necessarily be incorporated into the PCMH. Rather, it acknowledges that PCMH has become an increasingly recognized model and is often viewed as a platform to transition toward population-based payment and care models designed to encourage higher quality, coordinated care and that is becoming increasingly familiar to both payers and providers.

As development of the Payment Model proceeds there are a range of issues and considerations that will need to be addressed. These include: 1) considering what capabilities or structural activities would be required to qualify for a pre-paid care management/care coordination fee; 2) attribution issues related to assigning patients to the model and ensuring an adequate population size to support participation; c) role of risk adjustment in terms of population-based or value-based payments.

There are also potential regulatory issues to address such as those related to workforce licensure.

Moving Ahead

Building on the work of the collaboration between the AHIP Foundation and C-TAC, the Advanced Care Project (ACP) will focus on (1) developing a Payment Model approach to support advanced care models, (2) the development of quality metrics that can be used in conjunction with such a payment model to provide a means for more rigorously monitoring and improving the quality of advanced illness care; and (3) outlining key operational issues and how these relate to planning and structuring of advanced care models.

This next stage in the ACP seeks to be highly complementary of other efforts to reform payment and care delivery to provide for greater value, and ultimately move toward alternatives to fee-for-service (FFS) payments, while at the same time recognizing the need to provide a transition from FFS. A further important goal of this work is to seek greater alignment between acute, post-acute and long-term care settings.

From our initial work, we are now seeking to develop a comprehensive analysis and model development program. The full project contemplates these core elements:

1. Development of an Alternative Payment Model (APM);
2. Setting of the context for an effective APM through a general outline of current incentives and challenges for providing advanced illness care management programs and integrating care across acute, post-acute and long-term care settings;
3. Identification, classification, and specification of measurement goals for advanced care with a strong focus on quality metrics built on metrics that have proven successful for this patient population (prioritizing around those that could be available in the short term while outlining future development needs); and
4. Development of a “Pro Forma” financial model to support existing population-based payment methods that helps identify trade-offs and opportunities for aligning incentives across care settings while creating an environment for financially sustainable and successful APM’s; and
5. A focus on operational issues (including those related to regulatory considerations for when care is provided in the home) with implications for planning and structuring.

About the Coalition to Transform Advanced Care: C-TAC is a non-profit, non-partisan alliance of 120+ patient and consumer advocacy groups, health care professionals and providers, private sector stakeholders, faith-based organizations and health care payers. Its mission is to transform advanced illness care by empowering consumers, changing the health delivery system, improving public and private policies and enhancing provider capacity. For more information, visit <http://www.thectac.org>.

About the AHIP Foundation: The AHIP Foundation is a non-profit, non-partisan 501(c)(3) organization focused on exploring ways to better contribute to the health care research and policy enterprise. The Foundation seeks to play an important and unique role in conducting and disseminating credible, independent research and analysis involving health care delivery and finance issues to policymakers, researchers, health care professionals, and the general public. For more information, visit: <http://ahipfoundation.org>.

APPENDIX

The Advanced Care Project (ACP): Case Studies from the Field

June 2015

Aetna's Compassionate Care Program

Care Delivery Environment	<ul style="list-style-type: none">• Health plan administered case management services to members in close partnership with physicians
Population	<ul style="list-style-type: none">• Persons who have one or more conditions that progress enough that general health and functioning decline, and treatments begin to lose their impact• Defined by algorithm, care management process, physician referral, and or care manager clinical judgment
Interventions	<ul style="list-style-type: none">• Telephonic encounter• RN case manager supported by medical director• Team focuses on advance care planning and decision support, psychosocial support, symptom management and care coordination• Compassionate services are provided until patient is deceased
Outcomes	<ul style="list-style-type: none">• 82% of engaged decedents choose hospice• 82% reduction in acute inpatient days• 77% reduction in emergency room visits• 86% reduction in intensive care unit days• \$12,000 cost savings per member
Further Development	<ul style="list-style-type: none">• Coordinate and facilitate provider-led components such as clinic, home or hospital visits to enhance program access and provider engagement• Partner with ACP to promote adoption of similar interventions

Allina Health LifeCourse™ Program

Care Delivery Environment	<p>Allina is a not-for-profit health care system operating throughout Minnesota and western Wisconsin</p> <p>Allina cares for individuals and families through its 90+ clinics, 13 hospitals, 16 pharmacies and specialty medical services</p>
Population	<p>Individuals and families living with serious illness are identified and screened through an electronic eligibility report:</p> <ul style="list-style-type: none"> • 1 or more chronic illnesses (Heart, Kidney and Liver Failure, Lung Disease, Advanced Cancer, Dementia, Diabetes, Parkinson’s, Coronary Artery Disease) • Comorbidity score of ≥ 4 • Allina Health Provider and recent clinic or hospital encounter
Interventions	<ul style="list-style-type: none"> • Persons and their family receive a monthly in person visits from a trained lay healthcare worker, called a care guide, who acts as a primary contact of support as they move across settings • The care guide delivers whole person care through structured question sets, assessments and activities such as advance care planning that align with an expanded set of palliative care domains and practices • The care guide asks patients and caregivers to articulate individualized goals and take part in decision making • The care guide uses a family-oriented approach to understand needs, leverage strengths, and empower individuals and families to effectively support their loved ones while proactively linking or referring them to healthcare and community resources
Outcomes	<ul style="list-style-type: none"> • Individuals and families maintain quality of life as compared to individuals receiving usual care • Improve access to care and resources such as advance care planning, hospice and palliative care services • Decrease utilization of services and experience an overall reduction in total cost of care

Gundersen Health System Respecting Choices® Advance Care Planning (ACP) System

Care Delivery Environment	<ul style="list-style-type: none"> • Implemented in the La Crosse, Wisconsin Health Region • Includes two major, integrated health systems that each operates a tertiary medical center, community hospitals, and specialty and primary care clinics serving a population of 560,000 people in southwest Wisconsin, southeast Minnesota, and northeast Iowa. • Other providers, including other community hospitals, nursing homes and hospice programs. These other health care providers were encouraged to participate in implementing this standardized advanced care planning system.
Population	<ul style="list-style-type: none"> • All adult patients were included, but efforts were made to involve healthy adults in late middle age in creating a well thought out power of attorney for health care (First Steps® ACP), to update this plan over time and then to create a Physician Orders for Life-Sustaining Treatment (POLST) in the last year of life (Last Steps® ACP).
Interventions	<ul style="list-style-type: none"> • Develop an organized system for advance care planning so that patients in the target populations are always approached, the quality of care planning was facilitated by trained staff and community volunteers, systems were designed and implemented so that documented care plans could be stored and retrieved and would reliably be transitioned when patients moved from one setting to another. Care plans were updated over time as illness or health conditions changed. There was a planned community engagement to make advanced care planning part of both the community and health care culture.
Outcomes	<ul style="list-style-type: none"> • In La Crosse County (population of 120,000), adult residents of La Crosse county at the time of death (n=400) had some type of written care plan (either a power of attorney for health care or POLST form or both) 96% of the time; these plans were found in the medical records of the health organization caring for the decedent at the time of death 99% of the time; and medical care to provide or forgo treatment was consistent with the care plan

	<p>99% of the time.</p> <ul style="list-style-type: none"> • In the La Crosse Health Region (from the Dartmouth Atlas, 2010) • Total number of hospital days in the last two years of life is 10.0...national average, 16.7 • Total number of ICU care in the last two years of life 2.2...national average 5.9 • Total cost of care in the last two years of life, \$48,771...national average \$79,337. • Average LOS in hospice is 15.5 days...national average is 21.0
Further Development	<ul style="list-style-type: none"> • A new discussion for care planning is being introduced, that is focused on patients with advanced illness, called Next Steps. This facilitated conversation is provided between First Steps® and Last Steps® ACP to aid the patient and family in both planning and decision-making over the last 18-24 months of life. In one comparison of Senior Advantage members who received Next Steps, their average length of stay in hospice was 26 days versus six days for matched controls.

Highmark Advanced Illness Services (AIS) Program

Care Delivery Environment	<ul style="list-style-type: none"> • Highmark Inc. is an independent licensee of the Blue Cross and Blue Shield Association. Together with its affiliates, they are among the largest health insurers in the United States • Highmark Inc. is based in Pennsylvania, but operates plans in Delaware and West Virginia as well • Highmark Inc. provides coverage to approximately 5.2 million members
Population	<p>Medicare Advantage members that experience a life-limiting illness. No diagnosis is excluded.</p> <ul style="list-style-type: none"> • Demonstration of medical necessity is required through physician or practice attestation that “a patient has a substantial risk of death within one year” or “would not be surprised if the patient died within a year” to be eligible for

	AIS program services
Interventions	<p>Program's Focus:</p> <ul style="list-style-type: none"> • Controlling pain and symptoms • Providing emotional support • Helping members understand their condition • Preparing patients to effectively communicate with their physicians • Providing referrals to community services • Facilitating decision-making related to care and coordinating services • 100% Coverage for in-network services up to 10 outpatient care visits to contracted palliative care providers • Comprehensive care plans are developed after the predictive modeling phase to provide care coordination, advance care planning, education, and symptom management according to individual values and goals (for longevity, function and comfort).
Outcomes³⁰	<ul style="list-style-type: none"> • Reduced emergency room visits • Reduced acute hospital admissions, particularly in the ICU • Reduced readmission rates • Reduced rates of chemotherapy administration in the last two weeks of life • Increased hospice enrollment • Increased hospice median length of stay

HopeWest's Transitions and Living with Cancer Programs

Care Delivery Environment	<ul style="list-style-type: none"> • Partnership between hospice, hospital and physician offices
Population	<ul style="list-style-type: none"> • Persons who have one or more conditions that progress enough that general health and functioning decline, and treatments begin to lose their impact
Interventions	<ul style="list-style-type: none"> • Collaboration with inpatient palliative care team

	<ul style="list-style-type: none"> • Additional home and telephone management • Multidisciplinary team of nurses, social workers and palliative care physicians • Team focuses on care transitions management and care planning
Outcomes	<ul style="list-style-type: none"> • Over 95% patient satisfaction • 44% reduction in ED visits • Over 70% reduction in hospitalization rates
Further Development	<ul style="list-style-type: none"> • Partnership with payers to develop and implement payment model • Partner with ACP to promote adoption of similar interventions

Ochsner Health System's Development of Advanced Illness Care

Care Delivery Environment	<ul style="list-style-type: none"> • Hospital-led health system with an increasing network of Ochsner and independent physicians
Population	<ul style="list-style-type: none"> • Persons who have one or more conditions that progress enough that general health and functioning decline, and treatments begin to lose their impact
Interventions	<ul style="list-style-type: none"> • Inpatient consultations with nurses, social workers and palliative care physicians • Timely referral to post-acute care services
Outcomes	<ul style="list-style-type: none"> • TBD
Further Development	<ul style="list-style-type: none"> • Implementation of ACP's advanced care model • Collaborate with payers to develop and implement payment • Partner with ACP to promote adoption of similar interventions

Regence's Personalized Care Support Program

<p>Care Delivery Environment</p>	<ul style="list-style-type: none"> • Enhanced benefit structure to include concurrent hospice model; separate palliative care benefit; and the addition of reimbursement for palliative care consultations, care plan oversight, and medical team conferences • Health plan administered case management services to members and caregivers in close partnership with physicians and social services • Specialized customer service team for members and loved ones with serious illness in close partnership with case management • Partnerships with specialty providers, home health, hospice and skilled nursing facilities, incentivizing providers across the care continuum to ensure goals of care are explored, documented, and honored and that clinical data is collected and shared
<p>Population</p>	<ul style="list-style-type: none"> • Benefits extended to commercial, self-funded, and Medicare Advantage members • Directed case management outreach to individuals with any serious illness or advanced age, with higher likelihood of hospital or ER admission. Self, caregiver, or provider referrals for all individuals with indicated palliative care need. • All members enrolled in palliative care case management eligible for palliative care customer service assistance. • Partnerships focus on individuals with palliative care need, based on condition category and disease progression, dependent upon the provider location and specialty.
<p>Interventions</p>	<ul style="list-style-type: none"> • Telephonic case management team focuses on advanced care planning and decision support,

	<p>psychosocial support, symptom management and care coordination. Targeted support for patients and their caregivers, with caregivers followed even after patient has died.</p> <ul style="list-style-type: none"> • Customer service team focuses on assisting members and loved ones with benefit navigation and removal of administrative barriers to care in addition to providing comfort measures to families in need. • Specialty provider partnerships include integrating palliative care consultations into selected oncology practices, beginning at point of diagnosis. • Home health and hospice partnerships include support in transitioning members smoothly from hospital or outpatient practice to home, reducing ER visits, inpatient admissions, and hospital readmissions. Targeted support to ensure individual stays in hospice until death once admitted, rather than being discharged.
Outcomes	<ul style="list-style-type: none"> • 72% of members who are contacted engage in palliative care case management • Over 700 families engaged in case management to date
Further Development	<ul style="list-style-type: none"> • Completion of year one evaluation of provider partnerships to include measures on documentation of advance directive, documentation of medical decision maker, ER and inpatient utilization, hospice acceptance rate, hospice length of stay, patient and caregiver satisfaction, and cost savings to patient, payer, and provider. • Utilization and cost reduction analyses in progress after one year of implementation of case management • Home Based Primary Palliative Care pilot with 10 health systems with alternative reimbursement arrangements to support coordinated in home care for individuals with cancer, heart failure, and lung failure • Development of palliative care-based oncology medical

	home with 3 community-based oncology practices
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Sharp Healthcare’s Transitions Program

Care Delivery Environment	<ul style="list-style-type: none"> • Integrated delivery system of hospitals, physicians, skilled nursing facilities, home health and hospice providers
Population	<ul style="list-style-type: none"> • Persons in late stage illness such as advanced CHF, COPD, Dementia, stage IV cancer, and end-stage liver disease
Interventions	<ul style="list-style-type: none"> • Home and telephone visits • Interdisciplinary team of nurses, social workers and palliative care physicians • Team focuses on advance care planning, symptom management, caregiver support and care coordination
Outcomes	<ul style="list-style-type: none"> • 75% of discharges to hospice • All cause ER/hospitalization reduction of 94% • \$26,000 cost savings per enrollee
Further Development	<ul style="list-style-type: none"> • Expansion of program to FFS through aligned incentive model • Partner with ACP to promote adoption of similar interventions

Sutter Health Advanced Illness Management (AIM®) Program

Care Delivery Environment	<ul style="list-style-type: none"> • Large health system in Northern California including hospitals, physicians, home health and hospice providers; • Program collaborates and coordinates care with Sutter and independent providers • Currently in 15 counties. Expanding into 4 additional counties. • Current daily census – 2,100 persons with advanced illness
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	<ul style="list-style-type: none"> • Enrollees since CMMI grant over 5,500
Population	<p>Individuals with advanced illness (chronic or other) in the last 12-18 months of life, with any of the following indicators of active decline:</p> <ul style="list-style-type: none"> • Significant function decline: loss of 1 ADL in the last 3 months • Significant nutritional decline: 5% of baseline weight or albumin<3.0 • Recurrent and unplanned hospitalizations: 2 or more hospitalizations in the last 6 months or 2 or more ED visits in the last 3 months • Hospice eligible but not ready • Provider not surprised if patient died in the next 12 months
Interventions	<ul style="list-style-type: none"> • Home, telephonic, and direct patient encounters in the hospital, physician offices and SNF's • Accessing existing services wherever available; also filling in gaps of care where no support is available • Multidisciplinary team of nurses, social workers and palliative care physicians; team partners closely the patient's physicians and other providers to drive "<i>advanced illness care</i>" • Team focuses on advance care planning, symptom management, care coordination and physician follow up visits, medication reconciliation, and patient engagement and self management support • AIM services are provided until patient deceases or transitions to hospice
Outcomes	<p>Hospital days last 6 months of life - 7.1%</p> <p>Patients have greater than 1 ED visit last 30 days of life- 3.1%</p> <p>Have ICU days in last 30 days of life – 6.1%</p> <p>Transfer to hospice – 53%</p> <p>90 days pre/post interventions:</p> <ul style="list-style-type: none"> • Over 59% reduction in hospitalizations • 67% reduction in ICU days

	<ul style="list-style-type: none"> • Over 95% physician and patient satisfaction • \$9,985 payer savings per enrollee • \$8,289 reduction in total cost of care (hospital, physician, AIM program costs)
Further Development	<ul style="list-style-type: none"> • Partnership with payers to develop and implement payment model • Partner with ACP to promote adoption of similar interventions

UnitedHealthcare Advanced Illness Care Management Program

Care Delivery Environment	<ul style="list-style-type: none"> • UnitedHealthcare is part of UnitedHealth Group, which is the largest single health carrier in the United States. • UGH provides approximately 70 million Americans with products and services.
Population	<p>Members facing life-limiting illness, generally in the last 12-18 months of life and significant function decline. Eligible patients are identified based on predictive modeling, which accounts for utilization history, functional status and clinical and disease specific data.</p> <ul style="list-style-type: none"> • Treatment Decision Support Program (Optional) only available to Group Senior Supplement members. (These plans are not available in FL, LA, MN, MT, NH, VT, WA.)
Interventions	<ul style="list-style-type: none"> • Advanced Illness Care Management • Palliative Care Services or End of Life Support • Behavioral Health Management Program • Treatment Decision Support Program <p>Optional Buy Up Programs:</p> <ul style="list-style-type: none"> • Treatment Decision Support Program • Respiratory Care Management • Cancer Support Program • Emergency Room Decision Support

	<p>Senior Supplement Plans Include:</p> <ul style="list-style-type: none"> • Single premium rate and plan design (regardless of retiree’s place of residence or health conditions) • Freedom to choose providers and hospitals (that accept Medicare) • Portability options • Virtually no claim forms • 24/7 NurseLine
Outcomes	<ul style="list-style-type: none"> • Increased formulation of advance care plans • Enhanced system management • Improved hospice enrollment

LACE+ index: extension of a validated index to predict early death or urgent readmission after hospital discharge using administrative data

Read the article here: <http://www.openmedicine.ca/article/view/498>

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