Recalibrating Population Health Management to Include Community-Based Palliative Care

Effectively Addressing Advanced Illness Requires a Specialized Approach
The discussion of treatment options at end-of-life have long been considered uncomfortable topics for patients, families, physicians and payers alike. Innovations in medicine and technology, the graying population, and the sheer number of individuals with serious illnesses are now putting a spotlight on this critical conversation, as the cost and quality of care impact payers and their members.

Too often, people’s preferences are unknown and the way in which people die is often not in keeping with their wishes. Research has found, for example, that most adults (90 percent) say they would prefer to receive end-of-life care in their home if they were terminally ill, yet data show that only about one-third of Medicare beneficiaries (age 65 and older) died at home.¹

In a healthcare system that is largely void of patient-centric goals of care, it’s not surprising to learn that one-quarter of all Medicare dollars are spent on treatment during the final year of life. Moreover, one-third of the final-year expenditures are squeezed into the last month before death. Over that period, 80 percent of spending is for hospital-based treatment, much of it in intensive care units (ICUs).²

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¹ Recalibrating Population Health Management to Include Community-Based Palliative Care

² Effectively Addressing Advanced Illness Requires a Specialized Approach

This three-part series expands the understanding and analysis of the 12-18 month time period during the last stages of serious illness and examines its impact on specific market audiences: health payers, providers and the U.S. healthcare systems, and consumers, patients and family caregivers.
Even more notable is a recent study which looked at 2012 Medicare administrative claims data for older Medicare beneficiaries who died, and identified four unique spending trajectories:

- **48.7** percent (nearly half) of older Medicare beneficiaries were classified as “high persistent,” maintaining high spending throughout the year;
- **10.2** percent showed a “progressive” pattern, starting low but increasing steeply;
- **29.0** percent of decedents, were “moderate persistent,” mimicking the “high persistent” pattern except for a spending dip a few months prior to death;
- **12.1** percent of the sample exhibited a “late rise” in the final four months of life after very low spending in the earlier months of that final year.

These expense patterns are magnified by the extraordinary growth of the senior population and the likelihood that they will experience advanced illnesses. By 2050, the number of people on Medicare who are 80 and older will nearly triple, while the number of people in their 90s and 100s will quadruple.
Palliative care is specialized care for members with serious illness that provides relief from symptoms and stress, and offers medication management, care coordination and other support that may have gone missing from traditional models. The goal is to improve quality of life for both the patient and the family.

- Focuses on care coordination across all settings
- Emphasizes ongoing support at home
- Ensures advance care planning
- Engages physicians and other care providers
- Provides integrated, dedicated, interdisciplinary, team-based care
- Establishes goals of care
- Addresses needs of those who are ineligible or those who refuse hospice
- Identifies gaps in care
- Provides pain and symptom relief
- Facilitates disease understanding and self-management
- Offers psycho-social support
With the looming insolvency of Medicare, payers are forced to dig deeper into the root causes of problems associated with advanced illnesses. Current Population Health Management (PHM) solutions are a step in the right direction, because they represent a shift away from episodic to longitudinal care and leverage generalized analytics to forecast and track outcomes. But more is needed.

It is a requirement to move beyond a focus on disease process to one that emphasizes individuals and their goals of care; to progress from late reactionary approaches to predictive algorithms; to acknowledge the special nature of the last year of life, and to treat it accordingly – with specialized solutions. Care provided to members as they near the end-of-life is expansive and expensive, and requires special support and attention. It is a timeframe when the goals of care should shift toward a focus on comfort and quality of life, and broadly refers to health care of all those with a serious or life-limiting illness that has become advanced, progressive and incurable.

This series underscores the importance of specialized palliative care within the framework of broader PHM programs. This type of care plays a pivotal role in addressing the needs of the whole person and the family, improving quality of life for all. It can be provided along with curative treatment, offering services that effectively address the symptoms and stress of serious illnesses. For palliative care to function within a pop health framework, it must move beyond the four walls of an in-patient hospital setting to a community-focused engagement strategy - one that reaches patients in the home, before their condition seriously deteriorates. The result is care that creates better alignment with personal wishes, which reduces the economic burdens, improves outcomes and enhances quality of life.

Community-based palliative care is optimally provided in the home by specially trained nurses and clinical social workers practicing at the top of their licenses. When supported by a model that includes predictive identification of patients and a standardized platform to guide, capture and monitor interventions, this approach can be extremely effective.

As described more fully later in this document, their role serves as an important bridge to the medical home, addressing medical, emotional and social issues that occur during this challenging timeframe.

This document examines a number of challenges confronting payers as they address the needs of these members, and introduces new, innovative approaches facilitating the necessary transformation from a disease-specific model to a patient-centered one.
Patient Case Study

Patrick, Age 90

Patrick was a 90-year-old man with advanced lung disease who lived at home under the care of his daughter. When his symptoms changed suddenly and dramatically, he was rushed to the emergency department and diagnosed with pneumonia.

Later, he was transferred to an ICU, where doctors put him on a ventilator to support his breathing. With his family at his bedside, intravenous drips of morphine and lorazepam were adjusted, until his breathing was relaxed and unlabored. After attempts to pull out his IVs, his hands were restrained. At a family meeting where doctors discussed Patrick’s poor prognosis, his family requested removal of the ventilator. He died two days later while still in the hospital.

This was not the death that Patrick had imagined or wanted for himself. In fact, he would have preferred to die at home, a choice he might have made had he received palliative care consults concurrent with his diagnosis of advanced lung disease.

Palliative care consults include goals of care conversations that address the patient’s health conditions, their options for care and what care best fits their personal wishes, including end-of-life care (EOL). These conversations help to promote a patient-centered approach to decision-making so that care provided is consistent with the person’s wishes.

Patrick’s situation as described above speaks to the heart of the problem: patients with advanced illnesses and their families, are often forced to navigate a maze of care settings and information with little support and often lack insight into their prognosis. Without the benefit of expert palliative care interventions as described earlier, they are at risk of experiencing sudden and avoidable trips to the hospital emergency room and days in the ICU.

For Patrick and his daughter, the care received and eventual death in the hospital rather than at home did not match any of their personal wishes. For payers, this void translates into higher costs – which could have been avoided – along with diminished member satisfaction with care.
Bridging the Quality Gap

Despite impressive advancements in quality-of-death indices, the U.S. still has a long way to go: not even 10 percent of people who require care at EOL actually access it. The danger of remaining at status quo means that we are at a stalemate on how to achieve quality of care over quantity of services.

These factors all add up to a nation that is in a crisis of value, with the highest per capita spending on health care in the world, and without better results. Nevertheless, it is not surprising that wealthier countries tend to provide better care for the sick and elderly than poorer countries.

However, the U.S. did not fare very well with the Economist Intelligence Unit (EIU) measurements. EIU measures 20 aspects of end-of-life care to determine the quality-of-death index in 80 different countries. Attributes that the EIU measures are the quality of palliative care, affordability, health care, and community engagement.

EIU determines the quality-of-death index in 80 different countries, and ranks them with a score out of 100

The United Kingdom was ranked the highest with a score of 93.9

The United States was ranked 9th with a score of 80.8

Addressing Cost Of Care

Given the enormity of the socioeconomic burdens associated with serious illness, and the fact these are the sickest and most fragile members of a health plan, managed care decision-makers are seeking proven strategies to deliver excellent care and improve quality of life for these individuals, at a lower total cost.

A better alternative for this population is a predictive model that neither simply identifies patients at risk of death in the near-term, nor does it solely identify potential high-cost patients. Instead, the model should identify patients at risk of over-medicalized care and, ultimately, over-medicalized death in the next six months.

Spending on inpatient hospital services was 7x higher among decedents than survivors in 2014


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Over-medicalized Death

Over-medicalized care leads to over-medicalized death which can be defined as:  

- Chemotherapy for cancer patients within 14 days of death
- Unplanned hospitalization within 30 days of death
- More than one emergency department (ED) visit within 30 days of death
- ICU admission within 30 days of death; or
- Life-sustaining treatment within 30 days of death

This occurs when treatments and technologies are used by default, even when they are unlikely to help the patient. By the time patients are approaching the end, they are often too weak or disabled to express their preferences.

In fact, 80 percent of Americans would prefer to die at home, but only 20 percent achieve this wish.

Inappropriate Death

An inappropriate death is the result of care that did not benefit the patient as a whole.

Advanced medical technology has created uncertainty about what interventions are appropriate or potentially beneficial for members with advanced illness. This includes technologies such as dialysis, mechanical ventilation, ventricular assist devices, and parenteral nutrition, which make it possible to sustain life.

Non-beneficial Treatment (NBT)

NBT refers to the overtreatment of patients with advanced illnesses, as described in the terms Over-medicalized Care, Over-medicalized Death, and Inappropriate Death.

It is broadly defined as any treatment, procedure or test administered to patients who are naturally dying that will not make a difference to their survival, will probably impair their remaining quality of life, can potentially cause them pain or prolonged suffering, or leave them in a worse state of health than they were.
NBT may prolong life, but at a high cost in terms of social and economic burdens that translate into significant strains on patients and their families. These individuals often suffer through unnecessary, even harmful treatments despite overriding expert opinion that, when patients have a terminal illness, at some point more disease treatment does not equal better care.

Given the risk of NBT, however, healthcare providers must balance the potential benefits of medical treatment against the effects on quality of life for the individual, and whether such treatment is consistent with the patient’s personal values and beliefs.\textsuperscript{11}

**Failed Attempts to Solve the Problems**

Payers have failed to take a focused approach to PHM in order to more effectively channel their programs and resources on members with advanced illness and nearing end-of-life.

There is acknowledged value in general PHM programs with broad markers to track primary prevention activities, including compliance with flu shots, mammography or diabetic retinal screenings, as well as secondary and tertiary prevention measures focused on mitigating further disease progression/deterioration. However, these analytics are of negligible value when it comes to those facing end-of-life.

What is needed is an emphasis on quaternary prevention, defined as “action taken to identify patients at risk of over-medicalization, to protect from new medical invasion, and to suggest interventions ethically acceptable.”\textsuperscript{12} The concept of quaternary prevention makes it easier to identify patients at risk of over-medicalization, and addresses the critical areas impacting care for those with serious illnesses.

**What’s Not Working vs. What Works?**

While a generalized population health approach is valuable for benchmarking disease progression, this serious and advanced illness population requires a focused lens on the impact and effectiveness of interventions as they relate to the person and goals of care, not the disease process. Lagging indicators fail to predict future, likely outcomes. To achieve goals and optimize initiatives within the broader PHM framework, the emphasis should expand beyond sentinel events to eventual disease progression.

Furthermore, without the appropriate care management infrastructure, staffing and resources to intervene when something is predicted to happen, the potential of utilizing patient data will fail to be fully realized.
Data analytics must be combined with evidence and clinically driven approaches that result in improved coordination of care and patient outcomes. Too often, palliative care is relegated solely to the in-patient setting. While beneficial at the time of service, a palliative approach would undoubtedly have been more impactful had it been introduced earlier in the disease process to potentially avoid hospitalization. One study found that, among the 10,275 eligible admissions, 22.3 percent were followed by a 30-day readmission. Of these, 36 percent were identified as potentially avoidable.\(^\text{13}\)

**Potentially avoidable adult hospitalizations per 100,000 population, by type of condition. 2005 - 2013**

[Diagram showing potentially avoidable hospitalizations by type of condition from 2005 to 2013.]


What's also not working is the misallocation of resources to conduct some of the critical components of a palliative care program. While physicians are now reimbursed for these palliative interventions, such as Advance Care Planning (ACP), those without specialized palliative care training often find it difficult to say when a cure is not possible, and many are not experts in symptom management or comfortable in offering emotional support. Others believe that they must do everything to prolong life regardless of the pain and suffering involved, and fear that offering comfort care is akin to giving up, according to Amy Kelley and Diane Meier, M.D., of the Mount Sinai School of Medicine in New York.\(^\text{14}\)

While physician office-based staff personnel interact frequently with patients, they are not specifically trained to conduct sensitive conversations with patients and family caregivers about advanced illness and goals of care during the end-of-life timeframe. The same holds true for non-specialized staffers within the population health community.
And though trained palliative care physicians and nurse practitioners are capable of taking on this responsibility, they are not cost-effective resources for home-based general palliative care. While payers may ask if primary care physicians can take on this role, realistically, these physicians may not feel equipped to discuss end-of-life care, are uncomfortable initiating or leading these discussions, and fear the discomfort of communicating bad news.¹⁵

This was validated by the John A. Hartford Foundation, California Health Care Foundation and Cambia Health Foundation national poll in 2016 exploring the views of primary care and specialist physicians about end-of-life and ACP conversations with patients. The survey identified barriers that keep physicians from engaging in these sensitive conversations, with nearly half (46 percent) reporting that they frequently or sometimes feel unsure of what to say, and less than one-third (29 percent) reporting having had any formal training specifically on talking with patients and their families about end-of-life care. ¹⁶

Finally, there is a downside to a reactive approach that fails to introduce palliative care in a timely manner. The result of waiting is missed opportunities to avert non-beneficial treatment and costly hospitalizations. Another fall-out is the erosion of patient satisfaction with care.

**A Better Approach: Focus on Quality of Life**

Fortunately, Turn-Key Health (Turn-Key), a subsidiary of Enclara Healthcare, has introduced a robust, specialized PHM solution serving payers and their members with advanced illness. Appropriately entitled Palliative Illness Management™, PIM™ enables payers to leverage sophisticated predictive analytics to identify members who are high opportunity - not simply high cost - for specialized community-based palliative care services.

The candidates identified through PIM™ analytics are at risk of over-medicalized care and, ultimately, over-medicalized death in the next six months. This empowers a plan to identify seriously ill members in advance of the last six months of life -- well before they experience a costly, over-medicalized or inappropriate death.

The PIM™ platform integrates data with additional information, including referrals from the field from case managers, discharge planners and others. Leveraging the synergies of all these sources represents a sure-fire approach to determining those individuals who might otherwise go undetected by traditional means and would benefit from palliative care.
To engage these patients and caregivers, Turn-Key convenes community-based palliative care teams, recognized under the PIM™ model as Palliative Extensivists™ (PEs) -- primarily nurses and clinical social workers practicing at the top of their licenses. These clinical resources typically reside as a separate service within local hospice and palliative care organizations. Through Turn-Key, PEs are available in virtually every community, allowing payers to increase the scope and frequency of “touching” individual patient lives, matching appropriate resources to individual patient needs, and scaling their programs for larger populations.

This extraordinary level of personalized support aligns physicians and other care teams to organize patient care activities and create seamless transitions in care that directly achieve safer, more effective care. PEs aim to keep members healthier outside the hospital. The goal is that such regular, routine home visits and phone outreach will help to avoid emergency room visits, hospitalizations or readmissions, and ICU stays.

**A highly structured and consistent clinical program is the key to success.**

Risk-based workflows and palliative care assessments facilitate evaluation of patient/family needs, and expand the reach of case managers, Primary Care Physicians (PCPs), and other specialists.

Utilizing formalized telephonic and home visit assessments and questionnaires which are embedded in the Turn-Key platform, the PEs provide and document uniform, standardized and expert-level palliative care to patients.

**Initial and follow-up patient assessments include:**

- Primary and secondary diagnoses
- Medical and hospitalization/ED history
- Functional status and activities of daily living
- Symptom assessment
- Medication review; adherence assessment
- Adequacy of home, family, safety and financial supports
- Patient’s understanding of illness
- Goals of care
- Advance Care Planning
- Services in place or needed
- Patient risk evaluation
- Palliative plan of care
- Psychosocial support
- Caregiver need assessment
- Patient education, disease understanding
- Support for patient decision-making
Through telephonic team meetings and detailed clinical and administrative reporting, Turn-Key provides a high degree of accountability and clinical supervision to ensure the consistent delivery of quality care.

PE's are particularly experienced and adept at conducting sensitive, meaningful conversations among patients, families and caregivers, which results in shared decision-making that advances a clear understanding of what members and families view as important at the end-of-life. These discussions help align treatments to informed goals of care, avert costly, often unwanted interventions of questionable benefit, and avoid over-medicalization.

If there are symptom needs or other clinical care requiring a prescription, or if there is a change in code status or patients wish to discuss goals of care with their physician, the PIM™ team will make a direct call to the patient's physician. Non-clinical needs such as ordering Meals on Wheels, DME, or other social support services are performed by the PIM™ team or referred to the health plan's case manager, as appropriate.

The frequency and type of follow-up care is determined by the assessed risk level of the patient as defined in the PIM™ care pathways. Patients deemed higher risk receive more frequent calls/visits until their risk level is reduced. The team continues to follow the patient through the course of illness, unless the patient is stabilized and no longer requires PIM™ services; or the individual is admitted to another setting, such as hospice or a nursing home; or the patient moves out of the service area.

All information gathered during these patient engagements, including enrollment and outcomes, are tracked in the Turn-Key PIM™ platform. Related key metrics that also include interventions and satisfaction with care are gathered, reported and benchmarked to support continual quality improvement and care model refinement. Utilization and cost outcomes based upon claims data are performed by the Turn-Key actuarial team.

The PIM™ community-based palliative care model is filling the gap between what patients need and deserve, and what they actually experience. This results in a higher return on quality improvement and investment in resources.

Simply deploying these professionals is a step in the right direction but does not scale for the payer. A better solution is to partner with innovative companies like Turn-Key that have the expertise to build and manage PE-led teams, as well as offer the PHM analytics capabilities as described above. Leveraging this expertise, payers take advantage of the infrastructure, experience and care management processes to deliver this level of specialized palliative care.
A one-year program tested and validated this clinician-led program for approximately 1,000 Medicare Advantage members: enrolled cohort 208; control group 800

- Increase in Goals of Care Discussions
- Increase in Symptom Management
- Increase in Medication Reconciliation
- Increase in Member Satisfaction
- Increase in Hospice Benefit Utilization & Hospice Length of Stay

**Satisfied with Symptom Management**
- 97%

**Goals of Care Addressed**
- 98%

**Medication Reconciliation**
- 97%

**HEALTHCARE COST**
- 35% reduction in Medical Loss Ratio (MLR) comprised of two components:
  - 20% reduction in reduced member healthcare consumption
  - 15% reduction related to earlier and appropriate election of the Medicare hospice benefit

**Admits**
- IDENT BUT NOT ENROLLED
- ENROLLED

**Re-Hospitalizations**
- IDENT BUT NOT ENROLLED
- ENROLLED

**ICU Days**
- IDENT BUT NOT ENROLLED
- ENROLLED

Source: Turn-Key Health, 2016.
Payers are also discovering that through the PIM™ approach, and by matching these PE-led teams to the needs of patients, they quickly close gaps in care and enhance member satisfaction with the care they receive. Evidence shows that, with or without curative treatment, a palliative approach offers the best chance of maintaining the highest possible quality of life for the longest possible time.17

By adopting PIM™, payers demonstrate that they are treating advanced illness management as a specialty niche within population health, and taking charge of significant issues which seem to fester when not appropriately addressed. As palliative care evolves from an end-of-life modality to a PHM strategy, the PIM™ approach delivers multiple benefits to payers that are not replicated by other palliative care programs.

For payers, the cost savings are a by-product of PIM™ through improvement in care coordination and reduction of unwanted and avoidable medical utilization. At the same time, patients and family caregivers are more satisfied not only with the care received, but also with their health plan participation. The focus is on end-of-life as it relates to the person—not the disease process - and puts quality over quantity.

**Conclusion**

Despite the progress made in the past three decades, the current state of end-of-life care in the U.S. remains unsatisfactory. While more Medicare beneficiaries shift from fee-for-service to value-based payment models, payers are hamstrung by the absence of meaningful quality measures related to end-of-life, making it difficult to assess or reimburse for quality or value.

When people with serious illnesses are hospitalized, they are often identified by the healthcare system too late in the disease process, and end-of-life is seen as it relates to the disease, not the individual. What’s more, generalized data analytics fail to forecast what will happen to this individual, end-of-life care planning is non-existent, and members end up experiencing NBT. There is increased awareness amongst payers, providers and consumers regarding the reality that more care does not translate into better care. In fact, hospitalized patients treated by physicians who order more expensive tests and procedures are just as likely to be readmitted or to die as patients treated by doctors who order fewer or less expensive tests, according to research led by Harvard Medical School and the Harvard T.H. Chan School of Public Health.18

Payers are beginning to recognize the importance of providing specialized support programs for members who have serious illnesses, especially those who lack skilled needs or home-bound status for a homecare program. While some health plans are testing approaches to paying provider organizations to deliver specialty palliative care services, continued innovation in payment models and improved definition of eligibility standards and covered services are needed.19
These members are typically frail, and often have multiple co-morbid conditions requiring complicated medication regimens that make it difficult to cope with the challenges of day-to-day living. Increasingly, payers are seeking, and now finding, scalable solutions such as PIM™ that integrate within their existing care management programs. These new innovative care models enhance existing relationships between members, treating physicians and the medical home.

Given the complexity of healthcare decision-making for the nation’s most fragile and vulnerable patients who are facing serious illnesses, the introduction of innovative models like PIM™ represents an opportunity to better address individual needs and expectations. It is a positive sign that our system is shifting away from an episodic approach to care toward a patient-centered PHM approach.

Healthcare payers, providers, public sectors and other stakeholders in the healthcare ecosystem are beginning to connect the dots in an effort to address the issues surrounding advanced illness and care at the end-of-life. Public education and engagement about end-of-life remains a high priority.

Collectively, our nation’s healthcare leaders and decision-makers must put a laser focus on the consumer…the ultimate recipient of care. It is possible to make the process of death and dying a more palatable conversation for all.
Sources


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Turn-Key Health, a subsidiary of Enclara Healthcare, is a population health management company serving payers and their members with advanced illnesses. Its Palliative Illness Management™ (PIM™) model introduces a new, innovative option to improve care quality, address costs and reduce burdens associated with life-limiting illnesses.

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