Turn-Key Health, an Advanced Illness Management (AIM) company, conducted a one-year pilot program from October 2015 - June 2016 to test and validate its new, community-based population health solution, Palliative Illness Management™ – PIM™. The study encompassed 1,000 seniors enrolled in a Medicare Advantage plan: 200 individuals with advanced illness and 800 in the control group.

PIM™ offered a holistic, data-driven and evidence-based model to improve care quality and reduce the economic burdens of life-limiting illnesses for healthcare payers, at-risk provider organizations, as well as patients.

The project was funded by an innovation grant from a large national health system in conjunction with its affiliated hospice and palliative care program, and in partnership with Turn-Key Health. Goals of the project included scaling the program across the entire system, and moving into a value-based payment model with shared savings with payers.

**PIM™ MEETS PAYER EXPECTATIONS**

PIM™ is a unique population health management model, a derivative of AIM, that integrates within a payer’s broader population health initiatives. It performs as a stand-alone or plugs into existing population health initiatives, supporting payers and at-risk providers shifting from fee-for-service to value-based payment models.

This structured and consistent process ensures accurate reporting, and performance metrics designed to match interventions with operational improvements. Outcomes and results are measured and valued at a population level.

**SHIFTS CENTER OF CARE TO HOME OR COMMUNITY**

Placing the focus on care coordination and patient-centric services, PIM™ uses “local, in-home specialists” – along with complementary, sophisticated predictive analytics – to identify and engage individuals with advanced illness who might otherwise go undetected by traditional means. Identifying patients earlier in the progression of disease ensures that gaps in care are recognized and closed.

**SPECIALIZED COMMUNITY-BASED PALLIATIVE CARE TEAMS**

PIM™ taps into the expertise of specially trained palliative care healthcare professionals – predominantly nurses and social workers practicing to the highest level of their licenses.

These interdisciplinary palliative care teams review and manage symptoms, address gaps in care, establish goals of care and develop care plans in conjunction with the treating physician. They deliver a specialized approach, with niche capabilities and expertise for conducting progressive and difficult conversations around quality of life in the remaining months of life.

It’s an approach that enables highly sensitive discussions to advance a clear understanding of what members and families view as important at the end-of-life. This helps to match treatments to informed goals of care, avert costly, often unwanted interventions of questionable benefit, and avoid inappropriate deaths.

**Optimizing pre-and post-acute care results in cost savings while enhancing patient and family caregiver satisfaction with health plan participation.**

**METHODOLOGY**

PIM™ deployed community-based palliative care teams, utilizing field-based resources complemented by highly predictive algorithm and analytics, to identify individuals earlier in the disease trajectory, and provided a platform to support patient and family caregiver engagement.

**DISEASE PREVALENCE**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHF</td>
<td>26%</td>
</tr>
<tr>
<td>COPD</td>
<td>20%</td>
</tr>
<tr>
<td>CAD</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
</tr>
<tr>
<td>Cancer</td>
<td>9%</td>
</tr>
<tr>
<td>Dementia</td>
<td>4%</td>
</tr>
<tr>
<td>Neuro</td>
<td>4%</td>
</tr>
<tr>
<td>ESRD</td>
<td>2%</td>
</tr>
</tbody>
</table>

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Members at risk of over-medicalized care or inappropriate death were identified. The data was stratified and populated into the mobile platform, offering instruction and guidance to the palliative care providers regarding comprehensive telephonic and in-home patient assessments, interventions, and real-time risk stratification.

Using the predicted risk of patients referred for intervention, the population was segmented into patients enrolled in the program and those not enrolled. The two groups were compared for hospital admissions, re-admissions, ER visits and costs.

Community-based, specially trained nurses and social workers guided by customized palliative care assessments and risk stratified care pathways conducted telephone and home visits. Uniform assessments were embedded in the Turn-Key Health portal to capture key performance by analysis.

**PROJECT AND CLINICAL OUTCOMES**

Achieved a 34% reduction in healthcare expenditures

- 19% direct reduction in PMPM expense
  - Driven by a reduction in hospitalizations, re-admissions, and number of ICU days
- 15% reduction in Medical Loss Ratio – MLR related to earlier and appropriate election of the hospice Medicare benefit

**QUICK STATS**

**PALLIATIVE PERFORMANCE SCORE -- PPS**

- 87% PPS 60 or less
- 49% PPS 50 or less
- 32% PPS 50 or less
- 23% PPS 40 or less
- 73% PPS 30 or less

**NUMBER OF MEDICATIONS PER PATIENT**

- 4% 3 or less
- 23% 4 to 7
- 73% 8 or more

**PATIENT AND FAMILY CAREGIVER SATISFACTION**

**Five Star Ratings ★★★★★**

- Comfort with AIM team
- Helpfulness managing symptoms & stresses of illness
- Helpfulness of family and caregivers
- Satisfied with AIM services
- Likely to recommend
- Experience with AIM influence recommending Plan

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**Source:** Turn-Key Health, 2016