Health Quality Partners’ Model of Community-based Care Management: An Innovation that Improves Health Care Delivery, Outcomes, and Cost in Chronically Ill Older Adults

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HQP community-based care management

AIM: Improve health, promote independence, and relieve suffering of chronically ill older adults by providing a comprehensive and highly-effective preventive service.

- **Longitudinal** – continuous service until death or out-of-area relocation
- **Person-centered** – prioritize concerns of patients & caregivers, adapt care intensity and contact frequency to changing needs
- **Community-based** – participants are seen individually and in groups at accessible locations throughout the community, including at home
- **Nurse care managers** – clinically experienced RNs receive model-specific training and ongoing support and management
- **Collaborate & coordinate** – with primary care, specialist, hospitals, and other health care and community service providers
- **Robust portfolio of preventive interventions** – broad set of best in class interventions adopted with fidelity and delivered directly by nurse care managers
- **Process measurement and visual information displays** - drive performance management, process improvement, and organizational learning
Program Implementation & Evaluation: A Decade of R&D

- **Medicare Coordinated Care Demonstration**
  - Randomized, controlled trial; HQP model vs. usual care
  - Implemented in 90+ practices in 4 counties of eastern PA
  - April 2002 to present, 2,600+ traditional Medicare beneficiaries
  - Low, moderate, and high risk patients served during first 8 years
  - Serving higher-risk patients since late 2010
    - HF, CAD, DM, COPD and 1+ hospitalizations in prior year

- **Aetna Medicare Advantage**
  - Difference-in-differences analysis; trend of HQP cohort vs. like comparison
  - 50+ practices in eastern PA, started 2010
  - Serving higher-risk patients selected by diagnoses, utilization, and Aetna proprietary risk scoring methodology
### HQP Program Results Demonstrate that 3-part Aim is Achievable

**Better health care:** Person-centered prevention, support, education, and coordination  
**Better health:** Lives saved and suffering relieved  
**Reduced cost through improvement:** Lower net cost among higher-risk subgroups

<table>
<thead>
<tr>
<th>Population</th>
<th>N</th>
<th>Deaths</th>
<th>Part A &amp; B expenditures</th>
<th>Net Cost</th>
<th>Hospital admissions</th>
<th>ER visits</th>
<th>SNF cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCD</td>
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</tr>
<tr>
<td>All-in risk (low, mod, high)</td>
<td>1,464</td>
<td>-14% *</td>
<td>Neutral</td>
<td>-14%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1,721</td>
<td>-14% **</td>
<td>Neutral</td>
<td>+9%</td>
<td>-7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher-risk 1</td>
<td>502</td>
<td>-29% **</td>
<td>Neutral</td>
<td>-29% **</td>
<td></td>
<td></td>
<td>-37% **</td>
</tr>
<tr>
<td>Higher-risk 2</td>
<td>248</td>
<td>-36% **</td>
<td>-28% **</td>
<td>-39% **</td>
<td>-37% **</td>
<td>-64% **</td>
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<tr>
<td>Aetna</td>
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<tr>
<td>Higher-risk 3</td>
<td>942</td>
<td>-18%</td>
<td>-18% °</td>
<td>-20% °</td>
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</tbody>
</table>

**P ≤ 0.05, * P ≤ 0.1**

- $511 per person per month
- $6,132 per person per year

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**HQP Participant Survey (from Peikes et al, JAMA eTables) n=675, 98% response rate**

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
<th>Control</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received help in arranging care</td>
<td>76%</td>
<td>4%</td>
<td>+72% **</td>
</tr>
<tr>
<td>Pain interferes with usual activities</td>
<td>66%</td>
<td>75%</td>
<td>-9% *</td>
</tr>
<tr>
<td>Primary condition a burden on family</td>
<td>40%</td>
<td>53%</td>
<td>-13% **</td>
</tr>
<tr>
<td>Health care clinicians keep in touch with each other (excellent rating)</td>
<td>44%</td>
<td>36%</td>
<td>+8% *</td>
</tr>
</tbody>
</table>
Insights gained and future opportunities

• Variables that significantly impact savings
  – Target population, effectiveness in improving health outcomes, program cost (start-up, scale, and demonstration-related overhead), and time frame

• Access to Data on diagnoses, health service utilization, and clinical tests
  – Would significantly improve efficiency (case-finding), and effectiveness (better monitoring)

• Incentives for hospitals and PCPs to partner with effective providers of this model could
  – Accelerate dissemination
  – Optimize efficiency and fidelity to program implementation to preserve effectiveness

• Complementary to / synergistic with emerging primary care models
  – Interface can be designed to minimize redundancy of work and be mutually reinforcing

• HQP’s Replication and Reliability Platform
  – An integrated suite of tools to support training, decision support, performance analysis, and program monitoring and guidance would boost scalability and enhance reliability

• Robust and sustained research & development effort seems warranted
  – Design, adapt, and test variations of the HQP model to serve other vulnerable, at-risk populations

• Scale it up! The next frontier ...
  – Supporting scalability R&D could fit portfolio of CMMI, other HHS agencies, and/or foundations
  – Unique opportunity for ACO’s and consortia of health systems, physician groups, and health plans