AgeTech California Center for Technology and Aging

Dual RFI Response Summary

Improving Care through Integrated Medicare and Medi-Cal Delivery Models

Stakeholder Meeting
August 30, 2011
Organization Background

- AgeTech California enables aging-services and homecare providers in developing and implementing technology-based care models for better, more cost-effective care.
- Center for Technology and Aging seeks to improve the independence of older adults with chronic care issues by promoting the diffusion of beneficial technologies through programs and initiatives that generate and disseminate best practice and provide tools for developing successful programs.
Existing Problems that Should be Addressed by Demonstrations

• The overall opportunity is to leverage the maturation of remote monitoring and support (“telehealth”) technologies to better maintain dual-eligible beneficiaries in community-based settings

• Problem #1: Lack of means for continuous and cost-effective support in the community
  ◦ Self-management support for chronic conditions
  ◦ Environmental and ADL monitoring for frail elderly
  ◦ Nearly continuous monitoring for potential exacerbations

• Problem #2: Difficulty in coordinating right care at right time between variety of organizations (healthcare and aging / supportive services)
Overview of Demonstrations

- AgeTech CA / Center for Technology and Aging believe home-telehealth-based interventions can meet challenge of defined problems, and will be central to efforts to integrate and better manage care for dual-eligible beneficiaries.

- To further this goal, organizations recommend two pilots:
  - Program One with a COHS
  - Program Two with a consortium of homecare agencies

- Both based on care coordination and management model, using “telehealth” technology, developed by VA and now proven in other settings:
  - VA has shown 20 percent admissions reduction with large population
  - Medicare Care Management for High-Cost Beneficiaries program showed 240 percent return for CMS
Consumer Protection Considerations

- In RFI, suggested opt-in model – contractors implementing will be required to document verbal or written consent
- Telehealth technology can be used to survey engaged beneficiaries frequently about satisfaction with program and services
- Program will have to be able to support beneficiaries who cannot use home telehealth technology (primarily telephonic monitoring)
Suggested pilot programs will implement a telehealth-based care coordination and management intervention with the goal of:

- Maintaining dual-eligible beneficiaries in their homes through
  - Self-management support
  - Monitoring for early warning of complications
  - Coordination of key services – including in-home supportive services

*Note: approach will create a more “activated” population of beneficiaries*
Specific Care Integration Challenges

- **Key dimensions:**
  - Automated assessment and support of wide range of conditions, including mental health conditions, and individuals with multiple complex conditions
    - Example: Tech-enabled support of personal health and care management for those with specific chronic conditions
  - Exception-based workflow: Care coordinators attend to those beneficiaries with an identified need that day
  - Care coordinators establishes linkage with other providers and mobilizes them – as possible – to preventively remedy medical and non-medical risk factors
Measures for Success

- Key metric: Net cost savings relative to a propensity-matched sample based on one year of enrollment in program (N=TBD)
- Secondary metrics:
  - Utilization of healthcare services by category (primary, acute, post-acute, long-term care)
  - Engagement of assigned population
  - Beneficiary and provider satisfaction
  - Quality of life based on standard survey instruments
  - Population health measures relative to benchmarks as appropriate
  - Qualitative assessment of replicability as pilots succeed and programs are expanded statewide
Information Needed from CMS and California

- How will CMS and California provide data on timely basis given that this is a fee-for-service population?
  - What are the expected data lags?
- Will California and CMS specify a uniform evaluation methodology for all four pilot projects, or will each be able to propose its own?
- Will California and CMS provide any start-up funds for implementing new models (i.e. payment on full population assigned for $x$ number of months)?
- Do California and CMS envision requiring assumption of downside risk at any point in the demonstration?
Supporting Slides
RFI Response Summary

• Suggest two pilots to transpose highly successful VA-developed telehealth-based care coordination model into fee-for-service program for dual eligibles

• Model #1: Implemented through county-organized health system

• Model #2: Implemented through confederation of homecare agencies
Remote patient monitoring represents a range of technologies for moving care outside of traditional clinical and non-clinical settings.

For purposes of presentation, includes:
- Telehealth
- Wireless health
- mHealth
- Medication optimization

Does not include telemedicine, which connects traditional points of care.
Model Overview

• Developed by VA to focus on top 4 percent of non-institutionalized population that account for 40 percent of costs

• Intervention:
  ◦ Place telehealth appliance in home to monitor vital signs, symptoms, behavior, knowledge of condition
    • First line of defense: Self-management support
    • Second line of defense: Monitoring to catch complication early, remedy with medication adjustment or
Value Proposition

- Focus: High-cost individuals
- Reduction in utilization of most expensive healthcare services and cost for high-cost individuals
- Improved patient outcomes and quality of life
- Improved efficiency of healthcare personnel
  - Exception-based workflow
  - Reduced homecare visits
  - Integrated provider solutions
## Evidence

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<thead>
<tr>
<th>Study</th>
<th>Key Finding</th>
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<tbody>
<tr>
<td>VA Florida 2000</td>
<td>63% admission reduction</td>
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<tr>
<td>VA large study 17,000 – 2008</td>
<td>19.5% admission reduction; 25% reduction in bed days</td>
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<td>Medicare Health Buddy 2006-2009</td>
<td>240% return on investment</td>
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<td>Tufts-New England Medical Center 2005</td>
<td>72% reduction in CHF readmissions, 63% reduction in all-cardiac</td>
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<tr>
<td>Centura Health at Home</td>
<td>61.5% 30-day readmissions reduction</td>
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<tr>
<td>Sharp Health Care</td>
<td>66.5% 30-day readmissions reduction</td>
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Key Quote from VA 2008 Paper

“The cost of CCHT was $1,600 per patient per annum. This compares very favorably to the direct cost of VHA’s home-based primary care services of $13,121 per annum and market nursing home care rates that average $77,745 per patient per annum.”

Adam Darkins et al., “Care Coordination/Home Telehealth: The Systematic Implementation of Health Informatics, Home Telehealth, and Disease Management to Support the Care of Veteran Patients with Chronic Conditions,” Telemedicine and e-Health, December 2008
Program Mechanics and Economics

- Target beneficiaries in (or at risk of being in) top 15 percent of spend / 140,000 beneficiaries (derived all-in PBPY cost = $112,000)
- Enrollment target: 35 percent / 49,000 beneficiaries
- Gross savings target: 20 percent
- Annual technology-based care coordination cost: $2,400 per beneficiary per year (estimate, will vary based on area of state)
## Savings Analysis

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<tr>
<td>Pre-intervention beneficiary cost</td>
<td>$111,833</td>
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<tr>
<td>Gross savings – 20 percent</td>
<td>$22,367</td>
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<tr>
<td>Intervention cost</td>
<td>$2,400</td>
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<tr>
<td>Net per beneficiary savings</td>
<td>$19,967</td>
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Contacts:

Presenter:
Suneel Ratan, CEO, Care Architecture
Member, AgeTech California Advisory Council
Senior Advisor, Center for Technology and Aging
415.205.1008
suneelratan@gmail.com

Proposing Organizations:
Scott Peifer, Executive Director
AgeTech California
1315 1 Street, Suite 100
Sacramento, CA 95746
916.842.7341
speifer@agetechca.org
www.agetechca.org

David Lindeman, Director
Center for Technology & Aging
555 12th Street, 10th Floor
Oakland, CA 94607
510.285.5685
dlindeman@techandaging.org
www.techandaging.org