The RTI Evaluation of Phase I of the Medicare Health Support Pilot Program Under Traditional Fee-for-Service Medicare: 18-Month Interim Analysis
Overview of Medicare Health Support (MHS) Phase I Pilot

• 3-year randomized experiment in population-based care management of

• Designed to test the scalability of such programs in Medicare FFS: just under 300,000 beneficiaries

• 8 MHS organizations (MHSOs) launched their programs between August 1, 2005 and January 16, 2006

• Phase I Pilot projects ended between December 31, 2006 and August 31, 2008
  – Five MHSOs requested early termination

• The MHSOs received “at risk” monthly management fees for beneficiaries who verbally agreed to participate; retention of fees was contingent upon achieving savings in Medicare expenditures to offset fees (budget neutrality) and improvement in beneficiary satisfaction and quality of care
RTI conducting independent evaluation required by the enabling legislation
  – Quality and Health Outcomes
  – Beneficiary and Provider Satisfaction
  – Financial Outcomes

Presentation today is based on 18 months experience of original populations and analyses presented in October 2008 Report to Congress

Intent-to-treat randomized study design and a differences-in-differences evaluation framework

All analyses are weighted by period of eligibility to reduce influence of beneficiaries who were in the pilot for a short period of time
MHS Phase I Population

• **Original Population Selection Criteria**
  - Fee-for-service (FFS)
  - Claims-based diagnosis of heart failure and/or diabetes
  - CMS Hierarchical Condition Categories (HCC) score >1.35
  - Block Randomization Requested by the MHSOs

• **HCC risk scores**
  - Low: >1.35 and <2.00
  - Medium: >2.00 and <3.10
  - High: >3.10

• **Heart failure or not**

• **Medicaid enrollment**
MHS Phase I Population (cont)

- **Original Populations:** Roughly 30,000 beneficiaries randomized into each of the programs (20,000 intervention group and 10,000 comparison group)
  - About ½ have diabetes only, and about ¼ each have HF only and HF with diabetes
  - Mean HCC scores ranged from 2.3 to 2.6
  - Medicaid dual enrollment ranged from 2.8% to 43%
  - Mean Charlson Comorbidity Indices roughly 4.0
  - All cause hospitalization rates ranged from 83 to 116/100
  - Less than 20% of hospitalizations had HF or diabetes as the principal diagnosis

- **Refresh:** CMS offered and 7 programs accepted a refresh population to offset attrition and achieve roughly 20,000 beneficiaries at the start of Year 2
MHS Interventions

• Care management
  – Nurse-based health advice for the management and monitoring of symptoms
  – Health education
  – Health coaching to encourage self-care and management of chronic health conditions
  – Medication counseling
  – End-of-life care planning
  – Intensive case management
  – Home monitoring
  – Encourage compliance with evidence-based care guidelines
  – Assistance with psychosocial needs

• Primary mode was telephonic but there were varying degrees of in-person intervention among the MHSOs and over the course of the pilot
Over three-quarters of all original intervention beneficiaries verbally consented to participate in the MHS program during the first 18 months of the pilot.

- Consent rates ranged from 74% to 95%.
- Most of the participants consented in the initial 6-month period of the pilot.
- Between one-half and two-thirds of beneficiaries who consented were continuous participants.
- Of the beneficiaries who never consented to participate, the refusal rate ranged from 0.3% to 13%. The percent not contacted or unable to be located ranged from 4 to 15%.

Participants are somewhat healthier, less costly, and lower users of acute care services than beneficiaries who never participated.

- The proportion of participating beneficiaries with Medicaid enrollment is between 3 and 14 percentage points lower than for never participants.
- Six of the MHSOs have lower rates of Medicare beneficiaries who are under age 65 among their participating beneficiaries.
- The MHSOs reported challenges in locating and gaining consent from beneficiaries in long-term care settings.
## Intervention Activities

### Table 3-4

Percent distribution of original population participants across number of months of telephonic support during Months 7–18 of the Medicare Health Support Pilot

<table>
<thead>
<tr>
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<th>Months of Telephonic Support</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Aetna</td>
<td>19</td>
</tr>
<tr>
<td>Healthways</td>
<td>5</td>
</tr>
<tr>
<td>CIGNA Health Support</td>
<td>4</td>
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<tr>
<td>Health Dialog</td>
<td>3</td>
</tr>
<tr>
<td>Green Ribbon Health</td>
<td>9</td>
</tr>
<tr>
<td>LifeMasters</td>
<td>10</td>
</tr>
<tr>
<td>McKesson</td>
<td>15</td>
</tr>
<tr>
<td>XLHealth</td>
<td>5</td>
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</tbody>
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**SOURCE:** RTI analysis of Medicare Health Support (MHS) participation data and telephonic and in-person encounter data submitted monthly by the MHSOs for the original population for Months 1 – 18 of the Phase I pilot.
Beneficiary Survey

• Pre-post longitudinal survey of 7 MHSOs with response rates ranging from 73% to 84%

• Four domains
  – Satisfaction: Health care team are helping beneficiary to cope with their chronic condition
  – Care Experience measures that were principal foci of health coaching sessions
  – Self-management measures related to setting goals, self-efficacy, and self-care activities
  – Physical and Mental Health Functioning measures: Veterans RAND-12 and ADL functioning

• Findings
  – None of the 7 MHSOs demonstrated positive intervention effects across all four domains
  – Two MHSOs improved satisfaction
Seven of the MHSOs had a positive intervention effect on one or more process-of-care measures but no positive intervention effect on reduction in acute care utilization or mortality.

Claims-Based Quality of Care Measures
- HbA1c screening - diabetes
- Cholesterol screening – diabetes/heart failure
- Urine protein screening – diabetes
- Retinal Eye Exam – diabetes

Health Outcomes
- All cause, heart failure and diabetes hospitalization
- All cause, heart failure and diabetes readmission
- All cause, heart failure and diabetes ER visits
- Mortality
Cost Savings Findings

• Average monthly management fees during the first 18 months of the pilot ranged from $67 to $118 per beneficiary, or 4.7% to 9.3% of average per-beneficiary-per-month (PBPM) expenditures of the comparison group.

• None of the 8 MHSOs achieved gross savings rates that were statistically different from zero for their original populations.

• Difference in Growth of PBPM expenditures
  – Aetna -$26
  – Healthways +26
  – CIGNA Health Support -$13
  – Health Dialog +$26
  – Green Ribbon Health -$17
  – Life Masters +$38
  – McKesson +$1
  – XLHealth -$29

• Savings have offset 12 – 26% of estimated accrued fees for 4 MHSOs
Challenges in the MHS Pilot

- **Engaging the Intervention Population:**
  - Participation rates during the first 18-months of the Medicare Health Support (MHS) pilot ranged from 74% to 95%; however, the MHSOs did not engage the sicker, more costly, and higher acute care utilizing beneficiaries.

- **Barriers to Success:**
  - High search costs to locate beneficiaries.
  - Challenges in identifying and engaging institutionalized beneficiaries.
Challenges in the MHS Pilot

• **Enhancing Beneficiary Self-Management Behaviors:**
  – The beneficiary survey results showed little evidence of changes in self-efficacy or self-care

• **Barriers to Success:**
  – Nurses must build a relationship and conduct the intervention primarily telephonically
  – Primarily a frail elderly population with reported high levels of psychosocial needs and visual and hearing impairments
  – Lack of routine clinical data reduced the MHSOs ability to have up-to-date assessments of patient health status
  – The level of needed intervention broadly across the population may have been under-estimated as we did not observe change in beneficiary behavior with respect to self-management of their chronic illness
Improving Quality of Care and Health Outcomes:
- Rates of improvement in the quality of care measures were relatively modest. There were no statistically significant reductions in the rate of growth in hospitalizations, re-admissions, or ER visits in the intervention groups relative to the comparison groups.

Barriers to Success:
- In most instances there was no relationship between the primary care provider and the MHSO
- The MHSOs cannot provide the process-of-care services ensuring compliance but rather must rely upon beneficiary self-motivation and/or communication with providers about potential unmet needs
- A critical barrier to success in reducing ER visits and hospitalizations is lack of clinical information on deterioration in health status
- A barrier to reducing readmissions is lack of timely knowledge of hospitalizations
Challenges in the MHS Pilot (cont)

• **Achieving Financial Savings:**
  – Fees accrued through the first 18-month pilot period far exceed savings produced.

• **Barriers to Success:**
  – Without a reduction in inpatient costs, there will not be significant reductions in Medicare expenditures.
  – Given the intent-to-treat design, lack of engagement of the most costly beneficiaries required a substantially larger savings effect on participants, which has not materialized to date.
  – Monthly management fees are too high for savings generated.
Implications for Future Medicare Initiatives

• Changing the models to include greater involvement of physicians in the day-to-day care management may increase levels of active engagement in self-management

• Revising the eligibility criteria for selection into demonstration programs to eliminate those least likely to voluntarily participate or those for whom search costs are high but still produce valid comparison groups

• Removing barriers to more timely data flow from providers or beneficiaries

• Care management fees need to be set in light of findings to date