CMMI/CMS’s Health Care Innovation Awards and Opportunities for Philanthropy to Advance Population Health

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The CMS Innovation Center

The purpose of the Center is to test innovative payment and service delivery models to reduce program expenditures under Medicare, Medicaid, and CHIP… while preserving or enhancing the quality of care furnished.

- The Affordable Act
Our vision for improving health delivery is about **better, smarter, healthier**.

If we find better ways to **deliver care, pay providers**, and **distribute information**, we can receive better care, spend our dollars more wisely, and have healthier people and communities, and a healthier economy.

Continue to work across sectors for the goals we share: better care, smarter spending, and healthier people.
Delivery system and payment transformation

**Historical State**

- Producer-Centered
- Volume Driven
- Unsustainable
- Fragmented Care
- FFS Payment Systems

**Future State** –

- People-Centered
- Outcomes Driven
- Sustainable
- Coordinated Care

**New Payment Systems and other Policies**

- Value-based purchasing
- ACOs, Shared Savings
- Episode-based payments
- Medical Homes and care management
- Data Transparency

**PRIVATE SECTOR**

**PUBLIC SECTOR**
# Framework for Progression of Payment to Clinicians and Organizations in Payment Reform

<table>
<thead>
<tr>
<th>Category 1: Fee for Service – No Link to Quality</th>
<th>Category 2: Fee for Service – Link to Quality</th>
<th>Category 3: Alternative Payment Models on Fee-for-Service Architecture</th>
<th>Category 4: Population-Based Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Payments are based on volume of services and not linked to quality or efficiency</td>
<td>At least a portion of payments vary based on the quality or efficiency of health care delivery</td>
<td>• Some payment is linked to the effective management of a population or an episode of care  • Payments still triggered by delivery of services, but, opportunities for shared savings or 2-sided risk</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Medicare</td>
<td>• Limited in Medicare fee-for-service  • Majority of Medicare payments now are linked to quality</td>
<td>• Hospital value-based purchasing  • Physician Value-Based Modifier  • Readmissions/Hospital Acquired Condition Reduction Program</td>
<td>• Accountable Care Organizations  • Medical Homes  • Bundled Payments</td>
</tr>
<tr>
<td>Medicaid</td>
<td>Varies by state</td>
<td>• Primary Care Case Management  • Some managed care models</td>
<td>• Integrated care models under fee for service  • Managed fee-for-service models for Medicare-Medicaid beneficiaries  • Medicaid Health Homes  • Medicaid shared savings models</td>
</tr>
</tbody>
</table>

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Target percentage of payments in ‘FFS linked to quality’ and ‘alternative payment models’ by 2016 and 2018

- **Historical Performance**
  - 2011: All Medicare FFS (Categories 1-4) 68%, FFS linked to quality (Categories 2-4) 0%
  - 2014: All Medicare FFS (Categories 1-4) 85%, FFS linked to quality (Categories 2-4) 22%
  - 2016: All Medicare FFS (Categories 1-4) 85%, FFS linked to quality (Categories 2-4) 30%
  - 2018: All Medicare FFS (Categories 1-4) 90%, FFS linked to quality (Categories 2-4) 50%

- **Goals**
  - 2016: Target percentage of payments in ‘FFS linked to quality’ and ‘alternative payment models’ by 2016 and 2018
  - 2018: Target percentage of payments in ‘FFS linked to quality’ and ‘alternative payment models’ by 2016 and 2018

Legend:
- Alternative payment models (Categories 3-4)
- FFS linked to quality (Categories 2-4)
- All Medicare FFS (Categories 1-4)
Innovation Awards Summary

- Open solicitation to identify and test innovative service delivery and payment models that:
  - Improve health and healthcare
  - Improve cost efficiency of CMS programs
  - Rapidly train or deploy a new workforce
- Initial 107 awards, ranging from $1 to $30 million (Round 1), and additional 39 awards ranging from $2 to $24 million (Round 2).
- CMS recognizes that many of the best policy innovations can come from non-government developers
HCIA Goal

- **GOAL:** To identify and support a broad range of innovative service delivery and payment models that achieve better care, better health and lower costs through improvement in communities across the nation.
HCIA awardees will:

• Improve care and lower costs for Medicare, Medicaid and CHIP beneficiaries
• Reach diverse populations, including underserved and remote communities
• Rapidly implement the proposed model
• Develop, train, and deploy workforce to support the models
Innovation Awards Review Process: Round 1

- 2,260 applications were scored by 190 panels. These applications represent $30 billion in requested awards.
- Panels were composed of governmental and non-governmental reviewers.
- Reviewers scored applications along five criteria:
  - Design of project
  - Organizational capacity and management plan
  - Workforce goals
  - Budget and sustainability plan
  - Evaluation and reporting plan
The HCIA Portfolio has a diversity of initiatives of varying funding size requests.

- 47% of the initiatives funded were <$4.9 million.
Distribution by Community Type

- Innovations are happening across all types of communities across our nation.
Distribution by Participant Age

- We are testing innovations to improve the care of all of our beneficiaries across the nation.
A wide variety of entities are being funded through the HCIA.
All of our beneficiaries are benefiting from health care innovations across the country.

*“Mixed” describes initiatives with both public and private payers*
### Distribution by Category

<table>
<thead>
<tr>
<th>Type of Intervention</th>
<th>Award Count</th>
<th>Three-Year Total Funding Amount</th>
<th>Percentage of Total Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community interventions</strong></td>
<td>47</td>
<td>$430,355,320</td>
<td>48.15%</td>
</tr>
<tr>
<td>Community Resource Planning, Prevention, Monitoring</td>
<td>24</td>
<td>$162,912,663</td>
<td>18.23%</td>
</tr>
<tr>
<td>Medication management</td>
<td>6</td>
<td>$42,500,615</td>
<td>4.75%</td>
</tr>
<tr>
<td>Primary Care Redesign</td>
<td>15</td>
<td>$208,842,489</td>
<td>23.36%</td>
</tr>
<tr>
<td>Shared decision making</td>
<td>2</td>
<td>$16,099,553</td>
<td>1.80%</td>
</tr>
<tr>
<td><strong>Hospital Setting Interventions</strong></td>
<td>10</td>
<td>$115,050,185</td>
<td>12.87%</td>
</tr>
<tr>
<td>Acute Care Condition Specific</td>
<td>4</td>
<td>$53,923,447</td>
<td>6.03%</td>
</tr>
<tr>
<td>Acute Care Management</td>
<td>3</td>
<td>$22,580,365</td>
<td>2.53%</td>
</tr>
<tr>
<td>ICU/Remote ICU Care</td>
<td>3</td>
<td>$38,546,373</td>
<td>4.31%</td>
</tr>
<tr>
<td><strong>Management of medically fragile patients in the community</strong></td>
<td>50</td>
<td>$348,439,494</td>
<td>38.98%</td>
</tr>
<tr>
<td>Behavioral Health/Substance Abuse</td>
<td>9</td>
<td>$66,374,354</td>
<td>7.43%</td>
</tr>
<tr>
<td>Complex/High Risk Patient Targeting</td>
<td>23</td>
<td>$162,384,676</td>
<td>18.17%</td>
</tr>
<tr>
<td>Disease specific -- Cancer</td>
<td>4</td>
<td>$41,697,462</td>
<td>4.66%</td>
</tr>
<tr>
<td>Disease Specific -- Childhood Asthma</td>
<td>3</td>
<td>$10,534,103</td>
<td>1.19%</td>
</tr>
<tr>
<td>Disease specific -- Diabetes/Chronic Kidney Disease</td>
<td>3</td>
<td>$18,740,488</td>
<td>2.10%</td>
</tr>
<tr>
<td>Disease specific -- Other</td>
<td>8</td>
<td>$48,608,411</td>
<td>5.44%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>107</strong></td>
<td><strong>$893,844,999</strong></td>
<td><strong>100.00%</strong></td>
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</table>
## Range of Services Provided

<table>
<thead>
<tr>
<th>Rank</th>
<th>Service Type</th>
<th># Awardees</th>
<th>Rank</th>
<th>Service Type</th>
<th># Awardees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Care Coordination</td>
<td>75</td>
<td>23</td>
<td>Integrated Physical, Behavioral/Mental Health, and Social Services</td>
<td>33</td>
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<tr>
<td>2</td>
<td>Care Management / Chronic Disease Management</td>
<td>73</td>
<td>24</td>
<td>Discharge Planning</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Patient/Family Education</td>
<td>65</td>
<td>25</td>
<td>Integrated Health and Social Services</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>Self-Management Support</td>
<td>62</td>
<td>26</td>
<td>Medical Home</td>
<td>29</td>
</tr>
<tr>
<td>5</td>
<td>Medication Management</td>
<td>59</td>
<td>27</td>
<td>Telehealth</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>Referral Services</td>
<td>50</td>
<td>28</td>
<td>Crisis Management</td>
<td>26</td>
</tr>
<tr>
<td>7</td>
<td>Patient Care Monitoring</td>
<td>49</td>
<td>29</td>
<td>Benefits and Treatment Options Counseling</td>
<td>25</td>
</tr>
<tr>
<td>8</td>
<td>Community Outreach</td>
<td>47</td>
<td>30</td>
<td>Patient Safety</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>Decision Making Support (patient)</td>
<td>47</td>
<td>31</td>
<td>E-Prescribing</td>
<td>22</td>
</tr>
<tr>
<td>10</td>
<td>HIT</td>
<td>47</td>
<td>32</td>
<td>Home Care or Home Health</td>
<td>18</td>
</tr>
<tr>
<td>11</td>
<td>Medication Reconciliation</td>
<td>47</td>
<td>33</td>
<td>Registry</td>
<td>17</td>
</tr>
<tr>
<td>12</td>
<td>Needs Assessments</td>
<td>47</td>
<td>34</td>
<td>Home Safety Assessments</td>
<td>16</td>
</tr>
<tr>
<td>13</td>
<td>Patient Navigation Support</td>
<td>46</td>
<td>35</td>
<td>Other</td>
<td>14</td>
</tr>
<tr>
<td>14</td>
<td>Decision Making Tools (clinicians)</td>
<td>45</td>
<td>36</td>
<td>Substance Abuse Services</td>
<td>13</td>
</tr>
<tr>
<td>15</td>
<td>Counseling for Health and Social Supports</td>
<td>44</td>
<td>37</td>
<td>Project does not provide services directly to participant populations</td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td>Medical / Physician / Clinical Services</td>
<td>41</td>
<td>38</td>
<td>Palliative care / Comfort care</td>
<td>11</td>
</tr>
<tr>
<td>17</td>
<td>Preventive Care</td>
<td>40</td>
<td>39</td>
<td>Critical Care</td>
<td>9</td>
</tr>
<tr>
<td>18</td>
<td>Decision Making Joint (patient and provider)</td>
<td>38</td>
<td>40</td>
<td>Home Nurse Hotlines</td>
<td>8</td>
</tr>
<tr>
<td>19</td>
<td>Home and Community-Based Services and Supports</td>
<td>38</td>
<td>41</td>
<td>Urgent Care Transports</td>
<td>7</td>
</tr>
<tr>
<td>20</td>
<td>Transition Program or Services/Post discharge support</td>
<td>38</td>
<td>42</td>
<td>Dental Services / Oral Preventive Services</td>
<td>5</td>
</tr>
<tr>
<td>21</td>
<td>Community Health Resource Provision</td>
<td>35</td>
<td>43</td>
<td>Infant Growth and Development Monitoring</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>Behavioral/Mental Health Services</td>
<td>33</td>
<td>44</td>
<td>Radiology / Imaging Services</td>
<td>5</td>
</tr>
</tbody>
</table>
HCIA Implementation

• Project start July 2012
• Most projects scheduled for implementation first quarter, CY 2013.
• Ongoing self monitoring and rapid cycle improvement at each site
• Programs will develop measures of success and use those measures to identify operating issues and make improvements
• Program close June 2015
Independent Evaluations

- All CMS Innovation Center projects receive independent evaluations
- RAND Corporation is developing an overall evaluation design
- Evaluations of each of the 107 awards are expected using independent contractors
- Those projects that are most promising can be expanded for further analysis of the model
Deep Dive: HCIA Round 2 Award and Example of Accelerating Impact with Philanthropy

IOM Population Health Measures

**CDC “Winnable Battles”**
“The current Winnable Battles (Tobacco; Nutrition, Physical Activity and Obesity; Food Safety; Healthcare-Associated Infections; Motor Vehicle Injuries; Teen Pregnancy; HIV in the U.S.) have been chosen based on the magnitude of the health problem and our ability to make significant progress in outcomes.”

### Core Measure Set with Related Priority Measures

1. **Life expectancy**
   - Infant mortality
   - Maternal mortality
   - Violence and injury mortality

2. **Well-being**
   - Multiple chronic conditions
   - Depression

3. **Overweight and obesity**
   - Activity levels
   - Healthy eating patterns

4. **Addictive behavior**
   - Tobacco use
   - Drug dependence/illicit use
   - Alcohol dependence/misuse

5. **Unintended pregnancy**
   - Contraceptive use

6. **Healthy communities**
   - Childhood poverty rate
   - Childhood asthma
   - Air quality index
   - Drinking water quality index

7. **Preventive services**
   - Influenza immunization
   - Colorectal cancer screening
   - Breast cancer screening

8. **Care access**
   - Usual source of care
   - Delay of needed care

9. **Patient safety**
   - Wrong-site surgery
   - Pressure ulcers
   - Medication reconciliation

10. **Evidence-based care**
    - Cardiovascular risk reduction
    - Hypertension control
    - Diabetes control composite
    - Heart attack therapy protocol
    - Stroke therapy protocol
    - Unnecessary care composite

11. **Care match with patient goals**
    - Patient experience
    - Shared decision making
    - End-of-life/advanced care planning

12. **Personal spending burden**
    - Health care-related bankruptcies

13. **Population spending burden**
    - Total cost of care
    - Health care spending growth

14. **Individual engagement**
    - Involvement in health initiatives

15. **Community engagement**
    - Availability of healthy food
    - Walkability
    - Community health benefit agenda
Teen pregnancy and birth rates, United States, 2000–2013

Probability of Not Having an Unintended Pregnancy, According to Contraceptive Method and Age.
And further impact on termination-abortion rates

<table>
<thead>
<tr>
<th>Year</th>
<th>CHOICE Rate*</th>
<th>Region Rate†</th>
<th>P</th>
<th>Abortions Prevented‡</th>
<th>Number Treated to Prevent One Abortion</th>
<th>95% CI</th>
<th>National Rate¶</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>4.4</td>
<td>17.0</td>
<td>&lt;0.001</td>
<td>3124</td>
<td>79</td>
<td>44-255</td>
<td>19.6</td>
</tr>
<tr>
<td>2009</td>
<td>7.5</td>
<td>14.8</td>
<td>&lt;0.001</td>
<td>1810</td>
<td>137</td>
<td>97-224</td>
<td>NA</td>
</tr>
<tr>
<td>2010</td>
<td>5.9</td>
<td>13.4</td>
<td>&lt;0.001</td>
<td>1860</td>
<td>133</td>
<td>99-213</td>
<td>NA</td>
</tr>
</tbody>
</table>

NNT, number needed to treat; CI, confidence interval; NA, not applicable.
What are the Policy Issues for us?
How Can CMMI/CMS approach this issue?

- Explore payment and delivery system barriers
  - Maternal bundled payments (“Global obstetric package”)
    - Innovation: South Carolina
  - Stocking and high cost of LARC
    - Innovation: Illinois (but unexpected effect…)
  - Inappropriate payment
    - Example: Washington DC – Zero LARC coverage until recently
- Post-abortion LARC barriers
  - Innovation: New York and Oregon
- But how do we actually advance pop health in this area?
  - Understand the source of variation
    - Helpful role of private philanthropy
  - CMMI/CMS/CMCS could create composite “scorecard”
  - Distinct FQHC Family Planning encounter code
  - CMCS FOA for use of “contraception measure”
Deep Dive 2: Pediatric Asthma

[A diagram showing the anatomy of the respiratory system, comparing a normal airway (B) to an airway during symptoms of asthma (C). The diagram highlights muscle, airway wall, narrowed airway, tightened muscles, inflamed/thickened airway wall, mucus, and airway x-section.]

- Normal Airway (B): Muscle, Airway wall
- During Asthma Symptoms (C): Narrowed airway (limited airflow), Tightened muscles constrict airway, Inflamed/thickened airway wall, Mucus

Lungs, Airways
## Treatment is Complex!

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Preferred Treatment</strong></td>
<td>inhaled short-acting beta2-agonist (SABA) as needed</td>
<td>low-dose inhaled corticosteroid (ICS)</td>
<td>medium-dose inhaled corticosteroid (ICS) plus either inhaled long-acting beta2-agonist (LABA) or montelukast</td>
<td>high-dose inhaled corticosteroid (ICS) plus either inhaled long-acting beta2-agonist (LABA) or montelukast</td>
<td>high-dose inhaled corticosteroid (ICS) plus either inhaled long-acting beta2-agonist (LABA) or montelukast</td>
</tr>
<tr>
<td><strong>Alternative Treatment (If alternative treatment is used and response is inadequate, discontinue and use preferred treatment before stepping up.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>cromolyn or montelukast</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Simple Things…
How do we improve outcomes?

Knowledge + Systems + Payment = Outcomes

Adapted from Batalden, Qual Saf Health Care, 2007
The Potential

Childhood Asthma: % Patients with Asthma Admissions

Pilot Sites (PEDO & SOPED) Rest of CHA

Goal <=0.5%

% Patient Count

Childhood Asthma: % Patients with Asthma Admissions
Role for Private Philanthropy (1)

- Currently, CMMI/CMS has funded three programs with focus on pediatric asthma care, yet none have transitioned to clear, sustainable models of reimbursement
- What is the role of philanthropy?
  - Innovative funding structuring (GHII)
  - Direct funding of services (Community benefit funding from health care organizations)
  - Research and evaluation
  - Sophisticated technical support
<table>
<thead>
<tr>
<th>State-led/ statewide</th>
<th>Payor-led, voluntary for providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strong policy impetus; Medicaid as lead</td>
<td>• Payor-developed program/ framework</td>
</tr>
<tr>
<td>• Significant multi-payer involvement (multiple MCOs, Commercial)</td>
<td>• Providers choose whether to participate</td>
</tr>
<tr>
<td>• Typical: mandatory model, fixed thresholds for performance rewards</td>
<td>• Incentives typically based on shared savings based on performance improvement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provider-led</th>
<th>Employer-led, consumer-powered</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Providers initiate</td>
<td>• Employers initiate episode performance framework</td>
</tr>
<tr>
<td>• May establish rewards with payors or relationships with providers/ ACOs</td>
<td>• Sometimes involve strong network incentives (&quot;centers of excellence&quot;)</td>
</tr>
<tr>
<td>• Service lines with attractive economics (e.g., orthopedics, cardiac)</td>
<td>• Sometimes prospective payment</td>
</tr>
<tr>
<td>• Sometimes prospective payment</td>
<td>• May be linked to reference pricing</td>
</tr>
</tbody>
</table>

Logos: Arkansa Human Services, Arkansas BlueCross BlueShield, TENNCARE, Ohio, Horizon, BPCI, Colorado Business Group on Health, New England Baptist Hospital, Cleveland Clinic, Lowe's, CalPERS.
Thank You