Medicaid Best Buys: Improving Care Management for High-Need, High-Cost Beneficiaries

One of the five promising reform strategies outlined in CHCS’ policy brief, Medicaid Best Buys: Promising Reform Strategies for Governors, was to improve care management for high-need, high-cost beneficiaries with multiple chronic conditions. This new brief outlines important steps for states to consider in designing comprehensive programs for these complex populations.

As the nation edges closer to health reform and the promise of a more efficient health care system, a number of state leaders are including efforts to improve chronic care in their strategies. Rethinking how care is provided to Medicaid’s most chronically ill and costliest beneficiaries offers significant potential for improving the quality of care and bending cost trends in publicly financed care.

A remarkably small number of Medicaid beneficiaries with significant needs drive the majority of program spending. People with more than $5,000 in annual Medicaid costs make up less than 15 percent of total beneficiaries, but account for over 75 percent of all spending. Among these high-cost beneficiaries, virtually all have multiple physical and behavioral health conditions, disabilities, and/or frailties associated with aging. Within the most expensive one percent of beneficiaries, almost 83 percent have three or more chronic conditions, and more than 60 percent have five or more. For people with disabilities, each additional chronic condition is associated, on average, with an increase in costs of approximately $8,400 per year.

The complex needs of this patient population certainly drive these costs, but so does the fact that the majority of Medicaid’s highest-cost patients are in unmanaged fee-for-services systems. The absence of one entity or individual responsible for coordinating care and navigating transitions between care providers leads to fragmentation and duplication of services. The result is often preventable hospitalizations and readmissions, frequent inappropriate emergency room visits, avoidable institutionalizations, and poorly managed medication usage due to multiple providers. These adults are prime candidates for care management approaches that establish a consistent health care provider and coordinate the full range of necessary medical, behavioral, and non-medical services.

A number of states are beginning to experiment with sophisticated ways to improve care for beneficiaries with chronic and potentially high-cost health care needs. This brief outlines five key steps for states to consider in developing programs for high-risk, high-cost beneficiaries. It also highlights three innovative states that are pioneering new care management approaches.

The Faces of Comorbidity

Medicaid’s highest-need, highest-cost beneficiaries typically have a complex array of needs that are not addressed by traditional single-condition disease management programs. These profiles illustrate the severity of needs facing this population:

**Alma**, age 56, has diabetes, hypertension, hepatitis C, chronic obstructive pulmonary disorder, depression, liver cirrhosis, and a history of alcohol abuse. In the past year, she visited the emergency room 18 times, was admitted to the hospital twice, and had a short-term nursing home stay. Alma visited an outpatient clinic a handful of times in the last year, each time seeing a different provider.

**Sandra**, age 50, has multiple sclerosis, resulting in lower limb paralysis and urinary retention. She requires a walker and self catheterization. In the last year, she was hospitalized nine times for urinary tract and respiratory infections. She is a heavy smoker with recurring bouts of asthmatic bronchitis and a history of depression. She has multiple providers, but no regular primary care provider.

**Carl**, age 60, has congestive heart failure, diabetes, chronic leg ulcers, a narcotics addiction due to longstanding painkiller use, and he is severely obese. The pain associated with mobility and difficulties getting transportation limit his medical contacts. He frequently visits the emergency room and was hospitalized seven times in the past year.
Step One: Identify High-Opportunity Beneficiaries

Increasingly, states are targeting subsets of high-need, high-cost patients who are likely to benefit from enhanced care management. Identifying these high-opportunity beneficiaries requires a clear understanding of the patient population. States can start by examining disease prevalence and relationship to cost, comorbidity, and utilization patterns and determining whether: (a) consensus exists on appropriate care for common conditions; (b) treatment gaps are causing inappropriate utilization and unnecessary costs; (c) the potential exists for an intervention to improve care and increase appropriate utilization; and (d) there are quality and cost outcomes that can be measured.

Due to the high prevalence of comorbidity in Medicaid, understanding the patterns of chronic conditions can help states identify beneficiaries at highest risk for poor outcomes and costly care. Determining the most common diagnostic pairs or sets of diseases (“dyads” or “triads”) can help states prioritize beneficiary needs and develop care pathways for treating the pairs or sets of conditions. Based on a recent analysis of the patterns of comorbidity in Medicaid, the most common dyads or triads of diagnoses within the program’s highest-cost beneficiaries are potentially good prospects for focused care management strategies (Figure 1).

![Figure 1: Top 10 Diagnostic Pairs Among the Most Costly 5% of Medicaid Patients](image)

<table>
<thead>
<tr>
<th>Diagnostic Pair</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular–Pulmonary</td>
<td>30.5%</td>
</tr>
<tr>
<td>Cardiovascular–Gastrointestinal</td>
<td>24.8%</td>
</tr>
<tr>
<td>Cardiovascular–Central Nervous System</td>
<td>24.8%</td>
</tr>
<tr>
<td>Central Nervous System–Pulmonary</td>
<td>23.8%</td>
</tr>
<tr>
<td>Pulmonary–Gastrointestinal</td>
<td>23.8%</td>
</tr>
<tr>
<td>Cardiovascular–Psychiatric</td>
<td>22.0%</td>
</tr>
<tr>
<td>Cardiovascular–Renal</td>
<td>20.8%</td>
</tr>
<tr>
<td>Central Nervous System–Gastrointestinal</td>
<td>20.7%</td>
</tr>
<tr>
<td>Psychiatric–Central Nervous System</td>
<td>20.7%</td>
</tr>
<tr>
<td>Cardiovascular–Diabetes</td>
<td>19.2%</td>
</tr>
</tbody>
</table>


Step Two: Stratify the Population by Risk and Level of Need

Prioritizing the target population by risk and level of need can help states determine how to tailor care interventions. This is important because “one size fits all” approaches that do not address the complex needs of patients are not likely to be effective from a care or cost standpoint. Tools and strategies that states are using to stratify the target population include: (a) administrative claims data to stratify by costs; (b) diagnostic classification methods such as the Chronic Illness and Disability Payment System or Adjusted Clinical Groups that assign a risk score to beneficiaries; and/or (c) predictive models that identify beneficiaries at risk for future high utilization, adverse events, and/or costs.

Using a variety of data sources can increase the accuracy of stratification and the ability of states to tailor care management interventions to the target population. States might consider using predictive modeling coupled with a health risk assessment to identify patients who may be at high risk for future...
**State Innovations in Care Management**

States across the country are addressing the five steps outlined in this brief to identify beneficiaries with complex and costly needs and to improve the delivery and management of their care. Examples of three state programs that show promise in these areas include Indiana, Oklahoma, and Pennsylvania. The following summaries are excerpted from *Purchasing Strategies to Improve Care Management for Complex Populations: A National Scan of State Purchasers*. Download the full report at www.chcs.org.

**Indiana**

Indiana Care Select is designed to improve the quality of care and control costs for aged, blind, and disabled beneficiaries, including those receiving home- and community-based waiver services. The program, which provides tailored services through two care management organizations (CMOs), began in select Indiana counties in November 2007 and rolled out statewide in March 2008. Care Select uses a health assessment screener paired with claims data to identify and prioritize the care requirements of newly enrolled beneficiaries. Beneficiaries are stratified into four groups based on the severity of their needs; corresponding care management approaches are designed for each of the four risk levels. To gauge care management quality, the program is testing the use of the Agency for Healthcare Research and Quality's Prevention Quality Indicators (PQIs). The PQIs capture data on hospital admission rates for conditions common to people with chronic illnesses (e.g., dehydration, bacterial pneumonia, urinary tract infections, and respiratory failure) that are recognized as avoidable or preventable if proper care management has been provided. Care Select's pay-for-performance strategy includes CMO incentive payments and withholdings based on the timeliness and submission rate of the health assessments as well as increased payment to providers who adopt best practices, e.g., use of a personalized care plan. CMOs and providers are also eligible for incentives if they achieve targeted process and outcome measures.

**Oklahoma**

Oklahoma’s SoonerCare Health Management Program, launched in February 2008, seeks to strengthen linkages among high-cost, high-need beneficiaries, their providers, and other resources, including behavioral health and community services. The state uses predictive modeling to identify the top 5,000 beneficiaries who are at highest risk for poor outcomes and increased health care costs. Out of those 5,000, the 1,000 beneficiaries with highest predicted costs receive in-person nurse care management and education to improve self-management skills. The remaining beneficiaries receive less intensive services from call center-based nurse care managers. High-volume providers who agree to participate receive support from an on-site practice facilitator to enhance practice site quality and efficiency; access to a data base designed to track best evidenced-based practices; training to improve chronic and preventive care and build community partnerships; and financial incentives for achieving specified process and improvement outcomes.

**Pennsylvania**

ACCESS Plus, Pennsylvania’s enhanced primary care case management program, is designed to address varying levels of patient need. Traditional disease management services are available for beneficiaries with asthma, diabetes, chronic obstructive pulmonary disease, coronary artery disease and congestive heart failure. Adults with multiple chronic conditions or serious mental health conditions are eligible for tailored care management through the state’s Intensified Medical Case Management unit, which began in February 2007. Currently, the state identifies candidates for intensive case management on a referral basis. To identify “risk-movers” — beneficiaries who are likely to migrate from lowest risk to highest risk — the state is applying Medicaid Transformation Grant resources to adopt a more robust predictive modeling approach that stratifies beneficiaries with chronic conditions according to health risk and predicted future costs.
utilization or in need of care management. Indiana is combining claims data analysis with a health risk assessment to stratify its aged, blind and disabled population into four levels of care, including a “rush” designation for beneficiaries with immediate needs. A subsequent health needs assessment drills down to identify the specific clinical, psychosocial, and functional needs of each beneficiary to guide the design of care management services (see State Innovations in Care Management sidebar). 12

**Step Three: Tailor Interventions to Provide Person-Centered Care**

Care management programs aim to achieve an optimal level of wellness and improve coordination of care while providing cost effective, non-duplicative services. 13 In particular, programs that establish a set of standard features, but then tailor interventions to address the unique needs of high-risk beneficiaries can potentially target resources more effectively. Although designing interventions with the right “touch” and intensity for the target populations is critical, little knowledge exists on the comparative effectiveness of different types of interventions, e.g., telephone (“low-touch”) versus in-person (“high-touch”) strategies.

As such, states are experimenting with programs that provide different degrees of intensity to address the varying risk levels of beneficiaries. Some states, including Indiana and Oklahoma, are offering tiered care management approaches that vary levels of care to match beneficiary need and risk. Key components of care management interventions include strengthening the relationship between primary care physicians and their patients; integrating medical, behavioral and psychosocial services; and engaging consumers and their caregivers in health care decision making. Multi-faceted interventions that aim to improve quality of care through combinations of strategies at multiple levels (e.g., system, provider, and consumer) hold great promise for improving outcomes. 14

**Step Four: Develop Appropriate Measures to Assess Performance and Outcomes**

Systematic measurement can establish whether tailored interventions improve quality, efficiency, and effectiveness. Yet measuring clinical and non-clinical aspects of care management programs can be difficult, particularly since few, if any, existing measures meaningfully address the complex needs of adults with chronic illnesses and disabilities. Without a recognized set of measures to gauge the quality of care for adults with chronic conditions, states are adapting existing measures, adopting new measures, or doing both to more accurately reflect the complex needs of the population.

Pennsylvania, for example, is assessing the effectiveness of care coordination for beneficiaries with asthma, diabetes, coronary artery disease, congestive heart failure, and chronic obstructive pulmonary disease by tracking quality of care process improvements. Other states, e.g., California and New York, are testing new ways to assess the effectiveness of care for adults with multiple chronic needs. The National Committee for Quality Assurance’s Geriatric Measurement Advisory Panel is doing work in this area, particularly as it relates to complex populations served by Medicare Advantage Special Needs Plans. Careful and consistent evaluation will help build the evidence base in terms of what works for populations with complex needs.
Step Five: Structure Financing to Support Care Management

States are testing a variety of alternative financing mechanisms for providers and contractors to align payment to support improvements in care management for people with complex needs. Payment options include shared risk, shared savings, and pay for performance. In contractor managed programs, states may use financing mechanisms that put some or all of the contractor payment at risk for meeting performance targets or cost savings goals, i.e., sharing savings or withholding dollars based on contractor performance. A tiered payment system can provide varying levels of reimbursement for contractors depending on beneficiary risk level and level of care management required.

As states develop increasingly sophisticated methods to manage the care of high-risk, high-cost populations, they will need to focus corresponding attention on financing strategies that offer adequate reimbursement and hold providers and contractors accountable to improving care and controlling costs.

Conclusion

With the current economic downturn pinching state budgets, Medicaid directors are facing difficult decisions on how best to spend limited public dollars. Indeed, opportunities to improve care management for Medicaid’s most expensive beneficiaries may be one of the most effective, and sustainable, ways for states to rein in costs. Programs that focus quality improvement on high-cost, high-need patients can potentially help states both bend the Medicaid cost growth trend and significantly improve care for people with complex, chronic needs.

Endnotes

3. Ibid.
4. Ibid.
5. R.G. Kronick, et al., op. cit.
8. For more information about Indiana’s Care Select program, visit: http://www.in.gov/hsa/cnpp/4161.htm.
12. For more information, see Indiana Care Select Program Attachment D: Scope of Work. Available at: http://www.indianamedicaid.com/hsa/cnpp/CareSelect/content/documents/62artc1.pdf.
This brief is part of CHCS’ Medicaid Best Buys series developed to help states, health plans, and policymakers identify programs that have the greatest potential to improve health care quality and reduce costs for high-risk beneficiaries. The series, made possible through support from the Robert Wood Johnson Foundation, provides policy recommendations and technical resources to guide program development and implementation. Additional Medicaid Best Buys resources from CHCS include:

- **Policy Brief** — *Improving Value in Medicaid: Supporting Quality Improvement for High-Need, High-Cost Beneficiaries*: Outlines key opportunities for Congress and the Centers for Medicare and Medicaid Services to support state efforts in improving care for beneficiaries with complex and costly health needs.

- **Report** — *Purchasing Strategies to Improve Care Management for Complex Populations: A National Scan of State Purchasers*: Presents findings from interviews with 12 Medicaid programs on innovative care approaches for adults with complex needs.

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**About the Center for Health Care Strategies**

The Center for Health Care Strategies (CHCS) is a nonprofit health policy resource center dedicated to improving the quality and cost effectiveness of health care for people with chronic illnesses and disabilities, the elderly, and racially and ethnically diverse populations. CHCS works with state and federal agencies, health plans, and providers to develop innovative programs to better serve adults and children with complex and high cost health care needs. Its program priorities are: advancing regional quality improvement, reducing racial and ethnic disparities, and integrating care for people with complex and special needs. For more information, visit [www.chcs.org](http://www.chcs.org).