



Medicaid in a New Era: Proven Solutions to Enhance Quality and Reduce Costs

Introduction

In the midst of rising healthcare spending, increasing healthcare budgets, and economic uncertainty, the efficient use of public funds and resources is critically important. States are projected to have a combined deficit of \$125 billion in FY2012 and are expected to spend \$195 billion on Medicaid -- a 48 percent increase over 2010 budgets.¹ States also must plan to add an estimated 16 million uninsured Americans to Medicaid rolls in 2014 as required by the Affordable Care Act. Though the federal government will shoulder 90 percent of the costs of this expansion for the first five years, states will face short and long term challenges with this significant increase in Medicaid beneficiaries.

As one of the largest state budgetary expenses, Medicaid is a ripe target for spending cuts. Given the vulnerability of the populations served, however, methods to lower spending that reduce access to care or needed benefits can backfire, ultimately raising costs for the state and sacrificing health. Much of the cost problem stems from failing to address chronic disease as a cost driver and flaws inherent in the traditional fee-for-service (FFS) system that undermine the ability to prevent and manage chronic conditions effectively.

The traditional FFS structure is designed to focus on the short-term medical treatment of a patient's episodic illness or acute injury. Accordingly, the primary objective is resolving the ailment at hand and not managing the underlying cause to avoid a recurrence or coordinating the many health services that an individual with multiple conditions may be receiving. The structural flaws of the FFS system perpetuate this acute care focus: isolated funding streams and cost management; a lack of coordination of services or team-approaches to care; and a blunt approach to managing costs through benefit reductions, providers cuts, and price controls. Despite the realization that traditional FFS favors the quantity of services over the quality of outcomes, more than three quarters of Medicaid spending is still funded this way.

To assist states in facing the Medicaid challenge, the Partnership to Fight Chronic Disease asked The Cameron Institute to review and analyze chronic care management programs within Medicaid to determine what is working and why. This white paper relies on the seminal paper, "The Effectiveness of Disease Management Programs in the Medicaid Population," developed by The Cameron Institute for the Partnership.

The Partnership to Fight Chronic Disease is a national and state-based coalition of hundreds of patient, provider, community, business and labor groups, and health policy experts, committed to raising awareness of the number one cause of death, disability, and rising health care costs in the U.S.: chronic disease. For more information, visit www.fightchronicdisease.org.

¹ Winerman L and Dennis V, "Exclusive: States Facing Massive Medicaid Budget Crunch," PBS Newshour, Feb. 17, 2011. Available online at <http://www.pbs.org/newshour/rundown/2011/02/by-the-numbers-states-face-massive-medicaid-budget-crunch.html>. Accessed May 16, 2011. Site includes state-by-state estimates of budget shortfalls and Medicaid costs.

Today, 83 cents of every dollar spent in Medicaid goes to treating preventable and highly manageable chronic diseases including diabetes, asthma, and hypertension. Despite what we know about preventing and managing chronic diseases to slow or delay their progression, chronically ill patients receive just 56 percent of the clinically recommended preventive and maintenance care they need to avoid disease development and progression.²

Facing these realities, states have actively tested new models of care to improve access and health outcomes within Medicaid offering valuable lessons in what works. As evidenced by successful efforts with Medicaid and other populations, well-designed, targeted care management programs with proven strategies are effective in improving the quality of care and in lowering costs.

Recognizing the severity of the budget situation in most states, policymakers must prioritize actions that can have a near-term, sustainable impact. Examining the best practices of programs that work indicates four key areas of immediate opportunity: 1) cooling the hot spots; 2) filling costly gaps; 3) enhancing adherence; and (4) promoting coordinated care. Improving overall population health status through greater prevention efforts also offers significant savings opportunities, but can require a longer time to realize savings.

Cooling the Hot Spots³

Though more than 60 percent of adult Medicaid enrollees have a chronic or disabling condition, a mere 4 percent of Medicaid enrollees absorb half of all Medicaid funding. Not only is spending concentrated among a small part of the population, those spending patterns show some persistence over time.⁴ The concentration and persistence of high costs or “hot spots” present high-value opportunities to improve outcomes and lower costs.

Focusing in on hot spots allows a state to deploy evidence-based interventions strategically targeted at the most costly areas of a Medicaid program. Interventions that work include: personalized action plans; responsibility and accountability for outcomes; team-based, coordinated care that supports self-management; integrating with community-based resources to address barriers; and regular monitoring and follow up among care team members, including the patient, facilitated by the use of health information technology. Programs that identify and anticipate patients that are at high risk for imminent hospitalization, hospital readmission and ED utilization show the strongest evidence of immediate cost-savings and clinical benefit.

Coverage is not always a guarantee of access to care. High costs may also indicate challenges with access to appropriate care providers. Understanding and addressing the underlying causes of shortages, including payment incentives, the physical location of providers, availability of telehealth services, and patient timing, transportation, or other barriers, will remove access barriers to health services.

² McGlynn EA, Asch SM, Adams J, et al., “The quality of health care delivered to adults in the United States,” *New England Journal of Medicine* 2003; 348:2635-264.

³ See Gawande A, “The Hot Spotter: Can we lower medical costs by giving the neediest patients better care?” *The New Yorker*, Jan. 24, 2011. Available online at: http://www.newyorker.com/reporting/2011/01/24/110124fa_fact_gawande. Accessed May 17, 2011.

⁴ Stanton MW, Rutherford MK, “Research in Action: The High Concentration of U.S. Health Care Expenditures,” *AHRQ*, Issue 19, June 2006.

Applying advanced analytics and data mining methods can help states identify hot spots. It is also critical to engage providers and seek their input, particularly the safety-net hospitals that tend to see high-utilizing patients with some frequency. Cutting available data by costs, type of claim, geography, disease/diagnosis, and provider can help states identify the highest value targets for early-stage interventions to facilitate testing, evaluation, and adjustment before expanding programs.

Given the level of spending associated with high-utilizers, the savings generated could cover the cost of the interventions needed to address cost-drivers within short order. For example, a program in Pennsylvania identified Significant Episodes of Cluster Activity among Medicaid enrollees and enrolled them in a minimum one-year care management program and a medical home to provide comprehensive clinical, behavioral, and social needs. On average, patients enrolled six months or more showed a 60 percent reduction in ED visits and acute readmissions and annual medical costs dropped 22 percent.

Filling Costly Gaps

The fragmentation in traditional fee-for-service Medicaid leaves significant gaps in the continuum of care often required to avoid deteriorating health status that leads to urgent needs and costly interventions. Care transitions from in-patient to out-patient, in particular, have traditionally not been well-managed in the fee-for-service system. Reimbursement is provided for the provision of services, not the avoidance of them. Accordingly, reducing the number of in-patient admissions results in lost revenue for hospitals and in-patient facilities and creates a significant financial disincentive. No one is reimbursed for health improvements that avoid the need for additional care.

Avoiding readmissions presents a significant opportunity in Medicaid. Among non-obstetric Medicaid patients ages 21 to 64 who were hospitalized in 2007, about one in ten had at least one readmission within 30 days after discharge from their first stay, a much higher rate than the privately insured.⁵ Texas recently estimated that reducing preventable readmissions (occurring within 15 days of discharge) by just ten percent would save the state \$10 million a year.⁶

Best practices among leading hospitals with low readmission rates show active engagement by the hospitals to avoid the deterioration in health status that brings patients back to the hospital. An examination of top-performing hospitals revealed several common characteristics: investing in quality first; using health information technology to improve quality and integrate care; beginning care management and discharge planning early; targeting high-risk patients; ensuring frequent communication across the care team; educating the patient and family caregivers in managing conditions; maintaining contact with high-risk patients after discharge; and aligning hospital efforts with community providers to provide a continuum of care.⁷ Payment and care delivery

⁵ Jiang, H. J. (AHRQ), and Wier, L.M. (Thomson Reuters). All-Cause Hospital Readmissions among Non-Elderly Medicaid Patients, 2007. HCUP Statistical Brief #89. April 2010. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb89.pdf>.

⁶ Texas Health and Human Services Commission, "Potentially Preventable Readmissions in the Texas Medicaid Population, Fiscal Year 2009 (Jan. 2011). Available online at <http://www.hhsc.state.tx.us/reports/2011/PPR-Report-011811.pdf>. Accessed May 15, 2011.

⁷ Silow-Carroll S, Edwards J, and Lashbrook A, "Reducing Hospital Readmissions: Lessons from Top-Performing Hospitals," The Commonwealth Fund pub. 1473, Vol. 5 (April 2011).

reforms in the public and private sector support these efforts by measuring and rewarding improved readmission performance and providing post-discharge support for patients and family caregivers. These efforts provide substantial evidence that readmissions can be prevented, health improved, and savings generated. By providing guidance on best practices and aligning resources to support and encourage the reduction of readmissions, states can facilitate the rapid replication of these best practices in local hospitals.

Medicaid also experiences costly gaps in care within long-term care. Most Medicaid recipients in long-term care are dually eligible under Medicare. With long-term care covered by Medicaid and physician and hospital care covered by Medicare, dually eligible beneficiaries are left to cope with both complex health needs and complex coverage issues. Greater coordination of services and care management for dual eligibles has tremendous savings potential, estimated at \$250 billion over ten years, including more than \$40 billion for states.⁸

For frail elders, particularly those in institutional settings, just the transition from one care setting to another can be traumatic with a risk of injury for the physically frail or a risk of emotional instability for those with mental health impairments. Understanding and managing these transitions present opportunities for health improvements and cost savings. For example, the Evercare model, developed in 1987 by two nurse practitioners, places a care manager at the center of an integrated care team to develop a personalized care plan that avoids care gaps and manages transitions to ensure the effective integration of services. The program now serves 120,000 people with long-term or advanced illnesses, the elderly and those with disabilities in 35 states. Where adopted, Evercare has reduced hospitalizations for nursing home residents by 45 percent and cut ED visits by 50 percent.⁹

Realizing these gains more broadly within the dually eligible population depends upon federal and state policy changes that facilitate waivers for new models of long-term care, address barriers to community- and home-based long-term care options, and enable Medicare/Medicaid integration models that work and can be expanded nationally.

Enhancing Adherence

Poor medication adherence is common. One in four Americans do not follow directions in taking medications, and 3 out of 4 Americans admit to having not taken their medicines as prescribed at some point. Poor medication adherence is associated with higher rates of hospitalization and readmissions, emergency department (ED) visits, disease progression, and health status decline. One-third to two-thirds of all medication-related hospital admissions have been attributed to poor adherence.¹⁰ Overall, poor medication adherence costs more than \$100 billion a year nationwide.

⁸ UnitedHealth Group, "US Deficit Reduction: The Medicare and Medicaid Modernization Opportunity," Working Paper 4 (October 2010). Available online at: http://www.unitedhealthgroup.com/hrm/UNH_WorkingPaper4.pdf. Accessed May 20, 2011.

⁹ Weber DO, "Nursing Innovations," Hospitals & Health Networks Digital Magazine, Jan. 13, 2009. Available online at http://www.hhnmag.com/hhnmag_app/jsp/articledisplay.jsp?dcrpath=HHNMAG/Article/data/01JAN2009/090113HHN_Online_Weber&domain=HHNMAG. Accessed May 17, 2011.

¹⁰ Munger MA, et.al., "Medication Non-adherence: An Unrecognized Cardiovascular Risk Factor," Medscape General Medicine, Vol. 9, No. 3 Issue 58 September 2007.

Medicaid pharmacy claims are submitted electronically and provide sufficient “near time” information to allow for timely interventions. To identify poor adherence, it is the lack of claims that is most telling. For example, asthma, when poorly managed, can present a significant source of preventable ED usage, hospital admissions, and readmissions. In fact, one study found that among children presenting to the emergency room with symptoms of asthma, 82 percent did not regularly use their inhaled anti-inflammatory therapy.¹¹ Among children with persistent asthma in Medicaid, the underuse of controller medications is widespread, reaching as high as 73 percent.¹²

Comparing pharmacy claims, or a lack thereof, with recommended treatment guidelines can offer good indications of treatment to guidelines, regular refill rates, and medication possession. Gaps, particularly when matched with ED visits and hospital admissions, are a clear opportunity for intervention. Programs in Medicaid focused on improving medication adherence and risk factor management have generated cost savings above and beyond program costs.¹³ Accordingly, targeting disease areas associated with high utilization of in-patient services or emergency care offers the highest potential savings.

Since behavioral and mental health conditions are traditionally undertreated, enhancing adherence can lead to increased medical costs, at least in the short term. It is important to recognize, however, that the under treatment of these chronic conditions have substantial readmission rates and non-medical costs to the state, including associated criminal activity costs, corrections expenses, and homelessness.

Promoting Coordinated Care

Interest and experimentation in this area have led to many different vehicles that support greater care coordination including: integrated medical practices; medical home models; the growth in Accountable Care Organizations; Medicaid health plan models; Community Health Teams;¹⁴ and combinations of these different efforts. These programs target many of the primary problems with traditional FFS by aligning incentives to achieving shared goals, facilitating team-based care, and engaging the patient and family caregivers as a part of the care team and at the center of a shared care strategy. The savings can be significant. For example, the largest Medicaid Health Plan estimates that providing coordinated care for all non-dual Medicaid beneficiaries would save \$103 billion (\$40 billion for the states) over ten years or \$250 billion (\$44 billion for the states) over ten years if all Medicaid beneficiaries were enrolled.¹⁵

¹¹ Zuckerman, IH, et.al., “Adherence to Asthma Treatment Guidelines among Children in the Maryland Medicaid Program,” *Current Therapeutic Research*, Vol. 61, No. 12 December 2000 912-924.

¹² Stanton MW, Dougherty D, “Chronic Care for Low-Income Children with Asthma: Strategies for Improvement” *Research in Action Issue* 18. AHRQ Publication No. 05-0073, June 2005. Agency for Healthcare Research and Quality. Available online at <http://www.ahrq.gov/research/chasthria/chasthria.htm>. Accessed May 16, 2011.

¹³ See, e.g., Cauchi R, “Medication Therapy Management: Catching Errors, Savings Lives and Money,” *National Conference of State Legislatures LegisBrief*, Vol. 18, No. 4, January 2010.

¹⁴ Affordable Care Act Sec. 3502.

¹⁵ UnitedHealth Group, “US Deficit Reduction: The Medicare and Medicaid Modernization Opportunity,” Working Paper 4 (October 2010). Available online at: http://www.unitedhealthgroup.com/hrm/UNH_WorkingPaper4.pdf. Accessed May 20, 2011. Through 2035, a combined Medicare/Medicaid managed dual eligible program could save about \$1.62 trillion with \$35 billion accruing to the states.

Community Care of North Carolina (CCNC) is a statewide medical home model supported regionally by community health networks partnering with local providers to coordinate care for Medicaid recipients. Analysis by Mercer Government Human Services Consulting found that, when compared to historical fee-for-service program benchmarks, the state saved \$147 million in SFY07 and between \$156-164 million in SFY08.¹⁶ Building on this success, North Carolina is now part of a multi-payer demonstration that builds on the CCNC program to support care coordination through medical homes for people covered by NC Medicaid, Medicare, or one or more private insurers.

The Affordable Care Act offers some cost assistance that states can use to build greater care coordination into Medicaid. Specifically, beginning this year, the federal government has made planning grants available to states wanting to create health or medical homes for Medicaid recipients with multiple chronic conditions or with one chronic condition at risk for more. During the first eight quarters of state participation, the federal government will also provide an enhanced match of 90 percent.¹⁷

Improving Population Health

Ultimately, lowering spending on healthcare services sustainably will depend upon broader improvements in health status in the United States. The World Health Organization estimates that 80 percent of type 2 diabetes and heart disease and 40 percent of all cancers could be prevented, if we ate better, exercised more, and avoided tobacco use.

Overall the Medicaid population had higher levels of behavioral risk factors for poor health. For example, the smoking rate of Medicaid recipients is approximately 53 percent higher than in the general US population. Smoking-attributable costs to the states under Medicaid were \$22 billion in 2004.¹⁸ Likewise, obesity presents additional costs to Medicaid. Medicaid spends, on average per year, \$213 more for inpatient services, \$175 more for outpatient services, and \$230 more for medications for obese patients compared with normal weight patients.¹⁹ Medicaid also has a much higher prevalence of obesity than other health insurance providers.²⁰

Addressing these key risk factors for poor health and the development of costly chronic diseases through wellness initiatives and care management will help bend the cost curve for Medicaid long-term. Financial assistance and other resources, including federal Community Transformation Grants, the Prevention and Public Health Fund, the Community Guide to Preventive Services, and other public health resources, are available to help states identify and resource public health efforts to improve the overall health status within Medicaid and in general.

¹⁶ Community Cares of North Carolina, Program Impact. Available online at <http://www.communitycarenc.com/>. Accessed May 16, 2011.

¹⁷ Affordable Care Act Section 2703.

¹⁸ Armour B, Finkelstein E, and Fiebelkorn I, "State-Level Medicaid Expenditures Attributable to Smoking," Preventing Chronic Disease: Public Health Research, Practice, and Policy (CDC, July 2009).

¹⁹ Finkelstein E, Trogon J, et. al., "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimated," Health Affairs, 2009; 28(5):w822-w831.

²⁰ Finkelstein E, Fiebelkorn, and Wagner G, "National Medical Spending Attributable to Overweight and Obesity: How Much, and Who's Paying," Health Affairs, May 2003: W3-219-W3-226.

Estimating Savings

Being able to estimate both the costs and the potential returns on the investments made in chronic care management strategies is extremely important. To help determine the cost burden of chronic diseases in Medicaid for a specific state, the CDC developed the Chronic Disease Calculator.²¹ States can retrieve data on how much six chronic diseases (diabetes, congestive heart failure, stroke, heart disease, hypertension, and cancer) are costing the state's Medicaid program or can receive an estimate of chronic disease costs based on state inputs of disease prevalence and treatment costs. The latter is particularly helpful to provide projections based on trends in costs and disease prevalence.

To assist in estimating the potential savings of programs, the Center for Health Care Strategies, with assistance from the Robert Wood Johnson Foundation, developed the Return on Investment (ROI) Forecasting Calculator for Quality Initiatives.²² Using the calculator, Pennsylvania estimated that the ROI on its diabetes and other chronic care management programs was \$1.80 for each \$1 spent the first year. Similarly, Arizona estimated that a pay-for-performance program for diabetes would yield a three-year outcome of return of \$2.20 for each \$1 invested. In 2011, the Center also launched an ROI Forecasting Calculator for Health Homes and Medical Homes to help policymakers evaluate the benefits of adopting these models.²³

Conclusion

Given that the majority of chronically ill patients remain in the fragmented fee-for-service system in Medicaid, effective coordinated care and chronic disease management offers tremendous potential for improving health outcomes and generating savings for the states. Although state programs, populations, and policies vary, the challenges represented by the traditional fee-for-service system are universally ripe for change. Policy changes that address chronic disease as a cost driver and work to reorient care systems to prevent the onset and development of these costly conditions will build sustainable cost containment strategies. Prioritizing action to address the "hot spots" of costs, to fill expensive gaps in care, to enhance medication adherence and self-management, and to promote care coordination, will enable states to generate near-term cost savings. States must act quickly to realize the potential of these efforts and set systems in place before facing the 2014 Medicaid expansion. Without these changes, the budgetary challenges today will seem minor in comparison to those waiting in 2014 and beyond.

²¹ CDC, Chronic Disease Calculator. Available online at <http://www.cdc.gov/chronicdisease/resources/calculator/index.htm>. Accessed May 15, 2011.

²² Information available at: http://www.chcs.org/publications3960/publications_show.htm?doc_id=678806. Accessed May 17, 2011.

²³ Information available at: http://www.chcs.org/publications3960/publications_show.htm?doc_id=1261248. Accessed May 17, 2011.