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Recommended Approach for Calculating Savings in the NJ Medicaid ACO Demonstration Project

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July 2012

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Acknowledgments

This work was supported by a grant from the Agency for Healthcare Research and Quality (AHRQ) (Grant #R24 HS019678-01), within the AHRQ Multiple Chronic Condition Research Network. The authors are grateful to Margaret Koller of the CSHP and to Tricia McGinnis of the Center for Health Care Strategies for their helpful contributions to this project. We also appreciate technical advice provided to us by staff and consultants from the New Jersey Division of Medical Assistance and Health Services (DMAHS). Views expressed in this Discussion Paper are solely those of the authors and are not endorsed by AHRQ or DMAHS.

Preface

The New Jersey Medicaid Accountable Care Organization (ACO) Demonstration Project, enacted by legislation and signed by the Governor in August 2011 (P.L. 2011, Ch.114), authorizes the establishment of community-based ACOs by coalitions of healthcare providers serving Medicaid beneficiaries. The New Jersey ACO law calls on the Rutgers Center for State Health Policy (CSHP) to provide technical assistance for the evaluation of gainsharing plans submitted by coalitions seeking state certification to become Medicaid ACOs. Addressing one important aspect of that charge to CSHP, this Paper provides a recommended methodological framework for calculating the extent to which ACOs have achieved savings in Medicaid spending.

In May 2012, CSHP released a preliminary version of this paper and solicited comments from stakeholders and others with expertise in ACO development and healthcare delivery reform. This final version reflects input from a variety of individuals who commented on the draft Discussion Paper. The final recommended methodology described in this report was developed by CSHP researchers with input from New Jersey Medicaid staff, but the Rutgers CSHP team is solely responsible for all recommendations and other content in the document. Neither the New Jersey Medicaid program nor any other office of state government has endorsed the methodology. Rather, this paper is intended to inform future state decisions about acceptable methods for measuring ACO savings.

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Executive Summary

The recently enacted New Jersey Medicaid Accountable Care Organization (ACO) Demonstration Project enables the formation of ACOs that will be eligible for shared savings from the New Jersey Medicaid program. The New Jersey ACO law calls on the Rutgers Center for State Health Policy (CSHP) to provide technical assistance for the evaluation of gainsharing plans submitted by coalitions seeking state certification to become Medicaid ACOs. Addressing one important aspect of this charge to CSHP, this report outlines a series of technical issues that must be addressed to accurately measure the extent to which ACOs have generated savings in per capita Medicaid spending and provides a draft methodology that balances the analytic challenges involved. This methodology builds on the rules established by the Medicare Shared Savings Program (MSSP), which governs Medicare ACOs nationwide. Several features of the MSSP, however, require substantial modification to address differing program features and populations served by Medicaid. These include the development of Medicaid-specific risk adjusters, provisions to support ACOs with a focus on extremely high-cost (i.e., “super-user”) populations, and provisions to limit financial risk to Medicaid ACOs. Additional rules must be created to address challenges that are unique to Medicaid ACOs. These include rules for determining how the Demonstration Project will account for instability in Medicaid enrollment and incorporate newly eligible Medicaid enrollees under the federal health reform law in 2014. This report incorporates changes made in response to an earlier CSHP Discussion Paper seeking comments on the proposed methodology.

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Introduction

On August 18, 2011 the Medicaid Accountable Care Organization (ACO) Demonstration Project was signed into law (P.L. 2011, Ch.114). The law enables coalitions of healthcare providers and public health and social service agencies to create ACOs that focus on improved healthcare coordination and delivery for geographically defined populations of Medicaid beneficiaries. Specifically, a Medicaid ACO may take responsibility for all Medicaid beneficiaries in a “designated area”, which is “a municipality or defined geographic area in which no fewer than 5,000 Medicaid recipients reside” (P.L. 2011, Ch.114, C.30: 4D-8.2). Medicaid ACOs that are successful at reducing per capita Medicaid spending for their defined populations, while meeting standards for healthcare quality and patient experiences with care, are eligible to receive a share of the financial savings they generate, a process referred to as *gainsharing*. The demonstration will last three years with the possibility of reauthorization to continue and expand Medicaid ACO activity throughout New Jersey.

The statute requires Medicaid ACOs to propose methods for defining how savings will be measured and shared. These methods (along with proposed measures of health outcomes and patient experiences with care) are subject to approval from the New Jersey Department of Human Services (DHS) in consultation with the New Jersey Department of Health and Senior Services. The DHS will draw on the expertise of the Rutgers Center for State Health Policy (CSHP), which is named in the statute, to provide technical assistance with a variety of analytic tasks that are needed to administer and evaluate the 3-year demonstration. These tasks include organizing data for DHS to assess ACO’s proposed gainsharing plans and supporting the annual evaluation of the demonstration.

As specified in the statute, savings measurement must be based on a benchmark period prior to ACO formation to which future spending performance will be compared on an annual basis for Medicaid patients residing in the geographic area served by the ACO. Specifically, the savings measurement methodology must include:

- . . . expenditures per recipient by the Medicaid fee-for-service program during the benchmark period, adjusted for characteristics of recipients and local conditions that predict future Medicaid spending but are not amenable to the

care coordination or management activities of an ACO. (P.L. 2011, Ch.114, C.30:4D-8.5)

Once the benchmark is established, the savings measurement must compare “the benchmark payment calculation to amounts paid by the Medicaid fee-for-service program for all such resident recipients during subsequent periods” (P.L. 2011, Ch.114, C.30:4D-8.5).

Within this framework, Medicaid ACOs are given considerable flexibility to design savings measurement methodologies, which include the specification of the benchmark period (i.e., beginning and end dates), adjustment for patient characteristics, and other considerations described below. This flexibility is useful for the purpose of giving Medicaid ACOs the opportunity to design savings methodologies that are most relevant to their local circumstances. But there is also substantial value in developing a common analytic framework for measuring ACO performance. A common framework would provide a rigorous, consistent, and transparent mechanism for DHS to approve and oversee Medicaid ACO activities across the state. It would also provide a much needed resource to provider coalitions that are well positioned to improve care coordination but lack the analytic capabilities to develop rigorous performance measures on their own. In addition, Medicaid ACOs generally lack access to critical data from outside their own population against which to benchmark their performance. Finally, a common methodology can be administered efficiently, without placing data collection and analysis burdens on individual ACOs. The common framework proposed here is not intended to preclude ACOs from developing their own performance measurement methodology. Rather, it provides a methodology that ACOs may choose to adopt or a rigorous standard against which other methodologies proposed by ACOs can be judged by DHS in its approval process.

This Discussion Paper outlines a proposed approach for calculating whether and to what extent savings are achieved by individual ACOs in the Demonstration Project. The paper also highlights a number of key technical decisions and analytic tradeoffs that must be made to identify savings and to ensure that these savings do not coincide with diminished patient outcomes. It is intended to provide a starting point for discussion among ACO stakeholders of saving measurement methods. We note that while CSHP developed this draft strategy with input from DHS Medicaid officials, it has not been formally reviewed or endorsed by DHS.

Previously Established Principles for *Medicare* ACOs

The key to any calculation of ACO savings is a comparison between per capita healthcare spending in the ACO patient population versus a “counterfactual” – i.e., what the corresponding spending would have been for the relevant population in the absence of ACO activity. The proposed methodology is based on the Medicare Shared Savings Program (MSSP), which was developed by the Center for Medicare and Medicaid Services (CMS) in the context of

ACOs that enter into shared savings agreements with Medicare.¹ Drawing on the Medicare methodology provides two advantages: 1) it has already been through thorough technical review at the federal level and has been vetted by stakeholders through a public comment process, and 2) the Medicare methodology will be familiar to provider groups considering the development of a Medicare ACO.

Despite these advantages, a number of details in the Medicare methodology can be problematic for Medicaid ACOs in New Jersey. Thus, the proposed methodology deviates from the MSSP in specific ways that are described below.

Under the MSSP, an ACO is given credit for savings when per capita spending among the relevant patient population falls below a target spending level that is based on recent spending patterns and projected future spending. (Under some Medicare ACO models, the ACO could also be financially penalized if per capita spending among the relevant patient population falls significantly above the target level.)

First, baseline spending is calculated as a weighted average of the previous 3 years of per capita spending among patients assigned to the ACO. The use of multiple years provides a relatively stable measure of baseline spending (i.e., one that is less subject to random fluctuations from year to year). The use of a weighted average allows CMS to place more weight on the most recent years of baseline performance. Specifically, CMS's weighted average uses a weight of 0.6 for the most recent baseline year (Y3), 0.3 for the prior year (Y2), and 0.1 for the least recent year (Y1) in the 3-year weighted average.

Second, because of medical inflation, the 3 baseline years are not directly comparable. Therefore, Medicare "trends forward" years Y1 and Y2 by using the national growth rate in per capita Medicare spending to place Y1 and Y2 into Y3 "purchasing power."

Next, the baseline spending level is "updated" using a projected amount of growth in per capita Medicare spending nationally. In other words, Medicare predicts the additional dollars that will be spent on Medicare beneficiaries per capita (assuming no changes resulting from ACO participation) and adds it to the baseline amount. This updated amount is the target level of spending for the ACO. If ACO spending falls below the target by a designated amount (explained below), then the ACO will be credited with savings.

It is important to emphasize that CMS determines the baseline trend factor and updated baseline target based on national spending trends, not trends among the ACO's patients alone. Thus, ACOs must reduce spending relative to a national growth standard, not an ACO-specific one.

Medicare sets a specific threshold called the minimum savings rate (MSR) to determine whether measured savings are sufficiently less than the targeted amount. At issue is the problem of "normal variation", which is the idea that per capita spending levels within an ACO

¹ Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations, 76 Fed. Reg. 67802 (Nov. 2, 2011) (to be codified at 42 C.F.R. pt. 425).

can fluctuate randomly from year to year for reasons that are unrelated to care management activities. The importance of normal variation diminishes for ACOs with more patients. Therefore, Medicare sets smaller MSRs for larger ACOs. (For example, an ACO with 5,000 assignees would have to achieve savings that are at least 3.9% below the targeted amount, while an ACO with 60,000 assignees would have to achieve savings that are at least 2% below the targeted amount.)

Under the MSSP, gainsharing distributions from measured savings are contingent upon the ACO meeting a variety of healthcare quality standards. Failure to meet these standards would result in lower ACO payments (or larger financial penalties in models where ACOs are at risk for spending increases).

Finally, the Medicare approach includes the following additional technical adjustments:

- All expenditure amounts are risk adjusted using the CMS Hierarchical Condition Categories that were originally developed for risk adjusting premiums in the Medicare Advantage program.
- CMS expects per capita spending to grow at different rates for different categories of Medicare beneficiaries. Thus, CMS calculates separate trending and benchmark updating factors for four groups of Medicare beneficiaries: end-stage renal disease, disabled, aged dual eligibles, and aged non-dual eligibles.
- To minimize variation from catastrophically large claims, all Medicare beneficiaries (regardless of ACO assignment) with large spending amounts in a given year have their spending amount truncated at the 99th percentile of national Medicare spending (which is roughly \$100,000) for the relevant year. In other words, patients with catastrophically high spending are included in the baseline and performance year calculations but their actual spending amounts are replaced by the 99th percentile amount for the relevant year.

Adapting the Medicare Approach for NJ Medicaid ACOs

With some modification, the Medicare approach can be adapted to NJ Medicaid ACOs. Below we propose specific modifications and list additional analytic decisions that must be made.

Data: As required by statute, savings to be shared with ACOs must be based on per capita spending by the Medicaid fee-for-service population in the relevant geographic area. These savings will be measured using Medicaid claims data for the fee-for-service population. (Only the Medicaid portion of spending for Medicare-Medicaid duals eligibles will be included.)

Managed care organizations: Unlike the MSSP, the Medicaid ACO Demonstration Project allows Medicaid managed care organizations (MCOs) to voluntarily participate in gainsharing arrangements with Medicaid ACOs. In such cases, MCOs and ACOs would negotiate separate savings measurement and gainsharing arrangements that would be independent of (i.e., have no impact on) arrangements that apply to the Medicaid fee-for-service population. To avoid the complexity of holding ACOs responsible for multiple measurement and gainsharing standards, it may be useful for MCOs to follow standards similar to those created for Medicaid fee-for-service. Specifically, per capita spending among Medicaid managed care patients would be measured using payment information available in patient encounter records. In cases where services are reimbursed through capitation payments, per capita spending could be imputed based on capitation rates or other available data for the relevant services and patient groups.

Baseline spending: The numerator for per capita baseline spending will come from the most recent 3 years of claims/encounters records for all Medicaid services provided to Medicaid enrollees living in the ACO's designated geographic area before year 1 of ACO activity. The denominator will come from Medicaid enrollment files. To ensure that spending amounts apply only to the time when individuals were enrolled in Medicaid, baseline spending will be calculated on a per person per month basis. The same weighting used by CMS for Medicare ACOs would be applied.

Trending factor for early baseline years: The trending factor will be based on the statewide growth rate in per capita Medicaid spending.

Update factor for projected spending growth: The update factor will be derived from a one-year projection based on most recent 3 years of statewide Medicaid data. An adjustment will be needed to account for increases in Medicaid reimbursement rates for primary care that occur under the Patient Protection and Affordable Care Act (PPACA). Specifically, the federal government will provide funding to the states to increase these rates in 2013 and 2014. After 2014, states have the discretion to maintain or discontinue these enhanced reimbursement rates. These reimbursement changes can distort measurement of ACO savings performance since they will cause per beneficiary spending to rise and fall in ways that are not related to ACO care management. Moreover, this distortion will be greatest in ACOs where primary care utilization is most prevalent. Thus, we propose that per capita spending calculations be done using pre-PPACA reimbursement rates consistently through the baseline and demonstration periods. A similar approach would be used for other reimbursement changes that may occur during the demonstration period (e.g., behavioral health reimbursement under the state's anticipated 1115 waiver).

Unstable Medicaid enrollment: Unlike Medicare, Medicaid beneficiaries often “churn” on and off the program. As a result, spending calculations can be distorted during periods of disenrollment. For example, a patient with a 3-month gap in enrollment may appear to have a decrease in spending when in reality the individual may have used other services such as hospital charity care that are not recorded in Medicaid claims data. To compensate for churning, we propose that calculations be based on the number of patients per month of enrollment. For example, an individual enrolled in Medicaid for 12 months of the first performance year would have their total annual spending divided 12 to produce an average monthly amount. An individual who was in the program for only 4 months would have their total spending divided by 4. Average monthly amounts for each individual would be aggregated to produce an average per patient per month value for spending within the ACO during the baseline and performance periods.

Minimum threshold for savings: We propose not to use an MSR threshold for the initial implementation of New Jersey Medicaid ACOs. Although normal variation may lead to apparent ACO savings when none exist, it may also prevent the identification of true savings when such savings do exist. The added MSR requirement for ACOs to receive incentive payments may greatly discourage participation. Moreover, NJ requirements that ACOs invest in effective care improvement plans provides assurance that all ACO payments from recognized savings payments are appropriately invested for the benefit of enrolled populations. The need for MSR thresholds can be revisited later as the state and stakeholders gain experience with ACO arrangements.

Risk adjustment: We propose that all spending amounts be risk adjusted using the Chronic illness and Disability Payment System (CDPS), which currently forms the basis for setting payment rates to NJ Medicaid managed care plans.² We encourage comments on the applicability of the CDPS for all Medicaid patients as it is currently used only for specific eligibility categories enrolled in Medicaid managed care plans.

Trending and updating for eligibility and service categories: Following CMS’s approach for Medicare eligibility categories (e.g., dual eligible, End Stage Renal Disease, etc.), we propose to create different trending and updating factors for specific Medicaid populations. Currently, some stratification categories are included in the CDPS. Nevertheless, there may be additional variation in healthcare spending trends within specific eligibility and service categories over time. Failure to account for this differential variation could penalize ACOs with disproportionately large numbers of patients in categories with rapid spending trends beyond

² R Kronick, T Gilmer, T Dreyfus, and L Lee, “Improving Health-Based Payment for Medicaid Beneficiaries: CDPS,” *Health Care Financing Review* 21, no. 3 (2000): 29-64.

the ACO's control (e.g., due to new treatment modalities or technologies). Similarly, an ACO with a disproportionately large number of enrollees from a slowly growing spending category could be inappropriately rewarded.

Thus we propose to include separate trending and updating factors for the following eligibility categories: General Assistance, dual eligibles, non-dual eligible aged, blind and disabled (ABD), and all other enrollees. One might also include separate factors for service categories where costs are expected to grow at different rates. Such categories may include hospital inpatient, ambulatory care, pharmacy, long-term services/supports, behavioral health, trauma, and all other services. Service categories would have to be created to avoid the creation of incentives to deliver services in disconnected silos, which is a practice that ACOs are philosophically designed to reduce. In developing separate trending and updating factors, it is also important to keep the number of categories at a manageable level. This is especially important when eligibility categories are combined with service categories. For example, 4 eligibility categories and 5 service categories would lead to 20 cells for which calculations would have to be made. In addition to increasing the complexity of the savings calculation, a large number of cells makes it more likely that some cells will be sparsely populated giving unreliable estimates of spending growth.

Newly eligible Medicaid enrollees: In 2014, a new category of enrollees will enter the Medicaid program under federal health reform. This newly eligible group will consist mainly of poor childless adults who are unlikely to be similar to preexisting enrollees in terms of healthcare utilization and spending. Because this group will have no baseline Medicaid spending history, their inclusion into shared savings calculations will be complex.

To estimate per capita baseline spending for this newly eligible population, a blended estimate will be derived from preexisting data for Medicaid eligibles with income up to 24% of the Federal Poverty Level (FPL) and individuals whose hospital use is currently financed through the state's Hospital Charity Care Program. Among all current Medicaid enrollees, those who are eligible for the program because their income is below 24% of the FPL are most similar to those expected to gain coverage under federal reform. Current Hospital Charity Care users include much of the population who will gain Medicaid coverage. Although Charity Care users include undocumented immigrants who are ineligible for the federal Medicaid expansion, there is no clear way to remove these individuals from the proposed blended estimate. This estimate will be used to impute what Medicaid utilization would have been during the baseline period had these newly eligible individuals been in the Medicaid program during that period. To improve the accuracy of the imputation, estimated amounts will be stratified by age and sex and applied to individual enrollees accordingly. The imputation might be enhanced further by including information about Medicaid spending for parents with income and recent hospital use that is similar to the experience of newly eligible enrollees as measured in Hospital Charity Care

records maintained by the NJ Department of Health. We welcome comments on methods for imputing baseline spending for this newly eligible population.

Quality of care: The statute requires ACO gainsharing plans to “reward quality and improved patient outcomes and experiences with care” (P.L. 2011, Ch.114, C.30:4D-8.5). In the MSSP, the distribution of total savings (or losses) shared with the ACO are contingent on meeting specified quality goals. While a similar approach may be used in the Medicaid ACO Demonstration Project, criteria for distributing gains is beyond the scope of this discussion paper, which is concerned only with establishing whether savings have occurred.

Truncation of extreme spending levels: We propose not to truncate individual spending levels for Medicaid ACOs as is done in the MSSP. Much of the focus among NJ Medicaid ACOs will be to coordinate services for the most frequent users of expensive but preventable hospital and emergency department care. Truncating the spending of these individuals would limit the incentive payments to Medicaid ACOs doing this work.

We recognize that this decision involves important analytic tradeoffs. A small number of outlier patients with anomalously high spending in the performance period can make an ACO that was successful at reducing spending overall look like it failed to do so. Similarly, a few outlier patients in the baseline period can make an ACO appear to reduce spending in the performance period when, in fact, spending levels have just returned to a normal level. This problem can be especially acute for ACOs with a small number of Medicaid fee-for-service enrollees where per capita averages are much more sensitive to outliers. (Although ACOs must have a minimum of 5,000 Medicaid patients in their geographic area, many enrollees are likely to be enrolled in managed care plans.) A middle ground might involve a threshold that is set higher than that envisioned under the MSSP (e.g., \$200,000 rather than \$100,000). We recommend that the impact of outlier patients on shared savings formulas be monitored closely as part of the evaluation of the demonstration that is required by the statute.

Patients at the end of life: Another important issue is how to deal with patients who die during the demonstration period. In the MSSP, mortality-based outcome measures were not included in the final set of quality benchmarks. In addition, the MSSP excludes the expenditures of individuals who die during the ACO agreement period. This exclusion is made to take away any incentive that Medicare ACOs would have to avoid the most critically ill patients or to withhold beneficial care from them. However, the exclusion also takes away incentives for ACOs to improve the efficiency of end-of-life care. In addition, the New Jersey statute requires that Medicaid ACOs maintain a commitment to be accountable for the costs all Medicaid fee-for-service recipients living in the designated area (P.L. 2011, Ch.114, C.30:4D-8.4). Thus, it is our understanding that all end-of-life spending must be included in savings calculations, but

because savings estimates are likely to be very sensitive to costs incurred by patients in their final months of life, we recommend close monitoring of these expenses and their impact on savings calculations.

Impact on hospital revenue and financial stability: Some Medicaid ACO activities are expected to reduce hospital inpatient admissions, which could reduce hospital revenues. Thus, the statute requires applicant ACOs to submit an assessment of how ACO activity is expected to create changes in “both direct patient care revenue and indirect revenue, such as disproportionate share hospital payments, graduate medical education payments, and other similar payments” (P.L. 2011, Ch.114, C.30:4D-8.5). While these considerations form an important part of the ACO approval process, they would not alter the methodology used to demonstrate whether the ACO generates savings and are thus not part of this discussion paper.

Evolving issues: The New Jersey Medicaid ACO Demonstration Project is designed to give communities the opportunity to rapidly form and test the ACO concept for Medicaid enrollees. To enable rapid and minimally complex administration, the proposed savings measurement methodology does not make adjustments in response to a variety of complex analytic issues. Instead, we propose that the issues listed below be monitored during the course of the demonstration. Some issues that are found to be quantitatively important should be addressed as part of the evaluation of the demonstration and, possibly, inform changes to ACO savings calculations over time.

- Patients who routinely enroll and disenroll from Medicaid may have a medical risk profile that is different from other Medicaid patients. The direction of difference (i.e., higher or lower risk) is not clear. This difference could affect savings calculations if an ACO takes responsibility for a disproportionate number of such individuals. We propose to examine whether individuals with unstable Medicaid enrollment generate systematically different levels of healthcare expenditures relative to those with stable enrollment.
- The accuracy of the proposed imputation in per capita spending for new Medicaid enrollees cannot be known in advance. At issue is whether new enrollees have systematically higher or lower expenditures than the imputation would suggest. We propose to examine how spending generated by new enrollees under the federal Medicaid expansion compares to their imputed spending.
- New Medicaid enrollees may have certain approved services incurred within 90 days before enrollment reimbursed by Medicaid. Moreover, the rules governing this look-back period may change under the state’s anticipated 1115 waiver. The evaluation

should consider how the 90-day look-back may affect expenditure calculations during the course of the demonstration.

- During the course of the demonstration, coverage for particular services (e.g., dental care) may change. We propose to monitor these changes to determine whether they influence per capita spending calculations during the benchmark and performance periods.

Conclusion

The proposed approach to measuring savings generated by Medicaid ACOs is designed to balance the principles of analytic rigor, transparency, timeliness, and feasibility with existing information systems. As experience with the demonstration accumulates, these methods should be carefully evaluated and revised. Such an evaluation can be accomplished using the databases that will already be developed for evaluating the impact of the demonstration on healthcare spending and patient outcomes as specified in the Medicaid ACO Demonstration Project.



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