



November 1, 2014

The Honorable Crisanta Duran, Chair
Joint Budget Committee
200 East 14th Avenue, Third Floor
Denver, CO 80203

Dear Representative Duran:

Enclosed please find the Department's response to the Joint Budget Committee's Request for Information #1 regarding "An Annual Process to Address Medicaid Rate Disparities."

FY 2014-15 Request for Information #1 states:

The Department is requested to submit a plan to the Joint Budget Committee by November 1, 2014 for an ongoing annual process to address disparities in Medicaid rates that limit client access to cost-effective care. The proposed process must include opportunities for legislative input and modification. The proposed process must provide actions that can be taken to improve or preserve client access and quality of care in years when state funding for rates is flat or declining as well as years when funding increases. The Department is also requested to report on rate setting procedures used by other public and private insurers and evaluate the applicability of those processes to addressing rate disparities in Colorado. The plan should include an estimate of administrative costs and any statutory changes that may be necessary for implementation.

The report contains research and recommendations the Department proposed to utilize for an ongoing annual rate-setting approach. The approach includes measures and benchmarks that support rate setting decisions and address disparities in Medicaid rates that limit client access to cost effective care.

If you require further information or have additional questions, please contact the Department's Legislative Liaison, Zach Lynkiewicz, at zach.lynkiewicz@state.co.us or 720-854-9882.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan E. Birch".

Susan E. Birch, MBA, BSN, RN
Executive Director
SEB/vbe



CC: Senator Pat Steadman, Vice-Chair, Joint Budget Committee
Representative Jenise May, Joint Budget Committee
Representative Bob Rankin, Joint Budget Committee
Senator Mary Hodge, Joint Budget Committee
Senator Kent Lambert, Joint Budget Committee
John Ziegler, Staff Director, JBC
Eric Kurtz, JBC Analyst
Henry Sobanet, Director, Office of State Planning and Budgeting
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Tom Massey, Policy, Communications, and Administration Office Director
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Rachel Reiter, Communications Director



Department Response

The Department supports the idea that changing reimbursement rates should be done in a more consistent and data-driven manner in order to increase and preserve client access to cost-effective care. The attached report commissioned by the Department in response to the Legislative Request for Information (LRFI) 1 provides a useable framework for developing such a process. The Department believes the recommended process and timeline outlined in the report could be operationalized with proper funding and staff and would achieve the goal of creating a consistent and data-driven process to review the adequacy of reimbursements to Medicaid providers.

The report details many of the complexities involved in creating a permanent process. Notably, a permanent process would require an eighteen-month cycle, beginning with access and rate reviews, which would culminate with rate change proposals that would be shared with the General Assembly each November 1 in the annual submission of the Governor's budget. This timeline would allow for review in both the Executive Branch, by allowing rate proposals to be included in the Governor's balanced budget, and also the Legislative Branch and by stakeholders, as rate proposals would be submitted to the Joint Budget Committee as a decision item. Under this framework, the General Assembly retains control over which rate proposals to fund. Such a process could be defined in statute, although statutory changes are not required.

If the General Assembly chooses to pursue the creation of a permanent rate process, there are several factors that must be considered, including:

- **Federal Regulations:** The federal agency that oversees the Medicaid program, the Centers for Medicare and Medicaid Services (CMS), has proposed new regulations that may require periodic rate reviews for all covered services. The proposed regulations, scheduled for release November 1st, are based on the Medicaid and CHIP Payment and Access Commission (MACPAC) recommendations and summarized in the attached report. Under the proposed regulations, if access issues are discovered, the Department may be required to submit a remediation plan and increase rates outside of the State's usual budget process.
- **Implementation Timelines:** The Department cannot implement rate changes without approval from CMS, which has become increasingly critical as advance implementation is now likely to result in disallowance of federal matching funds. Last year numerous State Plan Amendments were submitted to CMS representing all of the rate increases approved by the JBC. The Department has not been able to implement all of those rate increases as of November 1, 2014 due to lengthy response times and multiple questions from CMS which "stop the clock" on their approval timeline. This variability in the CMS response timeline creates varying implementation dates for the rate increases which is confusing to providers. The Department agrees with the report that July 1 implementation dates are not feasible and the resulting retroactive payments are administratively burdensome for both providers and the Department to operationalize and pay out. The delay in the increased rate also causes confusion and uncertainty for providers as they do not understand what rate to bill and have a hard time planning for a future lump sum

retroactive payment. The Department would like the Committee to consider making any rate increases in FY 2015-16 and after effective January 1st and not allow for retroactive payments. The Department is confident it can get approval of the majority, if not all, of the rate increases from CMS by January 1st and would have sufficient time to input the changes into the MMIS. This change would improve administrative efficiencies to the Department and provide certainty to providers about the effective dates of rates. The Department will continue to start drafting any required State Plan Amendments once the Long Bill is signed and submit them to CMS as quickly as possible to guarantee approval by January 1st.

- **Administrative Resources:** Implementation of an annual rate review process would require both additional Department staff and contractor funding as the scope of reviewing the current fee schedule could not be absorbed with current resources; historically, the fee schedule has only been adjusted in response to Legislative changes to the Department's appropriation and consequently, it is not currently adjusted on a regular basis for most services. The Department assumes four FTE would be needed, effectively creating a unit responsible for the annual rate review process at an estimated cost of \$317,572. Department staff would include the following: one General Professional VI, two General Professional IV, and one General Professional III. Collectively the unit would be responsible for contract management, critical review of contractor analysis, stakeholder engagement, obtaining CMS approval, regulatory review for statutory compliance, data collection and review, coordination with other state agencies, reporting, and other duties associated with an annual rate review process. The GP VI would additionally be responsible for hiring, training, and general management of the unit. In addition to Department FTE to implement the process, contractor services at an estimated cost of \$200,000 (based on the Department's experience with managed care rate setting processes), would be needed for data analysis and rate setting. Lastly, data sources that would be useful for evaluating the adequacy of provider reimbursement would need to be added. Implementing provider surveys and purchasing access to additional data sources would cost approximately \$50,000 annually.

The Department recognizes that funding is not available every year to increase rates paid to providers; as the Committee is aware, this can have a number of negative effects, from reducing client access to causing cost-shifts to the private health insurance market. Therefore, when rates cannot be increased, robust policy analysis will focus specifically on whether policy alternatives—such as strategic use of RCCO partnerships and aligned incentives such as gainsharing—can effectively improve or preserve provider availability and appropriate utilization.

With over a million clients enrolled in Medicaid, the Department believes it is critically important that provider rates are sufficient to allow for provider retention, client access, and to support appropriate reimbursement of high-value services. This is especially true given that the State does not have unlimited revenue to dedicate to increasing provider rates. A comprehensive and data-driven process would help ensure that limited funding is distributed in the most effective manner, thereby improving provider retention and ultimately improving health outcomes for our clients.

State of Colorado Department of Health Care Policy and Financing

Review Methodology for Annual Medicaid Rate Analysis

Report of Recommendations

October 21, 2014



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I. Executive Summary

Legislative Request for Information #1 states:

The Department is requested to submit a plan to the Joint Budget Committee by November 1, 2014 for an ongoing annual process to address disparities in Medicaid rates that limit client access to cost-effective care. The proposed process must include opportunities for legislative input and modification. The proposed process must provide actions that can be taken to improve or preserve client access and quality of care in years when state funding for rates is flat or declining as well as years when funding increases. The Department is also requested to report on rate setting procedures used by other public and private insurers and evaluate the applicability of those processes to addressing rate disparities in Colorado. The plan should include an estimate of administrative costs and any statutory changes that may be necessary for implementation.

The Colorado Department of Health Care Policy and Financing (HCPF) has contracted with Public Consulting Group, Inc. (PCG) to develop a rate review methodology for evaluating the adequacy of the state's Medicaid fee-for-service rates to ensure appropriate access to care for enrollees.

In an attempt to identify best practices, PCG staff performed a literature review of recent access studies conducted by medical and academic researchers as well as government entities that attempt to quantify how Medicaid rates affect access to care. An online search of approaches in other states uncovered extensive reports of access in California, New Hampshire, and Virginia, with attention to issues of physician supply, service utilization, and enrollee feedback. Although PCG identified numerous resources for reviewing access developed by other state Medicaid programs, it does not appear that other states currently perform systematic rate reviews oriented specifically to improving access to care.

In addition to state resources, PCG staff studied materials prepared by the Medicaid and CHIP Payment and Access Commission (MACPAC), which identify measures of access to care that are generally accepted by academic institutions and the federal government. The MACPAC framework for measuring access to care was used for PCG's review methodology design, due to its comprehensive approach and because elements of this framework are likely to become federal requirements. CMS proposed a rule in May 2011 to create a standardized process for monitoring access using the MACPAC framework. The 2011 proposed rule, expected to be finalized in November 2014, is detailed in an appendix to the report and strongly informs PCG's review recommendations, which have been formulated in compliance with its requirements.

CMS' proposed rule includes three necessary financial reporting elements for the annual state rate review. This regulation requires that the review incorporate: (a) an estimate of the percentile which Medicaid payment represents of the estimated average customary provider charges; (b) an estimate of the percentile which Medicaid payment represents one, or more, of the following: Medicare payment rates, the average



commercial rates, or the applicable Medicaid allowable cost of the services; and (c) an estimate of the composite average percentage increase or decrease resulting from any proposed revision in payment rates. It would also require that Medicaid payment rates include both base and supplemental payments for Medicaid services. PCG recommends incorporating each of these reporting elements into the annual review.

These recommendations include specific measures for each component of our suggested review framework, a methodology for tying access measurement to rate changes over time, and an outline of procedural and reporting requirements for implementation of the review on an ongoing, annual basis. PCG has also defined steps for initiating corrective action and conducting additional compliance monitoring when evidence of inadequate access is discovered.

In addition to specific access and rate adequacy measures, PCG recommends the following high-level approach to establishing the annual review:

- Develop the review in two distinct phases: 1) an Access Review that determines access adequacy and disparity level, and 2) a Rate Review that develops recommendations for rate adjustment based on evidence of insufficient access caused by rate inadequacy.
- Examine access along three review dimensions as defined by the MACPAC and CMS framework: enrollee needs, provider availability, and service utilization.
- Compare access and rate adequacy measures, where possible, 1) to the general population, 2) over time, and 3) across geographic areas.
- Employ a “mixed methods” approach that harnesses existing monitoring processes and incorporates quantitative and qualitative data. The need for interpretation and policy decision in developing rate recommendations is not a liability but a necessity, given: the multiple dimensions of access and utilization; the indirect relationship between access and the rate structure; and the limitations of available data sets for measuring these variables.
- Embed the annual review process in program management tasks. The rate review should not take place in a vacuum, but must inform and be informed by HCPF’s program management functions in order to influence utilization effectively and generate administrative efficiencies.
- Coordinate rate review development with budgeting and program planning processes for defining the State’s overall quality strategy and expanding data analytics capacity.
- Adopt the regional designations used in Colorado’s Accountable Care Collaboratives (ACC) as the geographical areas demarcated in the review.



II. Overview and Understanding of Initiative

The Colorado Department of Health Care Policy and Financing (HCPF) has contracted with Public Consulting Group, Inc. (PCG) to develop a rate review methodology for evaluating the adequacy of the state's Medicaid fee-for-service rates to ensure appropriate access to care for enrollees. Based on a literature review of recent empirical studies of access, as well as a survey of federal guidance and similar initiatives in other states, PCG has developed recommendations for an annual rate review focused on improving multiple dimensions of access to care in Colorado's Medicaid program.

These recommendations include specific measures for each component of our suggested review framework, a methodology for tying access measurement to rate changes over time, and an outline of procedural and reporting requirements for implementation of the review on an ongoing, annual basis. PCG has also defined steps for initiating corrective action and conducting additional compliance monitoring when evidence of inadequate access is discovered.

PCG's recommendations encompass best practices gathered from other state Medicaid initiatives, federal guidelines, and a wealth of research into issues of access and methods of identifying rate disparities that diminish the availability of care. In alignment with the legislative request, the report surveys approaches to rate setting that emphasize appropriate utilization and estimates of the administrative costs required for successful implementation.

In an attempt to identify best practices, PCG staff performed an online search of other states' approaches to measuring access to care for Medicaid enrollees. The search found that California and New Hampshire already prepare extensive regular reports of access, with attention to issues of physician supply, service utilization, and enrollee feedback. In addition, the State of Virginia's Joint Legislative Audit and Review Commission recently performed a comprehensive review, with a recommendation that the Department of Medical Assistance Services issue an annual report on access to care for Medicaid enrollees. The Commission developed measures of provider participation, enrollee utilization, and enrollee feedback, developing a framework that would demonstrate trends over time and differences across geographic regions, with summary assessments of service areas with relatively limited access.

In addition to state resources, PCG staff studied materials prepared by federal commissions charged with providing policy and data analysis for Medicaid and Medicare. Reports prepared by the Medicaid and CHIP Payment and Access Commission (MACPAC) were used to identify measures of access to care that are generally accepted by academic institutions and the federal government. The MACPAC framework for measuring access to care was used for PCG's review methodology design, due to its comprehensive approach and because elements of this framework are likely to become federal requirements. CMS proposed a rule in May 2011 to create a standardized process for monitoring access using the MACPAC framework. The 2011 proposed rule, expected to be finalized in November 2014, is detailed in an appendix to the report



and strongly informs PCG’s review recommendations, which have been formulated in compliance with its requirements.

Significantly, PCG’s research did not identify any state currently performing the type of systematic Medicaid fee-for-service rate review of interest to Colorado. Although PCG found numerous resources for reviewing access developed by other state Medicaid programs, including existing programs for conducting annual access reviews, it does not appear that other states currently perform systematic rate reviews oriented specifically to improving access to care. In some cases, states’ access reviews have included recommendations for specific rate increases in the interest of increasing provider participation. However, these limited examinations of rates have followed primarily from states’ access reviews, and do not appear to follow an independent, well-elaborated review methodology. Additionally, the access rate reviews identified by PCG have been strictly tied to access issues, and do not address broader goals of optimizing utilization, administrative efficiency, or value-based care.

Where PCG has been able to find existing guidance, we have relied largely on MACPAC’s consensus study for developing access rate review processes. In regard to access, PCG recommends an examination of access along the three review dimensions of the MACPAC framework proposed by the rule: enrollee needs, provider ability, and service utilization. Although our review of the research literature found no absolute standard of adequacy of access to care, in the interest of relative comprehensiveness, PCG suggests three types of comparisons for each of the access components. Measures should be compared, where possible, 1) to the general population, 2) over time, and 3) across geographic areas.

PCG recommends that an analysis of enrollee characteristics and needs should be a primary focus of the access review. The characteristics of Medicaid subpopulations can be unique, highly variable, and greatly influenced by demographic factors, health needs, and state eligibility criteria. For this reason, HCPF should conduct a retrospective data analysis to evaluate the unique characteristics of Colorado’s Medicaid beneficiaries, documenting the size of the Medicaid population, basic demographics, enrollment data, trends in enrollment, and geographic dispersion. PCG also recommends that the state utilize national and agency-collected beneficiary experience data to measure both the relative ease by which Medicaid enrollees in Colorado obtain services as well as their satisfaction with those services.

Access Measures: Enrollee Characteristics and Needs		
Measure	Data	Access Dimension
Population Analysis	MMIS Enrollment Data	Enrollee Characteristics and Need
Enrollee Satisfaction	Consumer Assessment of Healthcare Providers and Systems (CAHPS)	Enrollee Characteristics and Need
Beneficiary Requests for Assistance	HCPF Customer Service Center data (Call Center)	Enrollee Characteristics and Need



Medicaid beneficiaries reporting difficulties	Call Center Medical Expenditure Panel Survey (MEPS)	Enrollee Characteristics and Need
Analysis of beneficiary complaints	Call Center National Health Interview Survey (NHIS)	Enrollee Characteristics and Need

PCG recommends that provider availability should be another focus of the access review. The measure of provider availability is a product of two review components: provider supply and provider participation. PCG recommends measuring provider supply through two primary measures: provider-to-population ratios and time-and-distance estimates. PCG recommends two primary measures in determining adequate provider participation: a ratio of providers enrolled in Medicaid to total providers in the system, revealing the proportion of providers participating in Medicaid; and a provider entry/exit measure that illustrates the expansion and contraction of the provider network over time. PCG also suggests a measure of providers accepting new patients to determine whether providers have stopped seeing new Medicaid patients and can be eliminated from consideration in the provider network of interest.

Access Measures: Provider Availability		
Measure	Data	Access Dimension
Provider-to-Population ratio	MMIS Enrollment Data	Provider Availability (Supply)
Time-and-Distance Measurement	MMIS Enrollment Data	Provider Availability (Supply)
Providers participating in Medicaid	MMIS Claims Data Colorado Physician Licensure Data	Provider Availability (Participation)
Provider network entry and exit	MMIS Claims Data	Provider Availability (Participation)
Providers accepting new patients	MMIS Claims Data	Provider Availability (Participation)

PCG recommends an analysis of service utilization as a third focus of the access review. Service utilization is greatly influenced by beneficiaries' access to healthcare services, the affordability of obtaining those services, and the satisfaction level of beneficiaries after their experiences in obtaining care. The measure of service utilization is a product of three review components: services used, health outcomes, and affordability of services.

Access Measures: Utilization		
Measure	Data	Access Dimension
Usual source of care for enrollees	MEPS	Utilization (Services Used)
Percentage of enrollees receiving particular services	Healthcare Effectiveness Data and Information Set (HEDIS) HCPF Benefit Management Reports	Utilization (Services Used)



Rates of use of preventative services	HEDIS	Utilization (Health Outcomes)
Potentially Preventable Events	Prevention Quality Indicators (PQI)	Utilization (Health Outcomes)
Adequacy of Prenatal and Postpartum Care	HEDIS NHIS	Utilization (Health Outcomes)
Emergency Department Visits	HEDIS	Utilization (Health Outcomes)
Benefit Restriction Analysis	MEPS	Utilization (Affordability)

In addition to measures specific to evaluating access to Medicaid health services, PCG recommends performing an analysis of Medicaid reimbursement rates over time. Two primary measures should be used to assess the adequacy of Medicaid rates over time: a comparison of Medicaid rates to other rates (such as Medicare and average private insurance rates) for physicians, dentists, and other practitioners; and a comparison of Medicaid costs and reimbursements for hospitals and nursing homes over the past five years.

From the data collected for each of these service types, it is possible to conduct a trend analysis that could illustrate associations between rate changes and provider participation over time. The review would develop counts of the number of physicians over time to determine whether increases or decreases in a service area led to corresponding changes in the number of providers serving Medicaid patients. The analysis would count the number of affected practitioners before and after the rate change, and then calculate the percentage change. To attempt to control for other factors that may affect the number of providers serving Medicaid patients, similar before-and-after comparisons could be performed in service areas not affected by a rate change. This approach is sometimes referred to as a “difference-in-difference” estimate, because it is based on the difference between two calculations which are themselves differences. Although this approach is not without limitations, PCG nevertheless recommends it as the most feasible and economical method for evaluating and monitoring the effects of rate changes under the constraints of an annual review cycle.

CMS’ proposed rule includes three necessary financial reporting elements for the annual state rate review. This regulation requires that the review must incorporate: (a) an estimate of the percentile which Medicaid payment represents of the estimated average customary provider charges; (b) an estimate of the percentile which Medicaid payment represents one, or more, of the following; Medicare payment rates, the average commercial rates, or the applicable Medicaid allowable cost of the services; and (c) an estimate of the composite average percentage increase or decrease resulting from any proposed revision in payment rates. It would also require that Medicaid payment rates include both base and supplemental payments for Medicaid services. PCG recommends incorporating each of these reporting elements into the annual review.

Optimal alignment with the state’s budgetary process would have the Access Rate Review follow a calendar year, beginning in January and running approximately six months. Implementation activities would start in the summer, proceeding into the spring of the following year. In reality, the annual cycle is a “long year,” to the extent that implementation is a nine month process in itself, and overlaps the beginning of the next



year's review cycle. PCG recommends distinguishing the Access Rate Review into two separate parts, an "access review" and a "rate review," each with its own independent measures and methodological elements.

PCG's objective in the next phase of this engagement will be to conduct the review of Colorado's fee-for-service rates in accordance with the methodology developed in this report. As an application of the methodology, this preliminary review will serve as a test of these recommendations and is likely to spur further revision and elaboration of the policies and guidelines outlined here.



III. Evaluation of Current Rate Review Strategies

A. Current Rate Review Strategies

In preparation for developing recommendations for an access rate review methodology appropriate for the state's Medicaid program, PCG utilized a number of resources available from HCPF. PCG staff conducted structured interviews with HCPF officials in order to gain their perspective on Medicaid reimbursement rates and enrollee access to health care. PCG also reviewed payment methodologies contained in the state plan, surveyed numerous quality of care and access to care documentation available on the agency website, as well as organizational information and active workgroups addressing various aspects of the access and rate review process. Finally, PCG reviewed several Requests for Proposal (RFPs) related to the state's Medicaid data analytics planning, both in connection to Accountable Care Collaborative (ACC) reforms, as well as Colorado's long-term Business Intelligence and Data Management (BIDM) strategies.

Although HCPF has begun the process of reviewing rates for specific services in an effort to increase provider participation, rate changes requested by the Department historically have not relied on a systematic review process or a methodology for original rate setting or periodic update. Rate adjustment in the past appears largely to have followed from the budget process, with increases or decreases implemented as a percentage for all procedures. PCG understands that this report represents a further development of HCPF's interest in targeting rates according to a specific rationale that aims to increase consumer access or improve service utilization within the fee-for-service system.

The Department's current lack of a clear methodology for targeted rate adjustment is not unique in Medicaid. PCG's research did not identify any states that perform the type of systematic Medicaid fee-for-service rate review of interest to Colorado, and we did not interview any officials in other state Medicaid programs as a result. The existing access rate reviews identified by PCG have been strictly tied to access issues, and do not address broader goals of optimizing utilization, administrative efficiency, or value-based care.

Although HCPF staff suggested that a representative rate review may be conducted in the State of Florida at present, PCG determined that the rate review in question is tied specifically to the state's 1115 waiver, and is focused on developing rate recommendations that will facilitate Florida's continuing transition from fee-for-service to managed care. Due to these dissimilarities, PCG did not further investigate Florida's rate review process.

B. Alignment of Rate Review with Current Quality and Access Monitoring

It is important to note that many of the analyses needed for a comprehensive access rate review are already being performed as a part of the State's existing quality efforts. PCG's recommendations attempt to describe



how these analyses could also be directed to a more systematic rate review. While the activities and expertise required to conduct an annual access rate review are naturally associated with the resources available within HCPF's data analytics and quality improvement infrastructure, PCG understands that this infrastructure is currently decentralized in various functions and organizational sub-units in the department and in other agencies. Moreover, the State's Medicaid data analytics structure is rapidly evolving. Although PCG has tried to draft recommendations that are fairly neutral as to where in the organization the resources and tasks needed for the review would be located, it is hoped that implementation for an annual review will consider the state's broader data analytics strategy and goals.

In Colorado, policymakers and stakeholders are actively debating what kind of data analytics would be most useful and feasible for moving forward. While the state has affirmed the value of the SDAC in its current ACC initiative, PCG is aware that the state is interested in integrating SDAC functionality into a more comprehensive approach to providing data analytics support for the Medicaid program. One potential source of change relates to current efforts to reconfigure the state's overall information support for Medicaid through the Colorado Medicaid Management Innovation and Transformation (COMMIT) project, which will involve a wider system of business intelligence and data support functions like those currently performed by SDAC for the ACC. It is not yet clear whether the SDAC will remain independent as COMMIT takes shape, or whether its functions will be absorbed by the system or merged in some way. However, PCG's observation is that many of the efforts needed for an access rate review are currently conducted by the ACC program on an ongoing basis for a subset of the Medicaid population, and with appropriate planning, could be fruitfully mapped onto and adapted to current ACC data analytics capacity if these become oriented to statewide reporting.



IV. Methodologies for Determining Sufficiency of Rates for Access

A. Overview of Measures and Approach

In anticipation of new federal requirements mandating annual access rate reviews by state Medicaid agencies, PCG recommends an examination of rates along the three access dimensions proposed by the rule: enrollee needs, provider ability, and service utilization. While there is no CMS-defined standard of adequacy of access to care, in the interest of relative comprehensiveness, PCG recommends three types of comparisons for each of the specific measures enumerated below. For all access components, measures should be compared, where possible, 1) to the general population, 2) over time, and 3) across geographic areas.

A population benchmark should be used as a primary point of comparison for determining adequacy, to the extent that general population data is itself available. Given that the proposed federal rule also mandates a review of access trends, it is also necessary to examine whether and to what extent access for Medicaid enrollees has changed over time. This benchmark will help to identify services for which access has increased or decreased over time. In view of the size and diversity of the State of Colorado, it is vital, too, to identify disparities in access for Medicaid enrollees according to geographical distribution, in order to understand whether gaps in access vary around the state. For the purposes of the review, PCG recommends that the state adopt the regional designations used in its Accountable Care Collaboratives (ACC) as the geographical areas demarcated in the review.

B. Measures of Enrollee Need

PCG recommends that an analysis of enrollee characteristics and needs should be a primary focus of the access rate review. The characteristics of Medicaid subpopulations can be unique, highly variable, and greatly influenced by demographic factors, health needs, and state eligibility criteria. Distinctive enrollee characteristics that impact access to Medicaid services include lower income and assets, discontinuous eligibility, geographic location, complex health care needs, cultural diversity, level of health literacy, availability of transportation, and time constraints.

The chief difficulty in determining enrollee need is ensuring the timeliness and comprehensiveness of available data. Data sources for recommended enrollee measures include the State's MMIS system, call center records, and the national surveys, but each of these sources is subject to potentially serious limitations requiring the supplement of other sources.

For the purposes of comparing the unique characteristics of Colorado's Medicaid population with other populations in the state and across the nation, PCG recommends utilizing available national and agency-collected beneficiary experience data. These measures are often captured in patient surveys, such as the



Medical Expenditure Panel Survey (MEPS) the National Health Interview Survey (NHIS), which are administered nationally, but also in the Consumer Assessment of Healthcare Providers and Systems (CAHPS), which is administered by HCPF to its enrollees. These surveys can be invaluable in determining whether enrollee satisfaction levels are meeting national standards and whether access problems are a result of issues with system navigation and patient experiences.

The limitation of these three surveys is that, in some cases, they are neither timely nor sufficiently granular in their portrait of the State’s Medicaid population. The tradeoff in the national comparability of surveys like MEPS and CAHPS lies in the age of the data. Both surveys exhibit a two-year lag in their data sources, qualifying their usefulness to an annual review. The generality of service types and populations surveyed also constrain one’s ability to identify significant variation by region or subpopulation, or to pinpoint specific services in need of intervention.

MMIS and call center data provide a timelier source of information on possible unmet need in the state’s Medicaid population, and PCG recommends the use of this data wherever feasible. However, given the lack of comparison populations for these data sources in isolation, PCG advocates the use of a mixed set of measures that will contextualize recent enrollee trends with points of national comparison.¹

Access Measures: Enrollee Characteristics and Needs		
Measure	Data	Access Dimension
Population Analysis	MMIS Enrollment Data	Enrollee Characteristics and Need
Enrollee Satisfaction	Consumer Assessment of Healthcare Providers and Systems (CAHPS)	Enrollee Characteristics and Need
Beneficiary Requests for Assistance	HCPF Customer Service Center data (Call Center)	Enrollee Characteristics and Need
Medicaid beneficiaries reporting difficulties	Call Center Medical Expenditure Panel Survey (MEPS)	Enrollee Characteristics and Need
Analysis of beneficiary complaints	Call Center National Health Interview Survey (NHIS)	Enrollee Characteristics and Need

Measure: Population analysis

This measure would involve a retrospective data analysis to evaluate the unique characteristics of Colorado’s Medicaid beneficiaries, documenting the size of the Medicaid population, basic demographics, enrollment data, trends in enrollment, and geographic dispersion. The purpose of this analysis should be to provide a clear picture of the population, its health care needs, and the context for evaluating Colorado’s network of providers.

¹ Colorado’s All Payer Claims database could eventually be a useful source of data on enrollee characteristics. However, based on interviews with HCPF rate specialists, PCG understands that only a limited set of services within this database currently yield useful comparison data.



Measure: Enrollee satisfaction with access to care

HCPF currently administers consumer satisfaction surveys to its FFS population, and specifically, the CAHPS survey, at least for some of its enrollment populations. Analysis of this measure would involve system performance on CAHPS measures that address patient experience of access. The CAHPS survey directly measures whether enrollees believe they can access the care they need, and can be compared with commercial and Medicaid MCO populations in Colorado, as well as national averages.

Measure: Beneficiary requests for assistance

This measure would analyze the number of calls tracked by the agency's Customer Service Center of beneficiary requests for assistance in finding providers. By measuring the number of calls per 1,000 enrollees, analysis could determine whether an increasing trend for assistance indicates an emerging access problem triggering the need for further research. Depending on the availability of historical call data, it would also be possible to establish control limits at a third standard deviation of historical call volumes to provide a threshold indicating a potential access problem.

Measure: Percentage of Medicaid beneficiaries reporting difficulties

PCG recommends this measure in order to quantify the rate that a Medicaid enrollee has trouble getting care. This would encompass the entire scope of problems a beneficiary may face in obtaining care, no matter how small or large the issue. While data for this measure may be available from calls tracked by HCPF's beneficiary hotline, state-level data can also be obtained using the MEPS survey information as a data source, combining all beneficiary reported problems into one quantity and comparing it to total survey respondents. This measure would also be evaluated for commercial insurance enrollees, revealing the difference in the rate that difficulties are reported among the Medicaid and commercial insurance populations. This difference, after being tested for statistical significance, would be compared with peer state benchmarks, revealing relative strength and weaknesses in Colorado's Medicaid delivery system. This analysis will be invaluable in determining the presence of unusually high levels of difficulties in obtaining Medicaid services, indicating access issues.

Measure: Analysis of beneficiary complaints

This measure would assist in revealing the spectrum of issues most prevalent for Medicaid beneficiaries in obtaining services. An analysis of beneficiary complaints would group complaints together and quantify them as a percentage of total complaints, pinpointing the primary catalysts of access problems. While data for this measure may be available from calls tracked by HCPF's beneficiary hotline, the National Health Interview Survey (NHIS) is a data source that can also be used to obtain this measure. Survey data on a broad range of health topics are collected through personal household interviews. A major strength of this survey lies in the ability to display the specific reasons beneficiaries experience difficulties in obtaining care.

C. Measures of Provider Availability



The measure of provider availability is a product of two review components: provider supply and provider participation. PCG recommends measuring provider supply through two primary measures: provider-to-population ratios and time-and-distance estimates. PCG recommends two primary measures in determining adequate provider participation: a ratio of providers enrolled in Medicaid to total providers in the system, revealing the proportion of providers participating in Medicaid; and a provider entry/exit measure that illustrates the expansion and contraction of the provider network over time. PCG also recommends a measure of providers accepting new patients to determine whether providers have stopped seeing new Medicaid patients and can be eliminated from consideration in the provider network of interest.

Access Measures: Provider Availability		
Measure	Data	Access Dimension
Provider-to-Population ratio	MMIS Enrollment Data	Provider Availability (Supply)
Time-and-Distance Measurement	MMIS Enrollment Data	Provider Availability (Supply)
Providers participating in Medicaid	MMIS Claims Data Colorado Physician Licensure Data	Provider Availability (Participation)
Provider network entry and exit	MMIS Claims Data	Provider Availability (Participation)
Providers accepting new patients	MMIS Claims Data	Provider Availability (Participation)

Measure: Provider-to-population ratios

Provider-to-population ratios are typically used to quantify provider supply in given subpopulations. In order to obtain this measure, quantitative data must be obtained on the total number of healthcare providers and the total number of Medicaid enrollees in the system. This information for the State of Colorado, as well as information on peer states for comparison, can be obtained through a data request from the Medicaid Management Information System (MMIS). If there is an insufficient number of providers available to this population, it is likely that access issues, such as unavailability of provider appointment times, stem from a basic lack of supply. This analysis will be broken down by physician specialty and measured against benchmark ratios established for each specialty. A variety of sources purport to show the number of physicians in various specialties required to meet the needs of a population of 100,000 people. Common benchmarks include those provided by the Graduate Medical Education National Advisory Committee (GMENAC), as well as the 1989 Hicks & Glenn and 1996 Goodman research studies. Although ratios exist for over 30 medical specialties, the specialty categories recommended for review will depend to some extent on the quality of the provider specialty data available within the state's MMIS.

Measure: Studies on time-and-distance provider availability

Another preliminary step in identifying access issues is a measure of the concentration of the provider network. In this part of the analysis, the inclusion of a heat map, displaying the disbursement of providers,



may be necessary. This can be produced using MMIS data, recording the zip codes of all providers in the network and coverage zones surrounding these locations. A study of a heat map would identify areas of the state where getting healthcare service may require significant travel, indicating possible HPSAs. The accompaniment of the disbursements Medicaid populations throughout the state, along with mass transit routes, would further enhance this study and its ability to identify access issues.

Measure: Proportion of providers participating in Medicaid

The data needed for this measure includes HCPF claims and enrollment data, as well state licensing data. Fundamentally, the measure consists of the number of providers serving Medicaid enrollees divided by the number of providers licensed in Colorado. The measure should only include providers actively serving Medicaid enrollees, but whether this is interpreted as serving at 10 enrollees, 1 enrollee, or simply enrolled in the Medicaid program depends to some extent on type of service under review.

Measure: Provider network entry and exit

In addition to the proportion measure of providers enrolled in Medicaid, it is also necessary to take note of the number of providers enrolling and dis-enrolling in Medicaid each year. If the Medicaid system is performing properly, the number of entries and exits in the system will be relatively small on a yearly basis. If the outcome of this measure reveals a significantly high number of provider exits or low number of provider entries, this may be evidence of rate or policy disincentives.

Measure: Providers accepting new patients

In order to obtain this measure, PCG recommends the use of MMIS data once again due to the detailed claim level information it provides. Using this claim level data, further eliminations of providers that have not filed a Medicaid claim on a new patient in recent history can be done. This will help to paint a clearer picture of the landscape of provider supply throughout the state. Provider-to-population ratios from the previous analysis of provider supply can now be refined and compared with those of peer states, being careful to include the same additional measures and using the same methodology in conducting necessary provider eliminations. These ratios from Colorado's peer states can be used to establish benchmarks for these measure that signify appropriate levels of access, as well as thresholds that should raise access concerns.

PCG understands that HCPF regularly conducts its own internal access and quality reports for certain services, programs, and enrollment populations. These will be valuable resources in identifying past issues with access and quality, as well as the locations where these issues have been most problematic. Comparing this information with coinciding changes in the Medicaid plan will assist PCG in gaining a better understanding of previous initiatives the State has taken in identifying and correcting access issues, as well as future strategies for aligning access rate review processes with current efforts.

D. Rate Adequacy Measures



In addition to measures specific to evaluating access to Medicaid health services, PCG recommends performing an analysis of Medicaid reimbursement rates over time. Two primary measures should be used to assess the adequacy of Medicaid rates over time: a comparison of Medicaid rates to other rates (such as Medicare and average private insurance rates) for physicians, dentists, and other practitioners; and a comparison of Medicaid costs and reimbursements for hospitals and nursing homes over the past five years.

Rates Paid to Practitioners

Identifying the cost of providing services for physicians and most other practitioners, such as dentists and psychologists, is not feasible, because no entity systematically collects such cost information. For an access rate review, Medicaid rates should be compared to other rates that providers receive. In the case of physicians in particular, Medicaid rates are often benchmarked against Medicare rates and Medicaid rates paid in other states. For physician services, PCG recommends a trend analysis of Medicaid-to-Medicare ratios over the past five years. PCG understands that many service categories, such as obstetrics, pediatrics, behavioral health, and many community-based services, will lack comparable Medicare rates, and average commercial rates may also be unavailable. In these cases, the review would need to rely on a peer benchmarking method, comparing Colorado's Medicaid rates to Medicaid rates paid in other states. For certain services, it is also possible to obtain Medicaid-to-Medicare ratios across all states. These ratios are compiled by the Kaiser Family Foundation from surveys sent by the Urban Institute to the 49 states and the District of Columbia which operate FFS Medicaid programs.

Given the potential infeasibility of locating comparison data for all FFS rates, it is advisable to develop a methodology for narrowing the focus of the rate review to high volume services, as well as to services known from the access review to suffer from inadequate rates. Common services can be selected through an analysis of HCPF claims and encounter data to identify the most common procedure codes used by practitioners. By focusing on a smaller subset of codes, it would then be possible to obtain Medicare and average commercial rates from the reimbursement department of a major public provider, such as University of Colorado Health, to serve as a basis for comparison.

Rates Paid to Hospitals and Nursing Homes

To assess the adequacy of Medicaid reimbursement rates and analyze the variation in unreimbursed costs over time, PCG recommends obtaining cost report databases for hospitals and nursing homes for the past five years. These databases should include operating and capital costs for major service areas and the corresponding Medicaid reimbursement amounts for each provider. The cost report data would allow the reviewer to analyze the extent to which Medicaid reimbursements have covered the cost of providing care to Medicaid patients over the past five years.



In addition to analyzing the cost coverage provided by FFS rates, the review would need to analyze the impact of supplemental payments to hospitals to compare total reimbursements to the cost of providing services. Hospitals may receive three supplemental payments if they treat a high volume of Medicaid patients or are teaching hospitals: Disproportionate Share Hospital (DSH), Graduate Medical Education (GME), and Indirect Medical Education (IME). The review would need to obtain all information related to supplemental payment disbursements.

Monitoring Impact of Rate Changes on Provider Participation

From the data collected above, it is possible to conduct a trend analysis that could illustrate associations between rate changes and provider participation over time. The review would develop counts of the number of physicians over time to determine whether increases or decreases in a service area led to corresponding changes in the number of providers serving Medicaid patients. The analysis would count the number of affected practitioners before and after the rate change, and then calculate the percentage change. To attempt to control for other factors that may affect the number of providers serving Medicaid patients, similar before-and-after comparisons could be performed in service areas not affected by a rate change. For example, one might focus on the effects of a targeted rate increase for optometry and ophthalmology services, noting that provider participation for ophthalmologists increased 5% within a year after the increase. During the same time period, the number of non-affected specialist physicians increased 2%. The estimated net impact of the rate increase would be measured as 3%. This approach is sometimes referred to as a “difference-in-difference” estimate, because it is based on the difference between two calculations which are themselves differences.

This approach would produce the clearest evidence of an impact if the change in providers was large and immediately followed a rate modification, and the change in providers unaffected by the rate was much smaller. However, other factors that cannot be quantified may also affect changes in the number of providers, such as rates paid by private insurers, age distribution of providers, demand for health care services, opportunities in other states or in positions other than direct patient care, and malpractice premiums. Although this approach is not without limitations, PCG nevertheless recommends it as the most feasible and economical method for evaluating and monitoring the effects of rate changes under the constraints of an annual review cycle.

Federal Reporting Requirements

CMS’ proposed rule includes three necessary financial reporting elements for the annual state rate review. This regulation requires that the review must incorporate: (a) an estimate of the percentile which Medicaid payment represents of the estimated average customary provider charges; (b) an estimate of the percentile which Medicaid payment represents one, or more, of the following: Medicare payment rates, the average commercial rates, or the applicable Medicaid allowable cost of the services; and (c) an estimate of the



composite average percentage increase or decrease resulting from any proposed revision in payment rates. It would also require that Medicaid payment rates include both base and supplemental payments for Medicaid services. PCG recommends incorporating each of these reporting elements into the annual review.

V. Methodologies for Prioritizing Rates to Promote Proper Utilization and Cost-Effective Care

A. Overview of Measures and Approach

In developing recommendations for prioritizing rates for promoting appropriate utilization, it is necessary for PCG to emphasize that the relationship between reimbursement and utilization is much more indirect in a fee-for-service system than in other types of payment system. For this reason, the most crucial element in a methodology that attempts to influence utilization through rate adjustment is the capacity for determining a) whether the current rate structure is a causal factor in inappropriate utilization, and b) whether any proposed adjustment is likely to impact utilization.

In many cases, inappropriate utilization is primarily a delivery system issue rather than a payment system issue. Rate interventions are frequently less likely to exert an impact on utilization than more direct reforms of the underlying system of care. Targeted rate increases (or decreases) tend to be more effective in circumstances in which a rate change is designed to support a more basic reform of the delivery system, typically as a means of directing providers to participate in innovative programmatic reforms rather than as a lever for increasing or decreasing volume in a certain set of procedures.

In some cases, states will establish higher rates for services in programs that feature care coordination or benefit management in an effort to increase provider participation in system reform. While this approach increases costs in the near term, it can also generate better health outcomes that reduce expenditures in the long term. Consequently, one of the policy decisions needed for a rate review is to define the timeframe for measuring performance. An effort to reduce expenditures in a one-year period will result in a different rate prioritization than a policy that aims to lower costs over five years.

Due to the indirect relationship between fee-for-service payment and the supply of services, many private insurers in a traditional fee-for-service setting have enjoyed greater success managing utilization by targeting demand instead. Many private and public insurers have implemented value-based insurance design (VBID) and other demand-side reforms that modify rates through increased cost sharing and premium subsidies, as well as other mechanisms like participation requirements and open enrollment, with utilization managed by tiering preventative and preference-sensitive procedures. Admittedly, these sorts of policy levers are less feasible for Medicaid than for private insurance, but their increasing importance in private insurance indicates some of the limitations of managing supply in a fee-for-service system.

Outside of increasing rates for well-known preventative procedures with proven value, PCG recommends developing the rate review within the broader process of program management. Promoting appropriate utilization is not just a rate exercise, but requires a process of setting utilization goals and reviewing data.



The rate review would need to be a part of a program management structure that formulates an appropriate continuum of care for identified service lines and establishes utilization goals based on this continuum. In view of these goals, it would then be possible to use rate adjustments to target utilization more precisely.

While that framework is under development, utilization measurement can still be a useful tool for identifying access problems within the delivery system. PCG recommends a set of common utilization measures that can be used to track access, serving more as a negative indicator and an indirect source of information about services in need of rate review than as a direct measure of the services to be prioritized.

B. Measures of Service Utilization

The measure of service utilization is a product of three review components: services used, health outcomes, and affordability of services. In terms of services used, determining a usual source of care is important for Medicaid enrollees because enrollees without a usual source of care may indicate a lack of provider availability in their geographic location. In order to measure health outcomes, PCG recommends a measurement of the rates of use for select preventative services as indicators of potential over- and under-utilization. Finally, affordability remains a concern due to out-of-pocket costs for some types of service. These costs include cost-sharing requirements and restrictions on benefits, which have been shown historically to reduce the use of services, especially in low-income areas.

Access Measures: Utilization		
Measure	Data	Access Dimension
Usual source of care for enrollees	MEPS	Utilization (Services Used)
Percentage of enrollees receiving particular services	Healthcare Effectiveness Data and Information Set (HEDIS) HCPF Benefit Management Reports	Utilization (Services Used)
Rates of use of preventative services	HEDIS	Utilization (Health Outcomes)
Potentially Preventable Events	Prevention Quality Indicators (PQI)	Utilization (Health Outcomes)
Adequacy of Prenatal and Postpartum Care	HEDIS NHIS	Utilization (Health Outcomes)
Emergency Department Visits	HEDIS	Utilization (Health Outcomes)
Benefit Restriction Analysis	MEPS	Utilization (Affordability)

Measure: Usual source of care for enrollees

This measure would be a comparison of Medicaid beneficiaries that consistently see the same provider or providers for their healthcare needs to those who do not. A high realization of this measure would indicate that beneficiaries have access to and are receiving adequate care. PCG recommends the use of the Medical Expenditure Panel Survey (MEPS) as the primary data source for obtaining this measure. A focus on the



frequencies of visits by these beneficiaries would return a measure of the proportion of the Medicaid population that has a usual source of care.

Measure: Percentage of enrollees receiving particular services

PCG recommends taking this measurement for a number of commonly utilized facility services, indicating any areas in which services are being over or under-utilized relative to previous time periods and peer states. These frequency measures can be measured using the Healthcare Effectiveness Data and Information Set (HEDIS). In order to gauge this measure, obtaining peer state measurements for the same services and comparing them with Colorado will be necessary. This analysis will help shed light on areas of over and under-utilization that may be related to access issues.

Measure: Rates of use for preventative services

This measure will evaluate the use of services considered preventative in the provider network. The services considered preventative can be identified in the HEDIS data, as well as the enrollees that are using them regularly. The rates of use per capita within the Medicaid population can subsequently be derived from this data. A comparison of these measures in the state of Colorado with measures of identical services in peer states will reveal strengths and weaknesses in access to these preventative services.

Measure: Potentially preventable events

PCG understands that Colorado's Regional Care Collaborative Organizations (RCCO) currently collect data on potentially preventable events (PPE) through the Statewide Data Analytics Contractor (SDAC). RCCO- and provider-level performance on these metrics is determined on the basis of Medicaid claims linked to enrollment data. Currently, 12-month and year-to-date metrics are analyzed for the following PPEs: spending for preventable events, admissions per 1,000 per year, readmissions per 1,000 per year, visits per 1,000 per year, and services per 1,000 per year. It is PCG's recommendation that this reporting mechanism be developed on a statewide basis, to the extent possible, as a key set of measures of appropriate utilization.

Measure: Adequacy of prenatal and postpartum care

PCG recommends the measure of the adequacy of these specific services due to their necessity and high costs. For these reasons it is essential to ensure that these services are carried out efficiently while accommodating the entirety of the needs of beneficiaries. This measure can be derived from the HEDIS data, using measures it supplies on the timeliness of prenatal care and postpartum care. In addition, satisfaction ratings in prenatal care will be derived using NHIS survey data for quality of care analysis. Using each of these data sources will enable PCG to obtain an overall measure of the adequacy of prenatal care, assuring that there are no access issues for the Medicaid population in need of these services.

Measure: Emergency Department visits

PCG recommends this measure of emergency department (ED) visits in order to ensure that the preventative services in the healthcare system are adequate and being utilized by the Medicaid population. A higher than normal realization of this measure would indicate that preventative services may be inadequate, possibly as



a result of access issues. The data used to derive this measure will come from the HEDIS data set, which contains a measure of ED visits. To discern whether these visits are too frequent among Medicaid enrollees, enrollee visits will be compared to measures from the general population. After testing the differences in these measures for statistical significance, they can be compared to the benchmarks set by peer states.

Measure: Benefit restriction analysis

A measure of benefit restrictions and its impact on the Medicaid population is recommended through further analysis of the MEPS survey data. MEPS-HC respondents are given the opportunity to report denials of services due to benefit restrictions. The measure of interest will be the rate at which this occurs and how it stacks up against peer state measures. If this rate is realized to be significantly high, it will possibly be an indication of access issues and the need for Medicaid benefit expansion in specific areas of service.

VI. Best Practices for Review Process

A. Frequency of Review

Proposed federal rules would require Colorado to conduct an access rate review of each service covered in the fee-for-service system at least once every five years, with the additional requirement of reviewing a subset of services each calendar year. The proposed rule grants the discretion to determine a timeframe to review each covered Medicaid service as long as the State reviews a subset of services each year and each covered service is reviewed at least once every five years.

PCG recommends that Colorado maintain a flexible schedule as to which subset of rates are to be reviewed in a given year, since budget circumstances or anticipated fluctuations in provider networks or enrollment may call for prioritizing rates “out of sequence.” However, similarities among rate setting methodologies and data availability for some procedures create natural subsets for review, and warrant treatment together in a common grouping. For instance, hospital and nursing home rates might be reviewed one year, while home-and-community-based services (HCBS) might be reviewed in another year, since these are usually authorized by a waiver and are attached to cost neutrality restrictions that would affect rate change recommendations. Physician services could be reviewed over multiple years, with rate schedules grouped by similar types of service or setting features.

B. Analytical Steps

The access rate review can be broken down into several distinct analytical steps. The first part of the review, the access review, has been described in detail in Section IV-B and C. In this analysis, access to care should be investigated on its own terms, with attention to measuring the availability of health providers and identifying any points in the delivery system in which diminished provider networks appear to be accompanied by unmet demand. The access review should be conducted in independence from a consideration of the sufficiency of the rate structure.

The rate review should be performed after the access review and should focus on services that appear to be affected by inadequate provider networks or increased enrollee need. The rate review will consist of two distinct analytical steps. The first is a causal analysis, in which rates will be examined to understand their relationship to identified access problems, on the one hand, and to inappropriate utilization of services on the other. As outlined in Section IV-D and in Section V, the rate review is designed to indicate causal connections between decreased reimbursement and problems in provider availability, as well as links between the rate structure and potential over- and under-utilization of services.

Once the review has determined the impact of the present rate structure on access and utilization, it will be possible in the second half of the rate review to develop policy options for addressing those access and



utilization issues through rate adjustment or alternative administrative strategies. Given the indirect relationship between the payment system and the delivery system, rate adjustment may not always be the most effective means for improving outcomes, even where there is a demonstrated link. Nor is substantial rate modification always be economically or politically feasible. For this reason, PCG presents the policy analysis as a distinct analytical step of the rate review, allowing for detailed consideration of alternative solutions to tackling identified access and utilization issues within the fee-for-service system.

Another reason to distinguish the access and rate reviews into two independent steps is that rate increases are not always likely to be viable budgetary or political options, especially in years when state funding for rates is flat or declining. By incorporating a robust policy analysis into the rate review, the proposed process will continue to provide actions that can be taken to improve or preserve client access and quality of care in years when rate adjustments are not feasible. Frequently, there are a range of alternatives available to address access and utilization issues apart from increasing rates. When rates cannot be increased, the policy analysis will focus specifically on whether these alternatives—such as changes to administrative rules, strategic use of RCCO partnerships and aligned incentives such as gainsharing—can effectively improve or preserve provider availability and appropriate utilization.

For these reasons, it is crucial to stress that the rate review relies inherently on a “mixed methods” approach that should incorporate both quantitative and qualitative data to understand the relationship between the rate structure and the state’s delivery system. The need for interpretation, policy decision, and the development of stakeholder consensus in forming rate recommendations is not a liability but a necessity, given the multiple dimensions of access and utilization, the indirect relationship between access and the rate structure, and the limitations of available data sets for measuring these variables. The analytical steps presented below outline a process that takes these constraints into account and provide a framework for effective analysis and decision-making.

Access Review	Rate Review (I): Causal Analysis	Rate Review (II): Policy Analysis
<ul style="list-style-type: none"> • Collect data on access to care • Analyze data on chosen metrics • Develop standards and thresholds of adequate access • Identify inadequacies in provider availability <ul style="list-style-type: none"> • Determine provider adequacy based on common metrics • Discern whether unavailability is Medicaid-specific or a general supply problem • Investigate whether supply issues are reflected in unfulfilled demand • Develop report of access inadequacies 	<ul style="list-style-type: none"> • Review and/or establish utilization goals, timelines for measuring performance • Identify services with inadequate access or inappropriate utilization • Identify associated rates for the services under review and compare with costs or other rate benchmarks • Determine causal connection between rates and access/utilization <ul style="list-style-type: none"> • Conduct Difference-in-difference analysis • Review stakeholder input • Assess impact of inadequate rates on utilization and outcomes • Estimate rate adjustment required for adequate access and utilization 	<ul style="list-style-type: none"> • Determine impact of rate adjustment <ul style="list-style-type: none"> • Estimate impact on access • Estimate impact on utilization • Estimate fiscal impact • Develop rate recommendations <ul style="list-style-type: none"> • Identify affected services • Explore alternatives to rate adjustment • Identify requirements for rate adjustment vs. alternatives • Determine priority of rate adjustment • Propose corrective action • Identify criteria for measuring success of implementation • Write and submit report to agency leadership

C. Annual Review Cycle

The annual timing of the access rate review would depend on a combination of statutory, budgetary and political constraints, both at the federal and state levels. After surveying federal and state statutory requirements for public notification and state plan amendment submissions, PCG’s view is that Colorado’s annual budget cycle is likely to be the most important factor in the timing of the review cycle. Consequently, in our recommendations, the formulation of review phases and processes has been oriented to align with the state budgetary cycle, including the schedules and activities of the General Assembly’s Joint Budget Committee and the annual legislative session.

The review cycle has been conceived in terms of three distinct but overlapping “processes,” which would be carried out over the full course of the year. These are the Access Rate Review Process, the Stakeholder Engagement Process, and the Implementation and Monitoring Process. The Access Rate Review Process consists of the Access Rate Review proper, while the other processes constitute either support activities that run parallel to review development, or implementation activities that seek to enact changes to the rates or otherwise respond to findings from the review. In reality, the annual cycle is a “long year,” to the extent

that implementation is a nine month process in itself, and overlaps the beginning of the next year’s review cycle.

Optimal alignment with the state’s budgetary process would have the Access Rate Review follow a calendar year, beginning in January and running approximately six months. Implementation activities would start in the summer, proceeding into the spring of the following year. These implementation activities might include: decisions to institute rate reductions or increases in light of a review, submission of a SPA and supporting documentation to CMS, re-allocations of agency resources and budgetary requests and recommendations for submission to the Governor’s Office and the Joint Budget Committee. The overlapping character of these parallel processes is represented in the figure below:

Access Rate Review Cycle



Although these review processes run in parallel, they inform each other, so that the review cycle can also be organized into distinct “phases,” based on the state of development of the review, the level of stakeholder participation required, and the implementation steps involved. The first two phases of the review cycle—the Access Review phase and the Rate Review phase—reflect two distinct phases of the Access Rate Review itself. PCG recommends distinguishing the Access Rate Review into two separate parts, each with its own independent measures and methodological elements (to be discussed in greater depth in Section V).

Phase 1 (January-March), the first part of the review, is designed to evaluate the adequacy of access to care prior to a formal evaluation of rate adequacy. Although it may be advantageous during Phase 1 to conduct a preliminary analysis of Medicaid rates for comparison with reimbursement rates from other payers, the



review should refrain from developing recommendations for rate change until the access review is concluded, and access is determined to be inadequate.

Phase 2 (April-June) of the review cycle is the rate review. This review itself consists of two steps: 1) the determination of the extent to which any identified access problems can be addressed more appropriately through corrective actions that do not involve rate change, and if not, 2) a consideration of how rates can be improved—through increase or decrease—to increase access and optimize utilization. PCG contemplates that stakeholder engagement should become formalized only in Phase 2, but not earlier, primarily to preserve the relative independence of the access determination from the political and budgetary process. If a potential access issue emerges in the analysis during Phase 1, it is recommended that agency staff schedule meetings with provider groups and other stakeholders affected by inadequate access to help estimate current and potential impacts of the rates on the services under review. Informed by rate analysis and provider feedback, the access rate review should be finalized by the end of June, developed with a description of findings and recommendations for rate changes, as necessary.

Phase 3 (July-October), the Budget Review, consists of the first stages of implementation of rate recommendations as well as any action required by CMS as a result of major findings of inadequate access. Proposed federal regulations stipulate that the state would need to develop a remediation plan within 90 days of discovering an access problem; the formulation of a corrective action plan would be a major deliverable of Phase 3. This phase falls within the period between June 1 and July 30th, in which HCPF develops proposals for policy changes to be implemented in the next fiscal year, with projected financial impacts. Phase 3 would involve agency budget planning for the next fiscal year informed by any rates proposed for modification as a consequence of the access rate review. By August 1, draft budgets would be sent to the Governor's Office to be reviewed and balanced with the larger state budget. The resulting budget would be submitted to the Joint Budget Committee and the Legislature by November 1, ending the phase.

Phase 4 (November-June) represents the final stage of the review cycle and coincides with the legislative budget process and the state's legislative session. Phase 4 would also see extensive consultation with legislative stakeholders during this time. By mid-March, the Joint Budget Committee would be expected to provide initial approvals on submitted budget actions, with final budgets typically passing in the General Assembly by the beginning of May. PCG contemplates that the state would begin drafting any SPAs needed for rate changes during this phase, as well as public notices informing stakeholders of plan modification. Although a SPA submission deadline at the end of March is optimal for allowing CMS the requisite 90-day review prior to implementation on July 1 of the new fiscal year, the short span between legislative budget approval and the effective date of rate changes renders a modest retroactive implementation more likely. To align the state budget process with the CMS approval process as smoothly as possible, the agency should submit required SPAs with documentation as quickly as possible after budget approval. The phase would also encompass monitoring activities evaluating the impacts of rate modifications implemented in the previous cycle, as well as measuring the success of the previous year's remediation plan and reporting



compliance status back to CMS, if necessary. The Department is investigating the feasibility of aligning the effective date of implemented rate changes with operational constraints such as federally required stakeholder notification, CMS approval, rate calculation and loading, and any necessary systems changes; this would likely result in an effective date of January 1 for most rate changes.

D. Opportunities for Legislative Input

In the cycle above, the rate review would generate a list of prioritized rates by the end of June, supported by an annual report of the access rate review. After their incorporation in agency budget planning during the summer and submission to the Governor's Office by August 1, the resulting budget would be submitted to the Joint Budget Committee and the Legislature by November 1. The finalized list of rates targeted for adjustment would be included in this submission for legislative review and approval.



VII. Best Practices for Administrative Costs

A. Best Practices for Reducing Administrative Costs

Administrative efficiency and cost effectiveness are goals that HCPF should pursue as it builds its rate review process. In the short term, HCPF will need to consider the cost of completing an annual rate review, and whether the reviews would be completed most accurately and effectively by internal staff or through outsourcing. Below are recommended considerations for HCPF:

Option	Pros	Cons
Insource Rate Review – conducted by current staff	<ul style="list-style-type: none"> Internal knowledge about process. Program management can play a role. 	<ul style="list-style-type: none"> Opportunity Cost – current staff would not be able to perform other assigned work.
Outsource Rate Review – procure a vendor to perform the review.	<ul style="list-style-type: none"> Fixed price for budgeting. Able to hold vendor accountable to timeline. Staff time not taken performing the rate reviews. 	<ul style="list-style-type: none"> Increased cost compared to insourcing

In the long term, the administrative costs of a rate review would be most effectively managed by embedding the rate review process into program management tasks. Not only are rates an important piece of a program’s management process, but they are more likely to create administrative efficiencies when data collection and analysis informs program management and vice versa, mitigating the risk of duplication of effort and maximizing mutual impact.

However, given the extent of the resources and timeframe needed for the comprehensive rate review requested within the LRFI, it is doubtful whether HCPF can absorb such a process with existing resources. In order to manage the process internally, the Department would need to develop significant additional permanent resources to perform the review, attend to the stakeholder process and communicate with CMS and other regulatory authorities. Under these circumstances, it may be more expedient to conduct the review externally.

B. Resource Needs and Allocations for Rate Review

As a part of our development of the proposed access rate review methodology, PCG established an estimate of administrative costs for implementation and ongoing monitoring, based on the required hours for



qualified agency staff. PCG’s analysis presents CMS’ estimate of resource burdens on states in its proposed rules. However, these federal estimates have been reorganized to align with PCG’s understanding of the annual review cycle and the processes recommended. Given that our recommendations reflect best practices, which exceed the minimum requirements set forth in CMS’ proposed rule, PCG has also developed alternative estimates to take account of the additional resource requirements involved. The table below presents an outsource estimate based on the common pricing models of external contractors. It is also important to note that CMS has stated that all activities associated with the annual access rate review are eligible for Medicaid administrative claiming.

Access Rate Review Resource Estimate				
Activity	CMS Base		Outsource Estimate	
	Time (hours)	Cost	Time (hours)	Cost
Access Rate Review Process	310	\$18,210	1300	\$225,700
Gathering Review Data	160	\$9,282	300	\$25,500
Developing Access Review Content	100	\$5,801	200	\$36,000
Performing Causal Analysis of Rate Impact on Access	--	--	300	\$60,000
Conducting Actuarial Analysis of Pricing	--	--	100	\$21,000
Conducting Actuarial Analysis of Utilization Effects	--	--	120	\$25,200
Performing Policy Analysis	--	--	120	\$21,600
Publishing Review Content	40	\$2,320	120	\$25,200
Reviewing and Approving Review	10	\$807	40	\$11,200
Stakeholder Engagement Process	192	\$8,296	192	\$25,380
Developing Feedback Effort	100	\$3,364	100	\$8,500
Monitoring Feedback Effort	24	\$807	24	\$2,040
Approving Feedback Effort	5	\$403	5	\$1,400
Developing Public Process	20	\$1,160	20	\$4,200
Overseeing Public Process	40	\$2,320	40	\$8,400
Approving Public Process	3	\$242	3	\$840
Implementation and Monitoring Process	130	\$6,215	356	\$68,080
Identifying Issues for Action	20	\$673	80	\$16,800
Developing Corrective/Action Plan	40	\$1,346	120	\$21,600
Approving Action Plan	3	\$242	8	\$2,240
Developing Monitoring Procedures	40	\$2,320	80	\$14,400
Reviewing Monitoring Results	24	\$1,392	60	\$10,800
Approving Monitoring Procedures	3	\$242	8	\$2,240
Total Resource Requirements	632	\$32,721	1848	\$319,160



VIII. Background Research and Survey of Methods

A. Other State and Federal Initiatives

In an attempt to identify best practices, PCG staff performed an online search of other states' approaches to measuring access to care for Medicaid enrollees. The search focused on state Medicaid agency websites and attempted to identify and review reports addressing any aspect of access to care for Medicaid enrollees.

The vast majority of states do not post analyses of access online. However, California and New Hampshire prepare extensive regular reports of access. California was required by the Centers for Medicare & Medicaid Services (CMS) to monitor health care access for fee-for-service Medicaid enrollees as a condition of approval for reducing certain reimbursement rates. Since 2011 the state has produced quarterly reports covering physician supply, service utilization, and enrollee feedback. The New Hampshire Department of Health and Human Services has produced reports approximately quarterly since March 2012 covering provider availability, utilization of services, and enrollee satisfaction for physicians, hospitals, and clinical care.

Although Virginia does not conduct regular access rate reviews, the state's Joint Legislative Audit and Review Commission recently performed a comprehensive review, with a recommendation that the Department of Medical Assistance Services issue an annual report on access to care for Medicaid enrollees. In 2012, the state's General Assembly directed the Commission to review the effect of Medicaid payment policies on access to health care services and to propose metrics for measuring enrollee access to care over time. The Commission developed measures of provider participation, enrollee utilization, and enrollee feedback, developing a framework that would demonstrate trends over time and differences across geographic regions, with summary assessments of service areas with relatively limited access. Many other states conduct narrower analyses, such as measuring avoidable hospitalizations. Apart from the state initiatives discussed above, PCG is not aware of other sustained efforts by states to conduct annual access rate reviews.

In addition to state resources, PCG staff studied materials prepared by federal commissions charged with providing policy and data analysis for Medicaid and Medicare. Reports prepared by the Medicaid and CHIP Payment and Access Commission (MACPAC) were used to identify measures of access to care that are generally accepted by academic institutions and the federal government. The MACPAC framework for measuring access to care was used for PCG's review methodology design, due to its comprehensive approach and because elements of this framework are likely to become federal requirements. CMS proposed a rule in May 2011 to create a standardized process for monitoring access using the MACPAC framework. The 2011 proposed rule will be discussed in further depth below. It strongly informs PCG's review recommendations, which have been formulated in compliance with its requirements.

B. Access Study Literature Review

PCG's development of an access rate review methodology for Colorado included a literature review of recent access studies conducted by government entities as well as medical and academic researchers. The goal of this literature review was to survey the range of approaches to studying Medicaid access available to investigators, to identify innovative methods of comparison between the Medicaid program and other forms of public and private insurance, and to understand the current state of care availability in Medicaid nationwide, along with the most visible patterns and root causes of inadequate access.

In identifying common types of access issues within state Medicaid programs, PCG observed a broad spectrum of views on the prevalence and severity of inadequate access in Medicaid. The literature was fairly consistent in identifying narrower provider networks for Medicaid than for other public programs, such as Medicare, or for commercial insurance. However, the literature review revealed contrasting conclusions about the relative importance of particular measures of access and the contribution of specific access indicators to overall network adequacy and relevant health outcomes. Additionally, the surveyed studies indicated a lack of consensus on the significance of lower Medicaid reimbursement rates on restricting provider networks and the potential impact of rate increases as a means for expanding them.²

PCG staff conducted an extensive search for empirical studies on how Medicaid rates affect access to care. This effort identified approximately 60 studies that have attempted to estimate the causal effect of Medicaid rates on access to care for Medicaid enrollees. PCG's survey revealed three basic types of research design:

1. *Physician Surveys*: approach based on survey responses designed to measure physicians' willingness to accept patients depending upon type of insurance coverage.
2. *Secret Shopper Studies*: approach based on using trained interviewers to who pose as patients with varying types of insurance coverage and call provider offices requesting an appointment.
3. *Comparative Utilization*: approach based on analyzing administrative data to identify associations between variations in rates and service utilization that indicate changes in access to care.

² Most studies note that Medicaid reimbursement rates traditionally have been notably less than private payer and Medicare rates, but were divided on the overall impact of Medicaid reimbursement rates on provider participation in the program. For example, see T. M. McGinnis, J. Berenson, and N. Highsmith, *Increasing Primary Care Rates, Maximizing Medicaid Access and Quality*, Center for Health Care Strategies, Inc. 2 (Jan. 2011); and S. Zuckerman et al., "Changes in Medicaid Physician Fee, 1998-2003: Implications for Physician Participation," *Health Affairs* (June 23, 2004). P. Galewitz, "A Dozen States Slice Medicaid Payments to Doctors, Hospitals," *Kaiser Health News* (July 6, 2011) notes that states pay Medicaid providers about 72% of what Medicare pays, which is already below market rate. Some studies noted that many providers lose money for each Medicaid beneficiary they treat, as reimbursements are on average considerably lower than the costs of providing Medicaid beneficiaries with care. According to W. Fox and J. Pickering, "Hospital & Physician Cost Shift: Patient Level Comparison of Medicare, Medicaid, and Commercial Payers," *Milliman* 6 (Dec. 2008), the hospital industry has found Medicaid margins to be on average almost 15% lower than hospital costs. It is ultimately unclear to what extent systemic underpayment directly affects provider enrollment and participation in Medicaid.



The first set of studies are represented by organizations that conduct annual or periodic physician surveys collecting information on physicians’ willingness to accept patients with different types of insurance, including reasons for perceived barriers to acceptance.³ Without exception, research based on physician surveys showed lower acceptance rates for Medicaid than for other insurers.

The second type of study, the “secret shopper” method, can be a helpful complement to physician survey data by providing a concrete measure of actual provider behavior, even though they do not identify reasons for differences in acceptance rates. These studies also consistently found that providers were less willing to accept new Medicaid patients than patients with other forms of insurance coverage.

PCG paid special attention to the third type of study, which focuses explicitly on estimating the statistical association between rates and access, as measured by fluctuations in service utilization in response to changes in rates over time or differences in rates across states. Although this set of studies employed a variety of research designs, the most common approach was to estimate the association between variation in rates and access to care across states. While findings demonstrate that Medicaid payment rates influence provider willingness to participate in the program, many of the studies also indicated that the level of payment is not the sole driver of the decision to participate

None of the comparative utilization studies indicated large effects of rate increases or decreases on access to care. Nine recent studies found that rates had a moderate impact on access. For example, one study found that if Medicaid rates were increased by 10 percentage points relative to Medicare rates (such as increasing Medicaid rates from 80% to 90% of Medicare), then the number of physicians who accept new Medicaid patients would increase by 4%. Four studies showed less significant effects on access. For example, another study demonstrated that a \$10 increase in the rate for a dental visit would increase the probability of a dental visit by merely 1.3%. Findings from the most recent studies surveyed are summarized in the table below:

Recent Studies on Effect of Medicaid Rates on Access					
Lead Author	Service	Effect	Impact	Comparisons	Summary Findings
Buchmueller, T. C. (2013)	Child dental care	Positive	Small	Across states and time	“Our estimates imply that a \$10 increase in the payment rate for an office visit leads to a 1.3-percentage point increase in the probability of an annual dental visit.”

³ For examples of annual physician surveys, see the American Academy of Pediatrics annual nationwide member survey, as well as the National Ambulatory Medical Care Survey (NAMCS) conducted by the National Center for Health Statistics. The Center for Studying Health System Change periodically issues its Health Tracking Physician Survey.



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Parish, S.L. (2012)	Pediatrics	Positive	Small	Across states	“For children with special health care needs, a \$10 increase in the Medicaid reimbursement rate for office visits increased the likelihood of receiving care.”
Decker, S.L. (2012)	All physicians	Positive	Moderate	Across states	“On average, a 10 percentage-point increase in the fee ratio raised the acceptance of new Medicaid patients by 4 percentage points.”
Thomas, K.C. (2012)	Health care services for children with autism	Positive	Moderate	Across states	Families raising children with autism are more likely to report no problems accessing care in states with higher reimbursement rates.
Cunningham, P.J. (2011)	Primary care	Positive	Small	Across states	“For primary care providers, a 10 percentage point increase in the Medicaid/Medicare fee ratio for primary care is associated with only a 2.1 percentage point increase in PCP Medicaid patient acceptance.”
Decker, S.L. (2011)	Child dental care	Positive	Moderate	Across states and time	“A \$10 increase in the Medicaid prophylaxis payment level (from \$20-\$30) was associated with a 3.92 percentage point increase in the change that a child or adolescent covered by Medicaid had seen a dentist.”
Chien, A.T. (2010)	Immunizations	Positive	Moderate	Within state, across MCOs	Immunization rates for 2-year-olds were 11 percent higher for the Medicaid health plan that paid a bonus per immunization compared to Medicaid health plans that paid no bonus.
Griffin, S.O. (2010)	Dental sealants	Positive	Moderate	Within two states, before and after	“Increasing the sealant reimbursement rate was associated with a 102% increase and a 39% increase in sealant prevalence in Mississippi and Alabama, respectively.”
Decker, S.L. (2009)	All physicians	Positive	Moderate	Across states and time	Increasing the Medicaid-to-Medicare fee ratio would increase the proportion of Medicaid enrollees with at least one visit.



Cunningham, P.J. (2009)	All physicians	Positive	Moderate	Across states	“Consistent with previous studies, Medicaid participation levels were much higher among physicians in states with relatively high fee levels than in those with relatively low fee levels.”
Adams, E. K. (2008)	All physicians	Positive	Moderate	Across states and time	“There are positive and significant effects on participation from increased relative Medicaid fees, mainly for office-based physicians already participating to some extent in the Medicaid market and for non-office-based physicians.”
Cunningham, P.J. (2008)	All physicians	Positive	Moderate	Across states and time	“Higher fees increase the likelihood that physicians will accept new Medicaid patients.”
Decker, S.L. (2007)	All physicians	Positive	Small	Across states	“A 10% increase in the [Medicaid-to-Medicare fee ratio would increase [provider] participation by a little less than 5%.”

While findings demonstrate that Medicaid payment rates influence provider willingness to participate in the program, many of the studies also indicated that the level of payment is not the sole driver of the decision to participate. For example, a study that examined the willingness of primary care providers to accept new Medicaid patients found that while higher Medicaid payment rates were associated with greater probability of primary care providers accepting all or most new Medicaid patients, the effects were relatively modest—suggesting that other factors affect the decision to accept Medicaid patients.⁴ According to this study, other factors, such as the structure of the practice and Medicaid administrative requirements can affect the decision to participate as well. Another study of physicians found that, in light of the multiple factors that may influence willingness to serve Medicaid beneficiaries, an increase in Medicaid payment rates must be accompanied by other program simplifications in order to influence physician participation.⁵ Related to these additional causal factors are concerns reported by many Medicaid agency officials nationwide that missed appointments—the beneficiary “no show” rate—substantially decrease provider participation, and could potentially be better addressed by robust beneficiary education efforts and improvement in transportation services than a rate increase for affected services.⁶

⁴ P. Cunningham, *State Variation in Primary Care Physician Supply: Implications for Health Reform Medicaid Expansions*, Research Brief, no. 19 (Center for Studying Health Systems Change, March 2011).

⁵ See P. Cunningham and A. O’Malley, “Do Reimbursement Delays Discourage Medicaid Participation by Physicians?” *Health Affairs*, Web Exclusive, (November 2008).

⁶ GAO, *Medicaid: States Made Multiple Program Changes, and Beneficiaries Generally Reported Access Comparable to Private Insurance*, GAO-13-55 (Washington, D.C.: Nov. 2012).



In developing methodological recommendations for the State of Colorado, PCG also considered the potential limitations of each of these approaches in an effort to develop a “mixed methods” methodology sufficiently robust to measure access to care in multiple dimensions. Despite the fact that the first two research methods offer concrete, intuitive measures by which to compare Medicaid with other types of medical coverage, these studies do not always provide an adequately nuanced representation of the non-Medicaid population by which to judge Medicaid’s comparative effectiveness. For instance, comparisons between Medicaid and private coverage that aggregate all private plans into a single category can be misleading, to the extent that treating these individual plans together does not necessarily reflect the potential access limitations of a single private provider network. In other words, if a physician office does not accept new Medicaid patients but does accept patients from private plans, this does not mean that the physician accepts any patient from any private plan. Studies that represent commercial insurance acceptance rates monolithically, ignoring the differences among plans, neglect the fact that individuals with private coverage on specific plans are themselves limited to networks which may be larger or smaller than the Medicaid network.

On the other hand, studies that make specific comparisons between Medicaid and a single private network often select the most expansive network, rather than a “typical” network. The NEJM study cited above compared Medicaid with Blue Cross Blue Shield, which provides perhaps the best private coverage in Cook County, IL, and is probably not representative of cheaper commercial plans with more limited provider networks. Interestingly, a different study appeared to illustrate that the disparities between Medicaid and private insurance narrowed considerably when private plans are stratified into capitated and non-capitated categories. Using National Ambulatory Medical Care Survey (NAMCS) data, the study indicated that acceptance rates for Medicaid frequently outperformed private capitated plans, particularly for core enrollee populations like mothers and children, and for major Medicaid service areas such as obstetrics and pediatrics.⁷

All three of the surveyed research designs are limited by their approach to access to care from the perspective of providers rather than consumers. Exclusive focus on providers, and particularly on acceptance rates for new patients, can potentially exaggerate access concerns if not informed by the experience of enrollees, who may not encounter denials or delays of service, despite potentially smaller provider networks. In fact, a recent 2012 GAO study of patient experience reported levels of Medicaid access comparable to private insurance for most services. Significantly, the study relied on a survey of patients, not providers, using data derived from the national Medical Expenditure Panel Survey.⁸ Another study which approached the question of access from the perspective of patient experience drew similar

⁷ T. F. Bishop et al., “Declines in Physician Acceptance of Medicare and Private Coverage,” *Archives of Internal Medicine* vol. 171, no. 12 (June 27, 2011).

⁸ GAO, *Medicaid: States Made Multiple Program Changes, and Beneficiaries Generally Reported Access Comparable to Private Insurance*, GAO-13-55 (Washington, D.C.: Nov. 2012). A prominent exception to this general comparability was a recognized deficiency in dental providers.



conclusions. Relying on respondent data from the National Survey of Children with Special Health Care Needs, the investigation found “no significant differences in unmet need [for specialty care] between children with private insurance and those covered by public forms of insurance.”⁹

⁹ M. L. Mayer et al., “Unmet Need for Routine and Specialty Care: Data from the National Survey of Children with Special Health Care Needs,” *Pediatrics* 113(2) (Feb. 2004).



Appendix A. Proposed Federal Rules on Annual Access Rate Review

On May 6, 2011, CMS issued a proposed amendment to the Medicaid regulations to clarify states' obligations under the equal access provision and "create a standardized, transparent process for States" to assess the sufficiency of their rates. Prior to the proposal of this rule, states had little guidance from CMS on how to assess whether state payment policies provide for sufficient access to beneficiaries under Section (30)(A). For this reason, the proposed rule has been instructive for developing an appropriate access rate review methodology. If the final rule, expected in November 2014, substantively reproduces the proposed rule, the state would need to produce a rate review on an annual basis, which would meet the following requirements:

1. Demonstrate access to care by considering: enrollee needs; the availability of care and providers; and the utilization of services.
2. Collect information on each of the above parts of the MACPAC recommended three-part framework, leaving states the discretion to determine which particular metrics they can and should examine.
3. Review the access data elements on an ongoing basis and specifically with respect to an affected service prior to submitting a Medicaid SPA that proposes service payment rate reductions.
4. Develop a schedule for reviewing each covered service at least once every five years, looking at a subset of services each calendar year.
5. Establish and maintain some process that allows the state to hear from beneficiaries on access issues; for example, a beneficiary survey, a hotline, or an ombudsman that is either internal to the agency or a contracted community partner.
6. Set procedures for the access review that will be informed by a public process, to monitor sustained access to care after a rate reduction is implemented and submit a corrective action plan to CMS to address access issues within 90 days of their discovery.
7. Review and make publically available data trends and factors that measure: enrollee needs, availability of care and providers, and utilization of services. Consistent with the statutory requirement, CMS proposes that states review the data by state designated geographic location.
8. Require that the review must include: (a) an estimate of the percentile which Medicaid payment represents of the estimated average customary provider charges; (b) an estimate of the percentile which Medicaid payment represents one, or more, of the following; Medicare payment rates, the average commercial rates, or the applicable Medicaid allowable cost of the services; and (c) an estimate of the composite average percentage increase or decrease resulting from any proposed revision in payment rates. It would also require that Medicaid payment rates include both base and supplemental payments for Medicaid services.
9. Stratify the access review data by state government owned or operated, non-State government owned or operated, and private providers.



10. Describe the measures that were used to conduct the review and their relationship to enrollee needs, the availability of care and providers, service utilization, and Medicaid payment rates as compared to other payment structures.
11. Conduct the data review and make the information available to the public through accessible public records or web sites on an ongoing basis for all covered services.
12. Require such annual reviews begin within a year of the effective date of the rule, so that states would have the discretion to determine a timeframe to review each covered Medicaid service as long as the State reviews a subset of services each year and each covered service is reviewed at least once every five years.
13. Conduct a review relevant to an affected service prior to submission of a SPA implementing a reduction.
14. Develop ongoing monitoring procedures through which states periodically review indices to measure sustained access to care.
15. Institute a corrective action procedure requiring states to submit a remediation plan should access issues be discovered through the access review or monitoring processes.
16. Amend the public notice requirement to recognize electronic publication on a state website as an option for publishing significant proposed changes in methods and standards for establishing rates of payments.



Appendix B. List of Interviewed HCPF Staff

PCG interviewed the following HCPF staff in the course of developing the rate review methodology:

- Valerie Baker-Easley, Benefits Section Manager
- Marceil Case, Director of Provider Relations
- Camille Harding, Quality and Health Improvement Manager
- Rene Horton, Data Manager
- Beth Martin, Senior Data Analyst
- Kevin Martin, Acting Fee for Service Rates Manager
- Jen Martinez, HCBS Benefits Manager
- Shane Mofford, Medical Premiums Unit Manager
- Randie Wilson, Rate Analyst

PCG also contacted the following individuals who were unavailable for interview:

- Susan Mathieu, Accountable Care Collaborative Manager
- Kelly O'Brien, Customer Service Center Director



Appendix C. Scope of Work

6.0 RESEARCH AND ANALYSIS OF RATE REVIEW PRACTICES AND PROCEDURES

6.1 The Contractor shall conduct research in order to develop a rate review process for annual Medicaid rate analysis. The rate review process shall identify rate issues and create a dedicated process to address these issues.

6.2 The Contractor shall review and evaluate the Department's current rate review strategies.

6.3 The Contractor shall research best practices for fee-for-service fee schedule rate review including, but not limited to, the following:

6.3.1 Methodologies for determining if rates are sufficient to garner adequate network capacity.

6.3.2 Methodologies for prioritizing which rates to increase to promote appropriate utilization.

6.3.3 Best practices for frequency of review.

6.3.4 Best practices for use of stakeholder input on the rate review process.

6.3.5 Best practices for reducing administrative costs including an estimate of administrative costs for implementation and ongoing performance of rate review.

6.3.6 Best practices for using rate setting to promote utilization of low-cost, high-value procedures that:

6.3.6.1 Improve client health outcomes.

6.3.6.2 Reduce expenditures.

6.3.6.3 Incentivize more providers to deliver the service(s) thereby increasing client access to Medicaid medical services. Improve rates and addresses other insufficiencies that discourages providers from participating.

6.3.6.4 Improve quality health outcomes for Medicaid clients.

6.4 In conducting the research, the Contractor shall review and evaluate applicable rate review procedures from the multiple sources, including but not limited to:

6.4.1 Medicaid programs in other states.

6.4.2 Other public insurers.

6.4.3 Private insurers.

6.4.4 Access to care studies.

6.4.5 Interviews with Department staff.

6.5 The Contractor shall draft and provide a Written Recommendations for Rate Review Report recommending best practices for the Department's new rate review process. The report shall address all of the following:

6.5.1 Best practices and methodologies for fee-for-service fee schedule rate review as listed in Section 6.3.

6.5.2 Best rate review procedures as listed in Section 6.4.

6.5.3 Statutory constraints.

6.5.4 Budgetary authority and Budget process (calendar).

6.5.5 Administrative burden (i.e. costs and resource requirements for implementation and ongoing annual performance of review).

6.5.6 Operability within the Department's Medicaid Management Information System (MMIS) system.

6.5.7 Opportunities for alignment with other payers.

6.5.8 Political constraints.

6.5.9 Provider impact.

6.5.10 Involvement of Legislative input and opportunities for modification.

6.5.11 Actions to improve or preserve client access during flat or reduced funding years.

6.5.12 Local, state and federal implications including the impact of methodology changes on client goals.

6.5.12.1 DELIVERABLE: Draft Written Recommendations for Rate Review Report

6.5.12.2 DUE: August 30, 2014

6.5.12.3 DELIVERABLE: Final Written Recommendations for Rate Review Report

6.5.12.4 DUE: Five (5) Business Days from the Department's feedback on the Draft Report

6.6 The Contractor shall draft and provide policies and methodologies for the rate review process. The policies and methodologies shall be based on the Department's feedback.

6.6.1 DELIVERABLE: Draft Written Policies and Methodologies for Rate Review

6.6.2 DUE: August 30, 2014.

6.6.3 DELIVERABLE: Final Written Policies and Methodologies for Rate Review

6.6.4 DUE: September 30, 2014

7.0 RATE REVIEW

7.1 Upon the Department's acceptance of the policies and methodologies for the rate review process, the Contractor shall, following the new policy and methodology, perform the rate review process.

7.2 In performing the rate review process, the Contractor shall work with the Department to shape the process and model for the rate review as results begin to emerge ("First Looks"). The Contractor, with Department input, shall use these First Looks to make adjustments and maximize the benefit to the client. This process shall include examining the impact of revised rates on utilization, providers, and the resultant state Medicaid budget. The Contractor shall produce and provide written documentation of the internal after-action assessment.

7.3 The Contractor shall draft and provide a Rate Review Evaluative Report that analyzes and evaluates the results of the rate new rate review methodologies and processes. The Rate Review Evaluative Report shall evaluate all of the following:

7.3.1 Process workability and efficiency.

7.3.2 Effectiveness of process to meet objectives.

7.3.3 Operability of process with MMIS system.

7.3.4 Acceptability of review for use by Colorado Medicaid.

7.3.5 Revisions to the policies and methodologies to meet Sections 5.4.2.1 through 5.4.2.5.

7.3.5.1 DELIVERABLE: Final Rate Review Evaluative Report

7.3.5.2 DUE: November 24, 2014

7.4 The Contractor shall draft and provide a report that prioritizes Medicaid rates in order to promote appropriate utilization. At a minimum, the report shall include:

7.4.1 A list of Medicaid rates prioritized for increases.

7.4.2 An explanation of application of policy and methodology to obtain the list.

7.4.2.1 DELIVERABLE: Prioritized Medicaid Rates Report

7.4.2.2 Due: December 15, 2014



7.5 The Department will review the Evaluative Report to determine what changes should be made to the methodologies and policies. Upon receiving Department direction, the Contractor shall make all required revisions to the written policies and methodologies to ensure objectives are met as evaluated by the Department.

7.5.1 DELIVERABLE: Updated Written Policies and Methodologies for Rate Review

7.5.2 DUE: December 15, 2014

7.6 The Contractor shall work with the Department to ensure that the Department understands and anticipates the impact of the changes on utilization, budgets, and the provider community.

7.7 The Contractor shall make revisions to the methodologies and remain dedicated to this project until the Department has approved a methodology to support and enhance the rate review process.



Appendix D. Project Plan with Phases and Key Deliverables

The project plan below identifies the work steps identified by PCG for completing the project, along with the schedule for completing key deliverables.

PCG Project Plan				
Task Name	Duration	Start Date	End Date	Responsible Entity
1.0 Project Set up				
1.1 Kick-off meeting	1	8/12/2014	8/12/2014	PCG/HCPF
1.2 PCG to submit data request to HCPF	1	8/12/2014	8/15/2014	PCG
1.3 HCPF to deliver data to PCG	7	8/15/2014	8/22/2014	HCPF
1.4 DELIVERABLE: Final Work Plan	10	8/12/2014	8/22/2014	PCG
2.0 Research and Analysis of Rate Review Practices and Procedures				
2.1 Conduct research of Colorado's current Medicaid rate review process	20	8/12/2014	9/1/2014	PCG
2.1.1 Conduct research to develop a rate review process for annual Medicaid rate analysis.	20	8/12/2014	9/1/2014	PCG
2.1.2 Review of evaluation of the Department's current rate review strategies.	20	8/12/2014	9/1/2014	PCG
2.1.3 Research best practices for fee-for-service fee schedule rate review.	20	8/12/2014	9/1/2014	PCG
2.1.4 Evaluation of applicable rate review procedures	20	8/12/2014	9/1/2014	PCG
2.2 DELIVERABLE: Written Policies and Methodologies for Rate Review <i>Draft</i>	24	8/12/2014	9/5/2014	PCG
2.3 Recommendation for Revisions	14	9/5/2014	9/19/2014	HCPF
2.4 DELIVERABLE Written Recommendation for Rate Review <i>Draft Submission</i>	4	9/1/2014	9/5/2014	PCG
2.5 Recommendation for Revisions	14	9/5/2014	9/19/2014	HCPF
2.6 DELIVERABLE Written Recommendation for Rate Review <i>Final Submission</i>	4	9/15/2014	9/19/2014	PCG
2.7 DELIVERABLE: Written Policies and Methodologies for Rate Review <i>Final Submission</i>	25	9/8/2014	10/3/2014	PCG
3.0 Rate Review				
3.1 Rate Review Evaluative Report	40	10/5/2014	11/14/2014	PCG
3.1.1 Process workability and efficiency.	40	10/5/2014	11/14/2014	PCG
3.1.2 Effectiveness of process to meet objectives.	40	10/5/2014	11/14/2014	PCG
3.1.3 Operability of process with MMIS system.	40	10/5/2014	11/14/2014	PCG



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3.1.4 Acceptability of review for use by Colorado Medicaid.	40	10/5/2014	11/14/2014	PCG
3.1.5 Revisions to the policies and methodologies	7	11/17/2014	11/24/2014	PCG
3.2 DELIVERABLE: Final Rate Review Evaluative Report	7	11/17/2014	11/24/2014	PCG
3.3 Prioritization of Medicaid rates to promote appropriate utilization.	13	11/25/2014	12/8/2014	PCG
3.3.1. A list of Medicaid rates prioritized for increases.	13	11/25/2014	12/8/2014	PCG
3.3.2 An explanation of application of policy and methodology to obtain the list.	13	11/25/2014	12/8/2014	PCG
3.4 DELIVERABLE: Prioritized Medicaid Rates Report	6	12/9/2014	12/15/2014	PCG
3.5 Department review of The Evaluative Report	10	11/25/2014	12/5/2014	HCPF
3.6 DELIVERABLE: Updated Written Policies and Methodologies for Rate Review	7	12/8/2014	12/15/2014	PCG