

PROPOSAL TO THE
OFFICE OF VERMONT HEALTH ACCESS
FOR
HOSPITAL PAYMENT SYSTEMS CONSULTATION

SUBMITTED BY

BURNS & ASSOCIATES, INC.
3030 NORTH THIRD STREET
PHOENIX, AZ 85012

AUGUST 25, 2006

August 25, 2006

Ms. Nancy Clermont
Deputy Director
Office of Vermont Health Access
312 Hurricane Lane, Suite 201
Williston, VT 05495

Dear Ms. Clermont :

Burns & Associates, Inc. (B&A), along with our subcontractors Gretchen Engquist and Dan Bretheim, are pleased to submit this response to the RFP *Hospital Payment Systems Consultation*. Our team's experience related to all aspects of the work requested in the RFP, in conjunction with our commitment to work of superior quality, will provide Vermont with options for establishing a reimbursement system that will reflect Medicaid-specific considerations under an inpatient DRG and outpatient APC methodology.

Burns & Associates, Inc. attests to the following under this procurement:

1. We accept the requirements set out in the RFP, including the retainage requirements and performance standards and penalties identified in Section V of the RFP.
2. We agree to comply with the terms and conditions found in the standard contract provisions and the Contract Attachments C, E, and F found in the Appendix to the RFP.
3. Our proposed price is valid for 180 days following the close date of the RFP.
4. The prices in the proposal have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other Bidder or with any competitor.
5. The prices which have been quoted in the proposal have not been knowingly disclosed by B&A and shall not knowingly be disclosed by B&A prior to award directly or indirectly to any other Bidder or to any competitor.
6. No attempt has been made or shall be made by B&A to induce any other person or firm to submit or not submit a proposal for the purpose of restricting competition.

As President of the firm, my signature commits Burns & Associates, Inc. to the contents of this proposal. I am the person in the organization responsible for the decision as to the prices being offered in the proposal and I have not participated (and shall not participate) in any action contrary to items 4, 5, and 6 above.

Immediately following this letter we have included a Bidder Information Sheet and a signed Vermont Tax Certification as required by the RFP.

We appreciate your consideration on this important effort.

Sincerely,

Peter Burns
President
Burns & Associates, Inc.
pburns@burnshealthpolicy.com

BIDDER INFORMATION SHEET

Name of Company: Burns & Associates, Inc.

Mailing Address: 3030 North Third Street
Suite 200
Phoenix, AZ 85012

Street Address: Same

Company Federal ID: 20-4270861

Name/Title of Person Who
Will Sign the Contract: Peter Burns, President

Name/Title of Company
Contact Person: Mark Podrazik, Principal

Information on Key Representatives

For contract-related questions:

Principal contact person:

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BUSINESS ORGANIZATION

An Overview of Burns & Associates

Burns & Associates, Inc. (B&A) was incorporated as an S-Corporation on February 2, 2006 in the State of Arizona. Our principal address is 3030 North Third Street, Suite 200, Phoenix, AZ 85012.

B&A is a health care consulting firm that specializes in assisting state governments and private entities develop customized, innovative approaches to the financing and delivery of health care and human services. Our specialties include strategic planning, financial model development, rate setting, evaluation and audit, and support of operations of health care programs. While working in the public sector, as independent consultants, and for another consulting firm, B&A's seasoned staff has been involved in the full cycle of public programs in 14 states—from conceptualization, financing, implementation, and subsequent evaluation. Peter Burns and Mark Podrazik, the Principals at B&A, guide a team of consultants and subcontractors who are used as subject experts when needed on projects to provide the highest quality service to our clients. More information about our firm can be found at our website at www.burnshealthpolicy.com.

Office Locations

Our principal office is in Phoenix, AZ with a two-person office in Alexandria, VA. The management of this engagement as well as most of the work proposed will be based out of our Alexandria, VA office. We will also utilize two subcontractors, one based in Lansdowne, VA (near DC) and the other based in Annandale, NJ (near Princeton), for their expertise in developing inpatient and outpatient reimbursement systems for Medicaid agencies, in particular, DRG systems modeled on the Medicare methodology.

Financial Information

Because B&A has only been in business since February 2006, we are only able to provide an income statement from inception to July 31, 2006 and a balance sheet as of August 16, 2006 (see Appendix 1 at the end of the proposal).

Although our firm is new, we currently have engagements with five different clients. To date, we have exceeded our monthly revenue expectations and were below our expense budget each month we have been in business. As a result, we are poised to build upon our initial success with future growth.

Ownership Status

Peter Burns, President of B&A, is the only individual that holds more than five percent ownership in the firm. B&A is not an affiliate of another organization.

Proposed Staff

The B&A team proposed for this engagement includes the following members:

- ❑ Mark Podrazik (Project Manager)- 10 years experience with Medicaid engagements; first DRG project in 1997 working for the State of Georgia; implemented APC-based system in Arizona
- ❑ Gretchen Engquist (Subject Expert, Subcontractor)- 25 years Medicaid experience, including serving as Medicaid Director in Missouri; first DRG project was working in Ohio in 1984 where they modeled their payment system after the newly-introduced Medicare DRG system
- ❑ Dan Bretheim (Subject Expert, Subcontractor)- 20 years Medicaid experience, including implementing DRG systems for Medicaid agencies back to 1988
- ❑ Justin Burkett (Key Staff)- over two years experience using SAS programming on Medicaid engagements for six state agencies, including inpatient DRG analysis in Ohio and outpatient APC analysis in Georgia
- ❑ Steven Abele (Key Staff)- over eight years experience in the health care industry, including five years in the financial office of a large tertiary hospital and three years consulting to hospitals and Medicaid agencies

The full resume for each individual appears in Appendix 2 at the end of the proposal. A brief introduction of each team members' capabilities are discussed below.

Mark Podrazik, a Principal at Burns & Associates, was the Project Manager of two recent outpatient ratesetting initiatives. In Arizona, he assisted the State in all aspects of their development from a cost-to-charge ratio (CCR) based payment system to a prospective, APC-based payment system modeled on the Medicare methodology. Mr. Podrazik was also the lead analyst on the project and represented AHCCCS (Arizona's Medicaid agency) at many presentations to the hospital industry and to its health plans. This project, from conceptualization to implementation activities, occurred from January 2003-June 2005.

From July 2005-February 2006, while still working at EP&P Consulting, Mr. Podrazik also managed a project in which Georgia's Medicaid program was exploring options to move to a prospective, APC-based payment system from a modified fee/CCR-based system. While working on the engagement, Mr. Podrazik developed for Georgia an initial APC fee schedule to react to and provided a number of methodological items for the State to consider before proceeding further. Mr. Podrazik was assisted on this engagement by *Justin Burkett*, another B&A staff member, who served as the lead programmer for the outpatient initiative. Mr. Burkett completed all of the programming used for data analysis in SAS, a statistical software package, and also developed user-friendly analysis tables in MS Excel which he presented to the client with Mr. Podrazik.

Mr. Podrazik also assisted on the inpatient rebase portion of the project with Georgia, utilizing his experience working with the State previously when EP&P Consulting assisted Georgia in 1997-98 in their initial transition to a DRG-based payment system. Also from 2003-2005, Mr. Podrazik assisted Ohio's Medicaid agency by writing an independent evaluation of the adequacy of their DRG-based inpatient payment system and fee schedule-based outpatient payment system. Ohio had made policy changes effective in early 2004 and early 2006 to their hospital payment methodologies. Mr. Podrazik used five years of historical data to analyze payment trends and cost coverage by peer group for both inpatient and outpatient services. The report in which he was the lead author provided background on the payment systems, analysis of recent payments, and forecasts for future payments under the new policy changes. He offered justification as to the appropriateness of the rates with the new changes. Mr. Burkett also assisted Mr. Podrazik on this engagement, providing both programming and data analysis skills.

For the inpatient rebase portion of the Georgia project, *Dan Bretheim*, a subcontractor to EP&P Consulting, was used as a subject expert and SAS programmer. Mr. Bretheim is proposed by B&A to assist in a similar capacity for this engagement. Mr. Bretheim's experience with the Medicare inpatient DRG system dates back to the late 1980s when he assisted the Medicaid programs in New Mexico, South Carolina, and Washington transition to DRG payment systems based on the Medicare methodology. He developed the SAS programs instrumental in these engagements which served as the basis for the programming done for the Georgia engagement last year. In addition to reimbursement, Mr. Bretheim's specialties include data mining of large databases and simulation modeling. For this project, he will guide the overall structure of the SAS programming effort and participate in developing policy options, particularly as they relate to the inpatient DRG reimbursement methodology.

Dr. Gretchen Engquist served as a subject expert assisting Mr. Podrazik on both the Arizona APC and Ohio report projects. Dr. Engquist will also serve as a subject expert on this engagement. Her experience in hospital rate setting dates back to 1981 when she implemented a new hospital reimbursement system while Medicaid Director in the State of Missouri. She assisted the State of Ohio in 1984 move to a DRG inpatient payment system modeled on Medicare. Since then, she has assisted the States of Arizona, Hawaii, Kansas, Michigan, Mississippi, Montana, Tennessee, and Washington implement prospective inpatient reimbursement systems. In Montana, Tennessee, and Washington, these were DRG-based systems. In addition to answering technical questions, Dr. Engquist will participate in meetings with OVHA staff and the provider community related to policy considerations in migrating to the new methodologies.

Dr. Engquist has also assisted numerous states either develop or refine their disproportionate share (DSH) payment and provider tax methodologies. In Arizona, she assisted in the initial implementation of their program and has advised them on modifications and reviewed annual payments made under the program since. She is considered a national expert on the DSH program and has helped states in gaining CMS approval on a number of innovative approaches. She has also assisted many states, most

recently Arizona Governor's Office last year, in developing GME and IME reimbursement methodologies. If the project requires, Dr. Engquist will participate in devising options to restructure the DSH payment methodology. She will be assisted in this area of the project by Mark Podrazik, who has assisted Dr. Engquist on a number of DSH engagements.

B&A will also utilize the analytical skills of *Steven Abele*, another B&A staff member. Mr. Abele is very familiar with the financial accounting functions of a hospital, having worked for five years at a large Phoenix-based hospital where he used general accounting, budgeting, cost accounting, billing and collection procedures related to managed care reimbursement. Also prior to his working at Burns & Associates, he worked as an independent consultant with small to medium-sized hospitals to optimize processes and implement measurements to determine service profitability and defined utilization issues.

Additional Subcontractor Information

Both of our subcontractors serve as independent consultants. They have both expressed their commitment to B&A for the responsibilities discussed below.

Daniel Bretheim
DB Analytics, Inc.
34 Sidney School Road
Annandale, NJ 08801
(908) 268-7033

Dr. Gretchen Engquist
19385 Cypress Ridge Court
Lansdowne, VA 20176
(202) 329-8060

Specific tasks:
SAS programming
Data analysis
Modeling
Policy development

Specific tasks:
Reimbursement policy development
DSH policy development
Presentations to stakeholders

Our team has worked together numerous times in the past. We all have a similar work style that has proven successful on prior projects. These experiences provide the State with assurances that we will complete the project in an efficient and thorough manner.

LOCATION

When not onsite in Williston, the majority of work for this engagement will be conducted out of B&A's Alexandria, VA office. Our subcontractors will work from their respective locations in Lansdowne, VA and Annandale, NJ.

RELEVANT EXPERIENCE REFERENCES

B&A encourages the State to speak to the client contacts at our recent engagements as to their satisfaction with the assistance our proposed team members provided. Our references below reflect client engagements where all of our proposed team members participated, both B&A staff and our subcontractors. The first three references specifically relate to the tasks required for this engagement. The fourth and fifth references pertain to our knowledge of hospital reimbursement generally.

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|---|---|
| 1. Tom Betlach
Deputy Director
Arizona Health Care
Cost Containment System
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(602) 417-4625 phone
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Kari.Price@azahcccs.gov |
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Project: Development and implementation of an APC-based outpatient payment system for Medicaid

Time Period: January 2003-June 2005, estimated 24.0 FTE months

Project Scope: This project involved Mr. Podrazik and a SAS programmer over the duration of the project. Subject expertise was provided on an as needed basis throughout the engagement. In the final 12 months of the project, a major focus was on redesigning the pricing methodology both at AHCCCS and its contracted health plans. A dedicated staff member was added for this function, working about 50% of full time in this capacity.

B&A team members who worked on this engagement were instrumental in all aspects of the project. This began with itemizing the methodological decisions that needed to be considered (e.g. adopt Medicare, hybrid Medicare, completely state-specific) and evaluating if the historical claims data supported modeling any of the options considered.

Once it was determined that there was a sufficient volume of claims that had pertinent data represented (i.e. procedure codes), cost and charge trends were conducted on major outpatient services to evaluate where charge inflation was growing the fastest. Other validity tests were conducted before grouping the claims into APCs. Stability analyses were conducted on the reliability of each Arizona cost-specific APC rate. Arizona-based rates were compared to Medicare's, and follow-up analyses were completed to develop logic for setting each APC rate.

The APC fee schedule was supplemented with rates from other sources so that, in the end, Arizona had a protocol for paying every CPT, including those not in the Medicare OPSS. The new fee schedule was modeled at the hospital-specific level, the hospital peer group level, the statewide level but for specific services (e.g. emergency department), and statewide across all services. This was completed on two different hospital years of claims.

Presentations were developed and made to AHCCCS staff, the hospital industry, and a workgroup of health plan officials. Major emphasis was made in gaining buy-in from the hospital industry and working with the health plans on implementing the new payment system.

Even though the health plans did not need to adopt the AHCCCS fee-for-service outpatient fee schedule as is, they did need to be able to pay their contracted hospitals under this methodology (as opposed to the existing CCR methodology). Therefore, the last six months of the project focused on evaluating test claims given to each health plan and testing each plan's pricing methodology to ensure that it was consistent across all plans.

Throughout the project, B&A team members sat in on calls and responded to questions from CMS about the transition to the new methodology. This included providing calculations to prove that projected payments would not exceed the upper payment limit.

Arizona was one of the first states to implement an APC-based outpatient payment system based on the OPSS. Therefore, many of the policy decisions we assisted AHCCCS in creating had no precedent.

2. Debbie Clement
Hospital Reimbursement Manager
Ohio Department of Job and Family Services
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Project: Evaluation reports of DRG inpatient and fee schedule-based outpatient hospital payment methodologies

Time Period: First report: January 2003-July 2003, estimated 2.5 FTE months
Second report: Nov. 2004-March 2006, estimated 6.5 FTE months

Project Scope: This project mostly involved Mr. Podrazik with Dr. Engquist serving as a reviewer of the draft reports written and answering questions in meetings and on conference calls related to hospital reimbursement in other states

as well as her historical knowledge of Ohio's system, since she assisted in the initial transition to the DRG payment methodology. Data analysts and SAS programmers were used periodically for specific tasks.

The Ohio Medicaid program implemented rate changes to its inpatient DRG system in January 2004 and January 2006. B&A team members assisted the State in developing a report that could be used to clarify the methodology and rate changes made as well as to providing supporting justification that the changes would continue to adequately reimburse providers and would not jeopardize access to services.

The first report was completed in preparation for the January 2004 changes. The second report was completed in preparation for the January 2006 changes. The second report built upon the first report, but was more detailed in its evaluation and included additional methodological pieces. For example, one of the changes that was new in the 2006 changes was a recalibration of the relative weights, which had not been done in many years in Ohio. A detailed examination was completed measuring costs using hospital-specific CCRs and also Global Insight inflation factors. This examination was completed at the hospital level, the peer group level, and the statewide level with respect to its impact on cost coverage.

Additional analyses were completed to evaluate the types of services and cost coverage for hospitals by population groups (e.g. children and families versus aged, blind and disabled) as well as quality-based initiatives built into the hospital reimbursement system.

Another series of models were run that measured the impact of DSH payments on hospital cost coverage. Different allocations of DSH payments were evaluated in the models at the hospital level (e.g. total DSH payments received, DSH net of provider tax, DSH allocated to Medicaid shortfall only, DSH allocated for patients over and under 100% of the FPL).

To date, the changes proposed in the report have been implemented without conflict from the hospital industry, even though cost coverage was estimated to decrease (in the aggregate) as a result of the changes.

3. Jim Connolly
Director of Reimbursement Services
Georgia Department of Community Health
2 Peachtree Street, Northwest
38th Floor
Atlanta, GA 30303
(404) 657-9541 (phone)
(404) 657-4199 (fax)
JConnolly@dma.state.ga.us

Project: Explore alternative reimbursement methodologies for outpatient hospital services; update DRG base rates and relative weights

Time Period: July 2005-March 2006, estimated 4.6 FTE months

Project Scope: This project involved Mr. Podrazik and Mr. Burkett, with the assistance of another data analyst periodically, on the outpatient portion of the project. Both Mr. Podrazik and Mr. Bretheim were part of a larger team that worked on the inpatient rebase.

Georgia currently pays for outpatient services (except lab) on a CCR basis with cost settling later similar to Vermont. A few services (such as emergency department) have a fixed fee. The State was interested in exploring alternative methodologies for paying for outpatient services. First, we reviewed state plans from the other states to inventory other methodologies currently being used by Medicaid agencies. Georgia staff tasked us with running a preliminary test using Medicare's APC grouping methodology on their Medicaid claims to develop Medicaid-specific APC rates.

In addition to running similar tests on charge and cost trends as were done by B&A staff on the Arizona project, a significant amount of work was completed on evaluating the alternatives to costing the outpatient details. This involved downloading and computing ancillary-line specific CCRs from the HCRIS (Healthcare Cost Report Information System) dataset as well as an American Hospital Association dataset. Because logical mappings could not be made between every revenue code and cost report line (Medicare's mappings do not account for every revenue code), we worked with the state on developing an algorithm for costing the claims using multiple data sources.

While still working on the project before leaving EP&P, B&A team members had met with Georgia staff to discuss our initial findings using the Medicare APC grouping methodology, and led discussions on other methodological decisions that would need to be made before moving forward, if it was decided to adopt a Medicare or "Medicare-like" system.

Tasks involved in the inpatient rebase included scrubbing and analyzing the claims database, amending SAS programs previously created for Georgia to reflect policy changes, running the claims dataset through the grouper, and conducting tests to determine if the relative weights derived from the grouper were stable enough using Medicaid claims only.

4. Bo Bowen

Former Deputy Director, Mississippi Division of Medicaid
Currently at Information and Quality Healthcare (Mississippi's QIO)
385 B Highland Colony Parkway
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bbowen@msqio.sdps.org

Project: Conduct independent evaluation of the operations of the Mississippi Medicaid program

Time Period: July 2002-November 2002, estimated 7.5 FTE months

Project Scope: While working at EP&P Consulting, Peter Burns and Dr. Engquist led a project to write two reports related to Mississippi's Medicaid program, with a focus on identifying areas for short-term and long-term cost containment. One chapter of the first report involved institutional reimbursement. Dr. Engquist and Mark Podrazik reviewed Mississippi's hospital reimbursement and DSH methodologies and made recommendations to both contain costs and create a more equitable payment system across all Medicaid providers.

5. Shawn Nau

Director of Health Care Mandates
Maricopa County
301 West Jefferson Street, Suite 320
Phoenix, AZ 85003
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snau@mail.maricopa.gov

Project: Develop criteria for settling a lawsuit of payment of hospital claims

Time Period: February 2004-February 2005, estimated 4.5 FTE months

Project Scope: Maricopa County was responsible for covering the emergent hospital care of indigents that presented themselves to county hospitals until late 2001. A lawsuit was filed by hospitals because the County had not paid all of the claims that the hospitals believed the County should have paid. Some hospitals were interested in settling the case out of court. Dr. Engquist and Mark Podrazik met with interested hospitals and the County and developed criteria to approximate the level of County responsibility. This involved creating a series of statistical analyses to determine County responsibility across a number of factors, including examining samples of cases for diagnoses to determine if the case was emergent. The final settlement was agreed to in short order to the satisfaction of both parties. The project continued for an extended period because other hospitals were later included in the settlement, and the process was repeated with tests done on a hospital-by-hospital basis.

CONTRACT ORGANIZATION AND STAFFING

B&A proposes to have Mark Podrazik serve as the Project Manager on this engagement. In this role, he will not only serve as the primary contact for the State staff, but he will coordinate all work products and be responsible for ensuring that all deliverables meet the client's satisfaction. In addition to his project management role, Mr. Podrazik will also serve as a key staff member completing the work on the product. He served this dual role on projects similar to this one, including those in Arizona, Georgia and Ohio.

After the initial kickoff meeting(s), B&A will work with the State to establish periodic checkpoints over the course of the project. We will create a formal workplan that shows the interim tasks that will be completed in preparation of the policy paper as well as the other activities necessary for an October 1, 2007 implementation.

In the first year, we assume that the project will involve weekly contact with OVHA either through onsite meetings or by conference call. The onsite meetings will be planned usually as two-day sessions in advance so that we will be able to meet with OVHA staff and other stakeholders (e.g. the VAHHS or the Health Oversight Committee) as needed. Mr. Podrazik will attend all meetings, and other B&A team members will join him onsite as the project dictates. The weekly status calls will allow everyone to keep tabs on what has happened on the project in the prior week, make potential issues known early, and allow for review of analysis and policy questions. We expect that onsite time will be heavier in the initial months of the project and possibly during the legislative session.

B&A understands that the policy paper due in early February will cover policy discussions that were evaluated over the course of the first four months of the engagement. B&A's final recommendations will be known to OVHA before it receives the policy paper. Because of the scope of work required, we have prepared for Mr. Podrazik and Mr. Burkett to work almost full time in the first four months of the engagement. Our subject experts are also available for this quick turnaround. The hours allocation for the entire project appears in the Price/Cost Proposal section.

The contact information for all team members is as follows:

Name	Responsibilities	Telephone	Email
Mark Podrazik	Project manager, analyst	(703) 313-8655	mpodrazik@burnshealthpolicy.com
Justin Burkett	SAS programmer, analyst	(703) 313-8655	jburkett@burnshealthpolicy.com
Gretchen Engquist	Subject expert	(202) 329-8060	gengquist@burnshealthpolicy.com
Dan Bretheim	Subject expert, SAS programmer	(908) 268-7033	danbretheim@patmedia.net
Steven Abele	Analyst	(602) 241-8521	sabele@burnshealthpolicy.com

METHODOLOGY AND APPROACH

Burns & Associates, Inc. (B&A) understands that the OVHA is interested in having its contractor develop new methodologies for both its inpatient and outpatient hospital payment systems with a target implementation date of October 1, 2007 for both. The inpatient system will be based on the DRG grouping methodology. The degree to which Vermont's methodology mirrors Medicare's and the decision on which hospitals to include in the payment system are important items to be researched and written up in the policy paper. Likewise, the OVHA is primarily interested in exploring an APC-based payment system for outpatient services. Although Medicare uses this methodology, B&A will discuss with the OVHA how other states have adopted the APC system in whole or in part as well as other Medicaid-specific methodologies.

We recognize that decisions on the overall framework need to be made by early February 2007. It is expected that these proposals will be vetted to other stakeholders, namely, the Legislature and hospital industry. We expect that the final nuances of both methodologies will require an iterative process over the course of several months beginning in February as other stakeholders react to the proposal. Decisions on possible methodologies will occur before February, since B&A will be meeting with the OVHA and, at times, the hospital industry to gain their input on areas to explore.

Because a significant amount of work and decisionmaking will occur from October to early February in preparation for the policy paper, we have delineated specific subtasks for inpatient and outpatient activities. We plan to provide the OVHA with deliverables prior to the policy paper as well to help guide the process. These anticipated deliverables related to each task appear at the end of each task discussion.

Tasks Related to the Inpatient Methodology

There are multiple possible routes that Vermont may take to implement a DRG-based system. We see this as a continuum that ranges from:

- ❑ Adopting Medicare's methodology as is;
- ❑ Using the key components calculated by Medicare as the baseline to make a more Medicaid-specific system; or
- ❑ Using just the DRG grouping software, which may or may not be the same grouper used by Medicare, to develop a payment methodology that is entirely Medicaid-specific but has components similar in nature to Medicare's

This can be illustrated by showing some of the key components of the DRG system and how they could differ under each of these scenarios in the table on the next page.

Methodological Considerations of Key Components of a DRG Payment System

Key Component	Use Medicare	Medicaid-adjusted Medicare	Strictly Medicaid
Operating base rate	Adopt rate published in Federal Register annually (adjusted by locality)	Adopt rate published in Federal Register annually (adjusted by locality)	Calculate operating base rates using Medicaid-specific costs; possibly varied by peer group
Capital base rate	Adopt rate published in Federal Register annually (adjusted by locality)	Adopt rate published in Federal Register annually (adjusted by locality)	Calculate capital base rates that are hospital specific using Medicaid-specific costs
Medical education (both GME and IME)	Adopt hospital-specific rates published in Federal Register annually	Adopt hospital-specific rates published in Federal Register annually	Adopt state-specific methodology to reimburse Medicaid portion of GME/IME
Cost-to-charge ratios	Use CCRs calculated by Medicare off the Medicare cost reports	Use CCRs calculated by Medicare off the Medicare cost reports	Calculate hospital-specific operating CCRs using Medicare cost reports but adjusted for Medicaid costs
DRG grouper	Use Medicare grouper	Use Medicare grouper, but possibly add additional DRGs for Medicaid populations (e.g. neonates)	Consider other groupers such as CHAMPUS (which include neonate DRGs), AP-DRG, APR-DRG
DRG relative weights	Adopt weights published annually in the Federal Register	Consider Medicare relative weights, but possibly adjust based on Medicaid average lengths of stay	Calculate relative weights based exclusively on Medicaid claims
DRG outlier thresholds	Adopt Medicare's DRG-specific thresholds	Consider Medicare's thresholds, but make adjustments as needed	Calculate outlier thresholds which are based solely on Medicaid costs; may be peer group-specific

A key aspect of our discussions with the OVHA will be the benefits and drawbacks to adopting a DRG payment system under one of these scenarios, the policy issues that will need to be decided that will lead to the final decision, and the fiscal impact of each scenario both on aggregate payments overall and as each impacts individual hospitals. We will also discuss with OVHA research we compile on selected states of similar size that have implemented DRG systems.

Regardless of the final options selected, it is most likely that the per case payment will be composed of a base operating payment, a capital add-on payment, and an outlier payment, where applicable. The base rate may be divided into a labor and non-labor component; the labor component is wage-adjusted by locality. The capital add-on is a per discharge amount that may be adjusted for geographical differences. Hospitals will be eligible for an outlier payment if the cost for their case is greater than the DRG payment plus a specified threshold amount, which may be DRG-specific. The percentage of the costs above the threshold may vary by DRG or by hospital peer group. B&A will also discuss with the OVHA and model potential policies in the treatment of certain cases, such as transfers, readmissions, and outpatient services provided by a hospital prior to a patient being admitted (“the 3-day rule”).

The work required to model any of these options is relatively similar. Our prior work in both implementing and rebasing DRG systems has enabled us to develop programs in SAS, a statistical software package, that will be used as the basis for our analysis. We have used these programs as the starting point to develop state-specific analyses. These programs have proven to be very useful and allow for efficiencies throughout the process.

Major Steps in the Inpatient Rate Development Process

1. Identify the base year for claims.
2. Run exclusions and perform other data cleaning on the claims database.
3. Gather input data from the Medicare Final Rule and from Medicare cost reports to use in modeling (including hospital-specific capital costs).
4. Cost the claims.
5. Run the claims through the grouper software and conduct the DRG stability analysis.
6. Calculate initial relative weights for all DRGs.
7. Develop outlier threshold methodology(ies) and identify outliers.
8. Run projected payments for the impact claims dataset under a new payment methodology and compare to payments under the old methodology.

Step 1: Identify the base year for claims.

At the project kickoff meeting, we will discuss with OVHA staff the usual protocol used for obtaining data extracts from the fiscal agent and any known limitations of the potential dataset. The claims dataset we normally request is the most recent three years of claims available, recognizing that the end of the most recent year may have a claims submissions lag. For this project, the time period we request may be state fiscal years 2004, 2005 and 2006. We request three years of data because we often compare two sets of Medicaid lengths of stay for each DRG in our stability analysis—the first set is just the base year of claims; the second set is the three years of claims. In some states, we have used three years of data for those DRGs where the average length of stay was unusual when only one year of data was used.

We will also be requesting a similar three-year dataset for outpatient claims so that we can identify outpatient services that occurred 72 hours prior to an inpatient admission. The specifics of the outpatient data request are discussed in more detail in the outpatient section of the workplan.

It may also be necessary to have a discussion with the fiscal agent at this time to gain a better understanding of the data variables that are populated and “cleaned” in their database. We have observed working with other states that the data present in fields may appear to be obvious based on the variable names but in fact are not what one would assume. For example, we recently encountered a dataset that had a number of variables beginning with PMT_[name]. When we ran statistics on these variables, the values seemed to be too high to be payments. In fact, these variables were charges, not payments. Therefore, we will work closely with the fiscal agent before submitting our data request so that we use their variable terminology but at the same time are assured that we receive what we are expecting in our datasets.

Deliverable 1: Data request to the fiscal agent

Step 2: Run exclusions and perform other data cleaning on the claims database.

It is very important to identify problems with the claims database early in the process so that relative weight and other calculations are not compromised later in the process. B&A implements a standard set of exclusion and data scrubbing criteria to apply to the claims datasets we receive. Before doing this, we will discuss these criteria with State staff to ensure that they are all relevant to this project. Additionally, we will add other criteria that are Vermont-specific, as needed. Some of the typical criteria we apply for DRG ratesetting projects involve excluding:

- Duplicate claims
- Claims from hospitals that are not paid by the DRG methodology
- Interim bills
- Claims with net payment = \$0
- Claims with blank recipient ID or provider ID

- ❑ Claims with primary diagnosis missing
- ❑ Claims with from and to service dates missing
- ❑ Claims where allowed charges is greater than billed amount
- ❑ Claims from hospitals where an operating CCR is not available
- ❑ Transfer, readmission, and same-day discharge claims
- ❑ One-day stay claims
- ❑ Claims with low charge amounts (for certain DRGs)

B&A will run the criteria agreed to with State staff on all three years of data that we receive. We will provide reports that measure the volume (number of claims, allowed charges) of each exclusion at the hospital level and statewide level across the three years. Aberrations, such as a disproportionate volume of exclusions in a given year for a specific criterion, will be investigated further and highlighted in our report to the State.

There are other types of analysis that will be conducted on the data at this time that may not involve excluding data, but will be considered when the grouper is applied. For example, we will review the lists of invalid diagnosis and procedure codes published in the Medicare Inpatient Prospective Payment System (IPPS) Final Rule and run frequencies on the prevalence of these codes in the base year of claims. We will flag claims that include these diagnosis and procedure codes because they may be designated as “ungroupable” when the grouper software is applied.

Depending upon the findings of our data exclusions and scrubbing analysis, we will determine whether or not a revised data extract is necessary. We will also make final determinations with the State as to which exclusions to apply and which ones not to apply to the final rate setting database. At this point, the dataset still includes outlier claims.

Deliverable 2: Spreadsheet that shows on a hospital-specific level the volume of claims (number of claims and allowed charges) for each exclusion category applied with identification of hospitals that have a disproportionate volume of exclusions in a particular category

Step 3: Gather input data from the Medicare Final Rule and from Medicare cost reports to use in modeling.

B&A understands that many of the key inputs to the ratesetting process may come from the most recent Final Rule released for the Medicare IPPS because Vermont may use some or most of the Medicare methodology. This means that we will most likely use the information released in the past few days by Medicare for its 2007 IPPS. Specific data points that we may utilize include:

- ❑ The national operating base rate(s) (for when wage indices are less than/equal to or greater than 1.0)
- ❑ The national capital base rate
- ❑ Hospital-specific wage indices (by CBSA and rural)
- ❑ The labor/nonlabor percentage allocations

- ❑ Capital geographic adjustment factors (by CBSA and rural)
- ❑ Any hospitals that have been reclassified by Medicare
- ❑ Any hospitals that have been identified for the Out-Migration adjustment
- ❑ The Medicare relative weights and arithmetic mean lengths of stay for each DRG
- ❑ Statewide average operating and capital CCRs for Vermont
- ❑ GME payments and IME operating and capital adjustment factors
- ❑ The CMS Input Price Index (for measuring budget neutrality)

To the extent that they are readily available, we will also request the hospital-specific operating and capital CCRs from the State's fiscal intermediary. If they are not available, we will request the most recent available cost reports for each hospital. B&A will discuss with the State their interest in using only Final cost reports or if As Filed cost reports are acceptable. If it is decided that As Filed are sufficient since they reflect the most recent available costs, we will discuss whether an audit adjustment should be applied to the As Filed cost reports. We will strive to match cost report periods with the period of claims in our dataset.

All of the information collected in this step will be stored in an Excel-based hospital "features" file for easy maintenance and accessibility. In addition to the variables mentioned above, this features file may also include other data that may be pertinent to calculations run later on (e.g., non-allowable costs collected on a supplemental schedule).

It is at this time that hospital-specific capital costs will be examined as well, comparing the computed capital cost per day to Medicare's calculation. All information in the features file will be reviewed with State staff prior to running the next calculations.

Deliverable 3: Hospital features file

Step 4: Cost the claims

After the evaluation of operating CCRs is completed and the final decision is made on which CCR to use for each hospital, the charges for the claims in the rate setting database are multiplied by the hospital-specific operating CCR to obtain costs. These costs are then inflated using a methodology that we will discuss with OVHA in advance. Usually, this involves applying one of the hospital-related inflators available from Global Insight (or some variation of it) or another nationally-recognized firm. Our normal process is to calculate an inflation factor at the monthly date of service level and inflation is calculated to the midpoint of the rate implementation year (in this case, it is assumed to be March 31, 2008). Each claim, therefore, has its own inflation factor based upon the beginning date of service.

It is also at this point in the process where we will need to determine if preadmission or outpatient services provided 72 hours prior to admission need to be factored into the operating costs. Since we will be extracting outpatient data for the other work in this engagement, we will run an algorithm that matches recipient ID, hospital ID and date of

service on inpatient claims against the same variables on the outpatient claims dataset. We will provide the State with a report that shows the incidence of outpatient utilization 72 hours prior to admission and work with staff to determine the proper methodology to incorporate the costs of these services into the base inpatient costs.

Deliverable 4: Report of the frequency and costs of outpatient claims delivered 72 hours prior to inpatient admission associated with claims in the inpatient claims database

Step 5: Run the claims through the grouper software and conduct the DRG stability analysis.

B&A will work with the State to obtain the most recent Medicare DRG grouper software available to run the claims through to obtain Medicaid-specific average lengths of stay. Although other groupers may also be considered, we suggest starting with the Medicare grouper because it will allow us to compare Medicaid average lengths of stay by DRG to those calculated by Medicare.

The problem with the Medicare grouper is that it does not adequately address a majority of Medicaid's inpatient claims, namely, neonates and normal newborns. One option will be to redirect claims that group into DRGs 385 through 390 with specific diagnoses to DRGs that more properly group low-weight babies. We have also used the CHAMPUS grouper, the grouper adopted by the Department of Defense, to group claims because it has a full inventory of DRGs that address neonates.

An area of concern regardless of the grouper used is the volume of Vermont Medicaid claims that will be grouped and the stability of the relative weights that will be calculated using these claims. We will employ a number of options to measure the stability of the Medicaid relative weights. First, we will compute the ratio of the Medicaid average length of stay to the Medicare average for each DRG. We measure adequate sample size by using statistical tests on claim costs, such as the coefficient of variation (the standard deviation divided by the mean) and/or confidence intervals. If it is determined that certain DRGs do not have sufficient sample size using just the base year of Medicaid claims, we will discuss with the State other options to achieve greater sample size. This may include using three years of Medicaid claims data for the DRGs in question, rolling up the DRGs with insufficient sample size to the MDC level, using a comparable state's relative weights, or defaulting to the Medicare relative weight for the DRG.

Deliverable 5: Spreadsheet that shows the volume of Medicaid claims in the DRG and compares the Medicare and Medicaid average lengths of stay by DRG. Further details will be run, as requested, that compare the 3-year Medicaid average length of stay or the MDC Medicaid average length of stay for certain DRGs with low sample size.

Step 6: Calculate initial relative weights for all DRGs.

B&A will provide the OVHA with options as to which relative weights to apply for use in the initial modeling. Options may include:

- ❑ Using the Medicare relative weights
- ❑ Adjust the Medicare relative weights for differences in the average lengths of stay between Medicare and Medicaid
- ❑ Using Medicaid-specific relative weights, which may be compiled in different ways to achieve stability (e.g. 1 year of claims, 3 years of claims, MDC level)
- ❑ Some combination of Medicaid-specific relative weights for some DRGs and defaults to Medicare relative weights when the Medicaid sample is too small

Deliverable 6: Spreadsheet of options for applying relative weights to subsequent calculations

Step 7: Develop outlier threshold methodology(ies) and identify outliers.

B&A will work with the State to develop potential methodologies to flag outliers as well as options for the additional payments (percentage to apply) that are made for outliers. States have employed a number of different policies in their Medicaid programs, ranging from different percentages by peer group, specific payment strategies for select DRGs (e.g. neonates), to statistical thresholds, or to adopting Medicare's policy in whole. The policies tend to vary in this part of the payment methodology more so than other areas because it is an area that can be adjusted relatively easily to achieve the fiscal impacts that states are aiming for.

B&A will use the hospital-specific operating and capital CCRs designated earlier in the process to cost out the claims and compare to the hospital-specific payment for the claim using the operating payment amount, the capital-related payment amount, and a pre-determined fixed loss threshold. We will flag those claims that meet the outlier threshold status and compute the outlier payment portion for the claim. We will sum outlier payment components by hospital and statewide and compare these payments to the total payments made to each hospital and statewide.

B&A expects that analyzing outlier payment scenarios will be an iterative process. We will use our SAS programs to run these simulations so that we can create variables to flag individual claims that would meet outlier status under these different scenarios. Therefore, it will be easier to compare each of these models side-by-side.

Deliverable 7: Simulations of possible outlier thresholds and their associated fiscal impact at the hospital-specific level and statewide

Step 8: Run projected payments for the impact claims dataset under a potential new payment methodology and compare to payments under the old methodology

B&A will discuss with the OVHA an appropriate period of claims that represents the most recent data available. Although there will be some claims lag, this may be the period October 1, 2005 – September 30, 2006. We will determine the actual payments made to hospitals under the existing methodology for these claims. We will then compare these payments to projected payments under different models of the DRG

payment system. Our analysis will measure actual and projected payments at the hospital level, the statewide level, and to some degree, the DRG or MDC level. We recognize that this step will be an iterative process and there will be many more models run that will be shared with the OVHA than those included in the policy paper. Because policies are in part driven by fiscal considerations, it will be important that all reasonable options be vetted prior to those that will be presented in the policy paper.

Deliverable 8: Tables that show the projected payments at the hospital and statewide level under various scenarios as compared to actual payments (This will actually be a series of spreadsheets delivered “real-time” versus a packaged deliverable.)

Tasks Related to the Outpatient Methodology

B&A team members completed an inventory of outpatient hospital payment methodologies last year and found only three states (Arizona, Minnesota, and Washington) that paid in a manner similar to the Medicare Outpatient Prospective Payment System (OPPS) which uses APC groupings. This was based on a review of state plan documents available from CMS as of October 2005. Sixteen other states paid on a fee schedule methodology that was not OPPS-based. Most of the remaining states paid on a cost-to-charge ratio (CCR) basis or some combination of the methodologies.

We have noticed a great deal of interest among Medicaid agencies moving towards the Medicare methodology or something similar to it (“Medicare-like”). Mark Podrazik, the proposed Project Manager for this engagement, managed the project for Arizona as they transitioned from a CCR-based payment system to a Medicare-like system. The reason why it is termed Medicare-like is because although Arizona uses the Medicare APC groupings, the State decided to deviate from Medicare on other methodological aspects of the system, some of which were to address the differences in populations served.

Similar to the considerations for an inpatient system, Vermont has options to consider on developing outpatient payments, ranging from using the Medicare OPPS as is to adopting a Medicaid-specific system. Because there are thousands of procedure codes that get mapped into hundreds of APCs, the potential for insufficient sample size is even greater for an APC-based system than a DRG system. Therefore, we propose that Vermont consider adopting most of the Medicare OPPS methodology, with some modifications to be discussed that would make it Medicaid-specific.

To initiate the design and implementation process, we propose a kickoff meeting with State staff that will necessarily be involved in system development and implementation. This may include management, fiscal, coding, and systems staff. We will provide an overview of the Medicare OPPS and discuss our experiences in assisting other states in developing an APC methodology. We will also discuss the claims and cost data required for this process and any known limitations as well as data availability.

Either at the kickoff meeting or a subsequent one, B&A will discuss with State staff the overall process of developing the APC system. Although the number of decisions that need to be made may appear overwhelming at first, we propose to introduce these issues early so that the State can consider which stakeholders should be part of the process and at what point their input will be required. The matrix of decisions to be made with comparisons to how other states and Medicare handled the policy decisions will be the basis for discussion. Some decisions are based on the rate development process and need to be decided in the early months of the project. Others are related to pricing and, though they should be discussed early on, the final decisions will most likely be delayed after fiscal impacts have been developed that measure anticipated payments under the new system. The matrix we review with the State will provide estimated target dates of when decisions will need to be made, assuming an October 1, 2007 implementation date. Examples of each category of decisions are listed below.

Examples of decisions based on the rate development process

1. The base year of costs to set fees on
2. Identifying criteria to exclude certain claims from the ratesetting dataset that could artificially skew rates (e.g. noncovered charges, claims with missing/no valid procedures, missing units, outliers)
3. How to map the revenue codes to cost report lines to cost the claims—use Medicare’s default mapping methodology or have Vermont hospitals provide their own specific mapping
4. What to do with procedures that do not logically match to revenue codes (e.g. Are Emergency Department procedures always billed at the detail level with a 45x revenue code?)
5. Criteria for identifying new procedures and those that changed service definition since the rate setting base year and how they will be used in the rate setting database
6. Identifying the source and amount of inflation to apply to costs from the base year to the mid-point of the year of implementation
7. When might Vermont differ from Medicare’s procedure-APC mappings
8. Whether or not to adopt Medicare’s bundling methodology (e.g. which procedures get bundling, which services bundle into these procedures)
9. How to handle claims where more than one procedure should bundle (e.g. if a claim has two surgery procedures, how to determine which details bundle with which surgery)
10. How often the APC fees will be updated after implementation

Examples of decisions based on pricing outpatient claims

1. When might Vermont use a Medicare APC fee instead of a State-specific fee (e.g. low volume from Vermont data to set a stable fee)
2. If Vermont does default to a Medicare fee, which Medicare fee to use for the procedure—the national average or one with local wage adjustments applied
3. When might Vermont use a non-APC fee for an outpatient service (e.g. the Medicaid physician fee schedule for procedures where the service delivery would be no different in a doctor's office or a hospital-based setting)
4. When, if ever, might Vermont pay for a procedure using a CCR instead of a fee (e.g. if procedure code is missing on the claim)
5. Whether APC rates will be statewide, by region, or by peer group
6. Whether or not an outlier payment policy will be implemented
7. Whether or not fees will be phased in or it will be a "turn-key" change

Our approach to assisting the OVHA in answering these questions will be addressed in the tasks listed below.

Major Steps to Developing and Implementing an APC Fee Schedule

1. Identify the base year of claims.
2. Analyze and scrub the dataset of Vermont Medicaid-specific claims.
3. Develop methodology to cost the claims and perform costing exercise.
4. Analyze cost trends in the Vermont claims dataset by major service category.
5. Develop initial APC fee schedule based on Vermont-specific costs.
6. Meet with State staff on limitations of the initial fee schedule, procedure fees that still need to be addressed, and other methodological considerations to model.
7. Revise the initial APC fee schedule with fees from other sources or other methodological decisions, based on State decisions.
8. Conduct impact analysis using historical data that compares historical payments to payments under the new fee schedule on a hospital-specific and statewide level.
9. Steps 7 and 8 are repeated in an iterative manner as policies are considered and decided.

Step 1: Identify the base year of claims

The data request we develop will be predicated on the fact that the variables that will be needed in the rate setting database are available and populated with meaningful data. At a minimum, data from the claims file needs to include:

- ❑ Revenue code
- ❑ Procedure code
- ❑ Units (not equal to zero and not blank)
- ❑ Beginning and ending date of service
- ❑ Covered charge amount
- ❑ Hospital ID

The variable that our experience has shown to be most problematic is the procedure code. In both Arizona and Georgia, we found that about 30% of all of the details in the claims database did not have procedure codes. Many of these were for details that would not be paid an APC rate anyway (e.g. supplies that get bundled), but it appeared that other details should have had a procedure code (e.g. a 450 revenue code was present which would lead us to believe it was an ED procedure).

If it is determined that none of the outpatient details have procedure codes, we will work with the State on alternative methods to implementing the system. One possibility is to map diagnosis codes to APCs; another possibility is to implement the Medicare OPPS rates as is but then require Vermont hospitals to start reporting procedure codes and re-evaluate rates in a year.

For the purposes of this workplan, we will assume that procedure codes are present most of the time on outpatient details and that the State would be interested in at least considering developing Vermont-specific APC rates in lieu of defaulting to the Medicare rates to account for its providers' specific costs.

We will request a dataset representing three years of historical data that will include all hospitals that will be paid under the new APC methodology. Most likely, this would be either state fiscal years (SFY) 2004-2006 or hospital fiscal years (HFY) 2003-2005.

Deliverable 9: Data request based upon information learned about data availability

Step 2: Analyze and scrub the dataset of Vermont Medicaid-specific claims.

In the work that the B&A team has done for other states, we have noticed that the growth rate in charges is not the same across major outpatient service areas. For example, we found in both Arizona and Georgia that charge growth for outpatient surgeries was relatively flat, even though the volume of surgeries had increased substantially. Conversely, the number of ED claims had not increased as much as other services over recent years but the per claim charges increased substantially more than other services.

It will be important for the State to learn the underlying trends in outpatient claim utilization and per unit charge growth as this may inform some of the decisions that get made specific to Vermont's system. It can also assist in modeling payments in an implementation year by forecasting growth from the impact year at the service-specific level. This analysis will also inform Vermont on post-implementation monitoring.

We will report on trends in categories that represent the majority of outpatient payments (e.g. ED, outpatient surgery, radiology, laboratory). We will work with the State to develop these categories, which could be defined by revenue codes or APC categories.

Before completing this trend analysis, we will "scrub" the claims dataset using exclusions criteria that we have developed for other states that have gone through this process. We will review the criteria with State staff to ensure that all of the exclusions are applicable to Vermont and to see if other Vermont-specific exclusions need to be added. We use SAS to read in these large datasets and to perform the analytical functions required. We have developed programs specific to outpatient APC rate development for prior engagements which will be used as the basis for this project.

We divide the exclusions into "upfront" exclusions before running the trend analysis and then "rate setting" exclusions which are performed after the trend analysis but before mapping details into APC categories. Examples of the upfront exclusions criteria that we used include:

- ❑ Duplicate claims
- ❑ Claims with charges less than \$1 or greater than \$100,000
- ❑ Claims that have no procedure codes on any detail lines
- ❑ Details with non-covered revenue codes for outpatient services (e.g. accommodation codes)
- ❑ Details with negative units
- ❑ Claims with TPL payments (optional)

Deliverable 10: Spreadsheet of initial charges and value of charges excluded by hospital and statewide

Deliverable 11: Bar charts that show the statewide growth in charges due to utilization growth only and due to charge inflation separately. This will be done for each major service category (e.g. ED, outpatient surgery, radiology, laboratory).

Step 3: Develop methodology to cost the claims and perform costing exercise.

Our experience in analyzing charge growth trends and performing costing evaluations in Arizona, Georgia, and Ohio suggests that using the overall outpatient CCR on the Medicare cost report to cost out claims does not provide the level of specificity required to set APC-based fees. We have used CCRs unique to specific services, which are cross-walked to revenue codes. Our assumption is that Vermont does not currently have this level of revenue code-based CCR specificity. Therefore, we will have to develop a

methodology for costing the claims before grouping the procedures into APCs. Our work in Arizona and Georgia led to two different approaches, each of which has its benefits and limitations. We are prepared to assist the State in either approach.

Before converting to an APC-based payment system, Arizona paid outpatient claims using a hospital-specific CCR. They did not use the overall outpatient CCR on the Medicare cost report, however. Each year, they collected a file from every hospital that mapped covered outpatient revenue codes to an ancillary cost center line on the Medicare cost report. Hospitals had the option to split the mapping across three cost report lines for every revenue code. We used the hospital-specific mappings of CCRs to revenue codes to cost the Arizona claims. The benefit to this method is that the costs were determined at the hospital level and recognized hospitals' unique cost structures. The drawback to this method is the effort required to collect the mappings from every hospital and not knowing how accurately the hospitals actually mapped the costs.

For the work we completed for Georgia, the State opted not to do a hospital mapping survey to cost the claims. Instead, we applied the standard mapping of cost report line to revenue code that Medicare used in its initial development of the OPSS. Although this streamlined the process, it did not recognize hospital-specific cost structures. Another limitation is that Medicare did not map cost report lines to all revenue codes that Georgia allowed to be billed for outpatient services, usually because the procedure is not paid under the OPSS (e.g. therapies). As a proxy, we applied the hospital's overall outpatient CCR to these revenue codes.

Under either scenario, we will need the cost report data to complete the mapping. If the State retains the Worksheet C data (either electronically or in hard-copy) that we would need for the years that correspond to the claims database, we will use this to derive the CCRs. An alternative would be to pull the data from the national Health Cost Report Information System's (HCRIS) dataset, which is what we did for Georgia, or the American Hospital Directory (AHD) which has a database of cost report data.

Deliverable 12: Table that maps, by hospital, each revenue code to a hospital-specific CCR for use in the costing process. [Note: If the survey method is employed to derive these CCRs, then a sub-deliverable would be the mapping document and instructions for the hospitals in how to complete the mapping.]

Step 4: Analyze cost trends in the Vermont claims dataset by major service category.

After costing out the details on the claims in the rate setting database, we will complete the same trend analysis for costs that we did for charges. That is, we will distinguish cost growth between utilization growth and per unit growth. We will then compare the cost growth to the charge growth. Since the utilization growth portion is the same in both scenarios, the focus will be on distinguishing how and if per unit costs are increasing at a different pace than charges.

One aspect that will need to be kept in mind during this analysis is the availability of recent cost report data. Recognizing the downward trend among most hospitals for outpatient service CCRs, we understand that by applying the HFY 2004 CCRs to claims data from 2005 and 2006 we are probably overstating costs to some extent. We will discuss with the State as we proceed in developing APC fees whether or not to apply an adjustment to costs from claims after the last available cost report period or to just use claims data to set the rates from the last year where cost data is available (e.g. 2004 or 2005, depending upon the availability of cost reports).

Deliverable 13: Bar charts that show the statewide growth in costs due to utilization growth only and due to cost inflation separately. This will be done for each major service category (e.g. ED, outpatient surgery, radiology, laboratory).

Step 5: Develop initial APC fee schedule based on Vermont-specific costs.

After the details are costed, a decision will need to be made on the amount of inflation to add to bring the estimated costs to the implementation year. We usually inflate the cost on each detail based on its date of service. Assuming an October 1, 2007 implementation, we would normally inflate to March 31, 2008 (the mid-point of the rate year). If it is decided to mirror the Medicare rate update schedule which would mean a January 1, 2008 implementation, we would inflate to June 30, 2008 (the mid-point of the Medicare rate year). We usually compute an inflation factor for each month in the claims rate setting period to the end point. Therefore, if a detail on one claim had a service date of 11/1/04 and a detail on another claim had a service date of 11/22/04, each would receive the same amount of inflation. Likewise, a detail with a service date of 12/4/04 would have slightly less inflation applied to it than the previous two details.

Another series of exclusions get applied at this point that are specific to the rate setting process. These exclusions are based on the fact that each APC fee is based on the median per unit value of all the details in that APC (if following Medicare's logic). It also assumes that the cost of a detail for some major procedures is inclusive of "bundled" items. Therefore, the exclusions that are done at this point in the process reflect situations that would adversely impact the per unit cost value. Examples include:

- ❑ Claims that do not have at least one detail that groups into a Medicare APC
- ❑ ED and surgery details with units > 1 (assuming that a patient can only receive one unit of these services per day)
- ❑ Other service details with units > 20 (more of a validity test; there may be some exceptions; the number can be something other than 20)
- ❑ Claims with multiple ED procedures present (due to bundling issue)
- ❑ Claims with multiple surgery procedures present (due to bundling issue)
- ❑ Claims with a combination of ED and surgery procedures

Once the rate setting dataset has these exclusion items removed, the file is ready for the bundling process to occur. Medicare OPPS identifies "primary" procedures which, when present on a claim, trigger the bundling process. This means that the cost of the primary

procedure will actually include other details present on the claim that get merged, or bundled, into the service. Examples of primary procedures include ED, surgery and radiology.

The procedure details (including those that were bundled) then get grouped into APCs. Medicare releases its mapping table as Addendum B in the Final Rule of annual changes to the OPSS. Since the Final Rule is usually published in November each year, we would plan to use the mapping logic that Medicare will utilize in its 2007 version of the OPSS. Once all of the details are assigned to an APC, the median per unit cost value is determined for each APC. These median costs form the initial APC fee schedule.

There are a number of issues to consider after the initial fee schedule is developed. First and foremost, we will measure the stability of the rate for each APC. There are a number of benchmarks that we will use to measure stability.

1. Compare the median rates for each APC found using Vermont-specific costs against the Medicare rates.
2. Compare the median values against the weighted mean values.
3. Determine the variation between the median value and other per unit values in the APC. Wide variation may mean an unstable rate.
4. For consistency, compare the median derived for the APC from the claims in the ratesetting database against the median derived from a prior period's claims (e.g. the year before the ratesetting database).
5. Identify the actual number of details that are contributing to determining the median. The State may want to specify a minimum number of details before a rate will be set. Arizona, for example, set the minimum at 20 details.
6. Determine the relative contribution of different procedure codes to the APC median. There may be 10 different procedures that group into an APC, but only one of the ten procedures is represented in the Vermont database.
7. Determine the volume of "unlisted procedures" in an APC. "Unlisted procedures" are those that could not be categorized under another CPT. Unlisted procedures tend to have little in common with each other. An APC based primarily on xxx99 CPT codes could cause an unreliable value.

We will indicate those APCs that we deem unstable when we deliver the initial APC fee schedule.

Another area that will need to be addressed is all of the procedures that did not group into an APC. Most laboratory procedures do not group into APCs, so the State will continue to utilize the Medicare Clinical Laboratory Fee Schedule for these procedures. But other details that are not lab procedures and did not get bundled with a primary procedure will need to be identified to consider options for paying them. We will prepare this list and categorize the details based on procedure code or revenue code (if procedure code is not present) along with the relative impact (charges) on the whole rate setting database. One alternative to consider for many of these procedures will be the Medicaid Physician Fee Schedule.

Other subsets of the database that will need to be evaluated are related to some of the rate setting exclusions. For example, if there are a significant number of ED procedures with units > 1, it may be the billing practice of just one hospital that can easily be corrected. We will drill down for rate setting exclusions that appear to have a higher volume as a percent of the total database than we have found in other projects.

Deliverable 14: Initial APC fee schedule

Deliverable 15: APC rate stability analyses (e.g. scatter plots showing variation in per unit costs within an APC, comparison of Vermont-based APC rates vs. Medicare OPPS rates, volume of details supporting the proposed rate for each APC)

Deliverable 16: Procedures present in the database for which an APC fee was not set (or are not on the Medicare Clinical Lab Fee Schedule)

Deliverable 17: Detailed analysis of rate setting exclusions

Step 6: Meet with State staff on limitations of the initial fee schedule, procedure fees that still need to be addressed, and other methodological considerations to model.

At this point in the process, we will go through Deliverables 14-17 in depth with State staff to discuss our findings in creating the initial APC fee schedule and limitations we find with the data. We will present suggested alternatives, where applicable, for the State to consider which will involve comparing multiple models of the fee schedule with these modifications compared side-by-side.

Additionally, there are other aspects of the rate setting process that will need to be considered before a final fee schedule can be developed. We have found that discussion of these aspects of the methodology are not as meaningful until at least an initial fee schedule has been developed to provide context to the client. However, each of these methodological features impact the fee schedule and will probably involve modeling dozens of fee schedules that offer different combinations of the methodological features before the final one is decided upon. Each of these features is discussed below.

Use of Medicare's procedure-APC mappings. We suggest that Vermont follow the logic that Medicare uses to map procedure codes to APCs, especially if it is decided that comparisons between the Medicare APC fee and a Vermont cost-based APC are warranted. However, the State may have specific exceptions to the Medicare mapping that they would like to test.

Bundled vs. unbundled costs. Medicare bundles additional services in with the rate it pays for ED, outpatient surgery, radiology, and other "primary" procedures. Vermont will need to decide whether or not it, too, will bundle ancillary services with the primary procedures. Examples of ancillary services include medical supplies and generic drugs. If it is decided to use the bundling methodology, it will also need to be decided if: (a) Vermont will use Medicare's logic to determine which detail lines on a claim to bundle

and which ones not to bundle; and (b) which services are defined as “primary” and will trigger the bundling process.

Arizona decided to follow Medicare with respect to the items to bundle with the primary procedure and to also follow Medicare with respect to ED and surgery claims trigger bundling. For radiology, however, Arizona decided not to make these procedures trigger bundling. This was primarily due to the fact that in the ratesetting database, it was found that more than half of all radiology procedures appeared on a claim where another radiology procedure was present. This caused a problem because we were not able to determine which of the radiology procedures gets assigned the bundled items. Therefore, a bundled cost could not be calculated. Medicare opted to exclude from its national database all claims that had multiple radiology procedures present. When we tried this in Arizona, it eliminated half of the radiology procedures in the database and affected the stability of the APC rates related to radiology.

New and changed procedures. Inevitably, there are changes to CPT and HCPCS code definitions due to new technologies or changes in service definitions. This means that there will be new procedures, deleted procedures, and procedures with changed definitions between the ratesetting database year and the implementation year. The State will need to consider how to pay for new procedures as well as how to determine the costs for procedures that changed definition across years.

Local wage adjustments. In order to compare the costs of APC services nationally, Medicare applies a local wage adjustment to 60% of the cost of each hospital claim in its database that varies by hospital location. These adjusted costs are what are used to determine the median value for the APC. If Vermont is going to rely solely on its own hospitals’ Medicaid costs, then this adjustment is not necessary for setting the APC rates. However, it will be necessary to apply this adjustment before comparing the Medicaid-based rates to the Medicare rates.

Outliers. For an APC fee schedule based on the Medicare APC groupings, we would run a side-by-side analysis of the median values for each APC with outliers in and outliers out. We will discuss with the State a definition for outliers, but normally we would define outliers in this case as per unit costs in an APC that were +/- two standard deviations from the mean per unit cost for the APC.

Hold Harmless provisions. Depending upon the variation in fiscal impact between payments under the old and new system, one option that the State may want to consider is to blend the APC rates in the first year or two of implementation between the median fee derived across all hospitals and a hospital-specific median. This would mitigate large gains and losses under the new system but does add a greater level of complexity.

Deliverable 18: Issue papers and accompanying analyses related to methodology considerations discussed with State staff.

Step 7: Revise the initial fee APC fee schedule with fees from other sources or other methodological decisions, based on State decisions.

Step 8: Conduct impact analysis using historical data that compares historical payments to payments under the new fee schedule on a hospital-specific and statewide level.

Step 9: Steps 7 and 8 are repeated in an iterative manner as policies are considered and decided.

B&A expects that Steps 7 and 8 will be conducted simultaneously and Step 9 reflects the iterative nature of the process whereby issues presented from Deliverable 18 will be discussed and considered with State staff. Most likely, methodological decisions will be considered in part by how the decisions affect payments to hospitals.

The impact analysis tables that we usually develop show the charges and actual payments for claims for each hospital from the impact dataset and compare these to what the payments would have been during the time period if the APC fee schedule was in place. This dataset may be different from the ratesetting data because it will include more current claims data than the ratesetting database. For this project, the impact dataset may be claims for each hospital from October 1, 2005- September 30, 2006. Hospital costs for the claims in the impact dataset can be estimated but they will not be exact because CCRs are not available for this more recent period. However, it may be useful to compare projected payments under the new system against estimated costs.

B&A will provide details on payments under the new APC system at the major service level. To the extent that historical payments can be determined at this level, we will compare the actual historical to the projected new payments. For example, we will show the impact of payments from the APC fee schedule on ED claims in particular as compared to historical payments. If a certain hospital is estimated to have lower payments under the APC system, drilling down to the major service area allows us to determine if the lower payments are across-the-board across all services or if it is service-specific. Likewise, we can determine if all hospitals get paid less than before for the service or if it is hospital-specific.

Since there are multiple options available for many of the methodological pieces that need to be decided, the proposed fee schedules and accompanying financial impact tables generated will start to become voluminous when the combinations of these decisions build upon each other. B&A recognizes that this process can take some time (we estimate about one month) for all options to be reviewed until final options are considered for the policy paper. Our SAS programs are streamlined such that the process to run the fee schedule and impact is done efficiently where often more than one run is done each day.

Deliverable 19: APC fee schedules and accompanying fiscal impact tables that compare payments using the new fee schedule against historical payments. (Note: It is expected

that there will be dozens of variations of the fee schedule and impact tables run before the final options for the policy paper are decided upon.)

Other Tasks Related to the Policy Paper

In addition to the specific methodological considerations for both the DRG and APC systems, B&A will work with the OVHA in the first months of the engagement on the other issues requested in the policy paper. These include:

- ❑ A review of the current payment methodology for IMDs and how and if IMDs should be incorporated into the new payment methodologies proposed which will depend on a number of factors:
 - The grouper selected for inpatient services
 - IMD length of stay and population trends
 - The nature of outpatient services provided which may be more community support than procedure-based
- ❑ How the new methodologies impact the critical access hospitals in particular and any modifications that may be required to ensure that their costs are covered under the new system
- ❑ How a reduction in the provider tax rate will affect overall hospital payments, including DSH, and any policy decisions that may be considered to shift payments that were previously covered from provider tax revenue
- ❑ An outline and timetable of implementation tasks required for the DRG system and APC system separately, and any additional tasks that may be required for specific policy decisions (e.g., the complexity of pricing methodologies). Separate tasks will be delineated for OVHA staff, the fiscal agent, and the providers.
- ❑ Potential issues to be expected from CMS depending upon policy decisions that may be decided that are more customary or unique in nature when implementing payment systems using these methodologies

The summarization of these additional items and the key options for both the inpatient and outpatient methodologies will be summarized in the policy paper. We expect that most of the contents of the policy paper will be worked through with OVHA staff prior to delivery. The paper itself will be summarized for potential use with stakeholders outside of OVHA. We will also include appendices of items that OVHA may not wish to distribute (e.g. hospital-specific impact tables or specific rate calculations).

Deliverable 20: Policy Paper

Provider Involvement

The RFP suggests, and we agree, that the hospital community should at least be introduced to the potential items under consideration for both the inpatient and outpatient payment systems. B&A will assist in providing materials and speaking at presentations to the hospital industry. We will plan at a minimum that there will be four public meetings where all hospitals will be invited to participate. There may be additional meetings of select hospitals that meet with the State which we may provide technical assistance on for the particular issues that they want to address.

We envision topics to address at specific meetings, to be approved by OVHA in advance, will include:

- ❑ Introduce the payment methodologies, items under consideration, and solicit feedback on potential items to consider in policy
- ❑ Introduce the draft inpatient and outpatient rates with, potentially, a discussion of the aggregate fiscal impact when compared to current payments
- ❑ Discuss any changes to the rates previously introduced based on feedback from all stakeholders
- ❑ Raise implementation issues (e.g., new billing requirements or system edits)

When Arizona implemented its new APC-based system, they found a sizable range of fiscal impacts among the hospitals when compared to their previous system (CCR-based). As a result, we provided hospital-specific claims extracts that the State gave to each hospital so that they could price out their own claims under the new system. Individual meetings hospitals had with the State compared how they priced their claims to how we priced them. Many times, their initial concerns with the new system were a result of the hospitals not pricing their claims correctly. We provided technical assistance to State staff to assist the hospitals in determining where their pricing logic was flawed.

This step of meeting with interested hospitals individually, though time-consuming, proved valuable because the State gained the trust of the hospitals that their own data was being used in the process and that “the math” was correct in the modeling of pricing claims. We have factored in time to produce hospital-specific extracts for the OVHA to provide hospitals for both the inpatient and outpatient pricing methodologies.

Deliverable 21: Presentation #1 to the hospital industry

Deliverable 22: Presentation #2 to the hospital industry

Deliverable 23: Presentation #3 to the hospital industry

Deliverable 24: Presentation #3 to the hospital industry

Deliverable 25: Hospital-specific extracts and pricing examples for the State to share in individual hospital meetings

Final Report

B&A understands that the final report will serve two key purposes—it will outline the final decisions made on the methodologies for both the inpatient and outpatient payment systems and it will provide supporting data-driven evidence of how the rates were calculated and the impact that the new methodologies have on provider payments. The report will also assist in supporting the development of operational protocols and will guide the OVHA for future updates to the systems.

We are accustomed to providing such documentation for other rate setting projects, recognizing that the information in these documents has in some circumstances been used in subsequent lawsuits. Therefore, we pay careful attention to the details of what is included in the report and assure that we can support the methodology discussed through the data analysis that will also appear in the report or its appendix.

We expect that the majority of the work for the final report will occur in September 2007 if the two payment systems are implemented October 1, 2007.

Deliverable 26: Final Report

State Plan Amendment and CMS Negotiations

B&A staff have experience in assisting states in amending rules, regulations and provider manuals whenever we develop a new payment system. Depending upon the State's capacity, we can serve in an edit/review role or take on the primary responsibility of updating the rules, regulations and provider manual. In either case, we will discuss with State staff the specific requirements of what needs to be in rule versus regulation and what can be in the state plan amendment.

Our experience has been that moving to either a DRG or APC-based payment system has not posed considerable problems with CMS, especially if payments under the Upper Payment Limit can be easily proved. However, understanding that each CMS region is different, we are prepared and experienced to assist states in writing the state plan amendment and in answering questions posed by CMS, which at a minimum include "the 5 questions". We will discuss with the State the benefits and drawbacks to providing more or less detail about the methodology in the state plan amendment. Our usual suggestion is to provide the minimum amount required to gain CMS approval. This allows states flexibility in making modifications to the payment methodology later on areas that may not need specific CMS approval (e.g. inflationary updates). We have also participated in the calls between states and CMS throughout the approval process. We expect that this will require providing CMS with tests to show that the new methodology meets UPL requirements.

Deliverable 27: Upper Payment Limit test methodology and exhibits

Deliverable 28: Assistance in answering CMS questions in writing or in conference calls

Education and Information

B&A recognizes that although OVHA has final authority over changes to the payment methodologies that will be developed, the decisions cannot operate in a vacuum. In addition to meeting with hospitals, we anticipate that there will be meetings with legislative committees, the Medicaid Advisory Board, and other OVHA staff impacted by the change to present the proposed methodologies, answer questions, and solicit feedback. We will work with the OVHA as to the timing and level of detail required for these presentations, recognizing that the contents of each presentation will vary by the audience. For example, the training for OVHA staff may be specific to certain staff responsibilities, for example, coding experts will need different information than staff in provider relations.

Although there are a significant number of decisions to be made before the fee schedules are developed, the operational aspects of converting to a new system should not be underestimated. B&A suggests that we meet with the State's fiscal agent early on in the process to give them a full understanding of the anticipated system changes that will be required and to prepare them for the anticipated timeframe. The State has suggested that EDS will begin preparing for this change around May 1, 2007. We suggest that initial meeting should occur much before this time period to prepare them for anticipated tasks. We have found that operational flowcharts that map out the pricing methodology is helpful so that both MIS and non-MIS staff understand what the new system needs to do.

Deliverable 29: Training materials for State staff

Deliverable 30: Conduct training session(s)

Deliverable 31: Presentations to stakeholders other than the hospital industry

Deliverable 32: Flow charts of the methodology for setting the APC rates and the pricing of claims, for use by State staff and the fiscal agent

Implementation Assistance (Optional Task)

We expect that Vermont's fiscal agent has experience in implementing DRGs, but less with APCs. In addition to pricing flowcharts, B&A has created tables for fiscal agents that are invoked in the pricing logic, specifically for an APC-based system. The reason for using a table-driven system is that the fiscal agent can prepare the pricing code to look for a table in advance of the values in the table being finalized.

As part of the activities prior to implementation, we would discuss the edits that are already in place for inpatient and outpatient claims pricing with EDS. It is expected that by moving to a new payment methodology, additional edits may need to be set. New edits that we have worked with fiscal agents on using the table-driven approach include:

- Logical mappings of revenue codes to procedure codes

- ❑ Medicaid covered service status based on procedure code
- ❑ Procedures that trigger the bundled payment methodology
- ❑ Revenue codes or specific procedures that get bundled into the payment
- ❑ Valid modifiers by procedure code
- ❑ Unit limits by procedure code

Although different fiscal agents use different methods, the reference table approach seems to work well since these tables will inevitably need to be updated on a periodic basis to account for new procedures, new revenue codes, Vermont-specific methodology changes, and at the rebase of the system. By updating just the table, it will save on changes to programming the pricing logic for both the fiscal agent and for hospitals.

The State may want to consider publishing these reference tables on a website for hospitals to use to aid them in modeling their anticipated payments.

After the new payment systems have been put in place, B&A proposes to develop an ongoing monitoring manual for both payment systems. Our time proposed in the Cost Proposal section for Year 2 of the project assumes the development of the manual, conducting the monitoring tasks in the first year of implementation (at 16 hours per month), and training time for OVHA staff to take over the monitoring responsibilities after the first year. The monitoring manual will include report templates of the types of items to track and what should be analyzed on each report.

We anticipate that there will be short-term (i.e. first six months after implementation) and long-term monitoring activities. The main categories of monitoring we foresee include:

- ❑ Information systems (e.g. volume of rejected claims, pended claims, edits)
- ❑ Utilization (e.g. volume by procedure code, bundled details per claim)
- ❑ Payments (e.g. volume of payments by major service and year-over-year)

Short-term monitoring will be more focused on the information systems itself, primarily to ensure that hospitals are submitting clean claims and are being paid at the same frequency as before implementation. Specific items that may be conducted include:

- ❑ Pulling a sample of claims to test the pricing by hand
- ❑ Measuring the volume of edits to determine if they are preventing payment
- ❑ Comparing the volume of claims submitted before and after implementation

Other monitoring activities are more long-term oriented and the tasks in the original months of implementation will serve as the starting point of longitudinal analyses. Some of the specific monitoring tasks we would anticipate include:

- ❑ Measure ancillary details on bundled outpatient claims to detect “unbundling”
- ❑ Measure “coding creep” on high-volume procedures
- ❑ Volume and average billed per claim by DRG

Proposed Timeframe for Completing Activities

The following timeline assumes an implementation date of October 1, 2007. Key milestones discussed in the workplan are shown below with target completion dates. Most milestones are related to both inpatient and outpatient activities, which are intended to be worked on simultaneously. Tasks specific to inpatient or outpatient are noted. A more detailed workplan with target dates will be completed after the initial project meeting.

Policy Development

1	Review of other state methodologies	Oct. 27, 2006
2	Perform data cleaning and identify exclusions on inpatient and outpatient datasets	Oct. 27, 2006
3	Gather and calculate information to cost the claims	Nov. 10, 2006
4	Trend analyses for inpatient and outpatient claims	Nov. 22, 2006
5	Initial relative weights for inpatient DRGs	Dec. 1, 2006
6	Initial APC schedule for outpatient system	Dec. 1, 2006
7	Initial impact analyses at the statewide and hospital level	Dec. 22, 2006
8	Methodological considerations for both payment systems	Mid Nov-late Jan
9	Iterative relative weight tables, APC fee schedules, and impact analyses	Late Dec-Feb 1
10	<i>Policy Paper</i>	<i>Feb 2, 2007</i>

Meetings with Stakeholders

1	Hospital industry meeting #1 (proposed)	Week of Nov 27
2	Hospital industry meeting #2 (proposed)	Week of Feb 12
3	Hospital industry meeting #3 (proposed)	March-April 2007
4	Hospital industry meeting #4 (proposed)	May-June 2007
5	Legislative Committee meetings	February 2007
6	Medicaid Advisory Board presentations	As needed

Implementation Preparation

1	Negotiations with CMS	March-Aug 2007
2	Revisions to methodological decisions, new impact tables	March-Aug 2007
3	Initial meeting with EDS	February 2007
4	Follow-up meetings with EDS	May-Sept 2007
5	Training sessions with OVHA staff	Aug-Sept 2007
6	<i>Final Report</i>	<i>Sept 28, 2007</i>
7	Training sessions with hospital industry (optional task)	Sept-Oct 2007
8	Monitoring manual (optional task)	Oct 2007
9	Ongoing monitoring and training OVHA staff (optional)	Nov 07-Sept 08

PRICE/COST PROPOSAL

The following tables represent our estimate of the level of effort and proposed cost to complete the tasks requested in this RFP. Per the RFP instructions, we have divided our cost proposal into two sections. Exhibit 1 represents the proposed price of \$341,780 for work through September 30, 2007 which leads up to implementation of the new inpatient and outpatient payment systems. Exhibit 2 represents the proposed price of \$110,120 for ongoing implementation activities after September 30, 2007. Exhibits 3 and 4 allocate the hours by person and major task area for the two years in the contract.

For Burns & Associates staff, the Base Cost is represented as an hourly rate. The hourly rates proposed for B&A staff are as follows:

Mark Podrazik	\$180.00/hour
Justin Burkett	\$150.00/hour
Steven Abele	\$170.00/hour

Hourly rates are computed using

- ❑ The individual's gross salary
- ❑ A 34% of gross salary factor for fringe benefits (vacation, sick, personal leave, health insurance and other benefits)
- ❑ An average 97% of gross salary factor (across this staff team) for operating expenses and margin

The product of these factors is divided by 1,904 hours, the available working hours in a year (which is 2,080 minus 176 hours for vacation and holidays), to derive the hourly rate per person.

Please note that it is not B&A policy to bill clients for travel time to and from client sites or for "down time" at client sites. In other words, clients are billed each onsite day only for the number of hours meeting or working at the client site, not 8 hours.

The individuals' gross salaries appear separately in Appendix 3 because they are considered confidential information.

Subcontractor costs are based on the number of hours proposed multiplied by their hourly rate. Our subcontractor costs for the first year are as follows:

Gretchen Engquist	172 hours * \$225.00/hour = \$38,700
Dan Bretheim	152 hours * \$200.00/hour = \$30,400

Subcontractor costs proposed for the second year are as follows:

Gretchen Engquist	96 hours * \$225.00/hour = \$21,600
Dan Bretheim	16 hours * \$200.00/hour = \$3,200

Travel Assumptions

B&A has assumed that each “person trip” will involve two days onsite in Williston. The number of person trips allocated for each person is as follows:

In Year 1

Mark Podrazik	14 trips, 28 days onsite
Gretchen Engquist	8 trips, 16 days onsite
Justin Burkett	8 trips, 16 days onsite

Total Days Onsite 60 person days

In Year 2

Mark Podrazik	10 trips, 20 days onsite
Justin Burkett	6 trips, 12 days onsite

Total Days Onsite 32 person days

We are open to discuss with the OVHA which staff members will be present for each onsite trip. However, we anticipate that for most trips it will be two B&A staff.

The estimated cost per trip is \$850. This includes round trip airfare from Washington, DC to Burlington VT; two overnights at a local hotel; one two-day car rental; and \$25 per diem for meals. If our travel costs for any trip exceed \$850, we will not bill the State the additional amount incurred. If the State has specific travel restrictions, we will adhere to these, even if it results in a per trip cost of less than \$850.

Effective Period

All prices and rates quoted are effective from the date that the Contract becomes effective to June 30, 2008. The proposal price is valid for 180 days from the close date of the RFP.

Exhibit 1
Detail of Hours and Expenses for Year 1 of Contract: 10/1/06 - 9/30/07

Personnel

Name	Base Cost (Reflected as Hourly Rate)	Number of Hours	Description of Role	Total Amount
Mark Podrazik	\$180.00	780	Project manager, policy and data analysis	\$140,400
Justin Burkett	\$150.00	600	SAS programmer, analyst	\$90,000
Steven Abele	\$170.00	144	Analyst	\$24,480
Total		1,524		\$254,880

Subcontractor Name	Address	Number of Hours	Description of Role, Organizational Abilities	Amount
Gretchen Engquist	19385 Cypress Ridge Court Lansdowne, VA 20176	172	Subject expert, provider tax and IMD rate work	\$38,700
Daniel Bretheim	34 Sidney School Road Annandale, NJ 08801	152	Subject expert, SAS programmer	\$30,400
Total		324		\$69,100

Operating Costs

Category	Description of need for the item	Basis for cost	Amount	Total
Per person trips to VT	Meetings with OVHA and other stakeholders	1 person trip = airfare, lodging, car rental, meals for two onsite days	\$850 per person trip; <u>Assumption:</u> 14 trips for M.Podrazik, 8 trips for G.Engquist, 8 trips for J.Burkett	\$25,500

<u>Total Bid Amount</u>	
Personnel	\$254,880
Subcontractors	\$69,100
Operating	\$25,500
TOTAL	\$349,480

Exhibit 2
Detail of Hours and Expenses for Year 2 of Contract: 10/1/07 - 6/30/08

Personnel

Name	Base Cost (Reflected as Hourly Rate)	Number of Hours	Description of Role	Total Amount
Mark Podrazik	\$180.00	264	Project manager, policy and data analysis	\$47,520
Justin Burkett	\$150.00	184	SAS programmer, analyst	\$27,600
Steven Abele	\$170.00	0	Analyst	\$0
Total		448		\$75,120

Subcontractor Name	Address	Number of Hours	Description of Role, Organizational Abilities	Amount
Gretchen Engquist	19385 Cypress Ridge Court Lansdowne, VA 20176	96	Subject expert, provider tax and IMD rate work	\$21,600
Daniel Bretheim	34 Sidney School Road Annandale, NJ 08801	16	Subject expert, SAS programmer	\$3,200
Total		112		\$24,800

Operating Costs

Category	Description of need for the item	Basis for cost	Amount	Total
Per person trips to VT	Meetings with OVHA and other stakeholders	1 person trip = airfare, lodging, car rental, meals for two onsite days	\$850 per person trip; <u>Assumption:</u> 10 trips for M.Podrazik, 6 trips for J.Burkett	\$13,600

Total Bid Amount	
Personnel	\$75,120
Subcontractors	\$24,800
Operating	\$13,600
TOTAL	\$113,520

Exhibit 3
Distribution of Hours By Major Task/Person in Year 1 of Contract: 10/1/06 - 9/30/07

Team Member	Policy Paper	Provider Involvement	Final Report	SPA and CMS Negotiations	Education and Information	Number of Hours
Mark Podrazik	520	80	80	20	80	780
Justin Burkett	472	80	40	8	0	600
Steven Abele	120	0	24	0	0	144
Gretchen Engquist	80	32	24	12	24	172
Daniel Bretheim	128	0	24	0	0	152
Total	1320	192	192	40	104	1,848

Exhibit 4
Distribution of Hours By Major Task/Person in Year 2 of Contract: 10/1/07 - 6/30/08

Team Member	Monitoring Manual, Edit Tables	Inpatient Monitoring	Outpatient Monitoring	Number of Hours
Mark Podrazik	64	100	100	264
Justin Burkett	64	60	60	184
Steven Abele	0	0	0	0
Gretchen Engquist	16	40	40	96
Daniel Bretheim	16	0	0	16
Total	160	200	200	560

APPENDIX 1

BURNS & ASSOCIATES, INC. FINANCIAL STATEMENTS

Burns & Associates, Inc.
Income Statement
For the Period February 1 through July 31, 2006

	<u>Feb - Jul 06</u>	<u>% of Income</u>
Income		
3000 B&A Consulting Revenue	523,780	78%
3200 Subcontractor Revenue	145,443	22%
3300 Interest Income	0	0%
Total Income	<u>669,223</u>	<u>100%</u>
Cost of Goods Sold		
4100 Client-Related Expense	8,698	1%
4200 Subcontractor Expense	79,722	12%
4300 EPP Service Charge	5,874	1%
Total COGS	<u>94,294</u>	<u>14%</u>
Gross Profit	574,929	86%
Expense		
5000 Employee Expenses	221,243	33%
5100 Office Expenses	8,763	1%
5200 Business Expenses	5,453	1%
5300 Variable Expenses	14,432	2%
Total Expense	<u>249,891</u>	<u>37%</u>
Net Income	<u>325,038</u>	<u>49%</u>

Burns & Associates, Inc.
Balance Sheet
As of August 16, 2006

ASSETS	
Current Assets	
Checking/Savings	
1000 Chase Checking	48,210.19
1010 Chase Savings	100.02
Total Checking/Savings	<u>48,310.21</u>
Accounts Receivable	
1100 Accounts Receivable	<u>285,276.25</u>
Total Accounts Receivable	<u>285,276.25</u>
Total Current Assets	<u>333,586.46</u>
TOTAL ASSETS	<u>333,586.46</u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Other Current Liabilities	
2200 Loan from P.Burns	<u>50,000.00</u>
Total Other Current Liabilities	<u>50,000.00</u>
Total Current Liabilities	<u>50,000.00</u>
Total Liabilities	50,000.00
Equity	
Net Income	<u>283,586.46</u>
Total Equity	<u>283,586.46</u>
TOTAL LIABILITIES & EQUITY	<u>333,586.46</u>

APPENDIX 2
RESUMES FOR BURNS & ASSOCIATES TEAM

Mark Podrazik

Gretchen Engquist (Subcontractor)

Dan Bretheim (Subcontractor)

Justin Burkett

Steven Abele

Mark Podrazik, M.B.A.
Principal
Burns & Associates, Inc.

Mark Podrazik has 10 years of experience in health care consulting, specializing in the budgeting, reimbursement, and evaluation components of health care programs. Prior to Burns & Associates, Mr. Podrazik was a Corporate Manager at EP&P Consulting, a health care consulting firm with a national practice. While there, he managed projects in nine states and also served as the Business Manager of the firm overseeing all accounting functions. Mr. Podrazik has served as Project Manager on multi-year engagements involving multiple state agencies.

Representative Accomplishments

- Provided assistance to the Arizona Health Care Cost Containment System on a number of projects including:
 - Project manager and lead analyst on AHCCCS's transition to a new fee schedule-based payment system for outpatient services to Medicaid beneficiaries.
 - Project manager for a project to update AHCCCS's rates paid to Medicaid fee-for-service providers of nursing home care.
 - Project manager for an engagement to calculate hospital DSH payments.
 - Key analyst on a project to evaluate AHCCCS's self-funded reinsurance program for acute care and long-term care services.

- Project manager of an initiative similar to what was implemented by AHCCCS in which the Georgia Medicaid agency was exploring possible methods to transition to a fee schedule-based payment system for outpatient services provided to Medicaid beneficiaries.

- Managed the successful negotiation of a settlement between a hospital chain and a County government over the payment of outstanding hospital claims for indigents that had crossed a five-year period. The parties accepted Mr. Podrazik's settlement methodology for evaluating County responsibility and conducted the analysis and review of claims to develop hospital-specific settlement amounts.

- Principal analyst and author of a report for the Ohio Department of Job and Family Services evaluating rates paid to hospitals for inpatient and outpatient hospital services for Medicaid beneficiaries.

- Key staff member and contributing author of an independent evaluation of Mississippi's Medicaid program which was delivered to the Mississippi Legislature. This included an evaluation of hospital and nursing facility reimbursement

methodologies. Also served as the principal analyst of a project where Mississippi was seeking federal financing for a population currently covered by Medicaid with state-only funds.

- ❑ Principal analyst on an initiative whereby a Governor-appointed task force in Nevada was commissioned to evaluate and develop recommendations for changing the methodology and updating rates paid to Medicaid providers who serve the developmentally disabled population and those with behavioral health needs.
- ❑ Established the rebased rates paid to Ohio's state-owned homes for the developmentally disabled in 2002. This involved a comparison of the financial structure of each home and the composition and needs of the clients within the home.
- ❑ Developed and evaluated the results of cost survey tools administered to community-based providers of services to the developmentally disabled as part of the process of refining the rates paid to these providers. Providers included group homes, day treatment and training centers, and providers of in-home personal care.
- ❑ Project manager of an initiative the Commonwealth of Pennsylvania is undertaking to improve the accessibility, affordability, and quality of health insurance and health care for all Pennsylvanians. Activities included developing strategies with the Governor's Office on Health Care Reform and Health Care Cabinet, preparing and presenting materials to four stakeholder task forces, developing financial models for potential reinsurance and subsidy components of a new insurance product, and conducting focus groups with low-income uninsured Pennsylvanians and small business owners on their perceptions of what should be included in a scaled-back, affordable health insurance product.
- ❑ Project manager and principal author of the annual evaluation report of the Healthy NY program in 2004 and 2005 which is offered through the New York Department of Insurance. The report included results from surveys administered by EP&P of members and small businesses that enrolled in the product; onsite surveys of health plans that offer the product; a financial analysis of the costs of the reinsurance component of the program which is funded by the State; and an elasticity analysis of demand for the product across competing health plans based upon rates charged within a county.
- ❑ Project manager and primary author of an annual independent evaluation of the Indiana Children's Health Insurance Program delivered to the Indiana legislature in each of the last five years. Also served as the project manager and one of the primary authors of an external quality review of the State's Medicaid managed care organizations.

- ❑ Project manager on a financial evaluation of homeless shelter providers paid by the New Jersey Department of Health and Human Services and provided recommendations for adjusting rates paid to these providers.
- ❑ Project manager for the design of a database that served as an inventory of the features of consumer-directed support service programs nationwide based upon survey responses.

Education & Academic Qualifications

Johns Hopkins University, Baltimore, MD
Masters of Business Administration – 2001

Syracuse University, Syracuse, NY
Bachelors of Science in Finance and Marketing – 1991

Publications

Flanagan, S., Engquist, G., and Podrazik, M., ASPE Consumer-Directed Support Service Program Inventory, prepared for the U.S. DHHS/Office of the Assistant Secretary for Planning and Evaluation, September 14, 2001.

GRETCHEN ENGQUIST, PH.D.

Dr. Engquist specializes in the design and implementation of health, behavioral health and long-term care reform initiatives. For over twenty-five years, Dr. Engquist has been involved with the Medicaid program and is known nationally for her work in Medicaid managed care, program financing and funding strategies, reimbursement and ratesetting, and policy development. Recently, Dr. Engquist has been working with a number of states and organizations in restructuring long-term care and behavioral health programs for people with disabilities. This work ranges from addressing differences in county administered and funded programs to developing consumer-directed programs for persons with disabilities. Her work also includes the development, negotiation, and implementation of waiver programs and ratesetting systems that address the community support needs of various populations.

Background

Dr. Engquist founded EP&P Consulting, Inc. in 1993 and was President until 2005. Prior to this, she was a partner at KPMG Peat Marwick and prior to that she was the Medicaid Director for the State of Missouri. As Medicaid Director, she developed, under a section 1115 waiver, a mandatory managed care system in Kansas City. She was also a Project Director for the National Governors' Association Center for Policy Research, and Research Director for the National Public Health Program Reporting System. Earlier, Dr. Engquist was a Congressional Science and Engineering Fellow, and a staff member to both the U.S. Senate Committee on Human Resource (Senator Jacob Javits) and the North Carolina Legislature, focusing on a series of health, economic, and planning issues.

Dr. Engquist is a member of the American Association for the Advancement of Sciences and the author of numerous research articles on health care cost containment and reimbursement topics. She has addressed national associations on health, long-term care, and behavioral health policy issues.

Education & Academic Qualifications

Duke University - Durham, NC
Round Table of Science and Public Affairs
Post doctoral fellowship - 1978

University of Virginia - Charlottesville, VA
Master of Arts in Experimental Social Psychology
Doctorate of Philosophy in Experimental Social Psychology - 1977

University of Wisconsin - Madison, WI
Bachelor of Arts in Psychology and Political Science – 1973

Representative Accomplishments

Hospital Reimbursement Experience:

- ❑ Assisted the State of Ohio implement a DRG inpatient payment system, one of the first Medicaid agencies to follow the Medicare methodology. Recently, she served as a Subject Expert and reviewer of reports written that justified the adequacy of Ohio's hospital rates even with recalibration of weights, changes to outlier payments, and rate freezes.
- ❑ Also managed projects in the late 1980s assisting states in converting to DRG payment methodologies for the States of Montana, Tennessee, and Washington.
- ❑ Managed other prospective hospital reimbursement projects for Medicaid agencies in the States of Arizona, Hawaii, and Kansas.
- ❑ Evaluated Michigan's and Mississippi's hospital reimbursement systems as part of independent evaluations.
- ❑ Calculated disproportionate share payments for AHCCCS since the inception of the DSH program in 1992. Dr. Engquist also provides or has provided disproportionate share advice in Ohio, Louisiana, and New Hampshire. Recently she successfully negotiated with CMS a payment-to-charge (PCR) methodology for establishing the upper payment limit.
- ❑ Developed disproportionate share funding options to help Louisiana finance the expansion of community-based primary care services.
- ❑ Participated in developing a graduate medical education strategy for Arizona in an initiative sponsored by the current Governor.
- ❑ Recently offered strategic planning advice to Nevada to maximize GME payments as part of an overarching strategic health plan.
- ❑ Provided litigation support to the Arizona Medicaid program on a number of lawsuits related to outlier payment methodologies, application of audit adjustments, and payment for specialized cases related to its hospital reimbursement system.
- ❑ Reviewed the statistical sampling for adequacy in ongoing litigation between Maricopa County and hospitals.

Medicaid Managed Care Experience:

- ❑ For the State of Arizona, developed and negotiated the first two HIFA waivers to be approved by the federal government.
- ❑ Assisted Oregon in developing the next generation of the Oregon Health Plan including developing the waiver strategy, design of benefit plans, and converting a private sector employer and individual health insurance program to Medicaid; assisted Oregon with negotiations with the federal government; currently assisting Oregon with amending the demonstration.
- ❑ Serving in her 16th year as a policy consultant to the statewide Medicaid Managed Care program operated by the Arizona Health Care Cost Containment System (AHCCCS) under section 1115 research and demonstration waiver authority. In this role, Dr. Engquist has been responsible for analyzing the budget impact of most new initiatives including LTC, KidsCare, the expansion of eligibility to 100% of FPL, disproportionate share, graduate medical education and provider ratesetting. In addition, Dr. Engquist advised the state on operational and financial features of the program, litigation support, and quality management. Dr. Engquist (with Dr. Jeanne McGee) completed statewide member (14,000 members), physician/office manager (1,400 providers), and dental (300 providers) surveys for Arizona.
- ❑ Developed and conducted the readiness review for the Nevada Managed Dental program operated through the health plans and the University of Nevada, Las Vegas School of Dentistry. Due to initial findings during the readiness review process, corrective action plans were developed with time frames and the plans and School of Dentistry were re-reviewed before they were allowed to go live.
- ❑ Reviewed the financial performance of Maricopa Health Systems in acute and long-term care.
- ❑ Conducted health plan negotiations and assistance in development of the RFP evaluation criteria for Hawaii's statewide Medicaid managed care program.
- ❑ Assisted the States of New Hampshire, Maine, and New York in the design of Medicaid managed acute care systems including waiver development (under contract to Pacific Health Policy Group) in New York.
- ❑ Assisted New Hampshire in the development of an acute care RFP and the development of evaluation criteria for a statewide section 1115 managed care program.
- ❑ Developed clinical case studies for New Jersey to assess their health plan's readiness to provide service to the aged, blind, and disabled.

Health Care Coverage Expansion Experience:

- Assisted Louisiana in three key programs areas:
 - Implementing LaChoice, an employer-sponsored initiative, including development of employer and employee eligibility and enrollment processes, developing the evaluation plan, and identifying resource and funding options.
 - Converting the state's catastrophic risk pools to Title XIX including developing the methodologies for performing the work
- Assessed local fund pools in Nevada used to purchase health care that may be available for expanding coverage including indigent care funds spent by the counties, the Indigent Accident Fund and the Supplemental fund. Based on the analysis of current service utilization within these pools, a HIFA waiver concept was developed and is included in the Governor's budget
- Prepared a successful grant request to use Tobacco Tax Funds in Nevada to develop a proposal for expansion of eligibility.

Evaluation Experience:

- Conducted an independent review of Medicaid expenditures, policies and practices for the Mississippi Joint Legislative Committee on PEER. Interviewed Medicaid staff and their contractors, reviewed policies and procedures, analyzed reimbursement methodologies, and evaluated information process flows and organizational staffing structures. The first of the two reports addressed Medicaid expenditure trends; budget and forecasting process; hospitals and nursing facility reimbursement, audit, utilization and cost reporting practices; administration of the Medicaid program; data management; pharmacy; and non-emergency transportation. The second report addressed Medicaid eligibility, optional services, and potential waiver strategies.
- Assisted Arizona and Hawaii in assessing the potential benefits of a joint venture to operate Hawaii's Medicaid Management Information System including the development of IT infrastructure, developing the interstate agreements, conducting the feasibility study and conducting the claims requirement analysis.

Financing and Fiscal Analysis Experience:

- Developed population projections using the CPS survey, food stamp files, and parents of Title XXI children who are not currently eligible for Medicaid in Arizona.
- Analyzed the financial and population impact of new legislation such as Title XXI (Children's Health Insurance Program) and the Balanced Budget Act of 1997.

- ❑ Performed cost impact analysis for waiver amendments, Title XXI as well as the analysis of using upper payment limits and implementing the premium tax while assisting AHCCCS.
- ❑ Developed federal financing maximization strategies for Arizona, New Hampshire, and Rhode Island.
- ❑ Developed cost and caseload estimates for Arizona, New Hampshire, Ohio, Rhode Island, and South Carolina section 1115 waivers.

Experience with Home and Community Based Services:

- ❑ Since 1984, has provided assistance to more than 20 states in the design and implementation of innovative Medicaid programs and participated in drafting more than 20 Section 1115 and 1915(c) waiver applications.
- ❑ Assisted Rhode Island in the design and implementation of the Citizenship Health Opportunities Interdependence Choices Environments Supports (CHOICES) demonstration for adults with developmental disabilities. CHOICES offers community support in a consumer-directed framework. CHOICES participants choose to obtain services through agencies or to manage their own plan through a fiscal intermediary. Each participant has a specific funding level. Dr. Engquist's work in Rhode Island included the development of funding levels based on the Personal Capacities Inventory for 24-hour supports, family supports, and day programs.
- ❑ Assisted in the design, development, and implementation of the first statewide managed long-term care initiative offering the full range of home and community based (HCBS) and institutional services, the Arizona Long Term Care System (ALTC). Dr. Engquist's role included assisting the state in preparing the waiver, developing pre-admission screening tools for the elderly and people with physical disabilities or developmental disabilities, preparing Request for Proposals, designing the structure of capitation, defining ongoing oversight requirements, negotiating with program contractors, designing quality management systems, and defining case manager qualifications and requirements.
- ❑ Assisted the State of Ohio in the restructuring of services for people with developmental disabilities through a major waiver redesign and federalizing county funded services. This work included analyzing differences in how counties purchase services and how these differences can be accommodated in a transition policy for implementation of a statewide reimbursement and funding level system. The work for Ohio was both highly technical – developing funding level models and ratesetting systems – as well as political – meeting with stakeholders (counties and providers) and the Medicaid agency in system redesign. Dr. Engquist also provided technical

assistance in developing the program policies, defining waiver requirements, and facilitating the coordination of various aspects of the program across agencies.

- ❑ Participated in a national survey for the Assistant Secretary of Planning and Evaluation (ASPE) for the Department of Health and Human Services of consumer-directed programs serving people with disabilities and seniors and co-authored the final report titled “ASPE Consumer-Directed Support Service Program Inventory.”
- ❑ Served as the expert witness in *Billy A. v Lewis-Payton* in Mississippi. The case involved the elderly and physically disabled but did not include the developmentally disabled.
- ❑ Designed a rate assessment tool in 2003 and 2004 for the Arizona Division of Developmental Disabilities (DDD) to use in determining the rate paid on a statewide basis to independent providers. The rate assessment tool evaluates environmental factors, distance, safety, behaviors, medical needs, ADL’s and the availability of nonpaid caregivers that can assist the paid independent provider. An automated scoring system and database was also developed as part of this process.
- ❑ Sampled Individual Service Plans for 50 individuals that are clients of the Arizona DDD and tracked the services on the plan to claims payment and authorization data. This data was linked to available assessment data including ICAP and the PAS to determine the appropriateness of services in the ISP.
- ❑ Assisted the Arizona DDD in implementing a fiscal intermediary program and ratesetting. The ratesetting work included surveying providers to determine cost of services for habilitation, attendant care, respite, and other community services. The FI work included the development of a fiscal intermediary.
- ❑ Completed work for the legislatively mandated Nevada Provider Rates Task Force charged with developing a long-term strategic rate plan for community based services for seniors, people with disabilities, and people with mental illness. Developed community service rates and a strategic transition plan that had complete rate-specific analyses and an overarching section that presented a strategic plan across individual rates for the payment of community services across target populations. Also made recommendations for the development of a fiscal intermediary program, the creation of a waiver for services for individuals with autism, and a revamping of the delivery and payment of Targeted Case Management.
- ❑ Provided technical assistance to Ohio and Oregon in developing their consumer-directed waivers through the National Council on Aging and the Robert Wood Johnson Foundation and developed the report “Using Federal Waiver Authority for Consumer Directed Programs.”

Mental Health and Substance Abuse Experience:

- ❑ Organized a process for conversion of the mental health system from grant funding to fee for service with the objective of maximizing federal funds to reinvest in community services while under contract to the Community Behavioral Health Association of Illinois (CBHA). The process included the development of five work groups with specific deliverables. The state recently agreed to follow this process during the conversion and pilot testing of FFS.
- ❑ Assisted the State of New Jersey in the development of a single point of entry system for children with mental health needs for foster care, the courts, Medicaid, juvenile justice, and the schools. This work included development of an RFP for selection of a Contract System Administrator (CSA) for the Children's System Initiative, assistance in evaluation of proposals, developing monitoring tools, and conducting the readiness review prior to implementation.
- ❑ Developed community based rates for mental health and substance abuse services for the Arizona Department of Health Services (ADHS). This work included examination of rates paid for the same services by other agencies, survey of providers (residential treatment facilities, community agencies, and individual providers), market analysis, and model rate development. Assisted ADHS in the development of new service definitions to broaden the continuum of services available and the rates paid for those services.
- ❑ Prepared a retroactive claim for additional FFP based on retroactive eligibility and services covered by Title XIX for ADHS.
- ❑ Participated on a clinical panel examining use of Selective Serotonin Reuptake Inhibitors (SSRIs) in managed care and fee-for-service.
- ❑ Analyzed service use and patterns to develop scoring criteria for identification of special needs children in New Hampshire and persons with serious mental illness in New York.
- ❑ Assisted the States of Arizona, Maine, and Georgia in the design of managed behavioral health systems.

Sample of Papers and Publications Relevant to this Engagement

Engquist, G. Competitive Bidding - Does it result in rates that are too low? IBC, Chicago, 1996.

Engquist, G. OBRA 1987: An Editorial. Keynote Address, Tri-regional Conference on LTC Reform, Reno, 1990.

Engquist, G. Diagnosis Related Groups in the First Two Years: Implications for Purchasers, Payors, and Providers. Innovation and Alliances, Seattle, 1985.

Teitelbaum, F. and Engquist, G. *The Health Care System in Transition*. Published by the Arizona Department of Health Services, 1984.

Engquist-Seidenberg, G. The state role in health care cost control. *Policy Studies Review*, Fall 1981.

Engquist-Seidenberg, G., Teitelbaum, F., Lyttle, D. *State Initiatives in Medicaid Cost Containment*. National Governor's Association, Washington, DC, 1980.

Engquist-Seidenberg, G., Teitelbaum, F., Lyttle, D., et. al. *Innovation in Controlling Statewide Health Costs*. National Governor's Association, Washington, DC, 1980.

Spitz, B., Engquist-Seidenberg, G., Teitelbaum, F. and Curtis, R. *State Guide to Medicaid Cost Containment*. National Governor's Association, Washington, DC, 1980.

Teitelbaum, F., Seladones, S., Lyttle, D., Engquist, G. and Duncan, H. *State Tax Policy*. National Governor's Association, Washington, DC, 1980.

Public Health Agencies, 1980: A Report on Their Expenditures and Activities. National Public Health Program Reporting System, Association of State and Territorial Health Officials, Washington, DC (with R. Whorton, et. al.).

Engquist G. Health care cost control. Participant author, *Health and Human Services Innovations*, American Association for the Advancement of Science, Washington, DC, 1979.

DANIEL R. BRETHEIM

34 Sidney School Road ~ Annandale, NJ 08801
908.268.7033 ~ info@dbanalytics.com

PROFILE

Senior Consultant experienced in developing and implementing data driven decision support solutions, process improvement, and new business initiatives for major consulting firms and Fortune 100 pharmaceutical company. Significant data analysis experience, including knowledge of advanced multivariate statistical procedures, research design, simulation, modeling, and over twenty years of SAS programming. Broad understanding of information technology. Specializing in: Data Mining, Business Model Simulation, Data Analysis & Reporting, Design & Code Review.

CAREER HIGHLIGHTS

Data Analysis/Decision Support:

- Authored a book titled “*Systematic Data Analysis and Reporting: An Introduction to the Craft of Making Your Analytic Work Bulletproof*”.
- Completed the first Data Mining Certificate program offered by SAS Institute.
- Developed innovative technical solutions related to database design, simulation studies, and economic impact analyses (see Addendum for specific examples).
- Managed an ad hoc studies group that developed Mercer’s first capitation risk analysis model for use by actuaries across the firm.
- Detailed hands on design, programming, and analysis experience in the methodology related to the development of DRG-based reimbursement rates.
- Taught a graduate course in "Applied Managerial Statistics" within the MBA program at Keller Graduate School of Management over a two-year period.
- SAS Product Experience: Base SAS, version 9.1.3; advanced DATA Step programming; Enterprise Miner; Text Miner; SAS Macro Language; SQL processing with SAS; SAS/ACCESS; SAS/AF and SCL; SAS/CONNECT; SAS/FSP; SAS/GRAPH; SAS/STAT

Process Improvement:

- Achieved a 300% increase in efficiency for a database production process through re-engineering and the implementation of automated workflow technologies.
- Reduced database update processing time by 50% by re-engineering workflow processes and implementing procedures for ensuring database quality.
- Successfully implemented processes for rationally managing a 60 person development staff. One result was the ability to increase headcount (with a resulting increase in department output) without increasing the annual \$10M+ budget.

New Business Initiatives:

- Led a pioneering data warehouse project that conceived, designed, and built one of the largest normative health care databases in the world.
- Saved over \$1M in capital expense by forming and leading a coalition of five diverse business units to select, configure, and implement a single enterprise wide contract management application, rather than five separate solutions.
- Contributed to business growth in a health care policy analysis consulting practice by bringing new clients to the firm and winning repeat engagements from existing clients.
- Built a team in, a start up environment, that designed and implemented the overall information technology architecture in a high volume multi-channel (Internet, call center, voice response) data transaction environment, which contributed to a successful merger and spin off.

DANIEL R. BRETHEIM

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PROFESSIONAL EXPERIENCE

- DB ANALYTICS Inc, Annandale, NJ 2003-present
Independent Consultant -- SAS Alliance Program Affiliate Member
- PFIZER Inc., Bedminster, NJ (formerly Pharmacia, G.D. Searle) 1996-2003
Sr. Director, IT Planning
Director, Business Solutions Delivery
Director, Process Re-engineering
Director, Projects
- MERCER HUMAN RESOURCE CONSULTING, Deerfield, IL 1990-1996
Principal, Associate, Senior Consultant
- KPMG, Bellevue, WA 1986-1990
Manager, Senior Consultant, Consultant
- COLLEGE OF BUSINESS ADMINISTRATION,
UNIVERSITY OF OREGON, Eugene, OR 1983-1985
Graduate Teaching Fellow - Teaching and research experience in a variety of general management areas. Published author.
- UNITED STATES MARINE CORPS 1976-1983
Engineering Officer - Overseas assignments, multiple awards, top-secret security clearance, and several command responsibilities. Attained the rank of captain. Honorable Discharge.

EDUCATION, CERTIFICATIONS & TRAINING

MS, Management, University of Oregon (emphasis in Research Methods and Statistics)
MPA, Public Admin., Calif. State Univ. - Bakersfield (emphasis in Budgeting and Policy Analysis)
BS, Management, California Lutheran University (emphasis in Accounting and Finance)

Data Mining Certificate, SAS Institute

SAS Certified Base Programmer, SAS Institute

Certified Computing Professional, Institute for Certification of Computing Professionals

Certified Employee Benefit Specialist, International Foundation of Employee Benefit Plans and the Wharton School of the University of Pennsylvania

Relevant training:

- Biostatistics
- Two Stage Predictive Modeling
- Data Preparation for Data Mining
- SAS SQL Processing
- SAS General Linear Models
- SAS Processing
- Structured Methods and Analysis
- Logical Data Modeling
- Software Testing - Development, Integration, and Validation
- Validation of Computer Systems: Pharmaceutical R&D
- Managing Project Managers
- System Development Project Management
- System Development Life Cycle
- Computer Telephony Integration
- Systems Controls and Security
- Distributed Enterprise Systems
- Fundamentals of Accounting and Finance
- Executive Effectiveness Course I
- Customer Knowledge and Relationship Management
- IT Performance Engineering and Measurement Strategies

SAMPLE PROJECT EXPERIENCE:

Hospital Reimbursement

- Designed analysis of cost, claim, and provider databases required for computation of DRG-based reimbursement rates for the South Carolina Medicaid program.
- Designed and managed development of software to derive DRG-based relative weights for use with the revised reimbursement methodology for hospital services for the New Mexico Medicaid program.
- Led analysis team that developed software for calculating inpatient hospital prospective payment rates for Medicaid reimbursement for the State of Washington.
- Designed and managed development of mainframe analysis and reporting system to monitor utilization and medical expenditures for the State of Washington's Workers Compensation program.

Hospital

- Major Midwest Teaching Hospital, defined and priced 2 specialty products: Cardiac Disease & Women's Cancer. Designed capitation to include all related hospital, physician, laboratory, and radiology services.

Pharmaceutical

- Quantified new patient market growth rates (by prescribing physician specialty) in autoimmune versus solid organ transplant populations.
- Developed medication use attrition tables related to solid organ transplant patients.
- Outcomes research to examine the effect of adherence with newly prescribed bisphosphonate therapy on risk of bone fracture.
- Analyzed medication-specific treatment patterns associated with newly diagnoses cancer cases.
- Identified incident and prevalent patient populations with chronic kidney disease using erythropoietin stimulating agents.
- Constructed a longitudinal database of all medical claims for individuals having a specific diagnostic condition. Analyzed physician prescription practices and the cost of various alternative drugs.
- Developed a capitated rate that would allow a manufacturer to enter into an exclusive arrangement with an HMO to provide its members with all prescription drugs for the treatment of hypertension.

Research

- For Harvard Medical School, built a longitudinal database of medical claims, prescription drug claims, and enrollee population data to support academic researchers under a HCFA grant.
- For Boston University, built a longitudinal database of medical claims, prescription drug claims, and enrollee population data to support academic researchers under a HCFA grant.

Home Health Care Provider

- Conducted a pilot study for major home health care provider assessing the feasibility of moving therapy services (primarily infusion) from inpatient to outpatient settings. PMPM rates were calculated to validate estimates of potential savings.

Physician Specialty

- American College of Radiation Oncology, developed PC-based model for Radiation Oncologists to evaluate capitated rates offered by payers. The model predicts expected number of cancers (by type) requiring radiation therapy for specific populations. For each cancer type, number of patients and associated weeks of treatment are predicted. Using physician assigned relative value units, the model estimates a PMPM rate and expected total revenue to the physician's practice.
- Gastroenterology Group Practice, developed capitated rate for a selected set of procedural services for group of Midwest consulting physicians using proprietary normative database.

SAMPLE PROJECT EXPERIENCE (continued):

Medical Device Manufacturer

- Ethicon Endo-Surgery, provided data to support market research projects related to their endoscopic instrument products.

Benefit Area Utilization and Price “Targets”

- Automated labor-intensive process calculating client-specific health care utilization and price targets.

Dependent Enrollment Simulation

- Developed application to create estimates of dependent counts for specific covered employee populations. Estimates were required for calculation of realistic health care utilization statistics.

U.S. Department of Defense

- Developed management reporting system to monitor expenditures and utilization trends related to the provision of health care services to military dependents.

Benefit Design Simulation

- Developed an application to simulate the financial impact of health care benefit design changes.

Actuarial Rate Book

- Built Mercer’s first capitation risk analysis model for use by actuaries across the firm.

Healthcare Education and Research Foundation, Inc.

- Designed and managed development of software to simulate impact of policy changes on reimbursement rates to hospitals.

Pierce County Medical Bureau

- Designed and developed software computing target rates to evaluate hospital bids for contractual services under a PPO.

Magliaro & McHaney

- Developed PC-based model using demographic, revenue, and utilization data to forecast hospitals market share.

Illinois Department of Public Aid

- Developed the research design for evaluation of the Illinois selective contracting program.

PUBLICATIONS:

“Systematic Data Analysis and Reporting: An Introduction to the Craft of Making Your Analytic Work Bulletproof”, AuthorHouse, 2004

With Carr, R., *“The Other Five Percent: Writing SAS Code for Multiple Operating Systems”*, Client/Server Computing with the SAS System: Tips and Techniques, SAS Institute, Inc., 1995

With Carr, R., *“The Other Five Percent: Writing SAS Code for Multiple Operating Systems”*, SAS Users Group Conference Proceedings, 1995

With Carr, R., *“Finding a Needle in the Haystack: Efficient Filtering of Large Data Sets”*, SAS Users Group Conference Proceedings, 1995

“A Macro-Based Approach for Calculating Binomial Probabilities”, SAS Users Group Conference Proceedings, 1994

With Carr, R., *“Finding a Needle in the Haystack: Efficient Filtering of Large Data Sets”*, Midwest SAS Users Group Conference Proceedings, 1994

With Carr, R., *“The Other Five Percent: Writing SAS Code for Multiple Operating Systems”*, Midwest SAS Users Group Conference Proceedings, 1994

“PC Data Conversion: Avoiding the Pitfalls”, SAS Users Group Conference Proceedings, 1993

“PC Data Conversion: Avoiding the Pitfalls”, Midwest SAS Users Group Conference Proceedings, 1993

“Problems With Missing Values? Use the SAS System To Generate Replacement Data”, SAS Users Group International Conference Proceedings, 1991

“Using the SAS System To Prepare Hospital Inpatient Claims Data for Case-Mix Analyses”, SAS Users Group International Conference Proceedings, 1990

“Modeling Policy Impact”, SAS Users Group International Conference Proceedings, 1989

“Computing the Standard Deviation From A Geometric Mean”, SAS Users Group International Conference Proceedings, 1989

With Terborg, J. and Mayer, S., *“Attitudinal, Behavioral, and Psychological Correlates of Employee Health Care Costs”*, American Psychological Association Annual Meeting, 1986

Justin Burkett
Consultant
Burns & Associates, Inc.

Mr. Burkett has been consulting with Medicaid and other state government agencies since he graduated from Washington University in 2004. At Burns & Associates, he uses SAS, Microsoft Excel and Microsoft Access to conduct utilization and financial analyses of public programs. Mr. Burkett has also served on projects that have evaluated public-private insurance products and children's health insurance programs.

Representative Accomplishments

While at Burns & Associates:

- ❑ Developing cost estimates in support of strategies that are being developed for a strategic health plan for the State of Nevada. Some strategies under consideration for which costs are being developed include Medicaid expansion to higher income-level parents (using CPS data) and developing a public-private subsidized insurance product (using MEPS data).
- ❑ Assisting in the calculation of retroactive payments to providers of Arizona's Division of Developmental Disabilities (DDD) as a result of a predetermined rate increase that did not take affect in the agency's new claims processing system. Calculations involve mapping claims and payments between the old and new systems and determining adjustments at the provider and service level.
- ❑ Also assisting the Arizona DDD with various aspects of an initiative to procure services provided to developmentally disabled children ages 0 to 3. Mr. Burkett has analyzed historical utilization patterns across the state among this population and has assisted in developing materials related to the procurement process itself.
- ❑ Analyzed encounter data to determine the appropriateness of capitation payments for the Arizona Department of Health Service's Division of Behavioral Health Services. This involved analyzing per unit valuations by service by provider by month over an 18-month period and comparisons across providers to assess acceptable per unit ranges.
- ❑ Developed the company's website that uses a Microsoft Access database as its platform.

While at EP&P Consulting, Inc.:

- ❑ Assisted the Arizona Health Care Cost Containment System (AHCCCS) in the rebase of their fee-for-service rates paid to nursing facilities. This involved surveying providers on wage and capital cost information as well as analyzing cost report data for indirect care and capital expenditures. The new rates reflect a shift to a fair rental value method for paying for capital. Findings were presented to AHCCCS Executive Management and industry representatives. Mr. Burkett also developed a new cost reporting tool for use by the nursing facilities to capture the costs that will be required for future ratesetting activities.
- ❑ Assisted the Georgia Department of Community Health (DCH) in developing options for a prospective fee-based outpatient payment system. Mr. Burkett developed SAS programs that costed out historical hospital claims based on hospital-specific cost-to-charge ratios, calculate fees based on median costs, and create reports used to assess the impact of the fees. He also assisted in the analysis and presentation of results to the client.
- ❑ Worked on the 2004 and 2005 annual evaluations of New York's Healthy NY program. This included writing a chapter on the relationship between premium levels and enrollment in the program and why enrollees do not always select the lowest premium in their county. He also validated the results from a financial survey administered to the plans by EP&P to measure medical loss ratios.
- ❑ Lead analyst for EP&P's 2006 annual report to the Indiana Legislature as well as lead analyst of EP&P's 2005 edition of the monitoring manual for the State's Children's Health Insurance Program. The report to the legislature evaluates the State's CHIP program by identifying trends in utilization and expenditures overall and within service categories by delivery system and by age group. The monitoring manual is designed to track Indiana's program against historical trends and national benchmarks. Mr. Burkett presented the information in the monitoring manual to CHIP management.
- ❑ Developed insurance subsidy and reinsurance models for consideration by the Pennsylvania Governor's Commission on Health Care Reform as they evaluate different options for expanding health care coverage. The models predicted enrollment and expenditures based on the different parameters chosen for the program, including reinsurance thresholds and take-up rates.
- ❑ Analyzed AHCCCS' reinsurance system to verify that claims are being reimbursed properly and to make recommendations for improving the system. This project involved summarizing encounter-level and person-level data using SAS to answer pertinent questions such as AHCCCS' current liability for outstanding claims and the likely financial impact of adjusting deductible levels.

Education & Academic Qualifications

Washington University, St. Louis, MO

Bachelor of Arts in Economics and Philosophy, May 2004

Kings College, London, England

Political Philosophy, December 2002

Steven C. Abele, M.A.
Senior Consultant
Burns & Associates, Inc.

Mr. Abele has over eight years of experience in the health care industry. Before joining Burns & Associates, Mr. Abele worked for two years at EP&P Consulting, another healthcare consulting firm that specializes in consulting to state governments. He provided a wide range of technical assistance to state agencies including evaluating and updating provider rates, assisting with operational issues, procurement, and performing various financial models and projections. Prior to his consulting career, Mr. Abele worked for a large tertiary hospital where he developed expertise in revenue performance monitoring, performance improvement, financial analysis, and admitting and patient financial services.

Representative Accomplishments

- Offers general analytical support for the Arizona Department of Economic Security, Division of Developmental Disabilities (DES/DDD). Duties have included:
 - Ongoing review and development of operational issues and processes created and modified for the Fiscal Intermediary program
 - Support for the maintenance of a Microsoft Access-based database used to determine consumer-specific rates paid to DES/DDD providers based on the client's needs
 - Setting rates paid to various DES/DDD providers including group home, day treatment and training, in-home care, supported employment, nursing, and therapists
 - Developing documentation for the Requests for Qualified Vendor Application process

- Recently provided support for the Arizona Department of Health Services, Division of Behavioral Health Services in reviewing institutional and community-based rates paid to providers. Duties included ongoing discussions with a multi-disciplinary team to review rate models that utilize market-based benchmarks to modify the design to provide appropriate reimbursement for best practices.

- Providing support for the Nevada Department of Health and Human Services while modifying and negotiating a HIFA demonstration waiver with the Centers for Medicare and Medicaid Services (CMS). Duties include the review and revision of the HIFA demonstration application, demonstration financial projections and development and assistance with new processes related to the demonstration implementation.

- ❑ Provided support for the DES/DDD Fiscal Intermediary program implementation. Duties included ongoing review and development for operational issues and processes created and modified during the implementation and oversight of testing for new processes. Mr. Abele also assisted in the implementation of provider rate increases implemented in the fall of 2004 and 2005.
- ❑ Collected data and completed analysis and process mapping for the State of Louisiana HIFA design. Assisted in the development and submission of the HIFA application to the CMS including sections relevant to budget neutrality. Participated on a cross-functional team to identify and assess information technology needs associated with eligibility and enrollment of individuals identified to participate in the program.
- ❑ Assisted in the successful mediation of a lawsuit between an Arizona hospital and a government entity over unpaid inpatient and ER claims. Analysis included auditing patient accounting records at the hospital site against disputed charges and verifying eligibility criteria to determine if the disputed claim should be paid.
- ❑ As an independent consultant, Mr. Abele worked with small to medium-sized hospitals to optimize processes and implement measurements to determine service profitability and defined utilization issues.
- ❑ Monitored and measured outsourced patient financial service functions including overseeing charge capture and patient and physician relations.
- ❑ Used general accounting, budgeting, cost accounting, billing and collection procedures related to managed care reimbursement while working for a large Phoenix-based hospital.

Education & Academic Qualifications

University of Kansas, Lawrence, KS
Masters of Arts in Mathematics – 1994

Wichita State University, Wichita, KS
Bachelors of Science in Mathematics – 1991