



**New York State
Department of Civil Service**

**ACTUARIAL AND BENEFIT MANAGEMENT
CONSULTING (ABMC) SERVICES**

Technical Proposal

May 31, 2017

Lawrence Singer
Senior Vice President
212.251.5095
lsinger@segalco.com

Segal Consulting
333 West 34th Street
New York, NY 10001-2402
www.segalco.com

Table of Contents

To Provide Actuarial and Benefit Management Consulting (ABMC) Services

Technical Proposal

May 31, 2017

1. Corporate and Account Team Experience.....	3
2. Project Services	23
3: Organizational Support and Experience	65
4. Appendix A: Revisions to Draft Agreement Legal Exceptions.....	96
5. Appendix B: Sample Copies of Reports	108
6. Appendix C: Insurance Certifications.....	156
7. Appendix D: “Representative Lists of GASB 43/45 Valuations”	160



333 West 34th Street New York, NY 10001-2402
T 212.251.5000 www.segalco.com

May 31, 2017

ABMC2017RFP@cs.ny.gov

ABMC Procurement Manager
Employee Benefits Division, Room 1106
New York State Department of Civil Service
Albany, New York 12239

RE: Proposal to Provide Actuarial and Benefit Management Consulting (ABMC) Services

Segal Consulting is pleased to submit this proposal to provide Actuarial and Benefit Management Consulting (ABMC) Services to the New York State Department of Civil Service (the Department) for use in the administration of the New York State Health Insurance Program (NYSHIP).

Segal is uniquely qualified to help the Department because we offer:

- **Unbiased Advice to Help the Department Control Costs:** The Department will benefit from our status as an independent firm without conflicts of interest. Unlike other firms, we do not sell “pre-packaged” solutions and outsourcing services. The Department has unique needs and challenges, and as an employee-owned company, our only objective is to use our expertise and experience to help you meet your goals.
- **Customized Insights for State Health Plan Sponsors:** We work with 27 other state plans and many other large public sector entities. This will allow you to receive insights and leading practices gained through our work across all these entities to help you address your issues and challenges.
- **Experience Working with Collectively Bargained Groups:** Segal is the leading benefits consulting firm in the country that works with collectively bargained groups. Our consultants understand the sensitivities and political climate, which must be carefully handled with employees’ bargaining agents. For example, we worked with the City of Philadelphia when labor and management were at odds over health plan design and funding. The bargaining parties formed a Joint Labor Management Committee to address medical cost challenges and we worked with the City and Unions to identify the medical risk factors in the population that were the primary medical plan cost drivers and provided recommendations regarding plan design and medical management.
- **National Resources with Local, Boutique Service:** I will lead the consulting team most of whom will be based in our New York City office along with Andrew Sherman, Segal’s National Public Sector Market Director and Kenneth C. Vieira, a senior actuary who works

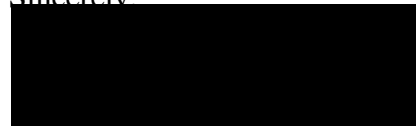
with other state health plans. I have been working with public sector entities in New York, New Jersey and Pennsylvania for over forty years.

- **Results-driven Approach:** Other similar public sector entities have received extensive cost savings for plans through our guidance. Examples of how we have helped clients contain costs and streamline administration procedures are detailed in our proposal.
- **Data Analytics and Predictive Modeling:** Segal's Health Analysis of Plan Experience (SHAPE) is a comprehensive medical data mining tool that helps entities strategize and make informed decisions. Segal's team of clinicians and analysts proactively monitor each client's data searching for trends or anomalies and inform clients of cost savings opportunities. When we find unexpected savings opportunities in one client, we often take the initiative to look across all clients explore if similar results might be achieved with other clients. In addition to savings, our analysis can help you get a better, more integrated view of your benefit coverages from a financial, operational, and clinical perspective. We expect the data summaries that we present will be helpful to discussions with the State's Labor-Management Committee.
- **Rigorous Quality Control and Quick Turnaround:** We provide accurate and on-time deliverables. Our intensive quality review process not only checks the accuracy of calculations but also analyzes the results to help decision-makers.

Our unbiased consulting advice, capabilities as a national firm with boutique customer service, and extensive experience with state health plans are three key differentiators that make Segal best matched for the Department's needs, and we would be honored to partner with you.

On behalf of our entire firm, we appreciate your consideration of Segal and look forward to the opportunity to share more with you on our capabilities. Please feel free to contact me directly at 212.251.5095 or lsinger@segalco.com with any questions.

Sincerely



Lawrence Singer
Senior Vice President

1. Corporate and Account Team Experience

1. EXECUTIVE SUMMARY

a. Required Submission

The Offeror must submit an Executive Summary outlining its overall program and its capacity to administer the Project Services outlined in this RFP. The Executive Summary must include

(1) The name and address of the Offeror's main and branch offices and the name of the senior officer responsible for this account;

Segal is headquartered in New York City and has 24 offices throughout the U.S. and Canada.

The address of our headquarters is:

Segal Consulting
333 West 34th Street
New York, NY 10001-2402
Phone: (212) 251-5000
Fax: (646) 365-3243

Most of the work that is described in this proposal will be performed in our New York City office.

Segal also has offices in: Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Detroit, Edmonton, Glendale, Hartford, Houston, Los Angeles, Minneapolis, Montreal, New Orleans, New York, Philadelphia, Philadelphia-Fort Washington, Phoenix, Princeton, Raleigh, San Francisco, Toronto, and Washington, DC.

Our National Compliance Practice and Public Sector Compensation and Collective Bargaining Practice are based in Washington, DC, although resources with expertise on New York requirements are located in our New York City office. Mr. Sherman is based in Boston and Mr. Vieira is based in Atlanta.

The senior officers for this account are:

Lawrence Singer
Senior Vice President
212.251.5095
lsinger@segalco.com

Kenneth C. Vieira, FSA, FCA, MAAA
Senior Vice President
678.306.3154
kvieira@segalco.com

(2) A concise description of the Offeror's understanding of the requirements presented in the RFP, the Department's needs, approach, and how the Offeror can assist the Department in accomplishing its objectives;

It is our understanding, based on the Request for Proposal (RFP), that the Department requests the following sets of deliverables, tasks and requirements:

- **Task #1: Premium Rate Development.** Support the Department in the development of funding requirements for the self-funded Empire Plan component programs.
- **Task #2: Quarterly Analysis.** Review and present an independent written evaluation regarding the Empire Plan vendors' annual experience projections and upcoming years' premium rate projections at the end of the first and fourth quarters of each calendar year.
- **Task #3: GASB 75 Valuation.** Perform actuarial valuations for New York State and produce reports in compliance with the requirements set forth by the Governmental Accounting Standards Board Statement No. 75 ("GASB 75") for New York State.
- **Task #4: Ad Hoc Consulting Services.** Provide a full range of ad hoc benefit consulting services both comprehensive and limited in scope when requested by the Department, generalized and specialized in nature and on an exigent or less urgent basis.

This proposal is designed to be fully compliant with the Department's RFP. We will accomplish this as we use our expertise and experience to optimize:

- The interface between NYSHIP staff and the various vendors engaged to service the Program and its participants. We will do this by focusing on (a) staffing and lines of responsibility, (b) system coordination and interface, (c) operational efficiency and effectiveness, as measured against best available practices, (d) contract compliance as well as a general review of contract terms to assure that typical requirements are included and (e) reasonableness of cost as measured against industry and peer group norms.
- The Program's (a) rate setting, (b) vendor expense factors (retention), (c) annual accounting and reconciliation, (d) employment of experience gains and losses in future rates, (e) internal risk sharing methods, including the use of family tiers, employer-type pools and/or regional adjustments and (f) compliance issues, including insurance and civil service law. The review will also focus on the benefit levels offered by NYSHIP as compared to other large public employers and industry standards.
- The ability of the Program to implement approaches to better control the Program's costs while improving participants' health and the customer service provided by the Program. This review will study the Program's benefit offerings, claims utilization and operations and, based on our activities with other clients and the industry's best practices, recommend changes that will accomplish the above objectives and likely be acceptable to participants and their collective bargaining agents as well as manageable by NYSHIP's vendors and other vendors and Program staff.

As we demonstrate in our proposal, we will accomplish this with the following approaches:

- Our Health Benefit Analysts, led by Dean Hatfield will meet with staff and vendor representatives to assess current rating practices and methods, which we will assess, based on our considerable experience in reviewing experience accountings, rate renewals and financial experience and budget projections. We will assess those practices and comment on the relative merits of current and proposed alternative approaches based on our experience with other large group insurance and multiple employer health plans.

- Our National Health Practice, led by Dr. Sadhna Paralkar, a physician with a strong background in public health data analysis; a pharmacist with significant experience in research on improving health while managing prescription costs; and a nurse with a strong background in managed care, will review current plan design, costs, utilization and participant demographics. They will apply their observations using an approach to care management that we call “Total Health Management” (THM).

The objective of this approach is to hold down the rate of medical cost increases over the long term by addressing certain root causes of medical cost escalation — consumer health habits, waste in the health care system, poor quality care and poor preventive care. This team will prepare a review and, in consultation with NYSHIP staff, develop a work plan to achieve certain of the goals identified in the report in an achievable manner that is likely to be acceptable to Program participants and their collective bargaining agents.

(3) A succinct statement that supports the Offeror has maintained an organization capable of performing the work specified herein this RFP, in continuous operation for at least the past three (3) years and that it has provided services comparable to the Project Services outlined in this RFP continuously during said period for the benefit of, at a minimum, three (3) governmental organizations with at least 100,000 in size;

Segal confirms it has maintained an organization capable of performing the work specified in the Department’s RFP in continuous operation for at least the past three years. Indeed, Segal has consulted to state and local governments and the federal government on their health benefit and retirement programs for over 60 years. We began working with our longest-standing state client, Hawaii, more than 50 years ago.

We also confirm that we have provided services comparable to the Project Services outlined in this RFP continuously for at least the past three years for the benefit of about 400 public sector plans many of which have 50,000 in plan members (which, for this purpose, we count as participating employees and retirees).

As requested, here are three Segal clients that have been clients for over three years and have over 100,000 participating employees and retirees:

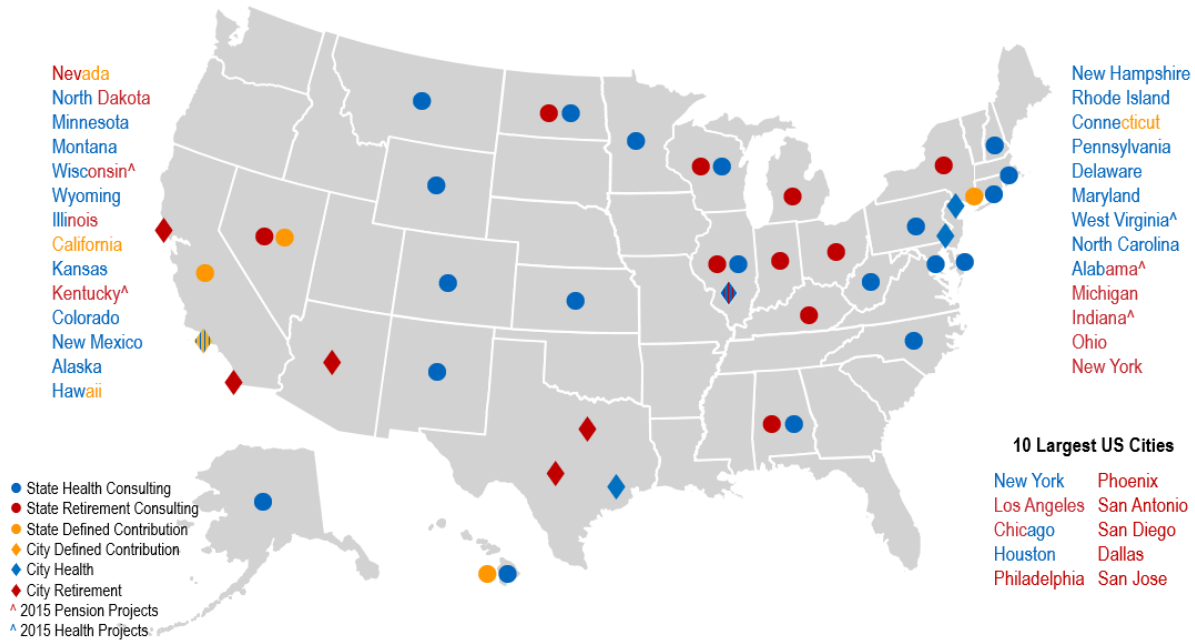
- Alabama Public Education Employees’ Health Insurance Plan
- North Carolina State Health Plan
- State of Maryland Health Plan

(4) A succinct statement explaining previous experience providing actuarial and benefits management consulting services to other governmental organizations administering health benefits programs and detail how that experience, in general and specifically in regard to the clients given as Client References in response to RFP Section III, qualifies the Offeror and, if applicable, any subcontractors, to perform the required Project Services;

Segal has consulted to state and local governments and the federal government on their health benefit and retirement programs for over 60 years. Our experience providing actuarial and benefits management consulting services to other governmental clients, including many large counties and special districts (such as school, water or transit districts), makes Segal uniquely qualified to provide the services outlined in the Department’s RFP.

Our experience extends not merely to the routine plan design, premium rate renewals, actuarial valuations and rate setting, but also to the special projects where state and local governments are exploring new options to meet new challenges.

The map below provides a snapshot of Segal’s current actuarial consulting work for governmental entities—including 27 current State-level clients and 10 major cities.



In New York, we have worked with large public sector health plans address the following issues:

- Plan design consulting
- Provider network analysis
- Vendor procurement
- Regulatory monitoring
- Assessing quality care programs
- Selecting disease management programs
- Developing performance based provider contracts
- Predictive cost modeling
- Network and prescription drug discount analysis

Our proposed team has also assisted:

- **New York City Transit:** Segal worked as co-consultant as New York City Transit conducted an RFP for their self-insured medical and hospital program, which has more than 100,000 participants with approximately \$600 million annual healthcare spend.

Result: The medical program moved to another provider while minimizing member disruption and developing a program for extended care coordination.

- **New Jersey Transit:** Segal conducted competitive bidding for more than 10,000 members for their self-insured medical/hospital, dental and prescription drugs.

Result: The Rx moved, saving money and increasing service. The medical remained with the incumbent, although they re-implemented and provided heavy service guarantees.

In addition, below are selected examples of the work Segal has completed—and the results we have achieved:

- **Pennsylvania Public Schools Employees' Retirement System – PSERS:** With the implementation of Medicare Prescription Drug coverage (Part D), PSERS was faced with a dilemma on how to maximize federal subsidies for members' Rx coverage. With no employer contributions to the plan, there was no opportunity to receive the Retiree Drug Subsidy (RDS). Segal recommended that PSERS apply to Medicare for a direct contract PDP, where the plan would provide Part D benefits to its retirees similar to commercial insurers.

Result: The application was accepted and PSERS has since saved its members almost half of the cost of the prescription drug program. Segal consults on all aspects of the PDP program.

- Segal was retained as PSERS' ongoing consultant and since has assisted the organization in conducting a number of competitive bid processes, including multiple pharmacy benefit manager bids, a bid for a national Medicare Advantage vendor, and a bid for a third party administrator. Segal provides ongoing claims auditing for the medical benefit programs. We provide all communications and marketing consulting for the program, including development of personalized annual option selection statements for all participants, public and secure website development and content and other special projects as requested.

Result: In addition to the comprehensive services outlined above, we have assisted PSERS in implementing a seniors' wellness and fitness program and are tracking the return on investment for that program.

- **North Carolina State Health Plan:** Segal completed a study of the North Carolina State Health Plan's "Ten Year Plan" for managing health care costs. Components of the study included:
 - A detailed analysis of alternative plan design elements being considered by the State Health Plan of North Carolina, including incentives, penalties, and value based features
 - A review of the ten-year financial forecast of medical costs
 - An evaluation of the impact of the Accountable Care Act on the Plan
 - A review of the impact of the current medical management and health promotion strategy
 - Recommendations to the State concerning their contribution strategy.

Result: Our guidance allowed state officials to consider a variety of strategies to modify plan design and refine medical management programs to improve member health, improve productivity and decrease medical trend.

West Virginia Public Employees Insurance Agency (PEIA): Segal has assisted the PEIA with procurements for PBM and wellness vendors. We provided full assistance with the development of the RFPs and assisted in the scoring of both the technical and cost proposals and facilitated finalist interviews and contract negotiations. The resulting contracts included performance guarantees that are projected to provide the Agency with significant savings while also enhancing vendor performance and contract compliance.

Result: The RFP generated \$28 million dollars of savings.

Georgia State Health Benefit Plan (SHBP): We assisted SHBP in issuing a Request for Approach (RFA) for medical, pharmacy, wellness, disease management, case management and Medicare Advantage (MA) benefits on a carved-in integrated basis. The team assisted in the development of the RFA and cost proposal evaluation. Under their leadership, the SHBP is projected to save approximately \$1 billion over the 5 year contracts. Segal also led a team in conducting a re-procurement of these contracts. The new procurement was structured so that SHBP will contract on a best-in-class approach, which resulted in different vendors being selected for different services: Medical TPA/Medicare Advantage, PBM and Wellness.

Result: These contracts are anticipated to reduce SHBP costs by more than \$200M annually.

Delivering Results

Segal works with states to address the key health issues many are facing, including:

- Rise of Chronic Diseases
- Aging Population
- Spiraling Pharmacy Costs
- Limited Revenue Growth
- Shrinking State Budgets
- Legislative Mandates
- Market Consolidation
- Numerous Constituencies
- Political Agendas
- Change to Federal Subsidies
- ACA Fallout
- Emerging Exchange Options
- New OPEB Statements (74 and 75)

The below summarizes the vast depth and breadth of state health issues in which we have assisted.

Project Description	NC	GA	PA	MD	IL	DE	WV	NH	AL	HI	NM	WI	CO	AK
Financial Projections	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IBNR	X		X	X		X		X	X			X	X	X
Funding Rates/Plan Cost Modeling	X	X	X	X	X	X		X	X	X	X	X	X	X
Legislative Support	X			X		X	X	X	X		X		X	X
Actuarial Rate Development	X	X	X	X	X	X		X	X	X	X	X	X	X
Data Analysis/Trends	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Participation in Meetings and Workgroups	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Procurement/Marketing	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Reporting	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Pharmacy Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HMOs/PPOs/FFS	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CDHP (HSA/HRA)	X	X				X						X	X	X
Medicare Advantage/Medicare Supplement	X	X	X	X	X	X	X	X	X	X	X	X		
Part D Consulting	X	X	X	X	X	X	X	X	X	X	X			
ACA Consulting	X	X	X	X	X	X		X	X	X	X		X	X
HIPAA Compliance	X		X	X		X		X	X		X		X	
Plan Design Review	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Wellness Plan Designs & Program Analysis	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Medical Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Contract Negotiations	X	X	X	X	X	X	X	X	X	X	X	X	X	X
OPEB valuation	X			X				X		X	X			X
Strategic Planning/Migration Strategies	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CAFR Support	X			X		X		X	X	X	X			X

Experience with Plans Subject to Collective Bargaining

Segal employs more actuaries and consultants who provide services to collectively bargained plans than any other firm in the country. Our long history of working with multiemployer plans in every industry will afford you a level of experience that is unparalleled. Currently, we provide actuarial and consulting services to approximately 1,500 collectively bargained pension and welfare plans nationwide.

(5) A concise description of the Contractor's full range benefits consulting services offering and experience addressing, at a minimum, the areas of:

Segal is a benefits, compensation and human resource consulting firm, providing professional services to a wide range of public sector clients in the following areas:

Health and Welfare Plan Consulting

- Medical, dental, disability, prescription drug and vision benefits plan design
- Vendor selection, contracting and management services
- Provider network access analysis
- Performance based contracting
- Total cost of care modeling
- Analytical support
- Discount analysis
- Design and selection of programs in:
 - Disease management

- Advanced primary care
- Quality care
- Wellness
- Valuation of retiree health plan liabilities and obligations according to GASB (Governmental Accounting Standards Board)
- Cost management strategies
- Financial forecasting and trend analysis
- Plan trend and industry benchmarking
- Plan administration and compliance strategies
- Quality performance standards

Compliance Consulting

- Preparation and review of plan documents, enrollment information, and participant correspondence
- Internal Revenue Code, state and local law, and GASB compliance
- HIPAA assessment, compliance and training programs
- SPD (Summary Plan Descriptions) review, drafting, and redesign

Administrative and Technology Consulting

- Review of strategic initiatives and business objectives
- Assessment of administrative processes, organizational structure, and operational technology
- Feasibility studies of administrative alternatives
- Process re-engineering
- Technology assessment, acquisition, and
- Implementation

Claims Audit Consulting

- Analysis of medical, dental, disability, vision, and/or prescription drug claims administration and transaction processes
- Assurance of financial and procedural accuracy in compliance with plan provisions and timeliness of claims adjudication
- Review of insurance carriers, third party administrators, and self-administered plans

Retirement Plan Consulting

- Defined benefit and defined contribution consulting
- Actuarial valuations and audits
- Supplemental savings plans 457, 403(b), 401(k)
- Deferred Retirement Option Plans and Partial Lump Sum Plans

Public Sector Human Resources Consulting

- Employee opinion surveys to support reward system design
- Customized rewards system design and implementation
- Customized compensation surveys and cost modeling
- Classification studies and job descriptions
- Job evaluation and classification analyses
- Collective bargaining support
- Human resources training

Communications Consulting

- Communications assessments, employee research, strategic planning
- Organizational change communications
- Compensation and performance management communications
- Personalized communications and benefit statements
- Web site content development and design

Investment Consulting (through our SEC-registered affiliate, Segal Marco Advisors)

- Asset allocation and investment strategies
- Asset/liability modeling (ALM)
- Manager searches
- Performance measurement
- Alternative investment research
- Fiduciary services
- Model portfolios
- MasterManagerSM
- Strategy-specific hedge fund portfolios
- Retire funds
- Specialty funds
- Defined contribution services
- Defined contribution vendor searches

In addition, our Compliance Department is available to help our clients and their attorneys deal with current and pending federal, state and local laws and regulations affecting employee benefit plans.

(6) A description of the activities the Offeror is proposing to undertake to begin or, in the case of the incumbent contractor should they choose to submit a Proposal, continue serving the Department as a client on January 1, 2018.

Based on the state's requests in the RFP, Segal would undertake to begin on January 1, 2018, the following:

- Support the Department in the development of funding requirements for the self-funded Empire Plan component programs.
- Review and present an independent written evaluation regarding the Empire Plan vendors' annual experience projections and upcoming years' premium rate projections at the end of the first and fourth quarters of each calendar year.
- Perform actuarial valuations for New York State and produce reports in compliance with the requirements set forth by the Governmental Accounting Standards Board Statement No. 75 ("GASB 75") for New York State.
- Provide a full range of ad hoc benefit consulting services, both comprehensive and limited in scope, generalized and specialized in nature and on an exigent or less urgent basis, to the full extent outlined in the RFP.

Upon being notified of our engagement, we will immediately commence the development of a consulting contract and HIPAA Business Associate Agreement. We do not expect this to take long, and we are prepared to promptly meet to establish the prior reports and baseline data that we need to perform the services. We, of course, understand that reports and data will not be submitted until all agreements have been finalized. Note that we will require certain historical information in conjunction with the initial rate setting. While the RFP's time line for setting rates effective January 1, 2019 is set to commence July 1, 2018, we will gather the historical information between the notice of our award and the actual task commencement on July 1, 2018. We have built capacity and budget into gathering this information between the date of the award and July 1, 2018.

(7) An explanation as to how the Offeror proposes to handle administrative responsibilities, such as the billing and invoicing of charges for services to the Department, including a description of how the Offeror will ensure only accurate and complete billing of charges are submitted to the Department;

Each employee is required to post time on a daily basis. We maintain a time keeping system that tracks time by client and matter. We envision establishing a separate matter for tasks 1, 2 and 3, and for each ad hoc project the Department requests of us. We will bill our time on a quarterly basis and maintain maximum fees for Task 1, 2, and 3 services in accordance with our price proposal. When requested to perform an ad hoc service, we may propose a maximum fee if we feel the scope can reasonably be anticipated. Regardless, our Financial Services Department provides monthly detailed billing reports to Mr. Singer. As the Client Relationship Manager, will assure the accuracy of the time postings. When we submit bills, we will document all time posted in a format agreeable to the Department noting 1) the names of individuals doing the work, 2) position, 3) hourly rate, 4) total hours on the entry (in fifteen minute increments) and a narrative of the work performed associated with the time entry.

(8) A description of the qualifications and experience of staff assigned to provide IT services in support of the Project Management Team's delivery of the required services and how they will interface with the Project Management Team to complete assignments and reports;

Segal's Administration and Technology Consulting (ATC) professionals have assisted organizations for over 30 years in the assessment of plan administration as well as the evaluation of third party administrators and service delivery systems. While we do not anticipate billing separately for the services of the following professionals, unless the Department requests an ad hoc service that will require their extensive involvement, that they will be an internal resource to the consulting team. Building in subject matter specialists into our engagement teams is an approach we regularly employ with the entities we serve. The qualifications and experience of our ATC team include:

Miriann Yoo

Vice President and Senior Consultant, New York

Project Role: Administrative Review Lead

- Expertise in all operational and organizational aspects of benefits administration
- Specializes in TPA searches, HIPAA compliance assessments, organizational/operational reviews and evaluation/redesign of administrative processes, employee benefit delivery systems
- Over 25 years of experience, including prior work for large TPA and insurance firm

Gisela De San Roman

Senior Consultant, Administration and Technology Consulting, New York

Project Role: Administration & Technology Expert

- Expertise includes HIPAA Security, HITECH assessment, network vendor searches
- Over 10 years of experience, including work in benefit administration software
- Certification in Project Management from New York University

Frank Tanz

Vice President and Senior Consultant, New York

Project Role: Administration & Technology Expert

- Expertise in a vast variety of emerging technology solutions and programs
- Over 20 years of experience, including prior role as Taft-Hartley fund IT Director
- MS in Software Engineering, BS in Information Systems from Villanova University

These team members will interface with the Project Management team as needed to complete assignments and reports to the full satisfaction of the Department.

(9) An overview of the Offeror's IT system and programming capabilities and its capacity to accept data from and exchange data with the Department and Empire Plan vendors/contractors, including a description of security measures used to ensure privacy and confidentiality of data is maintained

Capabilities

Our IT staff, which is separate from the ATS group described above, is an in-house department of 45 technology professionals, headquartered in New York and on-site in offices across the country.

Data Exchange

Our IT team has experience in data acquisition, ETL protocols and the latest methodologies for storing data in a manner that is easily accessible to our actuaries so they can assist you with your needs. We are fully capable of accepting data from and exchange data with the Department and Empire Plan vendors/contractors.

Security

Segal has strict protocols to ensure security for the sensitive data of our clients. We review audit and system activity logs for systems that create, receive, maintain, or transmit PHI, PII, C-PI, or other confidential data for any potential security breach.

Segal backs up all server data nightly to guard against security breaches as well as technical and hardware issues. In addition to the incremental back-ups that are performed daily, full backups are performed each week to ensure that our data is as current as possible.

Tapes are stored off-site by a data-warehousing vendor in a secured, environmentally-controlled facility. Backup integrity checks are performed on a regular basis and backup tapes are routinely recalled. Complete restoration of file servers from backups is regularly performed on a test basis.

All Segal staff members have a unique user ID and password that allows access to network resources as appropriate for the performance of their jobs. The system requires periodic password changes. Connecting to the network through the Internet requires passing additional levels of authentication. Transmission of protected or sensitive data is accomplished through the use of industry standard encryption solutions. In addition to physical security and access security measures, The Segal network is protected from external intrusion through industry standard firewalls and encrypted remote access solutions.

Segal continuously assesses potential risks to PHI, PII, C-PI, or other confidential data, and evaluates the effectiveness of implemented mitigating controls. In addition, third parties are engaged on at least an annual basis to conduct Risk Assessments and Vulnerability and Penetration Testing to identify and evaluate security risks and vulnerabilities and effectiveness of existing mitigating controls. Results of periodic internal Practice Level Audits, General Controls Audits, and Penetration Testing are evaluated and incorporated into the Risk Assessment process where applicable.

(10) A description of any additional services/benefits that the Offeror provides its customers, including the Department if the Offeror is selected, at no additional charge, e.g., newsletter, white papers, etc.

At no additional charge, you will have access to firm-wide research and expertise—from Segal compliance and legislative teams who create and distribute updates detailing legislation that affects your plan, to publications and informative webinars that explain benefits developments, to survey results sharing industry data and cost saving benchmarking information.

We will help the Department identify and monitor pertinent legal and regulatory developments through daily review of specialized trade publications and research critical state and local regulatory matters as necessary.

Segal communications are routinely provided to clients at no charge and include:

- *Update*, which summarizes important developments affecting health benefit plan compliance for public sector plans. Recent issues of *Update* include:
 - [*New Summary of Benefits and Coverage \(SBC\) Requirements*](#)
 - [*GASB's Updated Accounting Standards for OPEB*](#)
- *Public Sector Letters* and *Data* that discuss creative benefit planning options. Recent examples include:
 - [*Double-Digit Rx Benefit Cost Trends Projected for 2017*](#)
 - [*Survey Finds Concerns about GASB's OPEB Accounting Changes*](#)
 - [*Study of Medicaid Savings from State Retirement Savings Options for Private Sector Workers*](#)
- Free seminars for our clients to discuss current topics of concern and new legal and regulatory requirements. Recent examples include:
 - [*Why Rx Costs Are Increasing and What Plan Sponsors Should Do*](#)
 - [*GASB Game Changer in OPEB Accounting and Reporting for Public Employers and Plans*](#)



2. ACCOUNT TEAM

The Department expects the successful Offeror to have in place a proactive, experienced Project Manager and an experienced team who have the authority to coordinate the appropriate resources to implement and administer Project Services.

(1) The Offeror must have a knowledgeable, experienced project management team in place that has the responsibility, authority and integrity to administer, manage and oversee all aspects of the required Project Services during the entire term of the Contract,

(2) Designate a single account executive (“Project Team Leader”) accountable to the Department and responsible for ensuring that the needs of the Department are met,

(3) Be able to maintain and adjust staffing patterns at appropriate levels to provide services as requested by the Department,

(4) Ensure that all activities associated with Tasks 1, 2, 3, and 4, as applicable will be overseen by an individual certified as a Fellow in the Society of Actuaries (“FSA”),

(5) Notify the Department in writing of changes in key project management team personnel, and

6) Notify the Department of any actual or anticipated events impacting the delivery of Project Services and present options available to minimize or eliminate the impact of those events on the delivery of Project Services.

Segal confirms that we meet all of the requirements described above regarding the account team.

b. Required Submission

(1) Provide an organizational chart and narrative description illustrating how the Offeror proposes to administer, manage, and oversee all aspects of the Projects. Complete RFP Exhibit III.A entitled Project Team Roster listing the Offeror's proposed key project management team members, including Key Subcontractors, if any. The Offeror should also complete and submit RFP Exhibit I.B, entitled, "Biographical Sketch Form" for each proposed key project management team member. Where key individuals are not named, include qualifications of the individuals that you would seek to fill the positions. Include the following:

Please refer to C: Organizational Support and Experience for the above-requested information on key project management team members and their biographical information. Segal is not proposing any subcontractors for this engagement.

(2) Describe the experience of the individual who will assume the role of Project Team Leader. Include a description of the individual's experience with clients similar in size and scope of the Department.

We have considered the Department's needs. As we do with other major client relationships, we will staff this consulting assignment with three senior company officers, each of whom will have their own basic responsibility and all of whom will be available at all times to the responsible parties at the Department.

The **Project Team Leader** will be Kenneth C. Vieira, FSA, FCA, MAAA, Senior Vice President and Consulting Actuary. Mr. Vieira serves as Public Sector Market Leader for the firm's East Region and is a member of the firm's Public Sector Leadership Group and East Management Team. Mr. Vieira has extensive actuarial and consulting experience in strategic consulting, benefit plan design and evaluation, financial forecasting, trend analysis, risk profiling, new product design, plan rating, premium rate development, data analytics, retiree medical, statistical modeling, and other medical management programs. Mr. Vieira has extensive actuarial and consulting experience in strategic consulting, benefit plan design and evaluation, financial forecasting, trend analysis, risk profiling, new product design, plan rating, premium rate development, data analytics, retiree medical, statistical modeling, and other medical management programs.

Mr. Vieira's clients span a variety of public sector entities, including Medicaid agencies, school systems, community health departments, medical affairs, state health plans, and CMS. Mr. Vieira's public sector clients include:

- North Carolina State Health Plan
- Alabama Public Education Employees Health Insurance Plan
- Illinois Central Management Services
- State of Minnesota

- State of Wisconsin Employee Benefit Trust Fund

Mr. Vieira will work with Mr. Hatfield, Dr. Paralkar and Mr. Frias and the core service team. He will supervise the three defined service sets in the Department's RFP and the various ad hoc consulting assignments the Department may ask Segal to undertake. Based on his experience with other state systems, he will provide professional oversight and advise the Department of achievable best practices in both goals and production techniques as tasks are planned, executed and delivered. He will be accountable to the Department at all phases of production and his involvement will ensure that the needs of the Department are being met.

The **Client Relationship Manager** will be Lawrence Singer, Senior Vice President. Mr. Singer has more than 40 years of experience at Segal. He is currently responsible for all aspects of service and delivery to many large public sector clients in the New York region. Current public sector clients include:

- Philadelphia Fire Fighters Health Plan
- Law Enforcement Health Benefits Plan (Philadelphia)
- State Wide School Employees Cooperative Plan
- Orange Ulster School Employees Health Plan
- Suffolk School Employees Health Plan
- Rensselaer Columbia Greene Health Insurance Trust
- East End Health Plan
- United Federation of Teachers Welfare Fund
- Professional Staff Congress CUNY Welfare Fund

Mr. Singer will also work with Mr. Hatfield, Dr. Paralkar and Mr. Frias and the core service team. His fundamental responsibility will be to make sure that both the three defined service sets in the Department's RFP and the various ad hoc consulting assignments the Department may ask Segal to undertake are:

- properly understood by all parties (including appropriate Department personnel, vendors and the Segal service team),
- data is properly transferred,
- production stays on pace,
- deliverables are timely and valid and
- billings and other business elements of the relationship are properly managed.

He will be accountable to the Department at all phases of production and his involvement will ensure that the needs of the Department are being met.

In addition, Andrew Sherman is Segal's **National Public Sector Market Director**. He is based in both the Boston and Washington, DC offices. He has over 30 years of experience with Segal as a benefits consultant working with plan sponsors on a wide range of employee benefit issues and opportunities including plan design, benefit strategies, funding, and plan management. Mr. Sherman has managed the consulting practices for the firm's Boston and Hartford offices, and he served as a member of The Segal Group's Board of Directors from 2007 to 2016.

Mr. Sherman has been widely quoted in both the benefits press and general press, including the Boston Globe, The New York Times, and The Wall Street Journal. He has written several articles on employee benefit issues. Mr. Sherman has spoken on these issues at several universities, for the Massachusetts Bar Association, and at numerous employee benefit seminars and national conferences. He has also testified before the Massachusetts State House and the Boston City Council.

Recent publications and presentations include:

- “Redesigning Retiree Healthcare in the Public Sector,” IFEBP Public Sector Benefits Institute, February 2017
- “Health Cost Trends: What’s Expected for 2017 and What Can Plan Sponsors Do About It?,” National Labor and Management Conference, February 2017
- "Assessing ACA's Big Issues - Grandfathered Status and the 40% Excise Tax," National Labor and Management Conference, February 2016
- "The 40% Excise Tax Under the Affordable Care Act: The Tax that No Plan Sponsor Wants to Pay," Segal Consulting webinar, September 2015
- “Getting Ready for New ACA Reporting Requirements for Sponsors of Multiemployer Plans” Segal Consulting webinar, July 2015
- "Navigating Your Plans for the 2018 ACA Excise Tax and other ACA 'To Do's,'" 38th Annual National Labor & Management Conference, February 2015
- "The Cost of Healthcare - Highlights from the 2015 Segal Health Plan Cost Trend Survey," Segal Consulting webinar, November 2014
- "Affordable Care Act and the Employee Shared Responsibility Penalty," Segal Consulting webinar, May 2014
- "Industry Strategies in the ACA Environment," IFEBP Health Care Management Conference," April 2014
- “Self-Funding Health Benefits Can Help Plan Sponsors Control Costs,” Dean C. Hatfield and Andrew D. Sherman, Benefits & Compensation Digest, August 2009
- “Connecticut Licenses Same-Gender Marriages,” Joanne L. Husted and Andrew Sherman, Benefits Law Journal, Summer 2009

Mr. Sherman’s primary job is to make sure that the firm’s public sector clients are being properly serviced. If we are engaged by the Department, Mr. Sherman will solicit the Department’s feedback from time to time to make sure that this is the case as well as attend at least two meetings each year with appropriate personnel at the Department.

(3) Confirm that the Project Team will be readily accessible to the Department. Describe where the Project Team will be located.

We confirm that the core project team will be readily accessible to the Department. The New York City-based actuarial and consulting team is supported by our national Research and Compliance team that is based in Washington, D.C. You will also be served by New York City-based professionals who have specialized knowledge of New York State regulatory requirements. Other professionals that will support the services, such as professionals in our

Communications and Administration and Technology Consulting Practice are also based in New York. Mr. Sherman is based on Boston and Mr. Vieira is based in Atlanta.

(4) Provide:

(i) a description of how the Offeror proposes that the Project Management Team will successfully handle the four (4) tasks (including an indication of the percentage of time, by team member, dedicated to the project and a task(s), manage the Department's account; and interface with the Department in its delivery of Project Services;

Given both the large size and complex needs of NYSHIP, we are proposing a core team of 16 professionals to be dedicated to assisting the Department. We can assure you that due to our careful planning, the selected team members we have assembled for this proposal are fully available to the Department and will work closely to address both the immediate and long-term needs of the Program. As noted above, each core service team member has sufficient capacity to perform their role in providing the services described in this proposal.

The Client Relationship Manager, Lawrence Singer, will oversee the relationship by monitoring workflow, introducing other advisors as needed and periodically communicating progress to the Department. To the extent that additional resources are needed because of a task's exceptional complexity, unanticipated time requirements, unexpected staff issues or any other reason, Mr. Singer will obtain them and see that projects stay on pace.

Mr. Singer will closely monitor the workload of each team member to ensure they have capacity to meet the Department's expectations. Specifically, he will assess staff's availability to adhere to our high standards for quality work, balanced against the need to meet tight deadlines and be flexible enough to shift gears for the inevitable, unexpected challenges that crop up in the course of client engagements.

The Project team Leader, Kenneth C. Vieira will oversee the design, execution and delivery of the three defined and various ad hoc tasks to assure all parties that achievable best practices are being obtained at all phases of a task's design, production and delivery. Mr. Vieira will also keep the Department updated on any issues that arise in the industry that may be of interest and have an impact on NYSHIP.

In addition, Andrew Sherman is Segal's National Public Sector Market Director. His fundamental job is to make sure that all our public sector clients are being properly serviced. Mr. Sherman will always be available to the Department's leadership and will attend at least two meetings a year to monitor progress and obtain the Department's feedback.

Segal has numerous ways of interfacing with the Department in our delivery of project services. While our communication style will be customized to the Department's needs, key elements we recommend employing in this relationship are:

- **Service Action Plan:** Our project planning process ensures that key milestones are identified well in advance. We will create a calendar for ongoing plan management services that reflects your priorities and budget cycle, and assures the timely delivery of our services and coordination with service partners.
- **Conference Calls:** To monitor and update our project plan and to report progress, we will conduct monthly conference calls with all interested parties within the Department, service

vendors (as needed) and Segal. During initial months, these calls might take place weekly. Once we are up and running, we would reduce the frequency of these calls to monthly. In addition to regular calls, Mr. Singer will be available throughout at any time.

- **Quarterly Meetings:** We suggest that regularly scheduled quarterly meetings be used to review plan utilization, claims experience, financial performance, project deliverables and to discuss work in progress and upcoming work.
- **ExtraNet/ProjectNet Portal:** For the Department and Segal to share confidential data, reports and exchange information related to our work together. The portal can house contact information, project plans, deliverables, project data, etc.

(ii) a description of the process by which the Offeror proposes to provide notification to the Department of actual or anticipated events impacting the delivery of Project Services and the presentation of options available to minimize or eliminate the impact of those events on the delivery of Project Services;

At the outset of our engagement with you, we will establish standard routings or distribution lists for the various project deliverables. We will gather telephone numbers and e-mail addresses for all stakeholders, and provide all project participants with telephone numbers, and e-mail addresses of all Segal staff assigned to the project. We will frequently ask your staff what issues are causing them concern and Segal will be constantly available to hear—and expediently resolve—any issues relating to the services we provide.

(iii) a description of how the Offeror proposes to provide additional resources, should the need arise, from within the organization and/or from a third party;

Should our staffing abilities change due to unforeseen circumstances, we can assign additional resources from within the firm, as we have a large practice that specialized in public sector plans.

As a full-service firm with all resources in-house, we do not expect to require consulting resources beyond our staff to satisfy the services cited in the proposal.

(iv) for those positions for which an individual(s) has not been named at time of Proposal submission, a description of how the Offeror proposes to recruit the person(s) to fill the position;

Segal has sufficient professional resources to fully staff the project and services described in this RFP. We also fully expect to maintain continuity as services are performed as we discussed in our response to other preceding and following questions.

(v) a description of how the Offeror proposes to recruit replacement personnel, should one or more Project Management Team members leave during the term of the Contract; and

In the event that a need arises to replace a team member with another colleague due to circumstances beyond our control, we will discuss the situation with our client. It is Segal's policy to reassign core team consultants only with the client's consent.

(vi) a description of the steps that will be taken to ensure the continuity of Project Management Team members throughout the term of the Agreement.

Segal is proud to have exceptionally low turnover among its professional staff. We have assigned 16 core team members, including two senior managers and the National Public Sector Market Director, to ensure that the Department will always have an experienced and knowledgeable member servicing them should there be any turnover. We will maintain all documents and communication in a central library so that if a new team member joins the team, they will have access to all prior documentation and can be brought up to speed quickly.

(5) Provide reporting relationships and the responsibilities of each key position of the account management team; and how the team will interact with other business units or functional areas within the Offeror's organization. The Offeror must include the percentage of time (by position) dedicated to the Program and reporting relationships. Describe how the account management team interfaces with senior management and ultimate decision makers within the Offeror's organization;

Please refer to **C: Organizational Support and Experience** for a chart illustrating the reporting structure within your Project Team. Segal is organized as a matrix along geographic, practice and market lines. As noted above, the Department will have direct access to Andrew Sherman, our National Public Sector Market Director whose fundamental responsibility is to make sure all our public sector clients have access to best practices and are being properly serviced. Technical work will be managed by Segal's various practice leaders whose services the Department will need. For example, Dr. Sadhna Paralkar is our Medical Director and she and Dr. Steven Wolff from our Pharmacy Practice will serve as clinical resources to the consulting team. The health analytical work will be supervised by Dean Hatfield, our New York Health Practice Manager. He is supervised by, and works closely with, Edward Kaplan, our National Health Practice Leader. Similarly, Aldwin Frias, one of our senior actuaries will manage the production of the GASB 75 valuation. He is supervised by, and works closely with, Stuart Lawrence, our National Retirement Practice Leader.

Further, while we do not anticipate billing separately for the services of professionals in our Compliance or Administration and Technology Consulting Practices, unless the Department requests an ad hoc service that will require their extensive involvement, they will be an internal resource to the consulting team. Following the resumes of the core service team in C: Organizational Support and Experience is a general discussion of all of Segal's practices and the tools those practices employ.

2. Project Services

The Offeror must demonstrate its capacity to deliver the required Project Services described in Section IV of this RFP.

1. Project Task #1 - Premium Rate Development

a. Duties and Responsibilities

Currently, each year, the Department develops Empire Plan premium rates based on recommendations made by the Empire Plan vendors for each of the Plan's component contracts, specifically the Empire Plan's Hospital, Medical; Mental Health and Substance Abuse and Prescription Drug contracts. These rates are subject to the approval of the New York State Division of Budget ("DOB"). Since Empire Plan is self-funded, the Department seeks assistance from the Contractor in the review of the reasonableness of the vendors' rate recommendations ("Task #1"). During the term of the Agreement, one or more of the Empire Plan contracts may be merged into a single contract.

Rate analysis to be performed by the Contractor shall focus primarily on each vendor's projected aggregate experience and the justification provided by the vendors to support their trend projections and/or premium recommendations. As part of this task, the Contractor will also evaluate the costs and/or savings associated with any Plan revisions, which may be implemented in the coming Plan Year.

Exhibit II.E entitled, "Sample Vendor Rate Renewal Report" provides the table of contents for the Empire Plan Medical vendor's typical rate renewal request and Exhibit II.F entitled, "Standard Empire Plan Vendor Reports" lists the titles of the standard reports received from each of the four (4) Empire Plan vendors throughout the year.

During the term of the Contract, the Contractor shall:

(1) Submit a Task #1 work plan to the Department prior to the beginning of the rate renewal process for the upcoming Plan Year. This Task #1 work plan must be submitted to the Department not later than July 1 and it must be acceptable to the Department. The first Plan Year under the Contract will begin on January 1, 2019, and, as such, the first Task #1 work plan under the Contract is due on July 1, 2018;

(2) Submit to the Department the Contractor's independent premium rate estimates not later than August 31 of each year of the Contract;

(3) Review and provide a written evaluation of the Empire Plan vendors' rate proposals. This will include a review of all factors used by the vendors to determine premium requirements including, but not limited to, projected paid and incurred claims, vendor retention, and any deficit recoupment load. A preliminary report will be due on September 20 with the final written report due on October 15 unless extended by the Department;

(4) Provide written commentary on the Empire Plan vendors' premium rate development and projections to the Department;

(5) Support the Department in its analysis of the Empire Plan rates submitted by the vendors, including attendance at and participation in meetings over a two-day period as deemed necessary by the Department;

(6) Assist the Department in presenting rate proposals to GOER, DOB, the Joint Labor Management Committee, and other entities, as the Department deems necessary. At least one (1) all day presentation meetings are anticipated annually as part of the Rate Renewal process. (Note: While the Contractor may be called upon to make presentations to or brief other NYS entities involved in the NYSHIP, the Department's EBD is the "client," and as such, the Contractor will contract with and be accountable to DCS' EBD staff.);

(7) Support the Department by providing comparative analyses, as requested, using data of other large employers;

(8) Submit a final written report with recommendations on the proposed rates (i.e., the final "Benefits Management Consultant Final Report and Recommendations" report);

(9) Ensure that principal project staff is available to EBD management for ad hoc discussion of any aspect of Task # 1 throughout the Rate Renewal process; and

(10) Participate in and adhere to the following Rate Renewal process and cycle.

Segal confirms that we meet all of the requirements described above in subsection (a), "Duties and Responsibilities."

b. Required Submission

Submit a work plan that demonstrates your ability to deliver Task #1 Project Services as described in the Duties and Responsibilities above. The outline should include the following:

(1) A detailed description of the steps, factors, and required staff resources.

(2) The number of individuals per title and total number of hours per title using the Position Titles set forth in RFP Section V– Assumption #6 in your work plan. Please note that the projected total number of hours per Position Title per year as set forth in the Offeror's work plan must match the total number of hours per Position Title per year as set forth in the Offeror's Exhibit V.A Form 1 submission.

(3) A timeline with specified start dates based on number of Business Days, of the major milestones and interim activities for completion of the Task and related activities (e.g., attendance at meetings with the vendors).

Task #1 Work Plan

The premium equivalent renewal process requires careful timing for receipt of data, analysis, and negotiations so that claims and other associated data are as current as possible and yet the negotiations are complete and the contribution rate(s) settled prior to the contract renewal date. It also requires current knowledge of healthcare cost trends, competitive levels of retention, margin (if any), and risk or pooling charge (if any); achievable discount levels for managed benefits; and accurate measurement of the value of plan design changes, if such changes are being considered.

Following is a brief description of the steps, factors, resources, and other information for this process:

Steps

The proposed steps reflect an approach that we believe is thorough but efficient and that helps ensure fair and competitive premium equivalent rates. It also hopes to produce negotiations over vendor expense loads (retention) that are equitable and competitive, not contentious. While the approach outlined below is one that we have used successfully with other clients, we understand that protocols and precedents are in place already with the Department, its current actuary, and NYSHIP vendors and that those protocols and precedents may guide or influence the process in the future. We are prepared and able to proceed under any reasonable and appropriate approach.

- **Initial Meeting:** Depending upon the relationship between the Program and the various vendors who service it, we suggest beginning the annual rate renewal process with a meeting between responsible parties at the Department, Segal, and each vendor (individually). At this meeting, we will discuss evolving experience, prospective trends, margins, and retention/expense requirements, as well as to review and agree upon a project schedule to which all parties will adhere. This “kick off” meeting helps to identify likely areas of agreement and disagreement between the vendors and us so that we may focus our attention and analytic effort at those areas that likely will be the areas of most intense negotiation. *We suggest scheduling vendor meetings in early August.*
- **Data Collection:** Triangulated (i.e., monthly paid claims by incurred month) claims data and summarized participant data are key items required to develop an independent projection of future claim costs. The data may be available from regular quarterly analysis (Task 2). In addition, we will request updated claims and enrollment data, if appropriate, as well as trend rates and their justification, retention and margin and their justification, the value of plan design changes and its justification, and worksheets for reserves, dividends/surpluses, and other rate renewal components, similar to the information described in the sample call letter included in the RFP. *The data collection process has two parts:*
 - (1) claims/enrollment data required for our initial independent premium rate projection will be on hand from regular quarterly analysis, and will not require additional time to collect or organize;
 - (2) detailed renewal information from vendors, including updated claims/enrollment (if possible/practical), trend rates and their justification, retention and margin and their justification, the value of plan design changes and its justification, as well as worksheets for reserves, dividends, and other premium renewal components, should be presented as available before renewal premiums are presented by the vendors in early September. We will incorporate these data into our analysis upon receipt.
- **Independent Premium Equivalent Rate Requirement Calculation:** We will prepare an estimate of the coming year’s required premium based on available claim and enrollment data, information about retention/expense, reserves, and other rate components from the prior year’s renewal, information gleaned from our initial, pre-renewal meeting with vendors, and our own data about emerging cost trends. This rate development will serve as a benchmark against which we will be able to measure the vendors’ renewals when they are presented in early September. We use rate renewal templates that allow us to modify assumptions, as

needed, as more information about retention/expense and other non-claim components of rates are received, and to identify the exact areas (and size) of any differences between vendors' renewals and our independent projections. *Our development of an initial independent premium equivalent estimate will require approximately 20 days, and will be designed to permit us to present an initial premium equivalent estimate to the Department by August 31, reflecting all information received to date.*

- **Vendor Renewal Analysis:** We will conduct an in-depth analysis of vendors' renewals upon receipt in early September. This analysis will identify specific areas where our independent rate projections and the vendors' renewals differ, and will allow us to reconcile both data issues (e.g., actual claims and enrollments used) and assumptions (e.g., trend rates, value of plan changes, retention/expense factors and reserve factors). We will prepare a brief report for the Department articulating and quantifying discrepancies between vendors' proposals and our independent measurements, indicating areas where we may have updated or modified our measurement based on additional information received. During this phase of the analysis, we suggest identifying reasonable ranges for key assumptions (such as trend) and preparing premium equivalent estimates based on assumptions in these ranges. This additional level of analysis will help us and the Department address most efficiently those components of vendors' renewals that warrant more intensive negotiations, versus those for which our estimates are vendors' both fall within a reasonable range and are competitive. *The vendor renewal analysis will take place during the first ten business days following receipt of vendors' renewals.*
- **Finalize Rates; Prepare Report:** During the balance of September and in early October, we will work with the Department to develop final rates, using our rating worksheets and underwriting and other analytical tools to modify and update premium equivalent projections. Once the Department is satisfied with rates, we will prepare a findings report that will include the final proposed rates, underlying assumptions and their justification, and a chronology of the renewal analysis and negotiation process, highlighting key issues during the process and including information about the motivation and rationale for all factors contributing to the final proposed rates. *Timing for the negotiation and report-writing processes will depend in part on the Department's negotiation schedule; we anticipate that the process will require approximately ten to 15 business days of devoted effort, assuming full cooperation by all vendors.*

Factors

Many factors need to be considered in the rate renewal and negotiation process. As analysts and actuaries, our principal focus will be on providing a sound, defensible analytic foundation from which negotiations can be conducted and any required alternative measurements can be made. These factors include:

- **Claims:** We prefer triangulated data (as defined above), though we can work with more detailed data (e.g., raw individual claim data) or more summarized data (e.g., monthly paid claims summaries). If possible, claims should be provided separately by claim type (hospital, major medical, prescription drug, and other sub-divisions, if available). Large claims should be parsed from the data and reported separately.

- **Reserves:** Paid claims must be converted to incurred claims prior to projecting the coming year's costs. Using triangulated data, we develop reserve estimates from empirically derived completion factors using a proprietary reserving spreadsheet that has proven to be an extremely accurate and reliable predictor of claim runout and an invaluable tool in renewal calculations. In the absence of triangulated data, we use other assumptions, tools, and conventions to estimate reserves and to audit vendors' reserve estimates.
- **Cost trend:** An empirical understanding of recent past trend is required to bring historical claims data to the present. An understanding of how costs are expected to increase in the coming year is required to prepare an accurate estimate of claims for premium renewal period. We reconstruct historical trend by application of actuarial principles and algorithms to actual claims. These are compared with information available from proprietary sources, vendor disclosures, and public sources. In order to determine appropriate trend rates for the coming year, we use our annual *Segal Trend Survey*, a predictive survey of major health carriers. Survey findings are adjusted based on past years' observed variances between anticipated and realized trend. We suggest evaluating and trending costs separately for different major cost components (e.g., hospital, prescription drugs).
- **Claim fluctuation margin:** Although the size of NYSHIP is such that an (academic) argument may be made for the exclusion of claim fluctuation margin in premium equivalent development, the custom of including such a margin has been retained by even the largest health plans, in our experience. We can opine on the appropriate size of the reserve using proprietary statistical models that measure claim fluctuation based on the size, stability, and diversity of a covered population.
- **Value of design changes:** The addition or elimination of benefits, or proposals for benefit modifications, will affect Program cost and must be incorporated into renewal calculations. We use a proprietary underwriting tool developed to our specifications and specifically designed to meet our needs as health benefits analysts. This tool is used to measure the value of plan design changes, and complements other measurement tools for design changes (e.g., data requested of and provided by vendors for specific benefit changes being contemplated).
- **Demographic and other related changes:** As participating agencies join or withdraw from the Program, subtle changes in the overall composition of the group—related to demography, geography, or other factors—may affect the Program's cost basis, and should be adjusted for in renewal analysis.
- **Risk charge:** A program the size of NYSHIP does not require a specific risk charge or stop-loss arrangement. If the Department and the vendors have agreed to the inclusion of such a charge in the development of premium equivalent rates, we will assess the size of the charge and audit its accurate inclusion in the renewal rating process.
- **Interest credits:** To the extent that vendors hold all or a portion of the claim reserves or in any other way steward Program funds, we will review the rules that determine how interest is charged or credited and audit their accurate application.
- **Settlements:** The process by which Program experience is retrospectively reviewed and settled is a key component in the overall financial stewardship of the Program. We will

evaluate surpluses/deficits or other settlement items either as part of the renewal and negotiation process, or as an independent analysis.

Resources

“Resources” required for the premium renewal and negotiation process fall into three categories: personnel, data, and tools.

- **Personnel:** We presented our proposed core team and resource group in this proposal. In assembling the core team, we have been mindful of the various skill sets and levels and types of experience required to ensure expert, timely, efficient, rigorous, and insightful work for the Department. Core team members will be committed to the Department and our work for NYSHIP.

The vast majority of hours required for Task #1 will be for the core team. However, should the need arise, the team has at its disposal any or all of the additional resources listed in this proposal. Our anticipated mix of hours by position will vary slightly by year, but is shown in the chart below along with the number of core team members at position title.

Position Title	# of Individuals on Core Team	Year 1	Year 2	Year 3	Year 4	Year 5
Principal	3	3	3	3	3	3
Lead Consultant	2	2	2	2	2	2
Consultant	4	4	4	4	4	4
Analyst	3	3	3	3	3	3

- **Data:** Data may be organized in three broad categories:
 - Claims data
 - Census data
 - Plan data

Our role advising the Department and providing support in vendor negotiations is complemented by—and grows from—our role as analysts with unique experience and market knowledge of both health plans and public sector programs and with a high level of expertise in the evaluation, analysis, and interpretation of health care cost and demographic data. Data provide the key to informed, fair premium development and cost projections. Ideally, we will collect and use detailed information about paid and incurred claims and large claims for different basic benefit types (e.g., hospital, surgical, prescription drugs).

In addition to claim data, detailed census or demographic data will allow us to interpret and predict changes in the size or composition of the covered population that will further improve our ability to measure and monitor plan costs. We can work with either summarized census data (e.g., enrollment scatters by age, sex, coverage tier, covered group, region, etc.). Ideally, detailed census data with basic information for each covered individual will allow us to make customized “cuts” of the population for both routine and *ad hoc* analyses. Complementing census data, we generally request basic monthly enrollment statistics from vendors to audit consistency between the detailed census and vendors’ understanding of the population they are covering.

Plan descriptions will allow us to most thoroughly understand detailed benefit provisions and most accurately model benefit changes.

- **Tools:** In order to ensure a high and consistent level of quality in our analytical work, we have developed—under the auspices of Segal’s National Health Practice—tools, models, and software programs, and have established protocols, processes, and quality standards so that work is done at the highest level of both accuracy and efficiency. Our tools include:
 - A **claim cost analysis** tool that applies sophisticated actuarial and underwriting logic to claims and enrollment data and, where appropriate, blends actual plan experience with manual rates derived from our underwriting tools. The assessment of the statistical credibility of actual claims data incorporates information about the size and concentration of the covered population and the period for which data are available.
 - A **reserve analysis** tool that applies actuarial algorithms to triangulated claim data to derive completion factors and compute reserves for incurred by unpaid claims.
 - Various **pricing** tools:
 - **Medical Pricer:** This proprietary software uses detailed information about benefit provisions, together with information about the size and demographic composition of the covered population, to develop manual premium rates. The tool’s sophisticated methodology incorporates all types of demographic information, including industry and area codes, to ensure accurate rates. This tool is most useful in claim and cost analyses for small and mid-size clients, but has also been invaluable even to our largest clients for measuring the value of proposed changes in plan design and for providing “benchmark” rates against which experience rates can be compared.
 - **Prescription Drug Pricer:** This tool allows us to measure absolute and relative values of alternative prescription drug plan designs, including all types of both managed and unmanaged plans. The tool makes appropriate adjustments for anticipated changes in utilization associated with benefit design changes.

All of our pricing tools are updated regularly to ensure that calculations are based on recent data and reflect our most current and accurate understand of recent past trend rates.

- **Valuation** tools that are used to measure accounting obligations and expense under financial accounting standards applicable to postemployment and postretirement health and welfare benefit programs.
- A **stop-loss analysis and pricing** tool allows us to measure risk and predict premiums for both individual and aggregate stop-loss insurance or any internal pooling arrangement.
- **Economic and contingency reserve** tools that develop appropriate solvency assurance reserves for large self-funded programs.

(4) A description of the steps the Offeror will take to ensure that due dates and deadlines for Task #1 are met; and

To ensure timely completion of both regular and *ad hoc* work, we will establish timetables for all projects. These timetables will identify both the steps and timing for our analytical work, but also will identify other involved parties (e.g., the vendors who are providing data for analysis) and the due dates for our receipt of clean, complete data. In addition to using timetables, we consistently produce timely work for major clients by ensuring that the client service team has the right—and the right number of—people. In the context of this proposal, Mr. Vieira, as Project Team Leader, Mr. Singer, as Client Relationship Manager, and Mr. Hatfield, as New York Health Practice

Leader, will have daily access to tasks' progress. All will have a full understanding of all work being done at any time so that, if one is absent from the office, the other is still available to address client inquiries. Vacations and other out-of-office time are coordinated, to the extent possible, to help ensure continuous "coverage." For individual projects or *ad hoc* assignments, Mr. Vieira, Mr. Singer, Mr. Singer, Mr. Hatfield, Mr. Frias or Dr. Paralkar will take primary responsibility depending on the assignment's scope. In addition, a mid-level consultant will also be assigned to each specific project (e.g., renewal/settlement analysis, drug cost analysis) with accountability for project management and timely work; the Department will have direct access to these consultants as well.

In addition to using organizational structure and project management tools to guarantee timely work, we can also use financial incentives. For example, we would be pleased to work with responsible parties at the Department to develop performance standards with sanctions in the form of fee concessions for failure to meet the standards. Also, Segal's employees' incentive pay is related to their performance relative to agreed upon standards, which, for members of the State's project team, can include timely work and delivery of reports for the Department.

In order to meet the "specialized needs" of the State we will need to have a clear understanding of those needs. We look forward to working with responsible parties at the Department to articulate its needs and help ensure that work processes, performance standards, and financial penalties are appropriate.

(5) A description of the quality assurance process to be used to ensure Task #1 reports, documents and services are complete, accurate and of the quality required by the Department.

Client satisfaction based on the delivery of high quality, client-focused consulting services is the backbone of our business. We place a premium value on our relationships with clients. Segal's commitment to clients is evidenced by the loyalty of our clients, many of whom have maintained long-standing relationships with us spanning over 50 years.

A client relationship manager (CRM) oversees the relationship for each client by monitoring workflow, introducing other advisors as needed, and periodically communicating progress to the client. Mr. Singer has been designated to serve in that capacity. The CRM also solicits client feedback and keeps the client updated on any issues that arise in the industry that may be of interest and have an impact on the client's programs.

Our approach to account management and client satisfaction is proactive—to understand client business issues and anticipate client needs, rather than react to them.

Relative to our technical work product, we employ a rigorous quality control process that includes the following:

- **Mandatory peer review of actuarial reports and client correspondence:** Actuarial managers complete these reviews. Segal has detailed written quality control standards for actuarial work.
- **Work product quality assurance:** Reports, memoranda and letters on complex or technical matters are prepared by an experienced team member and reviewed by the senior consultant who is an expert in the area addressed by the material. This person ordinarily is one who has enough experience and judgment not only to grasp the substantive matter being discussed,

but also to understand the nuances that might have unique application to a particular client's circumstance or need.

- **Team consulting:** Through the client service team, we make checks and balances for quality control an organic feature of the consulting process. Meetings and significant phone calls and other contacts with the client are documented in file memoranda that are shared with the team. In the course of keeping one another informed about client developments, the team members go through an automatic quality-review procedure.
- **Early warning system:** Each office and region has an early warning system to identify and deal with potential difficulties and anomalies as they emerge and before they become problematic.
- **Company-wide standards and training:** By setting and enforcing the uniform national professional standards described above, and by company-wide training programs that equip our staff to achieve those standards, we assure consistency and quality in the delivery of services.
- **Client satisfaction surveys:** Detailed satisfaction interviews are conducted periodically by senior managers not involved with the clients' work.
- **Relationship management:** Segal realizes that each project's success depends on the team supporting the project. Therefore, we focus on involving the appropriate mix of technical and resource staff in each project to develop achievable solutions.
- **Audits:** Our offices that provide actuarial work for clients are audited by senior professionals from the National Health Practice once a year to assure compliance with quality standards.

We have consultants and actuaries throughout our 24 offices with the experience to support large and complex clients and projects. We will assign only the best professional staff available to serve your needs. Our corporate structure supports the use of the best technical professional for the job, wherever that person may be located.

(6) A detailed description that illustrates how you will independently project experience and premium requirements for each of the Empire Plan vendors.

This is discussed in our response to questions 1, 2 and 3 above.

(7) An example of a Final Report and Recommendations of Plan Funding Requirements.

We do not have reports of the nature contemplated in this proposal to submit as a sample. Included in *Appendix B* is a sample rate development report we employ for another state and an example of a utilization summary for the Department's general information. Regarding the reports we contemplate issuing to the Department, here are some thoughts about the deliverables we will provide to the Department.

To begin, we would replicate the outline provided by the current consultant in order to minimize the disruption experienced by Department staff. We would then review this structure and modify over time to better meet your needs. Ideally, we propose a report organized in four major sections, as follows:

- **Executive Summary**
 - Narrative description of findings and recommended renewal action
 - Summary of premium equivalent rates developed by vendors and by Segal, including reconciliation
 - Summary of key events (e.g., benefit changes) and assumptions (e.g., reserve factors, trend rates)
- **Detailed Experience Analysis and Premium Development.** Tables and accompanying narrative with details from our analysis:
 - Detailed claim development and projection
 - Reserve development
 - Value of benefit changes
 - Value of demographic, legislative, or other changes
 - Analysis of large claims/assessment of pooling charges
 - Analysis of any PCP and global capitations that might be employed
 - Detailed premium development and reconciliation
 - Development of required premium, development of premium at current rates, derivation of required premium increase
 - Retention
 - Risk charges
 - Claims fluctuation margin
 - State mandates affecting coverage
 - Audit/reconciliation of graduate medical assessments and indigent care surcharges
 - Solvency
 - Statutory reserves
- **Assumptions**
 - Development, reconciliation, and justification of healthcare cost trend
 - Empirical derivation
 - Vendor assumptions
 - Segal assumptions
 - Development of reserve factors
 - Development of adjustments for changes in plan design, demography, etc. (as appropriate)
 - Development of other assumptions, as appropriate

Exhibits

- Supporting tables
 - Claim summaries
 - Monthly enrollment summaries
- Data provided by vendors (attached to the report in electronic format)

2. Task #2 – Quarterly Analysis

a. Duties and Responsibilities

In accordance with the agreements between the Empire Plan vendors and the Department, the vendors are required to submit annual experience estimates on the 1st and 4th quarter. These quarterly reports provide quarterly and year-to-date estimates of experience, reconciliations of vendors' projections of prior years' experience, projected premium rate for the upcoming year, etc. See Exhibit II.H entitled, "Sample Vendor Quarterly Report" for a sample of the vendors' quarterly report information.

During the term of the Contract, the Contractor shall:

(1) Review and prepare comments on the Empire Plan vendors' first and fourth quarter reports. Said quarterly reports are based on calendar year; the 1st quarter is January through March and the 4th quarter is October through December. The required reviews will be conducted twice per calendar year, during April/May for the 1st quarter reports and January/February for the 4th quarter reports.

(2) Provide a written report of its review of each of the vendors' reports (vendor reports are due no later than the 23rd day of the month following the last month of the quarter under review). The report shall include the Contractor's assessment of the reasonableness of the vendors' projected current year experience and projected rates for the subsequent year, the Contractor's projected annual claim amount by vendor for the calendar year (January 1 – December 31), and the Contractor's observed and projected trends, including any other factors that may impact the projected incurred claims experience. Final copy of the required report ("Quarterly Contractor Commentary Report") must be submitted to the Department within forty-five (45) calendar days from the end of the quarter under review. These reports must be acceptable to the Department.

Segal confirms that we meet all of the requirements described above in subsection (a), "Duties and Responsibilities."

b. Required Submission

Submit a work plan, which outlines the proposed process to be followed in order to deliver Task #2 Project Services as described in the Duties and Responsibilities above. The outline should include:

(1) A detailed description of the steps, factors, required staff resources.

(2) The number of individuals per title and total number of hours per title using the Position Titles set forth in RFP Section V – Assumption #6 in your work plan. Please note that the projected total number of hours per Position Title per year as set forth in the Offeror’s work plan must match the total number of hours per Position Title per year as set forth in the Offeror’s Exhibit V.A Form 2 submission.

(3) A timeline with specified start dates based on the number of Business Days, of the major milestones and interim activities for completion of the Task and related activities.

Task #2 Work Plan

In our description of the work plan for Task 1, we provided detailed information about the steps, factors, resources and other information for that Task. These are similar for Task 2 (and for all our analytic work for the Department). The paragraphs below restate our response to Question 1 for Task 1, with edits and changes as appropriate for Task 2.

The quarterly review of claims experience combines skillful and accurate measurement and interpretation of claims data with knowledge of healthcare cost trends and other factors influencing healthcare delivery and costs. We view the activities for this process as a subset of Task 1, which begins with a review and analysis of claims experience, and then projects that experience and adds in other components of premium.

Following is a brief description of the steps, factors, resources, and other information for this process:

Steps

Quarterly analysis should be focused on gaining insight into the Program’s evolving experience and getting an early indication if experience begins to deviate from what was expected. It should also allow us to investigate the sources of any deviations in actual experience relative to what was projected. While the approach outlined below is one that we have used successfully with other clients, we understand that protocols and precedents are in place already with the Department, its current actuary, and the NYSHIP vendors and that those protocols and precedents may guide or influence the process in the future. We are prepared and able to proceed under any reasonable and appropriate approach.

- **Data Collection and Reconciliation:** Triangulated (i.e., monthly paid claims by incurred month) claims data and summarized participant data are the key items required to evaluate emerging and projected claim costs. Our initial activity when receiving claims data is to conduct a basic audit of the data’s reasonableness, completeness, and consistency with prior period’s reports. At the Department’s direction, we will work directly with vendors to resolve any data issues prior to analysis. *We assume that vendors will provide complete, accurate, timely claims data for this Task within a period mutually agreed to by vendors and the Department following the end of applicable quarters.*
- **Independent Claims Analysis/Reconciliation with Vendor’ Calculations:** We will use proprietary tools to prepare an independent estimate of current and projected incurred claim costs. We will then compare our estimates with those prepared by vendors and draft a report identifying and quantifying those areas where our figures differ from the vendors. Key areas

where differences are likely to occur are in the development of reserves (to convert paid claims to incurred claims) and health care cost trend rates. *Our analysis will require approximately 15 days after receipt of clean, complete data. A longer period may be allowed or a shorter period required depending upon vendors' timeliness in furnishing data.*

- **Preparation of Report:** Following the completion of our analysis, we will prepare a draft report for the Department in which we present our findings and a thorough explanation and reconciliation of all discrepancies between vendors' analyses and our independent analysis. Once responsible parties at the Department have reviewed and approved the draft report, we will prepare a final draft. *The draft report will be presented to the Department approximately one week after the completion of our analysis. The final draft, reflecting any changes or additional analysis, will be available within three days following the Department's approval of the draft report.*

Factors

Several factors need to be considered in evaluating plan experience. These factors include:

- **Claims:** We prefer triangulated data (as defined above), though we can work with more detailed data (e.g., raw individual claim data) or more summarized data (e.g., monthly paid claims summaries). If possible, claims should be provided separately by claim type (hospital, major medical, prescription drug, and other sub-divisions, if available). Large claims should be parsed from the data and reported separately, if possible.
- **Reserves:** Paid claims must be converted to incurred claims prior to projecting the coming year's costs. Using triangulated data, we develop reserve estimates from empirically derived completion factors using a proprietary reserving spreadsheet that has proven to be an extremely accurate and reliable predictor of claim runout and an invaluable tool in renewal calculations. In the absence of triangulated data, we use other assumptions, tools, and conventions to estimate reserves and to audit vendors' reserve estimates.
- **Cost trend:** An empirical understanding of recent past trend is required to bring historical claims data to the present. An understanding of how costs are expected to increase in the coming year is required to prepare an accurate estimate of claims for premium renewal period. We reconstruct historical trend by application of actuarial principles and algorithms to actual claims. These are compared with information available from proprietary sources, carrier disclosures, and public sources. In order to determine appropriate trend rates for the coming year, we use our annual *Segal Trend Survey*, a predictive survey of major health carriers. Survey findings are adjusted based on past years' observed variances between anticipated and realized trend. We suggest evaluating and trending costs separately for different major cost components (e.g., hospital, prescription drugs).
- **Value of design changes:** The addition or elimination of benefits, or proposals for benefit modifications, will affect Plan cost and must be incorporated into renewal calculations. We use a proprietary underwriting tool developed to our specifications and specifically designed to meet our needs as health benefits analysts. This tool is used to measure the value of plan design changes, and complements other measurement tools for design changes (e.g., data requested of and provided by vendors for specific benefit changes being contemplated).

- **Demographic and other related changes:** As participating agencies join or withdraw from the Program, subtle changes in the overall composition of the group—related to demography, geography, or other factors—may affect the Program’s cost basis, and should be adjusted for in renewal analysis.

Resources

“Resources” required for this Task fall into three categories: personnel, data, and tools.

- **Personnel:** We presented our proposed core team and resource group and biographies are included, as requested. In assembling the core team, we have been mindful of the various skill sets and levels and types of experience required to ensure expert, timely, efficient, rigorous, and insightful work for the State. Core team members will be committed to the State and our work for the NYSHIP.

The vast majority of hours required for Task #2 will be for the core team. However, should the need arise, the team has at its disposal additional resources. Our anticipated mix of hours by position will vary slightly by year, but is shown in the chart below along with the number of core team members at position title.

Position Title	# of Individuals on Core Team	Year 1	Year 2	Year 3	Year 4	Year 5
Principal	3	■	■	■	■	■
Lead Consultant	2	■	■	■	■	■
Consultant	4	■	■	■	■	■
Analyst	3	■	■	■	■	■

- **Data:** Claims data will be furnished by vendors in accordance with their agreements with the Department and with past practice. Census or other demographic data may allow more accurate and insightful analysis, and should be provided, if available.

As health actuarial, underwriters, and analysts serving the public sector, we have the expertise, experience, and market knowledge to evaluate, analyze, and interpret health care cost and demographic data. Data provide the key to complete and accurate cost measurement and projections. Ideally, we will collect and use detailed information about paid and incurred claims and large claims for different basic benefit types (e.g., hospital, surgical, prescription drugs).

In addition to claim data, detailed census or demographic data will allow us to interpret and predict changes in the size or composition of the covered population that will further improve our ability to measure and monitor plan costs. We can work with either summarized census data (e.g., enrollment scatters by age, sex, coverage tier, covered group, region, etc.). Ideally, detailed census data with basic information for each covered individual will allow us to make customized “cuts” of the population for both routine and *ad hoc* analyses. Complementing census data, we generally request basic monthly enrollment statistics from vendors to audit consistency between the detailed census and vendors’ understanding of the population they are covering.

Plan descriptions will allow us to most thoroughly understand detailed benefit provisions and most accurately model benefit changes.

- **Tools:** In order to ensure a high and consistent level of quality in our analytical work, we have developed—under the auspices of Segal’s National Health Practice—tools, models, and software programs, and have established protocols, processes, and quality standards so that work is done at the highest level of both accuracy and efficiency. Our tools include:
 - A **claim cost analysis** tool that applies sophisticated actuarial and underwriting logic to claims and enrollment data and, where appropriate, blends actual plan experience with manual rates derived from our underwriting tools. The assessment of the statistical credibility of actual claims data incorporates information about the size and concentration of the covered population and the period for which data are available.
 - A **reserve analysis** tool that applies actuarial algorithms to triangulated claim data to derive completion factors and compute reserves for incurred by unpaid claims.
 - Various **pricing** tools:
 - **Medical Pricer:** This proprietary software uses detailed information about benefit provisions, together with information about the size and demographic composition of the covered population, to develop manual premium rates. The tool’s sophisticated methodology incorporates all types of demographic information, including industry and area codes, to ensure accurate rates. This tool is most useful in claim and cost analyses for small and mid-size clients, but has also been invaluable even to our largest clients for measuring the value of proposed changes in plan design and for providing “benchmark” rates against which experience rates can be compared.
 - **Prescription Drug Pricer:** This tool allows us to measure absolute and relative values of alternative prescription drug plan designs, including all types of both managed and unmanaged plans. The tool makes appropriate adjustments for anticipated changes in utilization associated with benefit design changes.

All of our pricing tools are updated regularly to ensure that calculations are based on recent data and reflect our most current and accurate understand of recent past trend rates.

A **stop-loss analysis and pricing** tool allows us to measure risk and predict premiums for both individual and aggregate stop-loss insurance or pooling arrangements.

(4) A description of the steps the Offeror will take to ensure that due dates and deadlines for Task #2 are met, and

To ensure timely completion of both regular and *ad hoc* work, we will establish timetables for all projects. These timetables will identify both the steps and timing for our analytical work, but also will identify other involved parties (e.g., carriers who are providing data for analysis) and the due dates for our receipt of clean, complete data. In addition to using timetables, we consistently produce timely work for major clients by ensuring that the client service team has the right—and the right number of—people. Vacations and other out-of-office time are coordinated, to the extent possible, to help ensure continuous “coverage.” For individual projects or *ad hoc* assignments Mr. Vieira, Mr. Singer, Mr. Singer, Mr. Hatfield, Mr. Frias or Dr. Paralkar will take primary responsibility depending on the assignment’s scope. In addition, a consultant will be assigned to each specific project (e.g., renewal/settlement analysis, drug cost analysis) with accountability for project management and timely work. Our proposed account team structure for the Department includes several senior level professionals to ensure overlap and coverage at all times.

In addition to using organizational structure and project management tools to deliver timely work, we can also use financial incentives. For example, we would be pleased to work with responsible parties at the Department to develop performance standards with sanctions in the form of fee concessions for failure to meet the standards. As we noted, Segal employees’ incentive pay is related to their performance relative to agreed upon standards.

In order to meet the “specialized needs” of the Department we will need to have a clear understanding of those needs. We look forward to working with responsible parties at the Department to articulate its needs and help ensure that work processes, performance standards, and financial penalties are appropriate.

(5) A description of the quality assurance process used to ensure Task #2 reports, documents and services are complete, accurate and of the quality required by the Department.

A client relationship manager (CRM), in this case Mr. Singer, oversees the relationship for each client by monitoring workflow, introducing other advisors as needed, and periodically communicating progress to the client. Mr. Singer also solicits your feedback and will keep you updated on any issues that arise in the industry that may be of interest and have an impact on your programs.

Our approach to account management and client satisfaction is proactive—to understand your business issues and anticipate your needs, rather than react to them.

Relative to our technical work product, we employ a rigorous quality control process that includes the following:

- **Mandatory peer review of actuarial reports and client correspondence:** Actuarial managers complete these reviews. The Company has separate, detailed quality control standards for actuarial work.
- **Work product quality assurance:** Reports, memoranda and letters on complex or technical matters are prepared by an experienced team member and reviewed by the senior consultant who is an expert in the area addressed by the material. This person ordinarily is one who has

enough experience and judgment not only to grasp the substantive matter being discussed, but also to understand the nuances that might have unique application to a particular client's circumstance or need.

- **Team consulting:** Through the client service team, we make checks and balances for quality control an organic feature of the consulting process. Meetings and significant phone calls and other contacts with the client are documented in file memoranda that are shared with the team. In the course of keeping one another informed about client developments, the team members go through an automatic quality-review procedure.
- **Early warning system:** Each office and region has an early warning system to identify and deal with potential difficulties and anomalies as they emerge and before they become problematic.
- **Company-wide standards and training:** By setting and enforcing the uniform national professional standards described above, and by company-wide training programs that equip our staff to achieve those standards, we assure consistency and quality in the delivery of services.
- **Client satisfaction surveys:** Detailed satisfaction interviews are conducted periodically by senior managers not involved with the clients' work.
- **Relationship management:** Segal realizes that each project's success depends on the team supporting the project. Therefore, we focus on involving the appropriate mix of technical and resource staff in each project to develop achievable solutions.
- **Audits:** Our offices that provide actuarial work for clients are audited once a year to assure compliance with quality standards.

(6) A comprehensive outline of the information to be provided in the "Benefits Management Consultant Review of Empire Plan Vendors' Quarterly Reports" for each of the Empire Plan vendors, and a justification for inclusion of each of the subject areas.

We propose organizing our report from the quarterly review in a manner similar to the reports for Task 1. Once again, we will start with the format provided by the current consultant, and discuss with you any proposed enhancements or modifications that you desire.

We believe that any information provided in a reporting package should be easily understandable to a variety of constituents. To do so, the report must provide narratives that summarize key points and findings, provide tables and support that justify the narratives, and include sufficient details for those who desire an in-depth look at the data and workings of the plan. The report should be a standalone document, which does not require explanation or commentary in order to be understood.

Over time, we envision a set of reports that includes the following:

- Narrative description of findings
- Summary of claims developed by vendors and by Segal, including reconciliation

- Summary of key events (e.g., benefit changes) and assumptions (e.g., reserve factors, trend rates) influencing the analysis

Tables and accompanying narrative with details from our analysis:

- Detailed claim development and projection
- Reserve development
- Value of benefit changes
- Value of demographic, legislative, or other changes
- Analysis of large claims/assessment of pooling charges
- Analysis of any PCP and global capitations that may be employed
- Development, reconciliation, and justification of healthcare cost trend
- Empirical derivation
- Vendor assumptions
- Segal assumptions
- Development of reserve factors
- Development of adjustments for changes in plan design, demography, etc. (as appropriate)
- Development of other assumptions, as appropriate

Supporting tables:

- Claim summaries
- Monthly enrollment summaries
- Data provided by vendors (attached to the report in electronic format)

3. Task #3 – GASB 75 Valuation

a. Duties and Responsibilities

Governmental Accounting Standards Board Statement No. 75 (“GASB 75”) addresses Other Postemployment Benefits (“OPEB”) by state and local governments. In accordance with the requirements set forth in GASB 75, the Contractor shall perform an actuarial valuation and develop related reports for the benefit of the Department. In addition to the OPEB of State employees, the valuation must include the OPEB for employees of State University of New York (“SUNY”) Campuses, Hospitals and Construction Fund for the various differing fiscal years that will ultimately roll up into the fiscal year financial statements of New York State for the year under review. The NYSHIP Participating Employers (PEs) and Participating Agencies (PAs) are not included in the valuation; however, they each receive a report that presents the actuarial assumptions that were used in NYS’ valuation as guidance to assist them in preparing their own valuations.

The scope of the valuation is limited to post-retirement healthcare benefits. The State administers other benefits (e.g., dental and life insurance) for retirees, but there is no employer cost sharing.

The valuation must take into account factors and assumptions related to, but not limited to, the following:

- NYSHIP plan provisions, which may be impacted by negotiated changes and vary by bargaining group;
- Relationship of the health care benefits provided and the eligibility criteria under which those benefits are provided;
- Census data (data on both active enrollees as well as non-active enrollees, i.e. retirees, dependent survivors, and vestees) provided to the Contractor by the Department;
- Demographic assumptions based on experience under the New York State & Local Retirement System, Police and Fire Retirement System, and the New York State Teachers' Retirement System;
- Premium rates, provided by the Department;
- Retiree premium contributions can be reduced based on the value of the retiree's unused sick leave credit at the time of retirement (converted to a fixed monthly credit);
- Retiree claim and enrollment data provided by the Department and the Empire Plan vendors (Note: this is detailed claim data and related enrollment data specific to non-active enrollees).
- Medicare is assumed to be the primary payor for current and future retirees and dependents age 65 and over and also for retirees and/or dependents under age 65 who are Medicare eligible due to qualifying disability;
- NYSHIP requires enrollment in Medicare Parts A and B when an individual first becomes eligible for Medicare coverage. NYSHIP reimburses enrollees for the cost of the Medicare Part B premium (excluding any penalty for late enrollment) for Medicare eligible enrollees and their Medicare eligible dependents; and
- Medicare retirees in the Empire Plan receive their prescription drug coverage through an Employer Group Waiver Plan (EGWP) and the Empire Plan provides wrap coverage.

As described in further detail below, the Contractor shall produce, by May 31, 2019, the first annual valuations for the State, SUNY, and SUNY Construction Funds for the fiscal years as noted below. The first Valuation to be performed by the Contractor shall be as of April 1, 2018. The valuation due date is currently based on a March 31st measurement date as selected by New York State for the valuation. The valuation reporting due dates are subject to change should the reporting requirements for State, SUNY or the SUNY Construction Fund change. The Valuation shall be performed in accordance with the Contractor's actuarial assumptions as set forth in the Contractor's NYS/SUNY Actuarial Assumptions Report which is due not later than April 30, 2019. During the term of the Contract, the Contractor shall perform, at a minimum, four valuations in accordance with the schedule set forth in the table.

<i>Report Name</i>	<i>Due Date</i>	<i>Deliverable During Contract Year</i>
<i>April 1, 2018 Valuation</i>	<i>5/31/2019</i>	<i>Year 2</i>
<i>April 1, 2019 Valuation</i>	<i>5/31/2020</i>	<i>Year 3</i>

April 1, 2020 Valuation 5/31/2021 Year 4

April 1, 2021 Valuation 5/31/2022 Year 5

Copies of the Incumbent contractor’s 2014 and 2016 GASB 45 Reports are provided in Exhibit II.D1 through Exhibit II.D6.

During the term of the Contract, the Contractor shall:

(1) Provide Task #3 related support to the Department, on an as needed basis, in areas including, but not limited to, assisting the Department in:

(a) Responding to requests for information from DOB, SUNY and/or OSC;

(b) Preparation for legislative testimony; and

(c) Responding to questions on completed valuation(s) posed by auditors contracted to audit NYS’ financial records.

(2) Perform an actuarial valuation of NYS’ and SUNY’s OPEB on an annual basis and produce a comprehensive report by May 31 following the valuation year (“Valuation Report”). The first Valuation to be performed by the Contractor under the Contract (“2018 Valuation”) shall be as of April 1, 2018 for employers’ Financial Statement as follows:

<i>Employer</i>	<i>Financial Statements for the year ending</i>
<i>NYS (excluding all of SUNY)</i>	<i>3/31/2020</i>
<i>SUNY Campus</i>	<i>6/30/2019</i>
<i>SUNY Stony Brook Hospital</i>	<i>6/30/2019</i>
<i>SUNY Brooklyn Hospital</i>	<i>6/30/2019</i>
<i>SUNY Syracuse Hospital</i>	<i>6/30/2019</i>
<i>SUNY Construction Fund</i>	<i>3/31/2019</i>

The results of 2018 Valuation shall be set forth in the Contractor’s 2018 Valuation Report

(3) The Contractor must produce a report that presents the actuarial assumptions the Contractor will use for the Valuation along with the rationale for those assumptions (“NYS/SUNY Actuarial Assumptions Report”). The NYS/SUNY Actuarial Assumptions Report associated with the 2018 Valuation is due not later than April 30, 2019.

(4) Provide two (2) reports by April 30th following the Valuation year, that present the actuarial assumptions used for NYS’ Valuation, one for distribution to PEs (“PE Actuarial Assumptions Report”) and the other to PAs (“PA Actuarial Assumptions Report”), to provide assistance in

performing their GASB 75. The two reports associated with the 2018 Valuation are due no later than April 30, 2019.

Segal confirms that we meet all of the requirements described above in subsection (a), “Duties and Responsibilities.”

b. Required Submission

In regard to Task #3, at this point of its technical Proposal, provide the information sought in 1 through 4 below.

(1) GASB 75 Prior Experience:

Describe the Offeror’s prior experience in providing GASB 75 valuation and reporting services for other governmental organizations. The Offeror should demonstrate their understanding of the scope and purpose of the project in their response.

Segal is qualified to provide the requested actuarial and consulting services relating to OPEB, including specifically valuation under the Governmental Accounting Standards Board Statements 75 of liabilities for providing postretirement health and welfare benefits to current and future retirees. Segal has extensive experience, as well as a long history, of measuring OPEB under both the FASB’s Accounting Standards Codification 715 (FASB ASC 715 and FASB ASC 965) as well as, of course GASB 43/45, the predecessor to GASB 75. In addition, Segal actuaries were actively involved in the discussions about the appropriate application of accrual accounting for these benefits to public sector employers and benefit plans, and in the development of the Statements themselves.

Segal has been providing actuarial consulting services to public sector retirement plans since 1950. Segal serves as actuary and consultant to many state and local governments for their health benefit programs, including development of OPEB liabilities and costs. Company-wide, Segal provides benefits consulting services to approximately 400 public sector entities, representative of 37 states, plus the District of Columbia, the U.S. Virgin Islands, the U.S. Government, and Canada. We have enclosed a list of GASB 43/45 clients for your information for whom we will be doing GASB 75 calculations in *Appendix D*.

We will use our understanding of the methodologies contained in the GASB statements and the provisions of your Plan’s retiree health benefit program for our analysis. In performing actuarial valuations for our clients, we have an established process that defines the sequence, methodology, and quality control on the project. A credentialed actuary experienced in providing retiree health valuations will be assigned to the consulting team and will have responsibility for actuarial review and oversight of the work.

Our process, which is outlined in the work plan section, reflects our understanding of the scope and purpose of this project.

(2) Task # 3 Work Plan

Submit two work plans, which outline the proposed process to be followed in order to deliver Task 3 Project Services as set forth in the Duties and Responsibilities above. The first work plan should clearly identify the steps related to the actuarial valuation component of the Task (i.e.,

Valuation) and the second work plan should clearly identify the steps related to the annual trending component (i.e., Year Two Roll Forward). Both work plans should include:

(a) A detailed description of the steps, factors, required staff resources.

(b) The number of individuals per title and total number of hours per title using the Position Titles set forth in RFP Section V – Assumption #6 in your work plan. Please note that the projected total number of hours per Position Title per year as set forth in the Offeror’s work plan must match the total number of hours per Position Title per year as set forth in the Offeror’s Exhibit V.A, Form 3 submission.

(c) Any added assumptions, including justification of those assumptions.

(d) A timeline with specified start dates based on number of Business Days, of the major milestones and interim activities for completion of the Task and related activities.

(e) A description of the steps the Offeror will take to ensure that due dates and deadlines for Task #3 are met; and

(f) A description of the quality assurance process to be used to ensure Task #3 reports, documents and services are complete, accurate and of the quality required by the Department.

Segal will perform the actuarial calculations of the Plan’s liability and annual required contribution necessary to develop the OPEB expense and disclosure information required under GASB 75. The following summarizes our valuation process, the resources required, and the steps anticipated for both the full valuation and roll-forward years.

The Valuation Process

Project Initiation

Immediately upon approval of the engagement, Segal will establish a meeting or conference with Plan management to initiate the project. The purpose is to:

- Discuss and finalize the project scope and timing;
- Understand any special needs or interests;
- Establish parameters for keeping you updated—conference calls or some other medium;
- Identify data required for the overall engagement; and
- Review on the final due dates for all deliverables for the project.

Following the initial discussion, we will summarize the discussion and decisions and provide a project outline and data request. Any open issues and questions will be identified for review as the project progresses.

Evaluate Plan Documentation and Data

The next phase of the project would consist of a review of all relevant plan documents, summary plan descriptions and any other related documents concerning the OPEB benefits provided to the Plan’s retirees. Where needed, we will raise questions to assure that we fully understand all aspects of the program. Our data requirements include four primary types of information:

1. Plan descriptions and documents, including clarification of the eligible groups;
2. Participant data for active and retired individuals;
3. Retiree claims experience and premium data for recent years; and
4. Financial information about the program, including previous financial statements to show how the cost for retiree health benefits has been reported in past years.

Data elements required for the OPEB valuation will be outlined in our data request.

Develop Assumptions for Actuarial Valuation Process

Segal will develop an internally consistent set of actuarial assumptions to be used in the valuation process. In measuring the liability for OPEB, we must make assumptions about future events including the amount and timing of medical benefit claims to be paid.

Significant assumptions for the OPEB valuation include at least the following:

- Health care trend rates (medical inflation and rising administrative costs);
- Changes in utilization or patterns of delivery;
- Discount rates;
- Mortality rates;
- Disability rates;
- Retirement rates;
- Age-related medical expense increases;
- Initial medical expense cost factors;
- Medicare reimbursement rates; and
- Dependent and spouse coverage assumptions.

The liabilities and expense for OPEB are sensitive to the assumptions selected and relatively minor changes in certain areas could result in substantial shifts in the cost projections. Moreover, it is difficult to accurately predict experience in some of the areas for which actuarial assumptions are required. The basic assumptions will be selected to represent the “most likely” projection of expected experience, understanding that significant variations in actual experience may occur. We will also consider the demographic assumptions used in the pension valuation of the New York State & Local Retirement System, Police & Fire Retirement System and the New York State Teachers’ Retirement System and our knowledge of the Plan’s population behavior.

The assumptions developed in this process will also be disclosed in the Assumption Reports for the Participating Agencies and Participating Employers. Since Participating Agencies and Participating Employers are not included in the OPEB valuation, these reports will provide guidance to assist them in preparing their own valuations.

Perform actuarial valuation of the OPEB liability and expense under GASB 75 based on current benefit commitments.

Using participant and claims data, we will perform an actuarial valuation of the Plan's post-employment healthcare benefits in accordance with the rules of GASB Statement 75. Our analysis will include a projection of the post-retirement healthcare benefits based on the current population of active employees and retirees.

Segal will perform the following calculations for the employees of New York State, State University of New York ("SUNY") Campuses, Hospitals and Construction Fund:

- Project the total cost of providing postemployment benefits. The projection will be made on the basis of the current plan as communicated to participants but will not include other retiree benefits administered by the State that do not have employer cost-sharing (e.g., dental and life insurance).
- Discount the projected cost of benefits to the present value. The actuarial present value of total projected benefits is the amount that would have to be set aside today in an interest-earning account in order to provide enough capital to pay all expected costs of post-employment benefits for all current plan participants (both retirees and employees). The methodology in determining the discount rate is mandated by GASB 75.
- Determine the **Total OPEB Liability (TOL)**. The TOL is the portion of the actuarial present value of total projected benefits allocated to years of employment prior to the measurement date. The AAL is calculated using the individual entry age normal cost method as mandated by GASB 75.
- Calculate the **Net OPEB Liability (NOL)**. The NOL is the difference between the TOL and the Plan Fiduciary Net Position (or plan's assets).

Additional relevant figures would be calculated and provided, including annual expense.

Our calculations will also include the following reporting requirements required by GASB:

- **Actuarially Determined Contribution (ADC):** The ADC is equal to the sum of the service cost (SC) and the amortization of the NOL. Under GASB 45, this was commonly referred to as the Annual Required Contribution or ARC.
- **Net OPEB Liability (NOL):** As described above, the NOL is the difference between the TOL and the Plan Fiduciary Net Position. This replaces the Net OPEB Obligation (NOO) concept under GASB 75 which was determined as the cumulative difference between the ARC and the actual contributions made.
- **Required Supplementary Information (RSI):** The RSI will require historical information, including a 10-year history of the TOL Fiduciary Net Position, NOL, Covered Payroll and other funding ratios. At transition, the RSI may include only the first year's information. Under GASB 75, there are a significant number of new disclosure items, including sensitivity calculations, tracking of deferred inflows and outflows, current year inflows and outflows, changes in Net Fiduciary Position, etc.

Prepare Valuation Report

The OPEB valuation report will contain the following:

- Letter of certification
- Executive summary of the valuation
- Summary of the key results of the valuation
- Financial disclosures and actuarial cost factors for the major groups of employees covered by the Plan, including:
 - Actuarial and market value of assets, if applicable
 - Actuarial liabilities and liabilities for accrued benefits
 - Employer contribution rates, expressed as a dollar amount and as a percentage of covered payroll and split between service cost and NOL components.
 - GASB basis accounting disclosures
- Disclosures of actuarial assumptions, cost methods and procedures
- A glossary of terms used in the valuation report

Review report and findings

Once the valuation is complete, we will meet with the Department to review our actuarial report and findings.

Year Two Roll forward

Paragraph 28 of Statement 75 requires that actuarial valuations be performed at least biannually. We will send a request for data in which we will ask the State the following:

- Confirm there were no significant changes in benefit provisions
- Confirm there were no significant changes in participants in the Plan
- The actual employer contribution for OPEB benefits

Based on the information provided, Segal will then:

- Review the Plan Provisions to ensure correct interpretation,
- Update any Assumptions, such as discount rate, trends, or any other changes, and
- Calculate the roll-forward.

Using this information, and the participant data from the prior year's valuation report, we will produce a new report that provides all the GASB 75 requirements.

Resources

The vast majority of hours required for Task #3 will be for the core team. However, should the need arise, the team has at its disposal additional resources on staff. Our anticipated mix of hours by position will vary slightly by year, but is shown in the chart below along with the number of core team members at position title.

Task # 3 – Annual Projected Hours by Position Title					
Position Title	# of Individuals on Core Team	April 1, 2018 Valuation Report	April 1, 2019 Valuation Report (Rollforward)	April 1, 2020 Valuation Report	April 1, 2021 Valuation Report (Rollforward)
Principal	█	█	█	█	█
Lead Consultant	█	█	█	█	█
Consultant	█	█	█	█	█
Analyst	█	█	█	█	█

In addition, the Offerors should:

- 1) *A timeline with specified start dates based on number of Business Days, of the major milestones and interim activities for completion of the Task and related activities*

GASB 74/75 – PROPOSED TIMELINE OF APRIL 1, 2018 VALUATION		
Milestone/Task	Assignment	Target Date
Kickoff meeting and preparation of data request for the April 1, 2018 valuation	DCS and Segal	On or before March 31, 2018
Completion of April 1, 2017 Valuation Report by prior actuary	Prior Actuary	May 31, 2018
Request and receive valuation and experience data used by prior actuary to complete the April 1, 2017 Valuation Report and Assumptions Reports. Replicate prior actuary's April 1, 2017 Valuation results.	DCS and Prior Actuary	Depends on receipt of all the data but no later than October 31, 2018
Reconcile and prepare valuation data and claims cost experience. Discuss and resolve any data issues.	Segal	Depends on receipt of all the data but no later than January 31, 2019
Prepare, test and review all actuarial programs in accordance with quality control procedures. Determine actuarial experience results and reconcile actual and expected results to evaluate current actuarial assumptions.	Segal	March 1, 2019
Prepare preliminary memo/report detailing recommended actuarial assumptions, methods and preliminary valuation results	Segal	March 22, 2019
Discussion of recommended actuarial assumptions, methods and preliminary valuation results	DCS and Segal	March 29, 2019
Finalize Actuarial Assumptions Reports for NYS, Participating Agencies and Participating Employers	Segal	April 30, 2019
Discussion of Preliminary Valuation Results, if necessary	DCS and Segal	May 10, 2019
Finalize April 1, 2018 Valuation Report	Segal	May 31, 2019

2) Describe the steps the Offeror will take to ensure that due dates and deadlines for Task 3 are met, and

To ensure timely completion of both regular and *ad hoc* work, we will establish timetables for all projects. These timetables will identify both the steps and timing for our analytical work, but also will identify other involved parties (e.g., vendors who are providing data for analysis) and the due dates for our receipt of clean, complete data. In addition to using timetables, we consistently produce timely work for major clients by ensuring that the client service team has the right—and the right number of—people. Vacations and other out-of-office time are coordinated, to the extent possible, to help ensure continuous “coverage.” For individual projects or ad hoc assignments, one or the other of these “twin” team heads will take primary responsibility. In addition, a mid-level consultant is assigned to each specific project (e.g., renewal/settlement analysis, drug cost analysis) with accountability for project management and timely work. Our proposed account team structure for the State includes several senior level professionals to ensure overlap and coverage at all times.

In addition to using organizational structure and project management tools to guarantee timely work, we can also use financial incentives. For example, we would be pleased to work with responsible parties at the Department to develop performance standards with sanctions in the form of fee concessions for failure to meet the standards. As we note above, Segal employees’ incentive pay is related to their performance relative to agreed upon standards, and for members of the State’s project team, can include timely work and delivery of reports for the Department.

In order to meet the “specialized needs” of the State we will need to have a clear understanding of those needs. We look forward to working with responsible parties at the Department to articulate its needs and help ensure that work processes, performance standards, and financial penalties are appropriate.

3) Describe the quality assurance process to ensure Task #3 reports, documents and services are complete, accurate and of the quality required by the Department.

As mentioned previously, client satisfaction based on the delivery of high quality, client-focused consulting services is the backbone of our business. We place a premium value on our relationships with clients. Segal’s commitment to clients is evidenced by the loyalty of our clients, many of whom have maintained long-standing relationships with us spanning over 50 years.

A lead consultant, in the case of the GASB work Mr. Frias, oversees the relationship for each client by monitoring workflow, introducing other advisors as needed, and periodically communicating progress to the client. The lead consultant also solicits client feedback and will keep you updated on any issues that arise in the industry that may be of interest, and have an impact on, your programs.

Relative to our technical work product, we employ a rigorous quality control process that includes the following:

- **Mandatory peer review of actuarial reports and client correspondence:** Actuarial managers complete these reviews. The Company has separate, detailed quality control standards for actuarial work.
- **Work product quality assurance:** Reports, memoranda and letters on complex or technical matters are prepared by an experienced team member and reviewed by the senior consultant who is an expert in the area addressed by the material. This person ordinarily is one who has enough experience and judgment not only to grasp the substantive matter being discussed, but also to understand the nuances that might have unique application to a particular client's circumstance or need.
- **Team consulting:** Through the client service team, we make checks and balances for quality control an organic feature of the consulting process. Meetings and significant phone calls and other contacts with the client are documented in file memoranda that are shared with the team. In the course of keeping one another informed about client developments, the team members go through an automatic quality-review procedure.
- **Early warning system:** Each office and region has an early warning system to identify and deal with potential difficulties and anomalies as they emerge and before they become problematic.
- **Company-wide standards and training:** By setting and enforcing the uniform national professional standards described above, and by company-wide training programs that equip our staff to achieve those standards, we assure consistency and quality in the delivery of services.
- **Client satisfaction surveys:** Detailed satisfaction interviews are conducted periodically by senior managers not involved with the clients' work.
- **Relationship management:** Segal realizes that each project's success depends on the team supporting the project. Therefore, we focus on involving the appropriate mix of technical and resource staff in each project to develop achievable solutions.
- **Audits:** Our offices that provide actuarial work for clients are audited once a year to assure compliance with quality standards.

We have consultants and actuaries throughout our 24 offices with the experience to support large and complex clients and projects. We will assign only the best professional staff available to serve your needs. Our corporate structure supports the use of the best technical professional for the job, wherever that person may be located.

(3) NYS/SUNY Deliverables:

The Offeror should provide a comprehensive outline of the information to be provided in the “New York State/State University of New York GASB 75 Postemployment Healthcare Benefits Actuarial Valuation” report, including an explanation of each of the subject areas to be included in the document.

The OPEB valuation report will contain the following:

- An introduction, which includes important information about actuarial valuations, the purpose and highlights of the key valuation results and the actuarial certification
- Valuation details, which includes the following:
 - General Information about the OPEB Plan
 - Total OPEB Liability and Net OPEB Liability
 - Determination of Discount Rate and Investment Rates of Return (if applicable)
 - Sensitivity of the Net OPEB Liability
 - Schedule of Changes in Net OPEB Liability
 - Deferred Outflows and Deferred Inflows of Resources
 - OPEB Expense
 - Schedule of Employer Contributions
 - Actuarially Determined Contribution
 - Statement of Net Fiduciary Position
 - Schedule of Investment Returns, if applicable
- Supporting information, which includes:
 - Summary of Participant Data
 - Actuarial Assumptions and Actuarial Cost Method Used
 - Summary of Plan Provisions
 - Definition of Terms
 - Accounting Requirement
 - GASB 74/75 Concepts

(4) PE/PA Deliverables:

The Offeror should confirm its ability to produce a modified version of the NYS/SUNY actuarial assumptions report as required for distribution to NYSHIP PEs and PAs.

The Offeror should confirm its ability to produce a modified version of the NYS/SUNY Actuarial valuation report as required for distribution to NYSHIP PEs and PAs.

Yes, we are capable and will produce the report as requested above. In addition, we are prepared to provide:

Cash Flow Projections for the Current Eligible Population

In addition to the quoted valuation, we can prepare a cash flow projection to assist you in budgeting future costs for the program. We typically prepare ten-year projections but can work with you to address any needs you may have in this area.

Retiree Health Consulting

To support and enhance the usefulness of the primary GASB actuarial valuation, Segal can provide retiree health benefit consulting services such as reviewing the merits of potential design changes and exploring the impact of those changes on valuation results

Segal can also assist in analyzing your OPEB funding and benefit design options, including the impact of the various scenarios on the Plan's overall budget projections and financial condition. The following are major areas for design consideration:

- Eligibility
- Plan design including Medicare integration methods
- Vendor Management
- Participant contributions and jurisdiction subsidies

Segal can review and suggest possible vehicles for pre-funding retiree health benefit costs by the employer or employees during their active careers, or jointly by both. Pre-funding of future retiree health benefits will have an impact on the GASB liability. We will assist by determining the likely financial impact.

As part of our review of potential retiree health benefit program changes, we will identify key advantages and disadvantages of each proposed plan design change. In addition, we will provide cost estimates reflecting expected cash outlay should the program changes be enacted. As potential changes are considered and accepted, we will assist in developing an implementation plan for the new benefit features or changes.

Strategic Planning

Review of retiree health benefit program strategy and current design

Segal can assist in constructing a well-reasoned strategic plan for the benefits programs covering retirees and active employees.

At the onset of our engagement, Segal will review any current written benefits strategy statements and make comments on items and concepts we believe should have further consideration. If there are no strategy statements, we can assist in constructing a draft statement of apparent objectives based on our review of the current plans in place. We have found that by providing a draft of the strategy implied through current program design, we can help the client challenge and assess each aspect of its current benefit program.

The draft strategy statement, whether updated from a previous client version or created as a draft by Segal based on actual programs in place, will become the focal point for discussion on possible benefit feature and program changes. Following the planning process and agreement on a clear retiree health benefit strategy, we will work with Plan management to begin implementation of changes necessary to achieve the agreed strategy.

We fully recognize that retiree health benefit design is often subject to the collective bargaining or discussion processes with active employee representatives. Segal's expertise with benefits that are the subject of collective bargaining or other employee agreements is valuable in the plan design process.

4. Task #4 – Ad Hoc Consulting Services

a. Duties and Responsibilities

The Contractor shall be expected to provide the Department with a full range of ad hoc benefit consulting services. In its delivery of ad hoc services, the Contractor's analysis should consider and make use of the most current employee benefit data and information in the marketplace. The Contractor shall be expected to possess and/or obtain and make available to the Department a full breadth of benefit consulting services, including such areas as:

- *plan design consulting,*
- *provider network access analysis,*
- *provider network discount analysis,*
- *consulting on vendor procurements,*
- *regulatory monitoring and compliance guidance,*
- *risk management,*
- *quality care programs*
- *wellness programs,*
- *disease management*
- *performance based contracting*
- *advanced primary care*
- *total cost of care modeling*
- *analytical support*
- *discount analysis*

The Contractor shall, as requested by the Department on a case-by-case basis, be expected to routinely analyze and prepare comprehensive cost and benefit analysis (“Ad Hoc Consulting Services Projects” or “Ad Hoc Projects”). Such Ad Hoc Projects often must be undertaken and completed within very limited timeframes; frequently within 2-3 days of the request and, on occasion, within a twenty-four (24) hour period for certain high priority tasks. The Contractor shall be required to submit final deliverable(s) required for completion of an Ad Hoc Project within timeframes mutually agreed upon by the Department and the Contractor.

Segal confirms that we meet all of the requirements described above in subsection (a), “Duties and Responsibilities.” To demonstrate that we are familiar with these issues and regularly provide these services, we have included a bit of narrative on each service category suggested below.

During the term of the Contract, the Contractor shall be expected to, at the rates set forth in the Contractor’s Financial Proposal, provide a full range of benefit consulting services. Such services may include, but are not limited to:

1) Assisting the Department with the analysis, design and/or review of solicitation instruments (e.g., requests for proposals) and their associated evaluation criteria developed by the Department for any of the benefit programs administered by the Department and/or the evaluation of specified proposals received in regard thereto;

Our team has extensive experience with competitively bidding on all types of health and welfare benefit programs. We have the technical expertise to assist in drafting, reviewing, analyzing and evaluating detailed RFPs and bids. We have detailed, state of the art RFPs for all coverages that we would tailor and modify specifically for the State. As benefit programs progress weekly and monthly, our national practice leaders continuously update and enhance our model bid and RFP requests to keep up with recent practices.

The bidding process includes the following components:

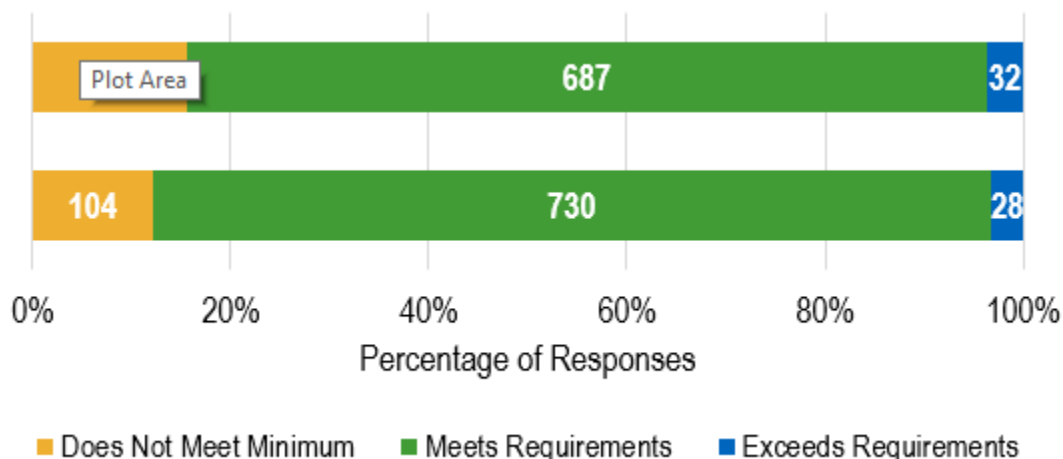
- **Identify key bid requirements:** Prior to preparing bid specifications, we would spend time with you to understand your issues and objectives associated with the bid process. Given the State’s many operating divisions and unique challenges at participating agencies, we might spend the first few days visiting with the key contacts at those locations either by phone or in person to understand their hot buttons, concerns with incumbent vendors and objectives of the bidding process. The information gathered during this process will allow us to customize our model bid specifications appropriately. To the extent that you might be planning on design changes, we would want to identify those at this time to ensure that they are appropriately reflected in the RFP.
- **Preparing bid specifications:** Bid specifications are prepared by customizing firm-standard specifications developed and continually updated by our National Health Practice. These standards help ensure that bid specifications are comprehensive and well organized, and reflect the most current benefit and vendor issues. Segal has company-standard specifications for RFIs and for RFPs, as well as for all types of health and welfare benefits. Specifications include a detailed questionnaire as well as financial bid forms designed to ensure that information provided is complete and comparable (from one offeror to another).

- **Customize scoring template:** Segal is accustomed to working within the strict procurement rules of a public sector vendor selection process, and does so hundreds of times each year. In collaboration with your procurement staff, we could create a custom scoring template to rank the proposals we receive from both a qualitative and quantitative perspective. The template would reflect issues like network access and disruption, discounts, tools and website, health management programs, account service team and location, etc. We have included some screen shots of our scoring template below.

PROPOSAL SCORING SUMMARY

	Raw		Relative		Weighting	Weighted	
	Offeror A	Offeror B	Offeror A	Offeror B		Offeror A	Offeror B
General Information	108.0	94.0	91.5	79.7	2.0%	1.8	1.6
Performance Guarantees	1.0	1.0	100.0	100.0	2.0%	2.0	2.0
Request for References	2.0	2.0	100.0	100.0	2.0%	2.0	2.0
Financial Issues	16.0	15.0	100.0	93.8	2.0%	2.0	1.9
Proposal Questionnaire	1.0	1.0	100.0	100.0	2.0%	2.0	2.0
Q1: Consumer Directed Health Plan Administration	10.0	12.0	100.0	120.0	12.5%	12.5	15.0
Q2: Hospital/Medical Provider Network	87.0	86.0	90.6	89.6	12.5%	11.3	11.2
Q3: Dental Provider Network	23.0	19.0	100.0	82.6	10.0%	10.0	8.3
Q4: Care and Case Management	64.0	44.0	94.1	64.7	2.5%	2.4	1.6
Q5: Behavioral Health Management	134.0	135.0	93.7	94.4	2.5%	2.3	2.4
Q6: Quality Management	17.0	26.0	53.1	81.3	12.5%	6.6	10.2
Q7: Wellness and Health Promotion	13.0	11.0	92.9	78.6	12.5%	11.6	9.8
Q8: Disease Management	132.0	131.0	80.5	79.9	12.5%	10.1	10.0
Q9: Pharmacy Benefit Management Services	151.0	138.0	96.8	88.5	5.0%	4.8	4.4
Q10 Health Portal Technology	30.0	35.0	78.9	92.1	7.5%	5.9	6.9
Grand Totals	789.0	750.0			100.0%	87.4	89.2

PROPOSAL SCORING SUMMARY



- **Identify potential bidders:** Segal maintains a comprehensive directory of carriers, administrators, and other vendors related to health and welfare benefit plans. This directory is updated frequently to ensure that company names, offerings, and appropriate contacts are current. In some instances, we recommend an RFI process, which allows us to include a relatively large, comprehensive list of vendors initially, and then to narrow the list before the more comprehensive RFP process is begun.
- **Interacting with bidders:** Interaction with bidders during the proposal preparation process can be labor-intensive, but is essential to ensuring that proposals are complete, accurate, and competitive. Generally, we require that interaction with bidders be conducted in writing (including fax and e-mail) so that we may share questions and answers with all bidders, thereby ensuring a fair, disinterested process. Depending upon the benefits being bid, the size of the program, the number of potential bidders, and the bidding timetable, we often recommend a “bidders’ conference” at which potential bidders may present their questions. We frequently are asked to organize and host such conferences.
- **Evaluating proposals:** The proposal evaluation process has two major components: a qualitative review of capabilities, services, performance guarantees, contract provisions, and benefit offerings, and a quantitative review of proposed claim, premium, and administrative costs, and network access and discounts. Generally, we are asked to conduct an in-depth analysis of both the qualitative and quantitative aspects of all proposals. Our client also reviews proposals. In some cases, labor is divided in such a way that we are responsible for some aspects of proposal review while our client retains responsibility for other aspects. The result of our proposal evaluation is a report that includes an executive summary highlighting key findings and presenting the basic components of bidders’ financial proposals. Our quantitative review is multidimensional, providing in-depth analysis that considers both the pricing terms and employee impact of each carrier chosen.
- **Selecting and interviewing finalists:** As a matter of principle, we do not select finalists. Our job is to provide our client with sufficient information and supporting documentation to allow them to make this selection with confidence. Once finalists have been selected, it may be appropriate to interview finalists and/or to visit finalists’ facilities (e.g., a health insurer’s proposed claims paying facility). We can organize, script, and conduct interviews with our client, or on our client’s behalf, and can participate in site visits. At this stage in the competitive bidding process, we strongly recommend conducting negotiations with finalists to ensure that fees, contract provisions, customer and client service assurances, and performance guarantees and sanctions are appropriate, competitive, and clearly understood.
- **Awarding contracts:** Our proposal evaluation report, supplemented by interview and site-visit notes, and amended by the outcomes of finalist negotiations, will allow our client to award contracts with confidence. In addition, we typically we outline minimum contractual requirements of all bidders during the RFP process and require “contract ready” language be utilized in all bids, so that the process of finalizing the contract is as smooth as possible.
- **Implementation:** During this important phase of the process, administrative details are addressed, contracts are drafted and reviewed, and data are transferred from old to new vendors. Even after the effective date of new contracts, administrative and service issues will arise. The implementation process may be shepherded by our client, or delegated to us. In some instances (for large new contracts), we have been asked to designate and dedicate an

implementation advocate who works with vendors on our client's behalf to ensure that data, contracts, and communication materials are processed in a timely and efficient manner.

(2) Providing the Department with analysis of federal and state legislative proposals, including advice on compliance with such legislation;

Segal's National Compliance Practice in Washington DC, with local members in our New York City offices, provides our clients, consultants, and analysts with in-depth technical research and information on an ongoing basis on current and pending federal and state laws and regulations that may affect our clients' benefit plans. Segal has extensive experience in drafting benefit plan materials, including plan documents and subsequent amendments based on benefit design changes and legislative requirements. In addition, we have significant experience in the preparation of other key disclosure documents such as summary plan descriptions and summary annual reports. We *proactively* contact our clients whenever new/proposed legislation or regulations could materially impact their benefit plans. This is one way Segal strives to anticipate our clients' needs, rather than taking a reactive approach to compliance assistance. Currently, we are carefully monitoring proposed legislation from the Trump administration.



House Passes Legislation to Repeal and Replace Aspects of the Affordable Care Act

On May 4, 2017, the U.S. House of Representatives passed the American Health Care Act (HR 1628) by a slim majority (217-213). The efforts to repeal and replace the Affordable Care Act now move to the Senate. HR 1628 is drafted as a budget reconciliation bill, which can be passed by the U.S. Senate with a simple majority vote.¹ However, the Senate is likely to take some time to develop its own version. Many of the same tensions between conservative and more moderate Republicans that delayed House action will affect not only the Senate bill's content but whether, and how quickly, it can pass the Senate. If the Senate passes a bill, it is likely to be different from the House's version. In that case, either the bills go to a conference committee to work out the differences or the House would have to pass the Senate's bill.

Although significant changes are expected as this legislation moves through the Senate, this *Update* focuses on how the House-passed bill would affect group health plans. It also summarizes other features of the bill, including changes to the individual insurance market, the new age-based tax credits that individuals could use to purchase health coverage and the restructuring of Medicaid.

Background on Budget Reconciliation

Budget reconciliation was created by Congress to allow expedited consideration of certain tax, spending and debt-limit legislation. Under budget reconciliation, Congress could repeal the parts of the Affordable Care Act that have a budgetary impact. This includes taxes or fees that raise money as well as expenditures by the federal government. Due to complicated rules governing budget reconciliation, Congress could not repeal portions of the Affordable Care Act that do not affect the budget, such as the mandate to extend coverage to dependent children until they reach age 26. As this bill moves through the Senate, there will be many discussions about which provisions in the House-passed bill will be allowed under the Senate rules.

Provisions in the House Budget Reconciliation Bill That Would Affect



Health Compliance News Highlights:

- The House bill would eliminate the employer penalty but not the associated reporting requirements.
- The 40 percent excise tax on high-cost health plans would be delayed from 2020 to 2026, but would not be repealed outright.
- The House bill could result in the imposition of annual and lifetime dollar limits on a wider range of benefits than is permissible today.
- Significant changes are expected as this legislation moves through the Senate.

- **Constant Monitoring.** We actively help our clients identify legislative developments and compliance issues and monitor pertinent federal and state legal and regulatory developments through the daily review of the *BNA Daily Tax Report*, *Health Care Daily* and weekly *Pension and Benefits Reporter*, *Tax Notes Today*, and *Inside CMS*. We monitor the release of pertinent government materials, including FAQs, Notices, and Press Releases. In addition, we have prompt access to all official documents such as proposed and final regulations, Revenue Rulings, and bills introduced or acted on in Congress.
- **News and Legal Information Databases.** Segal's Center for Information Resources has access to a robust collection of research tools including specialized legal databases such as LexisAdvance and Bloomberg Law. We maintain additional memberships to organizations that track legislation related to benefits including International Foundation of Employee Benefit Plans. Of course, we also have access to publicly available tracking tools such as Congress.gov, GovTrack.us, and the National Conference of State Legislatures. Segal licenses benefits-focused databases from BNA and CCH, which include current information on health and retirement plan legal issues. This enables us to go a step beyond providing just the official record, supplementing that with statistical analyses, bill summaries and editorial analysis that puts the legal information in context.

(3) In addition to those services required by Task #1 for Empire Plan Rate Renewal activities, assisting the Department with benefit and premium renewal activities for any of the other benefit programs administered by the Department;

As we note in C: Organizational Support and Experience, Segal's analytical capabilities goes beyond hospital, medical and drug benefits and includes significant experience and tools reviewing disability, dental, optical, term and permanent life insurance and long term care programs.

(4) In addition to those services required by Task #3 for GASB 75 Valuation, assisting the Department with any actuarial valuations;

As we note in our discussion of our services in Task 3, we are prepared to support the Department with developing retiree benefit design strategies, including consideration of the potential of a Medicare Advantage Plan, either as an option or a replacement. Included in these services can be modeling the effect alternatives would have on GASB 75 values.

We are also prepared to provide a GASB 74 valuation should the Department or the State feel the need for the NYSHIP benefit plans or any other State post-employment benefit to have such a valuation.

(5) Providing recommendations regarding proposed benefit/plan design changes;

Our plan design consulting process begins by taking a step back to understand your overall people strategy and in particular your rewards philosophy and strategy. In thinking about rewards, we use the Employee Value Proposition (EVP) framework shown below. In simple terms, the EVP describes why employees come to and stay at employment with New York State and local governments in the State. In addition to financial rewards (pay and benefits), State and local public sector entities offer career opportunities, interesting work, a brand name and a unique work environment. These attributes fall within career, work content and affiliation depicted in the model. The EVP framework is essentially a point of view that a large government can employ as it raises a variety of issues with the unions representing its workforce. While this proposal covers services provided to the State's health benefits plan, we have found that this point of view is helpful in putting health benefits into proper context to make sure that coverage provides needed and desired protection.

The focus of our rewards discussion is to understand the role of benefits in the State's overall rewards philosophy. We will work with responsible parties at Department to see that they understand the following:

Key Questions:

- What is the role of benefits to the State, participating agencies and Plan participants?
- What benefits will be core?
- What is the appropriate richness of the benefits package to each of the above noted parties?
- Does *each* benefit within the package need to be competitively positioned at the same level or is only important for the *overall* competitiveness to be at a certain level?
- Are plans flexible enough to appeal to the broad array of talent employed by the State and local governments?
- Do employees understand the value of benefits?



Understanding the role of benefits is important as it will help guide advice that may be requested of us when asked for design recommendation. While express assistance in the bargaining process is beyond the scope of this proposal, representatives of our Public Sector Collective Bargaining Practice regularly help clients construct an EVP model, which can be shared with those involved in collective bargaining.

With the rewards back-drop, we would then take a close look at your current health plan benefit levels, population management and vendor management. We clearly understand how benefit levels are set and we are familiar with the role of the Joint Labor-management Health Care Committee. The following services are designed to support the existing bargaining process and the joint oversight arrangement. Indeed, in other instances, our employment of this perspective has yielded numerous “positive-sum” changes that employers and employee representatives have been willing to consider.

Our health care strategy development process centers around the three-circle diagram below. Our starting point is data analytics. There are three elements to our data analysis:

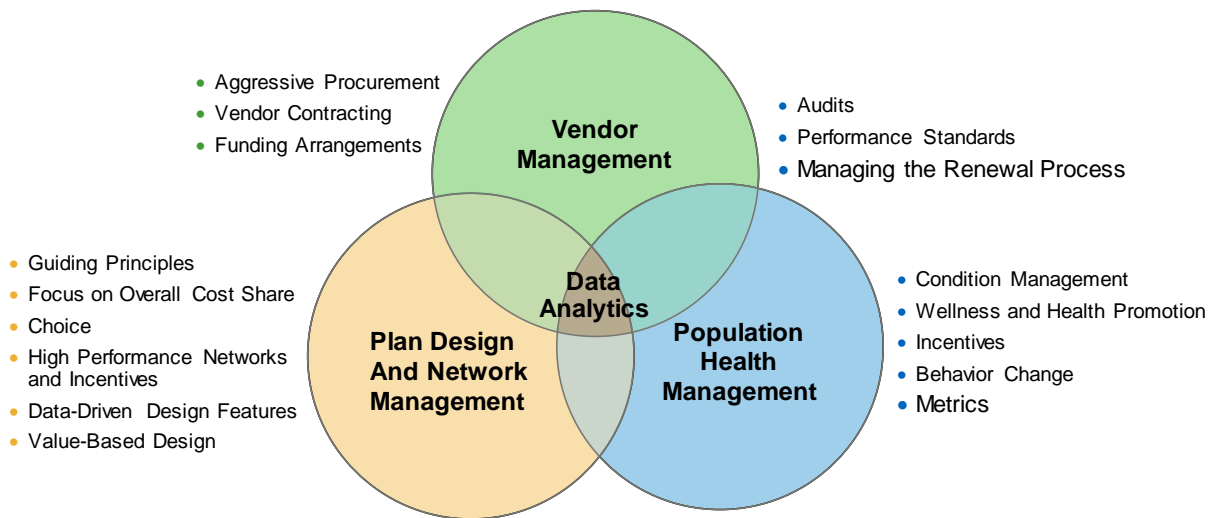
- How do the State’s health plans stack up competitively in the various markets in which it competing for employees? Are the needs of local governments different from the State?
- What patterns do we see in your data that suggest certain design and vendor considerations? Are there significant opportunities to save money with specialized networks, new care management techniques or through plan design changes? Are there utilization patterns that

networks, care management techniques or design can address? Are your current discounts out of line with the market? Are there health conditions that your current vendors are not managing?

- What limitations or other constraints have been placed on benefit plan provisions and what effect on utilization (either positive or negative) have resulted from those provisions?

These findings would then be matched up with your overall reward and cost objectives to produce specific health care strategy recommendations for the State.

Although our clients may not go through this process every year, we think it is important to review data from time to time and revisit the strategy in anticipation of Collective Bargaining or discussing specific issues with the Joint Labor-Management Committee.



(6) Performing cost/savings analyses of collectively bargained plan changes; and

As a general matter, we are both expert in and sensitive to the collective bargaining dynamic. In addition, Segal maintains a Public Sector Collective Bargaining Practice that is dedicated to assisting clients in all facets of collective bargaining. Our professionals serve clients both at the table or through technical support as clients see fit. This Practice assists in developing bargaining options for all economic issues and has extensive experience in providing assistance with health care matters including plan design, implementation of care management techniques, and plan financing.

Professionals in this Practice can help the Department develop presentation forms and, if desired, actually help present to the State’s unions the costs of any current and desired health care elements calculated by our benefit analysts. Professionals can also gather data on other relevant health plans and/or employers as the basis of comparison to help explain the Department’s position to its employees’ bargaining agents.

Segal is widely recognized by both management and labor as an objective and credible source of bargaining expertise. Should the need arise, we are available to provide assistance in mediation and arbitration.

(7) Reviewing vendors’ contract provisions and provide recommendations.

Segal is viewed as a critical contributor to maintaining a cost-effective plan and helping preserve a harmonious relationship between our clients and their carriers, TPAs, PBMs and other service providers. Our approach with the clients' vendors is to use data and analysis as the foundations for the cases we make about appropriate fees and services. This approach has earned Segal the respect of the firms who service our clients and a reputation for being "fair but firm" in our negotiations.

Included in our vendor management services can be a review of the contracts in place with vendors. We can comment on the competitiveness of the contracts' cost and service elements to help the Department's office prepare for contract renewals or possible contract enhancements during their term.

b. Required Submission

In regard to Task #4, please provide the information requested below as part of your technical proposal:

(1) A description of the proposed process by which the Offeror will plan, complete and report back to the Department on Ad Hoc projects;

Segal can and will provide customized or ad hoc reports for the Department, including, comprehensive cost-and-benefit analyses and all other forms of custom reporting requested in this RFP. We have assembled a team that can meet a broad range of ad hoc requests and analysis. In addition to the core service team, professionals from our Compliance, Administration and Technology Consulting, Communications and Public Sector Collective Bargaining Practices will be available to support the Department as needs emerge. All requests will be directed to Mr. Vieira, the Project Team Leader. Mr. Vieira will respond promptly and assign appropriate staff to best meet the Department's specific needs, provided in an agreeable timeframe.

(2) A description of the steps the Offeror will take to ensure that due dates and deadlines for the required ad hoc deliverables are met, including how the Offeror will ensure that this process meets the time constraints and specialized needs of the Department, and

Segal is fully prepared to meet the Department's requirements for undertaking and completing ad hoc requests within very limited timeframes, i.e., within 2 – 3 days of the request and, on occasion, within a 24-hour period for certain high priority tasks. As a national benefits consulting firm, we are able to draw on the considerable talent and resources of our actuarial and analytical reporting staff to provide these quick-turnaround services as needed.

The timing for ad hoc reports will depend upon the complexity of the report required and the analysis and insight desired. Simply generating an ad hoc report may only take a day or two to produce. However, if the Department is looking for Segal to dig into the data and develop an analysis of a particular aspect of a program to draw insights, or determine the ROI of an investment made, the report may take a few weeks to carefully design the analysis, generate the reports, document the analysis and findings and have the analysis properly reviewed. We typically outline the project and delivery timeframe and get the client's feedback before beginning work.

(3) A description of the quality assurance process to be used to ensure requested Ad Hoc reports, documents and services are complete, accurate and of the quality required by the Department.

Actuarial work requires complex calculations and high-level computer programming. Our intensive quality review process not only checks the accuracy of the calculations but also analyzes what the results mean for NYSHIP. Our excellent quality control and peer review standards for client work, including in any ad hoc reports or services requested, are maintained by the implementation of the following programs:

- **Mandatory peer review of actuarial reports:** Actuarial managers oversee a comprehensive, three-stage review process for all technical actuarial work. This ensures that current regulations and requirements are considered, all assumptions and calculations have been appropriately documented, checked and reviewed, quality control checklists completed and followed, the review process is fully documented, data reasonability criteria met, and adherence is maintained with all of the firm's policies and procedures as well as professional actuarial standards.
- **Software:** To maintain accuracy and quality, the firm's actuarial software is internally developed and tested by credentialed actuaries working in our national Actuarial Technology and Systems unit. The same basic actuarial modeling software is used in all valuations, with customized applications that develop appropriate results for each type of plan.
- **Audits:** Our offices that provide health and actuarial work for clients are audited once a year to assure compliance with quality standards.
- **Actuarial training and quality control:** Many members of our staff are Fellows and Associates of the Society of Actuaries, Members of the American Academy of Actuaries, Fellows and Members of the Conference of Consulting Actuaries, Enrolled Actuaries and Fellows of the Canadian Institute of Actuaries. In addition, several of our firm's senior actuaries have served on committees of the American Academy of Actuaries, the Society of Actuaries, the Conference of Consulting Actuaries and the Actuarial Standards Board and on the Advisory Committee of the Joint Board for the Enrollment of Actuaries. Because of staff involvement in professional actuarial organizations, the company has a Director of Actuarial Continuing Education, who arranges a Technical Actuarial Meeting each year, as well as other professional development opportunities, which help actuarial staff meet continuing education requirements. Segal's Office of Chief Actuary (OCA) monitors adherence to our actuarial policies and processes by conducting annual internal peer reviews of each of Segal's local actuarial operations. Improvements to actuarial processes or practices are developed, implemented and monitored as part of the annual office operation reviews. OCA and our national actuarial policy committee oversee the contents of our standard actuarial valuation report.

(4) Provide a description of two (2) prior ad hoc projects undertaken by the Offeror for a client(s). (The ad hoc projects provided cannot be for ad hoc projects undertaken for the benefit of the Department, DOB and/or GOER.) Each of the projects should have, in the opinion of the Offeror, required a comprehensive analysis of a highly complex issue that was of urgent nature to the client.

- **The State of Maryland** needed to actively manage costs across multiple vendors, while continuing to offer competitive, comprehensive health benefits for employees and retirees has created an ongoing need for quick turnaround on claims analyses and insights. Increasing budgetary pressures have exacerbated the State's need to obtain data spanning its multiple vendors in a timely manner. While each vendor issued utilization studies, the State utilized Segal's Health Analysis of Plan Experience (SHAPE), a proprietary data-mining tool

to provide in-depth analyses and evidence-based recommendations regarding the ongoing management of the State's health plan. This data warehouse has allows Segal to combine data across the State's medical vendors and Pharmacy Benefits Manager to obtain integrated results which were reported in conjunction with valid and objective benchmarks. The results are summarized on the Project Abstract in Appendix B.

- **The City of Chandler, Arizona** was spending considerable amounts in attempts to improve the health of for its health plan members. In addition to services provided by its health plan administrator, the City also offered some programs itself. Questions were raised about Plan members' understanding of the programs and their value as well as the effect such program s were having on the incidence and severity of diseases. Segal suggested a strategy to identify the effectiveness of the current program and enhance areas determined to need development. Segal recommended the following projects to assist the City achieve their wellness initiative's goals and objectives. We worked closely with the Benefits Department and the Administrative Services Director to accomplish the recommended activities. The project took approximately six months to complete and identified a number of recommendations, which are summarized on the Project Abstract in *Appendix B*.

(5) The Offeror should complete and submit RFP Exhibit III.B, entitled "Project Abstract" for each of the two (2) examples discussed above using the instructions provided in the Exhibit.

These forms are provided in *Appendix B* along with sample reports.

3: Organizational Support and Experience

Follows is an organization chart noting the lines of authority for the contemplated core service team, resumes of the team’s members and a general description of Segal’s tools and resources that will be available to the Department.

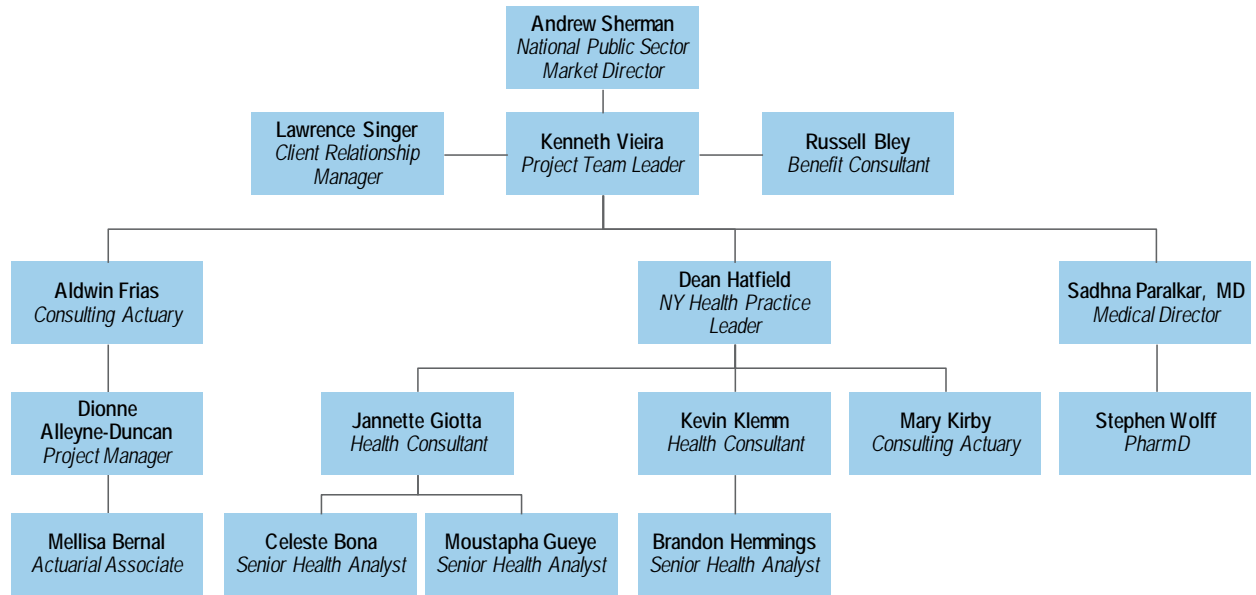


Exhibit 111.A

Project Team Roster

Project Team Member's Name	Position Title	Subcontractor (Y/N)	Employer
Andrew D. Sherman	SVP, National Public Sector Market Director	N	Segal
Kenneth C. Vieira, FSA, FCA, MAAA	SVP, Project Team Leader	N	Segal
Lawrence Singer	SVP, Client Relationship Manager	N	Segal
Dean Hatfield	SVP, NY Health Practice Leader	N	Segal
Jannette Giotta	VP, Health Consultant	N	Segal
Kevin Klemm	VP, Health Consultant	N	Segal
Mary Kirby, FSA, MAAA, FCA	SVP, Consulting Actuary	N	Segal
Sadhna Paralkar, MD, MPH, MBA	SVP, Medical Director	N	Segal
Stephen E. Wolff, PharmD	Pharmacy Benefits Consultant	N	Segal
Celeste Bona	Senior Health Analyst	N	Segal
Moustapha Gueye	Senior Health Analyst	N	Segal
Brandon Hemmings	Senior Health Analyst	N	Segal
Russell Bley	Benefits Consultant	N	Segal
Aldwin P. Frias, FSA, MAAA, FCA, EA	SVP, Consulting Actuary	N	Segal
Dionne T. Alleyne-Duncan	Actuarial Project Mgr.	N	Segal
Melisa Bernal	Actuarial Associate	N	Segal

Appendix B - STANDARD CLAUSES FOR ALL DEPARTMENT CONTRACTS

INSTRUCTION: Prepare this form for each key staff individual, including subcontractor provided key staff, if any.

Name: Andrew D. Sherman

Job Title: Senior Vice President

Relationship to Project: National Public Sector Market Director

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Brandeis University, Waltham, MA	BA	1984	Economics
Harvard University, Cambridge, MA	Masters in Public Policy	1986	Health Care Policy

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
May 1986 to present	Segal Consulting	Senior Vice President

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Sherman is a Senior Vice President and is National Director of the Public Sector market. He is based in both the Boston and Washington, DC offices. He has over 30 years of experience in the Northeast and throughout the U.S. as a benefits consultant working with plan sponsors on a wide range of employee benefit issues and opportunities including plan design, benefit strategies, funding, and plan management.

Mr. Sherman has extensive experience consulting to benefit plan sponsors on all aspects of health benefit plans as well as an array of wellness and work/life benefit programs. His consulting expertise includes total health management, Affordable Care Act compliance, prescription drug benefit plan design, retiree health benefit programs including Medicare and Medicare Part D, cost analysis, and benefit program implementation. He also assists clients with plan design review, funding alternatives, participant choice, eligibility provisions, provider reimbursement, and public and private health insurance exchanges.

Mr. Sherman has been widely quoted in both the benefits press and general press, including the *Boston Globe*, *The New York Times*, and *The Wall Street Journal*. He has written several articles on employee benefit issues. Mr. Sherman has spoken on these issues at several universities, for the Massachusetts Bar Association, and at numerous

employee benefit seminars and national conferences. He has also testified before the Massachusetts State House and the Boston City Council.

Name: Kenneth C. Vieira, FSA, FCA, MAAA

Job Title: Senior Vice President and Actuary

Relationship to Project: Project Team Leader

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Syracuse University, NY	BS	1986	Engineering

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
January 2012 to Present	Segal Consulting	Senior Vice President
Sept 1994 to Dec 2011	AonHewitt	Senior Vice President
May 1990 to Aug 1994	Mercer	Actuarial Analyst
May 1989 to April 1990	Cigna	Actuarial Analyst
Sept 1986 to April 1989	General Dynamics	Software Engineer

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Vieira is a Senior Vice President and Consulting Actuary with nearly 25 years of experience as an account manager, actuary and consultant. He serves as East Region Public Sector Market Leader and is a member of the Public Sector Leadership Group and the East Management Team.

Mr. Vieira's current public sector clients include: North Carolina State Health Plan, Alabama Public Education Employees Health Insurance Plan, State of Illinois – Department of Central Management Services, State of Nebraska, State of Wisconsin – Department of Employee Trust Fund, State of Kansas, State of Tennessee, Commonwealth of Kentucky, Georgia State Health Benefit Plan Pennsylvania Public School Employees' Retirement System

Name: Lawrence Singer

Job Title: Senior Vice President

Relationship to Project: Client Relationship Manager

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Syracuse University, NY	AB	1973	Economics
Syracuse University, NY	MBA	1975	Business

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
December 1975 to present	Segal Consulting	Senior Vice President

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Singer is a Senior Vice President and Benefits Consultant in Segal's New York office. Mr. Singer has over 40 years of experience and works with large public sector health plans in the New York metropolitan area. He is an expert on health, life and supplemental benefits plans as well as the administrative systems used in voluntary employee benefit programs. Mr. Singer has specialized experience in the development of PPOs, voluntary supplemental insurance plans for excess life insurance, disability plans and long-term care plans.

Mr. Singer has taught at the New York Institute of Technology in the School of Labor Relations and at the New School University in the Milano Graduate School of Management and Urban Policy.

Mr. Singer has published numerous articles on industry related topics that have appeared in publications including School Business Affairs and The Reporter.

Name: Russell Bley

Job Title: Benefits Consultant

Relationship to Project: Benefits Consultant

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Pace University, Pleasantville, NY	BBA	1999	Business

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
January 2015 to present	Segal Consulting	Benefits Consultant
August 2008 – January 2015	Segal Select	Senior Broker
May 2003 – August 2008	KBS International	Broker

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Bley is a Benefits Consultant in Segal's New York office. He consults to a variety of local multiemployer health, annuity and pension fund clients in the building trades, entertainment and service industries.

Mr. Bley previously served as a Senior Broker for Segal Select Insurance, a member of The Segal Group, where he developed analyses and comparisons, monitored and reviewed market strategy and proposed coverage specifications and delivered quotation communications. He also conducted policy reviews and presented firm findings and recommendations to client staff, board subcommittees and trustees.

Name: Aldwin P. Frias, FSA, MAAA, FCA, EA

Job Title: Senior Vice President and Actuary

Relationship to Project: GASB 75 Project Manager

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
New York University, NY	BS	1997	Actuarial Science

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
February 1998 to present	Segal Consulting	Senior Vice President and Actuary

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Frias is a Senior Vice President and Actuary in Segal's New York office with over 18 years of retirement consulting experience. As the Actuarial Manager for the firm's New York Retirement Practice, he oversees a staff of over 30 retirement actuaries and has supervisory responsibility for all work performed in the practice.

Mr. Frias consults to several multiemployer and public sector plans. He specializes in pension and retiree health valuations, particularly with regards to funding, design, accounting, regulatory and collective bargaining issues. In addition to serving as the Enrolled Actuary on pension valuations, he acts as the signing actuary responsible for supervising retiree health valuations.

Name: Dean Hatfield, CEBS

Job Title: Senior Vice President, New York Health Practice Leader

Relationship to Project: Lead Health Analyst

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
University of California, Santa Barbara, CA	BA	1986	Mathematics / Economics
Wharton School of the University of Pennsylvania	Certified Employee Benefit Specialists (CEBS)		

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
2008 to Present	Segal Consulting	Senior Vice President
2006 to 2008	United Healthcare	NE Regional Vice President
1990 to 2006	Buck Consultants	Principal, NE Region Leader

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Hatfield is a Senior Vice President and Benefits Consultant in Segal's New York office with over 30 years of experience working with plan sponsors on a wide range of employee benefit services, including benefits strategies, funding and plan management. He is the firm's Health Practice Leader in the New York Region. Mr. Hatfield works with clients on plan design, vendor management, compliance, benefit integration, data analytics and financial management.

Prior to joining Segal, Mr. Hatfield served as Northeast Regional Vice President for a major health insurance carrier, where he focused on strategy and market development. He previously worked for another major consulting firm, where he managed their largest health care practice and acted as lead consultant for several of their premier accounts.

Mr. Hatfield is frequently interviewed by and quoted in the media, appearing in Business Insurance, Crain's New York Business, Entrepreneur magazine, The New York Times, Chicago Sun-Times, LA Times, SF Chronicle and The Wall Street Journal. In addition, his many articles on health care issues have appeared in leading industry publications, including WorldatWork's workspan, the IFEBP's Benefits and Compensation Digest, and SHRM Online.

Name: Dr. Sadhna Paralkar

Job Title: Senior Vice President, National Medical Director

Relationship to Project: Subject Matter Expert, Clinical Consulting

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Northwestern University, IL	MBA	2003	Healthcare and marketing
University of Illinois, IL	MPH	1995	Public Health
University of Mumbai, India	MD	1992	Medicine

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
December 2014 to present	Segal Consulting	Senior Vice President
October 2008 to December 2014	Segal Consulting	Contract Consultant
March 2003 to October 2008	Optum /UnitedHealthGroup	Vice President
April 1997 to March 2003	Navistar	Medical Director
April 1995 to March 1997	HealthcareCOMPARE (Aetna)	Senior Consultant

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Dr. Paralkar is a Senior Vice President and National Medical Director in Segal's Chicago office with over 20 years of experience. Dr. Paralkar leads Segal's Medical Management Services and has specialized expertise in health care informatics, medical management program design, clinical operations, on-site clinics, and network management strategies to optimize health improvement while containing costs, and evaluation and implementation of disease management and wellness programs.

Dr. Paralkar has published several articles on health and productivity in peer-reviewed journals and is a frequent speaker at national conferences concerning health care and population health management.

Name: Dionne Alleyne-Duncan

Job Title: Retiree Health Project Manager

Relationship to Project: Reviewer – will oversee the analysis of the client data, gathering of statistics and information for actuarial assumptions, implement procedures and programs relevant to client needs while making sure team is meeting company's quality standards.

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
New York University, NY	BS	1989	Actuarial Science

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
Sept 1989 - present	Segal Consulting	Retiree Health Project Manager

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Has over 25 years of experience working with local, regional and national multiemployer defined benefit pension plans and retiree health plans. Relevant team member for providing FASB ASC 965, FASB ASC 715 and GASB valuations for health funds with participants in New Jersey State, New York State and City Retirement Systems. As Project Manager, is responsible for the collaboration between two departments to meet client OPEB valuation requirements in a timely manner.

Name: Jannette Giotta

Job Title: Vice President

Relationship to Project: Health Consultant, Health Benefits Analyst

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Hofstra University, NY	BBA	1990	International Business
Dowling College, NY	MBA	1994	Business Administration

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
August 2003 to present	Segal Consulting	Vice President/Health Consultant
September 1997-July 2003	GHI	Senior Underwriter
April 1992-August 1997	Metlife/United Healthcare	Underwriter

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Ms. Giotta is a Vice President, manager, and Health Consultant in Segal's New York office and has over 25 years of experience in employee benefits. She is a lead consultant to both multiemployer and public sector clients.

Ms. Giotta's expertise includes performing financial projections, providing COBRA rates, conducting renewal analyses and issuing and analyzing Requests for Proposals (RFPs) for an array of products. She also performs merger and acquisition studies, analyzes contribution rates and develops benefit design recommendations.

Name: Kevin Klemm

Job Title: Vice President

Relationship to Project: Health Consultant, Health Benefits Analyst

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Montclair State University, NJ	BS	1976	Management & Marketing
Fairleigh Dickinson University, NJ	MBA	1984	Finance

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
December 1986 to date	Segal Consulting	Vice President

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Klemm is a Vice President and Health Consultant in Segal's New York office with over 30 years of experience in working with public sector and multiemployer clients on a wide range of employee benefit services, including benefit strategies and pricing, funding and plan management.

Mr. Klemm works with many of Segal's large public sector clients. He has special expertise in analyzing the effectiveness of managed care options and with Segal's proprietary pricing tools to evaluate the cost impact of various plan modifications. His expertise includes performing financial projections, providing COBRA rates, conducting renewal analyses and issuing and analyzing Requests for Proposals (RFPs) for an array of products. He also performs merger and acquisition studies, analyzes contribution rates and develops benefit design recommendations.

Mr. Klemm is also a technical resource for COBRA rating, administrative issues, and ancillary benefits. He regularly attends meetings to provide commentary on cost and plan design issues. He is a licensed insurance broker and agent for both Life and Health in multiple states.

Name: Mary Kirby, FSA, FCA, MAAA
Job Title: Senior Vice President and Actuary

Relationship to Project: Health Actuary

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
St. John's University, NY	BS	1987	Mathematics
Stevens Institute of Technology, NJ	MS	1990	Applied Mathematics & Statistics

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
August 2000 to present	Segal Consulting	SVP & Consulting Actuary
January 1998-August 2000	Buck Consulting	Actuary
July 1992-January 1998	ASA Inc	Sr. Actuarial Associate

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Ms. Kirby is a Senior Vice President and Consulting Actuary in Segal's New York office with over 20 years of experience working with employee benefits plans. She serves in the firm's Office of the Chief Actuary and is the National Retiree Health Practice Leader.

Ms. Kirby advises public sector, multiemployer and corporate clients on issues and topics related to the Affordable Care Act (ACA) and its implications for plans and employers. She consults on plan design (medical, dental, life, and disability) for active employees and retirees; health exchanges; competitive bidding; reserve calculation and valuation; ASC 965, GASB 43/45 (and the new GASB 74/75 statements), ASC715 and ASC 712; union negotiations; flex pricing; claims analysis; and underwriting.

Ms. Kirby received a BS *summa cum laude* in Mathematics from St. John's University and an MS in Applied Mathematics and Statistics from the Stevens Institute of Technology (Hoboken, NJ). She is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and a Member of the American Academy of Actuaries.

Name: Stephen Wolff, PharmD.

Job Title: Pharmacy Benefits Consultant

Relationship to Project: Pharmacy Benefit Consultant

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
University at Buffalo, NY	Doctorate	2013	Pharmacy

PROFESSIONAL EMPLOYMENT

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
July 2015 to Present	Segal Consulting	Pharmacy Consultant
July 2013 to July 2015	Tops Markets	Pharmacist

PROFESSIONAL EXPERIENCE

Dr. Wolff is a Pharmacy Benefits Consultant in Segal's New York office. He received a Doctorate of Pharmacy from the University at Buffalo School of Pharmacy and Pharmaceutical Sciences, where he is an adjunct clinical instructor. He is currently taking exams given by the Society of Actuaries (SOA) in pursuit of an actuarial designation. He is a licensed pharmacist in New York State, and also holds a New York health and life insurance license.

Prior to joining Segal, Stephen was a practicing community pharmacist, where he directly participated in patient care.

Stephen has published multiple articles on pharmacy related topics in peer-reviewed journals and annual meetings.

Name: Mellissa Bernal

Job Title: Actuarial Associate

Relationship to Project:

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
New York University, NY	BS	1999	Actuarial Science/Finance

PROFESSIONAL EMPLOYMENT

<u>Dates From - To</u>	<u>Employer</u>
January 1999 to present	Segal Consulting

PROFESSIONAL EXPERIENCE

Mellissa Bernal has been employed with Segal for over 15 years, initially as an Actuarial Analyst and progressed to Actuarial Associate. She is has worked on retiree benefits for pension and health plans for multiemployer and public sector plans.

Name: Celeste Bona

Job Title: Health Plan Analyst

Relationship to Project: : Health Plan Analyst

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
Wake Forest University, NC	BA	1987	Sociology

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
June 1993 to present	The Segal Company	Health Consultant
September 1987 to June 1993	Prudential Insurance	Group Underwriter

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Ms. Bona is a Health Consultant in Segal's New York office and has 30 years' experience working with group benefit plans. She works with many of Segal's large multiemployer and public sector health and welfare clients. She has worked with both national and local clients

Ms. Bona has extensive expertise in analyzing the effectiveness of managed care options, plan design changes, and in cost projecting. She conducts renewal analyses and often negotiates underwriting issues directly with carriers. She also issues and analyzes Requests for Proposals (RFPs) for an array of products.

Name: Moustapha Gueye

Job Title: Manager Health Benefits Advisors

Relationship to Project: Health Plan Analyst

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
St John's University, NY	MBA	1992	Finance
Universite Abidjan	"Maitrise"	1989	Economics
Universite Dakar	"Maitrise"	1981	Mathematics

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
August 1994 to present	Segal Consultant	Health Analyst
February 1994 to June 1994	NYC Board of Education	Math Teacher

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Gueye is a Manager of Health Benefits Analysts in Segal's New York office. He manages a team of health analysts and works with health plans for many of Segal's clients in each of the firm's practice areas. Mr. Gueye has extensive experience in analyzing prescription drug plans and issues related to them.

Name: Brandon Hemmings

Job Title: Senior Health Benefits Analyst

Relationship to Project: Analyst

EDUCATION

<u>Institution & Location</u>	<u>Degree</u>	<u>Year Conferred</u>	<u>Discipline</u>
U. of Mich. School of Social Work	MSW	2010	Community Health
University of Michigan	BA	2007	Political Science

PROFESSIONAL EMPLOYMENT (Start with most recent.)

<u>Dates From - To</u>	<u>Employer</u>	<u>Title</u>
Apr '14 – present	Segal Consulting	Health Benefits Analyst
Jun '12 – Nov '13	Ctr for Healthcare Research & Transformation	Healthcare Analyst
Mar '11 – May '12	Ctr for Healthcare Research & Transformation	Health Policy Fellow
Dec '10 – Mar '11	U. of Mich. School of Social Work	Healthcare Policy Research Assoc.

PROFESSIONAL EXPERIENCE (Significant experience/education relevant to program)

Mr. Hemmings is a Senior Health Benefits Analyst in Segal's New York office with over five years of experience in health services and benefits analytics. His clients include several major multiemployer health and welfare clients across a range of industries, as well as public sector entities.

Mr. Hemmings provides budget projections, benefit rate calculations and plan change cost estimates. He also specializes in Hospital and Medical RFP analyses and the review of market conditions to identify and evaluate network options with regard to discounts, network breadth and administrative fees in order to improve both costs and participant care.

Prior to joining Segal, Mr. Hemmings was a Healthcare Analyst at the Center for Healthcare Research and Transformation, where he published numerous studies on healthcare cost trends and consulted for the UAW Retiree Medical Benefits Trust.

Segal Consulting Resume

Segal, a firm of employee benefits, compensation and human resources consultants and actuaries, has consulted since 1939 on the total rewards provided to public sector employees. We serve the needs of over 400 public sector clients, including:

- State and local governments
- Statewide employee retirement systems and health benefit plans
- Public schools and higher education institutions
- Federal government agencies and other public organizations and entities
- Special districts: transit, utilities, water, toll and port authorities

Our consultants and actuaries have broad experience and extensive knowledge of employee benefits. Many of our professionals have one or more professional certifications and advanced degrees. Our professional staff includes Fellows and Associates of the Society of Actuaries, Members of the American Academy of Actuaries, Fellows, and Members of the Conference of Consulting Actuaries, Enrolled Actuaries, Chartered Financial Analysts and Certified Employee Benefits Specialists.

Our underwriters and actuaries have extensive experience with all types of funding. Whether it be self-insuring, health insurance or prescription drug plans through ASO, TPA, or PBM service providers we have the expertise, analytical tools, and actuarial models to assure that our clients are getting “best in class” financial terms and contractual terms. We also have extensive experience in self-funding dental, disability and for jumbo employers crafting cost plus life insurance arrangements. We bring our expertise to bear for our clients by preparing rate and budget projections independent of insurers and administrators. We also prepare our own independent rate calculations rather than relying upon the manual calculations of the insurers and administrators.

Our comprehensive array of results-driven consulting and actuarial services includes strategic planning and program designs that align benefits with staffing needs.

Vision Statement

- In our chosen markets, we are the leader in client satisfaction, professionalism, superior quality and innovation
- We are the architect of responsive and creative solutions to our clients’ benefit, compensation and human resources needs

- Our teams combine technical excellence with a superior understanding of client needs and the environment in which our clients operate
- We are committed to working partnerships with our clients that add value and consistently exceed expectations

Statement of Values

- We are dedicated to total client satisfaction
- We deliver excellence, superior quality and value in everything we do
- We recognize that our most important asset is our employees and encourage their professional growth
- We require the integrity, professionalism and contributions of our employees for our success
- We are committed to the importance of our employees' quality of life and a balance between their personal and work lives
- We will achieve superior performance, as measured by return on investment, through systematic, substantial and profitable growth
- We are committed to operating as an independent consulting firm
- We assume responsibility as a corporate citizen and support cultural and charitable causes and organizations

The Segal Philosophy

- We do not just talk; we listen
- Benefits and actuarial consulting is our only business
- We are dedicated to serving collectively bargained plans
- Our goal is to meet the needs of our clients, fund trustees and the participants in their plans
- We rely on a team approach to maximize our resources
- Our clients and the professionals working with them are important team members
- Our attention to quality brings us our greatest rewards
- Each client is unique
- Our employees are our greatest asset

Segal Services and Tools

Health and Welfare Plan Consulting

- Medical, dental, disability, prescription drug and vision benefits plan design
- Retiree health plan liability assessments
- Cost management strategies
- Financial forecasting and trend analysis
- Plan trend and industry benchmarking
- Plan administration and compliance strategies
- Vendor selection, contracting and management services
- Quality performance standards
- Claims Audit Consulting
- Medical, dental, disability, vision and prescription drug claims administration and transaction processes analysis
- Plan provisions and timeliness of claims adjudication compliance review
- Insurance carriers, third party administrators and self-administered plans review

Communications Consulting

- Communications assessments, employee research and strategic planning
- Organizational change communications
- Compensation and performance management communications
- Personalized communications and benefit statements
- Web site content development and design

Administrative and Technology Consulting

Strategic initiatives and business objectives review

Administrative processes, organizational structure and operational technology assessment

Administrative alternatives feasibility studies

Process re-engineering

Technology assessment, acquisition and implementation

Compliance Consulting

Segal's Compliance Practice is available to help clients and their attorneys with current and pending federal, state and local laws and regulations affecting employee benefit plans. Segal's

seminars, workshops and publications devoted to public sector concerns focus on current and emerging issues and legislation that may affect clients' benefit plans organization.

Experience with Plans Subject to Collective Bargaining

The Segal Company employs more actuaries who provide services to collectively bargained plans than any other firm. Our long history of working with multiemployer plans in every industry has given us a level of experience that is unparalleled. Currently, we provide actuarial and consulting services to approximately 1,500 collectively bargained pension and welfare plans nationwide.

Insurance Brokerage Services

Insurance Brokerage Services are provided by Segal Select Insurance Services, the insurance brokerage subsidiary of The Segal Group, Inc. Segal Select Insurance ("Segal Select") is the largest retail insurance broker dedicated to fiduciary liability insurance and fidelity bonds for multiemployer and public sector plans, which gives us unmatched recognition in the insurance marketplace. Segal Select Insurance brokers are also experts in employment practice liability insurance and cyber liability insurance and use our extensive experience to obtain insurance policies that offer broad coverage and competitive premiums. Segal Select's brokers are licensed in all 50 states.

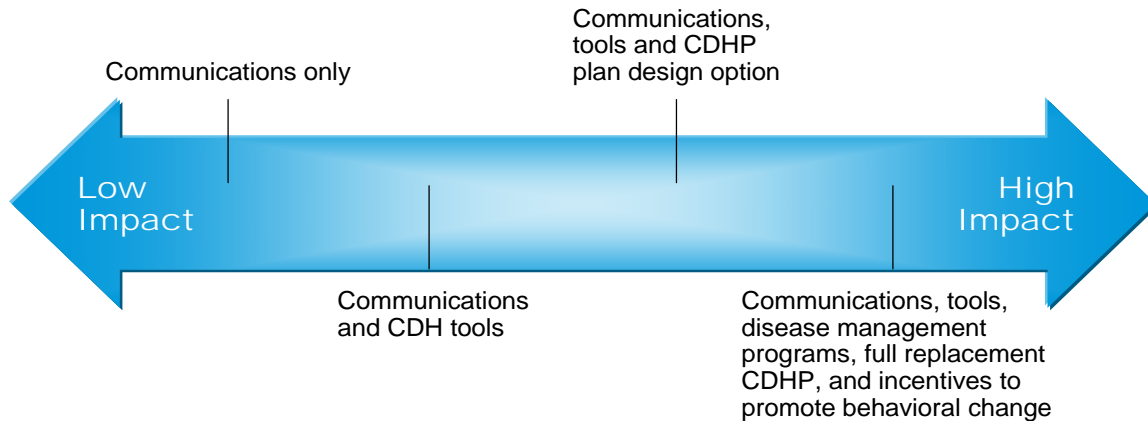
Experience with HSAs and HRAs

Segal has a large number of clients in all three of the markets that we serve who have considered HSAs and HRAs in a variety of different formats. We have been helping our clients with the various design, communications, risk and clinical issues associated with consumerism and individual accountability for many years, indeed far longer than these plans' current names have been in use.

We therefore have developed a dynamic array of consumer-driven health care strategies, tools, services and resources. Our core consumerism beliefs are that consumer-driven health care programs are not a "product," but rather a plan design consideration that is just one piece of larger strategy of behavioral change. There are many issues to consider, and Segal can help do so.

Segal believes that consumer-driven health care programs will become more prevalent in the future. We encourage our clients to utilize them but only after properly assessing feasibility and scope and developing systems to measure the budget and clinical impact on an ongoing basis.

Services of this nature are typically included in the routine service we provide our clients in examining new plan designs. We have found that the real difference is in consumer empowerment and this is where Segal's employee communications consulting experience makes our approach different.



Actuarial Technology

Segal’s health care consultants utilize several analytical tools to measure, monitor, and predict the costs of health and welfare benefit programs. Segal has developed a number of pricing tools to help clients assess the impact of the Affordable Care Act (ACA), including early retiree reinsurance subsidy, expansion of dependent coverage to age 26, evaluating maximum plan changes for the decision on maintaining grandfathered status, removing annual and lifetime dollar limits, coverage of preventive services without any cost sharing in-network, and modeling impact of state health exchanges and federal subsidies. We customize our technical resources for your specific needs, ensuring that we provide the high level of quality consulting that our clients expect. Segal is on the cutting edge of health care industry trends and relevant legislation, and we update and revise our tools as needed to provide maximum value to our clients.

<p>APEX <i>Health Plan Rating</i></p>	<ul style="list-style-type: none"> • Software application designed to calculate medical plan premium rates and to estimate relative values of plan design changes. • Reflects client’s benefit plan design, location, and industry. • Annual updates underlying data and assumptions.
<p>CCA <i>Claims Cost Application Tool for Measuring Costs of Retiree Health Plans</i></p>	<ul style="list-style-type: none"> • Software application that computes baseline health care plan starting costs for valuations of retiree health plans under FAS 106, FASB ASC 965 and GASB 45. • Reflects client’s own population, claim experience, and plan administration expenses.
<p>Clinical Program Review (CPR)</p>	<ul style="list-style-type: none"> • Analyzes client specific data and evaluates the effectiveness of clinical programs in managing drug utilization • Provides a detailed assessment of a client’s current clinical programs, recommendations for improvements to existing edits, and identifies new clinical management opportunities • Delivers a report outlining the findings and key recommendations—tailored specifically for each client
<p>Dental Pricer <i>Dental Plan Cost Rating Tool</i></p>	<ul style="list-style-type: none"> • Application used for developing dental premium rates and can estimate the effect of a plan changes. • Uses plan design information and summary level claims data

<p>Discount Database <i>National database of provider discounts</i></p>	<ul style="list-style-type: none"> • Segal participates in the Uniform Data Specification (UDS) task that have devised a common methodology of evaluating provider discounts that is accepted by most carriers. • Data is updated twice annually and can be used for client specific discount analyses by service area.
<p>Employee Cost Share Calculator & Benchmarking Tool <i>Employee Cost Sharing Calculator and Summary-Level Data</i></p>	<ul style="list-style-type: none"> • Allows plan sponsor to compare value of plan designs to determine optimal balance of employee and employer cost • Calculates the “true employee cost share” for a medical / Rx plan, and graphically benchmarks it against other plans (i.e., includes plan copayment features, etc., not just EE payroll contributions / deductions) • Allows the comparison of the total (gross) value of the plans and / or the employee cost share of those plans against other entities
<p>Excise Tax Forecaster <i>Forecasts excise tax on high-cost health plans</i></p>	<ul style="list-style-type: none"> • ACA Excise Tax Forecaster provides clients with an estimate of the potential tax liability. • Can model whether and when a plan would hit the excise tax annual threshold and the cost of the tax over several years using several different assumptions of plan cost trends. • Can address single and multiemployer health plans, multiple coverage tier arrangements and varied annual trend assumptions. • Allows for the calculation of standard risk groups, high-risk industries, early retirees and Medicare eligible retirees.
<p>Medi-Span <i>National Drug Data File</i></p>	<ul style="list-style-type: none"> • Drug product descriptive information (e.g., NDC elements, generic classification indicator and packaging examples). • Pricing (such as AWP and direct pricing). • HCFA drug product information. • Clinical data (such as drug interactions & precautions).
<p>HBRs <i>Health Benefit Reports</i></p>	<ul style="list-style-type: none"> • The HBR series is a routine consulting service provided in response to annual financial planning and reporting needs of health and welfare programs. This approach is modular and permits ad hoc delivery to our clients, as needed. Segal’s consulting services include: <ul style="list-style-type: none"> – Financial Experience and Budget Projections – including interactive modeling application; – Proposed COBRA & Other Self-Pay Rates; – Vendor Renewal Analysis; – Group Insurance Policy Settlement Analysis
<p>IBNR Model <i>Model for Developing Reserves for Claims Incurred but Not Reported</i></p>	<ul style="list-style-type: none"> • Spreadsheet template used to develop IBNR reserves • Uses claims triangular data (by incurred and paid month)

<p>Ingenix Encoder Pro Compliance Code Editing Software</p>	<ul style="list-style-type: none"> • Online, real-time code lookup software that delivers code detail and reference information on CPT®, HCPCS and ICD-9-CM codes. • Compliance editor checks for coding accuracy and review your code selections for CCI unbundle edits, ICD-9-CM specificity, age, medical necessity and gender. Understand whether a code carries an age or sex edit, is covered by Medicare or contains bundled procedures. • Compliance editor to review your code selections and a fee calculator to compute the Medicare reimbursement rate for your region.
<p>Interactive Projections Modeling</p>	<ul style="list-style-type: none"> • Enables the modeling of different income and expense assumptions (from completed FEBP reports). • The model allows for various assumption changes and scenarios to be presented to clients in “real-time”
<p>Medical Claim Audit Sampling <i>Detailed Claimant Data to Support Segal Claims Audit</i></p>	<ul style="list-style-type: none"> • Develops a random sample of claimant records based on various criteria • Assists in validating claims adjudication process and other contractual terms of a benefits plan
<p>Medicare Part D Calculator <i>Medicare Part D Actuarial Equivalence Calculation</i></p>	<ul style="list-style-type: none"> • It is used to determine whether a plan will pass a gross test (prong 1) or a net test (prong 2) • This proprietary tool estimates a projected federal subsidy (total and per participant) based on client detailed drug claim information
<p>Mental Health Parity Pricer <i>Mental Health Parity Rating Tool</i></p>	<ul style="list-style-type: none"> • Assessment of the likely cost impact to bring non-compliant design elements into compliance under the Mental Health Parity and Addiction Equity Act (MHPAEA)
<p>MESVAL/STAR <i>Retiree Health Valuation System</i></p>	<ul style="list-style-type: none"> • A multi-decrement actuarial valuation program that produces a comprehensive set of liability calculations and cost projections associated with a wide range of benefit plans. • The modular structure of the program allows for improvements to be implemented with a high degree of ease, speed and accuracy.
<p>National Dental Advisory Service (NDAS) Pricing Program <i>Dental Fee Schedule Database</i></p>	<ul style="list-style-type: none"> • The NDAS pricing program contains dental fee information from survey data as published by Yale Wasserman DMD Medical Publishers (primary participants in the survey are dentists in private practices). • This tool allows you to compare fees with NDAS 40th, 50th, 60th, 70th, 80th, 90th & 95th Percentile Fees. It can be used to review, fine-tune or design a fee schedule. It can also be used to support frequency/utilization analyses.
<p>Physician Fee Modeler <i>Physician Fee Schedule Comparison Tool</i></p>	<ul style="list-style-type: none"> • Proprietary tool to analyze multiple physician fee schedules and compare them against a common point of reference, Medicare RBRVS. • The tool gives Segal a standard and uniform method for comparing various physician fee schedules in a way that is statistically valid, informative, and easy to understand. • The tool also has the ability to breakdown a fee schedule into 28 separate service categories, giving us the ability to detect fee schedule inconsistencies and isolate particular services of interest.

<p>Potential Fraud and Abuse Review (PFAR)</p>	<ul style="list-style-type: none"> • Identifies potential fraudulent or abusive behavior of prescription drugs in their membership. • Uses sophisticated clinical criteria to identify members who may be at risk and offers plan sponsors a clear, detailed report of the utilization patterns of the identified members.
<p>Pharmacy Benefit Diagnostic Check-Up</p>	<ul style="list-style-type: none"> • Assesses the client's prescription drug benefits across the following categories: Financial, Plan Design, Utilization, Clinical Programs, and Cost/Containment/Summary.
<p>Proposal Tech <i>Electronic RFP Tool</i></p>	<ul style="list-style-type: none"> • Software to automate the health RFP bidding and analyses processes that are performed on behalf of a health benefits program. • System has the capability to attach necessary data required by a third party administrator, insurance carrier, or vendor in order to calculate and provide competitive quotations. • Offers auction-like function and allows for auditing
<p>R&A Comprehensive Medicare Coordination Model <i>Post-65 Rating Model</i></p>	<ul style="list-style-type: none"> • Prices health care benefits for a Medicare-eligible population. • Models plan design options that coordinate with Medicare.
<p>Rx Omni Pricer <i>Prescription Drug Cost RatingTool</i></p>	<ul style="list-style-type: none"> • Application used for developing prescription drug premium rates and calculate the value of plan changes to the plan design. • Uses plan design information and summary level claims data (optional). • Also, a version is used for Medicare Part Actuarial Equivalence calculation where client drug claims data is not credible
<p>SHAPE <i>Segal's Health Analysis of Plan Experience is a Comprehensive Medical Data Mining Service</i></p>	<p>Data warehouse that combines data across medical vendors and PBMs and has capability to compare plan to normative benchmarks. Information is used to:</p> <ul style="list-style-type: none"> • Determine the medical conditions and treatments that are driving up health care costs which helps us develop more targeted and effective cost containment strategies • Benchmark cost and utilization patterns of a plan to industry norms and other plan sponsors • Determine member out-of-pocket cost burdens relative to other plan sponsors (accurately forecast patient disruption) • Assess impact and effectiveness of wellness, disease management and other clinical programs • Accurately measure the future saving impact of plan modifications being considered • Serve as the tool for plan sponsors and vendors to manage "at risk patients" through predictive modeling • Profile cost and quality of highly used hospitals, labs, physicians and other medical care facilities (e.g. build custom, high performance networks) • Serves as an audit tool to validate vendor performance guarantees (e.g., vendors discounts, generic fill rates, etc.) • Investigating Fraud, Claims Coordination and Subrogation Opportunities • Allows clients to centralize all data from multiple vendors in one locations

Segal Multi-
Employer Health
Plan Design Norms
*Medical and Prescription
Drug Plan Design
Database*

- Database consisting of current medical and prescription drug plan designs for ninety plus Segal multiemployer clients on a national and regional basis.
 - Metrics captured include medical plan deductible, coinsurance, office visit copay, emergency room copay, generic/brand Rx copay, and percent of plans with prescription drug coinsurance.
-

Stop Loss Database Stop Loss Benchmarks	<ul style="list-style-type: none"> • This proprietary tool allows Segal consultants to help our clients benchmark costs and coverage levels to group peers of similar size and industry. • The Stop Loss Database includes data on over 200 Segal clients
Stop Loss Deductible Modeler Customize Stop Loss Deductible	<ul style="list-style-type: none"> • Stop Loss Deductible Modeler generates customized stop loss deductible suggestions for your plan based on each client's risk tolerance and reserve position. • Whether you are implementing a new plan, revisiting existing stop loss policies, or considering added coverage, our decision-support tool helps to guide you toward the appropriate level of coverage. • The tool provides a suggested range of deductibles based on several variables including: <ul style="list-style-type: none"> – Group size – Projected medical plan per capita claim costs and current reserve levels – Dependent ratio – Risk tolerance—the maximum dollars the plan is willing to put at risk each year • Also a version that calculates stop loss premium estimates for both individual and aggregate stop loss based on cost of underlying plan
Wellness Inventory Utilization Management Assessment Tool	<ul style="list-style-type: none"> • Outlines a plan sponsor's current wellness efforts on over 150 possible wellness services, identifies gaps and prices the financial impact of benefit modifications.

General Client Support Services

We note below two areas where our firm has committed significant resources, the cost of which is typically included in our regular time charge rates to be accessed by our clients as they see fit. We have made these commitments because we have found they are necessary for our clients to accomplish their core objective of always providing the highest level of value to the people to whom they are accountable. We have made the investment of providing support to our clients in these two areas.

Access to Legal Resources

While not engaged in the practice of law, Segal takes a proactive role in keeping clients informed on federal legislative, judicial, and regulatory changes and issues that may impact benefit plans. We actively bring issues to our clients before the opportunity for change has passed. Our involvement at the highest levels of the legislative and regulatory process allows us to identify emerging issues to our clients when there is still time to influence the outcome.

We help our clients identify legislative developments and compliance issues and monitor pertinent federal and state legal and regulatory developments through daily review of specialized trade publications such as the BNA Daily Tax Report and Health Care Daily and weekly Pension and Benefits Reporter, Tax Notes Today, and Inside HCFA. In addition, we monitor the release of pertinent government material, and have prompt access to all official documents such as

proposed and final regulations, Revenue Rulings, and bills introduced or acted on in Congress. Our research staff in the Washington, DC office includes a number of key members of our National Staff who monitor and report on developments in the employee benefits field.

Information is gathered and reported to our clients in various formats, depending on the context of the information. These formats include contacting clients directly, Segal-hosted educational seminars and workshops, and several regular Segal publications.

Important and breaking issues are made known to our clients through special issues of Segal's Bulletin. The Bulletin provides a concise description of the legislative or regulatory matter with a discussion of the possible implications for public sector plans. A more comprehensive treatment of the issues is provided through our Public Sector Letter, which presents in mini-white paper format, a thorough discussion of significant issues for governmental plans. Each issue of our In Depth publication provides highly focused analysis on a particular benefit issue.

When late-breaking developments can potentially affect a client, the consultants involved alert the client by telephone, letter or both. Consultants notify their clients as to the relevance and possible impact of a new statute, regulation or judicial decision on a client's plan(s) and discuss possible design opportunities. However, because Segal does not practice law, if a legal issue arises, clients are advised to supplement the information and observations that we offer by looking to their attorneys for authoritative legal advice. In addition, clients are encouraged to contact Segal staff members who are familiar with their work whenever a question arises about an issue that can affect their plan.

For example, Segal compliance specialists, under the direction of Kathy Bakich, JD, will be available to work with the Corporation on compliance related topics such as HIPAA, Medicare Part D and PPACA.

Access to Client Training Resources

Segal's leadership role in national public sector organizations is widely recognized. Our professionals are frequent speakers, authors and advisors to organizations such as the State and Local Government Benefits Association, National Association of State Retirement Administrators, National Council on Teacher Retirement, Government Finance Officers Association, National Association of Government Defined Contribution Administrators, International Foundation of Employee Benefit Plans, College and University Professionals Association—Human Resources, International Personnel Management Association—Human Resources, and WorldatWork. Seeing a need for a state and local government health benefits organization, Segal was instrumental in the founding of the State and Local Government Benefits Association (SALGBA). Today, nearly 15 years after our initial sponsorship and organization of its first two conferences, SALGBA is a thriving organization devoted to the special issues and challenges confronting public-sector health benefit plans.

Segal's publications that are routinely provided to clients include electronic newsletters including *Compliance Alert*, a periodic electronic newsletter on the company website summarizing important legislation and regulations concerning administration and compliance

issues, and *Capital Checkup*, which summarizes health issues. This information is provided upon release via email through our website, located at www.segalco.com:

- Periodic Updates, which detail the latest legal and regulatory developments.
- Periodic Public Sector Letters, Executive Letters and Newsletters that discuss creative benefit planning options for employers and plan sponsors.
- Segal Advisory, a publication of Segal Advisors, Inc., our investment consulting subsidiary, which discusses investment topics for plan sponsors.
- Periodic Bulletins on major compliance developments, which are distributed to staff and clients.
- The company also produces studies and conducts surveys on public employee health insurance plans, retiree health programs, funding of pension plans, investment results, post-retirement and other employee benefit subjects.

4. Appendix A: Revisions to Draft Agreement Legal Exceptions

Margery Sinder Friedman, Segal's legal counsel has provided comments on the sample contract included in the City of New York Office of the Comptroller, Actuarial Audit of Employer Contributions. We can use these as a basis for discussion should Segal be awarded the contract.

Appendix B - STANDARD CLAUSES FOR ALL DEPARTMENT CONTRACTS

10. INDEMNIFICATION

The Contractor agrees to indemnify, defend and save harmless the Department, the State, its officers, agents and employees, for any claims or losses the Department, the State or any individuals may suffer to the extent such claims or losses result from the claims of any person or organization for any and all injuries or damages caused by the willful misconduct or negligent acts or omissions of the Contractor, its officers, employees, agents, consultants sub-contractors and/or any other persons, firms, or corporations furnishing or supplying work, services, materials, or supplies in connection with the performance of the Agreement and from all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by the Contractor in the performance of the Agreement, and against any loss, damages or actions, including, but not limited to, costs and expenses, for violation of proprietary rights, copyrights, patents, or rights of privacy, arising out of the publication, translation, reproduction, delivery, performance, use, or disposition of any material, information or data furnished under the Agreement, or based on any libelous or otherwise unlawful matter contained in such material, information or data, except as otherwise provided in the Article entitled "Patent Copyright or Proprietary Rights Infringement" of this Appendix B.

15. USE RESTRICTIONS AND INTELLECTUAL PROPERTY

16. OWNERSHIP/TITLE TO PRODUCT DELIVERABLES

Except to the extent that they incorporate the Contractor's proprietary software, tools, know-how, techniques, methodologies and report formats (collectively, "Contractor's Proprietary Information"), all documents, data, and other tangible materials authored or prepared and delivered by the Contractor to the Department under this Agreement (collectively, the "Deliverables"), are the sole and exclusive property of the Department once paid for by the Department. To the extent Contractor's Proprietary Information is incorporated into such Deliverables, the Department shall have a perpetual, nonexclusive, worldwide, royalty-free license to use, copy, and modify the Contractor's Proprietary Information as part of the Deliverables internally and for their intended purpose.

27. AUDIT AUTHORITY

The Contractor acknowledges that the Department and the Office of the State Comptroller have the authority to conduct financial and performance audits of the Contractor's delivery of Program

Services (or Project Services) in accordance with the Agreement and any applicable State and federal statutory and regulatory authorities. Any such audit will be conducted after providing notice to the Contractor and during normal business hours. Such audit activity may include, but not necessarily be limited to, the review of documentary evidence to determine the accuracy and fairness of all items on the Contractor's submission of claims for payment under the Agreement, and the review of any and all activities relating to the Contractor's performance and administration of the Agreement.

Subject to applicable privilege and other legally binding obligations of confidentiality, the Contractor shall make available documentary evidence necessary to perform such reviews. Documentation made available by the Contractor may include, but is not limited to, source documents, books of account, subsidiary records and supporting work papers, claim documentation and pertinent contracts and correspondence.

The audit provisions contained herein shall in no way be construed to limit the audit authority or audit scope of the Office of the State Comptroller as set forth in Appendix A of the Agreement - Standards Clauses for All New York State Contracts.

29. INFORMATION SECURITY REQUIREMENTS

In accordance with the Information Security Breach and Notification Act (ISBNA) (General Business Law §889-aa, State Technology Law §208), Contractor shall be responsible for complying with provisions of the ISBNA and the following terms contained herein with respect to any private information (as defined in ISBNA) received by Contractor under the Agreement (Private Information) that is within the control of the Contractor either on the Department's information security systems or the Contractor's information security system (System). In the event of a breach of the security of the System (as defined by ISBNA), Contractor shall immediately commence an investigation, in cooperation with the Department, to determine the scope of the breach and restore security of the System to prevent any further breaches. Contractor shall also notify the Department of any breach of the security of the System as soon as practicable following discovery of such breach.

Contemporaneous with the execution of the Agreement, the Contractor and its designees shall execute the Department's Third Party Connection and Data Exchange Agreement and any other protocol required by the Department, and shall ensure its employees, agents and designees comply with the Department's Third Party Connection and Data Exchange Agreement if applicable, to ensure the security of data transmissions and other information related to the administration of the Agreement. This request may be waived by the Department in its sole discretion.

30. NONDISCLOSURE OF CONFIDENTIAL INFORMATION

Except as may be required by applicable law or a court of competent jurisdiction, the Contractor, its officers, agents, employees, and subcontractors shall maintain strict confidence with respect to any Confidential Information to which the Contractor, its officers, agents, employees, and subcontractors have access in the course of the Contractor's performance under the Agreement. For purposes of the Agreement, all State information of which the Contractor, its officers, agents, employees and subcontractors becomes aware during the course of performing services for the Department shall be deemed to be Confidential Information (oral, visual or written). Notwithstanding the foregoing, information that falls into any of the following categories shall not be considered Confidential Information:

- (a) information that is previously rightfully known to the receiving party without restriction on disclosure;
- (b) information that becomes, from no act or failure to act on the part of the receiving party, generally known in the relevant industry or is in the public domain; and
- (c) information that is independently developed by the Contractor without use of confidential information of the State.

The Contractor shall mitigate and known harmful effects resulting from the disclosure by the Contractor, its officers, agents, employees, and subcontractors of such Confidential Information.

34. OPERATIONAL CONTACTS

The Contractor shall maintain appropriate corporate and/or legal authority, which shall include, but not be limited to, the maintenance of an organization capable of delivering Program Services in accordance with the Agreement and the authority to do business in the State of New York or any other governmental jurisdiction in which Program Services are to be delivered pursuant to the Agreement. The Contractor also shall maintain operations, financial and legal staff that shall be directly available to the Department's operations, financial and legal staff, respectively. For purposes of the Agreement, maintenance of such staff and staff availability by the Contractor shall in no way create any agency relationship between the Department and the Contractor.

The Contractor acknowledges and agrees that no aspect of the Contractor's performance under the Agreement is contingent upon Department personnel or the availability of Department resources, with the exception of all proposed actions of the Contractor specifically identified in the Agreement as requiring the Department approval. With respect to such approval, the Department shall act promptly and in good faith.

The Contractor must cooperate fully with any other contractors who may be engaged by the Department relative to the Agreement.

The Contractor must ensure that all contacts by the Contractor personnel with other New York State agencies, external organizations (Federal Agencies, Unions, etc.) which result in any charge, cost or payment of any kind, must receive prior written authorization from the Department's Contract Manager.

37. CONSULTANT DISCLOSURE REQUIREMENTS

Upon request of the Department the Contractor shall demonstrate its compliance with Chapter 10 of the Laws of 2006 throughout the term of the Agreement by submitting to the Department and to the Office of the State Comptroller a "State Consultant Services - Contractor's Annual Employment Report" for each State Fiscal Year. Such report shall be due no later than May 15th of each year following the end of the State Fiscal Year being reported. Such report shall be required of any contract that includes services for analysis, evaluation, research, training, data processing, computer programming, engineering, environmental, health and mental health services, accounting, auditing, paralegal, legal, or similar services. Such report shall conform with Bulletin No. G-226 – Form B as issued by the Office of the State Comptroller. The report must be submitted to the Office of the State Comptroller, Bureau of Contracts, 110 State Street, 11th floor, Albany, NY 12236, ATTN: Consultant Reporting; and to the Department's Contract Manager.

SECTION VII: CONTRACT PROVISIONS

ARTICLE IX: RECORDS AND INFORMATION TO BE FURNISHED

- 9.1.0 On a timely basis, ~~The~~ the Department and the Vendors shall furnish to the Contractor all information which the Contractor may reasonably require and request with regard to any matters pertaining to the delivery of Project Services under this Agreement. The contractor will prepare a detailed data request outlining what is necessary to perform the Project Services and such data will be requested in a computer format compatible with the Contractor's computer system
- 9.2.0 Upon receipt of the data, the Contractor will examine it for missing information and internal consistency. The Contractor may charge the Department, at its normal hourly rates, if it is necessary to convert data not presented in the format requested and for the additional processing time required to reconcile data that contains errors, duplicate records or missing information. The Department agrees and acknowledges that the Contractor shall (a) have the right to rely on the accuracy of the data and information provided by the Department and the Vendors and (b) have no responsibility for independently verifying this data and information, except that, the Contractor shall have the duty to advise the Department if the data and information appears to be abnormal, unusual, or incorrect. The Department agrees that it will notify the Contractor (and require the Vendors to notify the Contractor) promptly upon gaining knowledge of any material change to any of the information provided to the Contractor.

ARTICLE XI: USE AND DISCLOSURE OF PROTECTED HEALTH INFORMATION

- 11.6 11.3 **Permitted Uses and Disclosures of the Department's PHI:** The Contractor may create, receive, maintain, access, transmit, use and/or disclose the Department's PHI solely in accordance with the terms of this Agreement. ~~In addition~~ Except as specifically permitted in this Section 11.3, the Contractor may not use or disclose PHI in a manner that would not be permissible if done by the Department. The Contractor may use the Department's PHI to provide data aggregation services relating to the health care operations of the Department. Further, the Contractor may use and disclose the Department's PHI for the proper management and administration of the Contractor if such use is necessary for the Contractor's proper management and administration or to carry out the Contractor's legal responsibilities, or if such disclosure is required by law or the Contractor obtains reasonable assurances from the person to whom the information is disclosed that it shall be held confidentially and used or further disclosed only as required by law or for the purpose for which it was disclosed to the person, and the person notifies the Contractor or any instances of which it is aware in which the confidentiality of the information has been breached. The Contractor may de-identify the Department's PHI in accordance with the requirements of 45 CFR §164.514(a)-(c), and may use or disclose the information that has been de-identified.**Breach Notification:**

11.6.1 **Reporting:** The Contractor shall report to the Department any use or disclosure of the Department's PHI otherwise than as provided for by this Agreement, including any breach of unsecured PHI, of which the Contractor becomes aware. An acquisition, access, transmission, use or disclosure of the Department's PHI that is unsecured in a manner not permitted by HIPAA or this Agreement is presumed to be a breach unless the Contractor demonstrates that there is a low probability that the Department's PHI has been compromised based on the Contractor's risk assessment of at least the following factors: (i) the nature and extent of the Department's PHI involved, including the types of identifiers and the likelihood of re-identification; (ii) the unauthorized person who used the Department's PHI or to whom the disclosure was made; (iii) whether the Department's PHI was actually acquired or viewed; and (iv) the extent to which the risk to the Department's PHI has been mitigated. Further, the Contractor shall report to the Department any security incident of which it becomes aware, ~~subject to~~ except that the Contractor shall not be required to notify the Department of any "Unsuccessful Security Incident" as defined in Section ~~40-11.6. 5.4~~ of this Agreement "Security incident" shall mean the attempted or successful unauthorized access, use, disclosure, modification, or destruction of information, or interference with system operations in an information system. ~~The~~ In the event of a Breach of unsecured PHI, the Contractor shall notify the Department ~~within five (5) Business~~ without unreasonable delay and no case later than thirty (30) Calendar Days of the date the Contractor becomes aware of the event for which reporting is required by this Section ~~40 11 6.1~~ of this Agreement.

11.6.2 **Required Information:** In the event of a Breach of Unsecured PHI, The Contractor shall provide the following information to the Department within ~~ten (10) Business Days of discovery except when, despite all reasonable efforts by the Contractor to obtain information require, circumstances beyond the control of the contractor necessitate additional time. Under such circumstances the Contractor shall provide to the Department the following information~~ soon as possible and without unreasonable delay, but in no event later than thirty (30) Days from the date of discovery

11.6.2 description of these procedures and the specific findings of the investigation to the Department upon request.

11.6.3 For purposes of this Agreement, "Unsuccessful Security Incidents" include activity such as pings and other broadcast attacks on Business Associate's firewall, port scans, unsuccessful log-on attempts, denials of service, and any combination of the above, so long as no such incident results in unauthorized access, use, or disclosure of electronic PHI.

11.6.4 The Contractor shall mitigate, to the extent practicable, any harmful effects from any use

or disclosure of PHI by the Contractor not permitted by this Agreement.

11.7 **Associate's Agents:** The Contractor shall require all of its agents or Key Subcontractors to whom it provides the Department's PHI, whether received from the Department or created or received by the Contractor on behalf of the Department, to agree, by way of written contract or other written arrangement, to the same or more stringent restrictions and conditions on the access, use, and disclosure of PHI that apply to the Contractor with respect to the Department's PHI under this Agreement.

11.10 **Internal Practices:** The Contractor shall make its internal practices, policies and procedures, books, records, and agreements relating to the use and disclosure of the Department's PHI, whether received from the Department or created or received by the Contractor on behalf of the Department, available to Department upon reasonable notice and during normal business hours, and/or the Secretary of the U.S. Department of Health and Human Services in a time and manner designated by the Department and/or the Secretary for purposes of determining the Department's compliance with HIPAA and its implementing regulations.

11.11 **Obligations and Activities of the Department Termination**

11.11.1 The Department shall notify the Contractor of any limitation(s) in the notice of privacy practices of covered entity under 45 CFR 164.520, to the extent that such limitation may affect business associate's use or disclosure of PHI.

11.11.2 The Department shall notify the Contractor of any changes in, or revocation of, the permission by an individual to use or disclose his or her PHI, to the extent that such changes may affect the Contractor's use or disclosure of PHI.

11.11.3 The Department shall notify the Contractor of any restriction on the use or disclosure of PHI that the Department has agreed to or is required to abide by under 45 CFR 164.522, to the extent that such restriction may affect the Contractor's use or disclosure of PHI.

11.11.4 The Department shall not request the Contractor to use or disclose PHI in any manner that would not be permissible under Subpart E of 45 CFR Part 164 if done by the Department, except that the Contractor may use or disclose PHI for data aggregation or management and administration and legal responsibilities of the Contractor, as permitted by Section 11.3 of this Agreement.

~~11.11.12~~ **Termination**

Either party may terminate this Agreement if the other, ~~This Agreement may be terminated by the Department at the Department's discretion if the Department determines that the Contractor, as a business associate, has violated a material term of this Article XI~~

or of the Agreement with respect to the Contractor's obligations under this Article XI, provided that the non-breaching party provides the breaching party with no less than 30 days in which to cure such violation prior to termination becoming effective. However, if the non-breaching party reasonably and in good faith determines that the violation is not curable, it may terminate this Agreement immediately upon written notice to the breaching party.

11.12.1 **Disposition of the Department's PHI:** At the time this Agreement is terminated, the Contractor shall, if feasible, return or destroy all of the Department's PHI, whether received from the Department or created or received by the Contractor on behalf of the Department, that the Contractor still maintains in any form and retain no copies of such information. Alternatively, if such return or destruction is not feasible, the Contractor shall extend indefinitely the protections of this Agreement to the information and shall limit further uses and disclosures to those purposes that make the return or destruction of the Department's PHI infeasible. The Department understands that the Contractor's need to maintain portions of the PHI for archival purposes related to memorializing advice provided will render return or destruction infeasible.

11.132 ~~Indemnification~~ **Reimbursement** In addition to its obligations to mitigate any known harmful effect of an improper use or disclosure of PHI under Section 11.6.6 of this Agreement, the Contractor shall reimburse the Department for any civil fines or penalties imposed as result of such improper use or disclosure and for the reasonable and actual costs of providing notice to individuals in the event of a Breach of Unsecured PHI caused by the Contractor. ~~The Contractor agrees to indemnify, defend and hold harmless the State and the Department and its respective employees, officers, agents or other members of its workforce (each of the foregoing hereinafter referred to as "Indemnified Party") against all actual and direct losses suffered by the Indemnified Party and all liability to third parties arising from or in connection with any breach of this Agreement or from any acts or omissions related to this Agreement by the contractor or its employees, officers, subcontractors, agents or other members of its workforce. Accordingly, the Contractor shall reimburse any Indemnified Party for any and all actual and direct losses, liabilities, lost profits, fines, penalties, costs or expenses (including reasonable attorneys' fees) which may for any reason be imposed upon any Indemnified Party by reason of any suit, claim, action, proceeding or demand by any third party which results from the Contractor's acts or omissions hereunder. The Contractor's obligation to indemnify any Indemnified Party shall survive the expiration or termination of this Agreement.~~

11.14 **Miscellaneous:**

11.14.1 **Amendments:** This Agreement may not be modified, nor shall any provision hereof be waived or amended, except in writing duly signed by authorized representatives of the Parties and approved by the NYS AG and OSC. The Parties agree to take such

action as is necessary to amend this Agreement from time to time as is necessary to achieve and maintain compliance with the requirements of HIPAA-HIPAA and its implementing regulations

11.14.2 **Survival:** The respective rights and obligations of business associate and the “covered entities” identified herein under HIPAA and as set forth in this Article XI shall survive termination of this Agreement.

11.14.3 **Regulatory References:** Any reference herein to a federal regulatory section within the Code of Federal Regulations shall be a reference to such section as it may be subsequently updated, amended or modified, as of their respective compliance dates.

11.14.4 **Interpretation:** Any ambiguity in this Agreement shall be resolved to permit ~~covered entities~~ the parties to comply with HIPAA.

11.14.5 **Third Party Beneficiaries.** Nothing in this Article XI shall be construed to create any third party beneficiary rights in any person, including any participant or beneficiary of a covered entity.

~~11.14.4~~ 11.14.6 Notices. All notices to be given pursuant to the terms of this Article XI shall be in writing and shall be sent certified mail, return receipt requested, postage prepaid or by courier service. If to the Department, the notice shall be sent to such address as the Department notifies the Contractor of in writing. If to the Contractor, the notice shall be sent to the Privacy Official, c/o General Counsel, The Segal Group, 333 West 34th Street, New York, New York 10001

ARTICLE XIII: GENERAL PROVISION AS TO REMEDIES

~~13.2.0~~—In addition to any other remedies available to the Department under the Agreement, the Department has the following additional remedies which may include, but are not limited to, the following:

~~13.2.4~~ 13.2.0 The right for the Department to withhold payment of some or all of the amounts due and owed under the Agreement until Contractor’s performance is brought within the specified parameters.

~~13.2.2~~ 13.2.1 The application of credits against amounts due and owed by the Department under the Agreement.

ARTICLE XIV: AUDIT AUTHORITY

In addition to the Audit Authority requirements specified in Appendices A and B to this Agreement, the following provisions shall apply:

14.6.0 If the Contractor has an independent audit performed of the records relating to this Agreement, a certified copy of the audit report shall be provided to the Department ~~within ten (10) Days after receipt of such audit report by the Contractor.~~ upon request.

14.7.0 The audit provisions contained herein shall in no way be construed to limit the audit authority or audit scope of the Office of the NYS Comptroller as set forth in either Appendix A of this Agreement, Standard Clauses for All New York State Contracts, or Appendix B, Standard Clauses for All Department Contracts.

ARTICLE XVI: REPORTS OWNERSHIP & ERROR CORRECTIONS

16.1.0 In addition to ownership provisions set forth elsewhere in Appendices A and B, the Contractor agrees, except to the extent that they incorporate the Contractor's proprietary software, tools, know-how, techniques, methodologies and report formats (collectively, "Contractor's Proprietary Information") that information and documents developed pursuant to the Agreement (collectively, the "Deliverables") are the property of the State of New York and that the Contractor will not discuss such information, documents and systems with a third party without the express written authorization of the Department, other than as required by court order, law, rule or regulation. To the extent Contractor's Proprietary Information is incorporated into such Deliverables, the Department shall have a perpetual, nonexclusive, worldwide, royalty-free license to use, copy, and modify Contractor's Proprietary Information as part of the Deliverables internally and for their intended purpose.

16.2.0 The Contractor shall correct any and all errors in any reports, materials and/or documents provided or prepared by the Contractor pursuant to this Agreement provided the Department notifies the Contractor of such errors and, if required, furnishes to the Contractor data and information the Department may be required to provide in order for the Contractor to make such corrections after delivery of any such report, material, document or service. This Contractor requirement shall survive for one year following the expiration or termination of the Agreement. In regard to corrections required due solely to an error made by the Contractor, the Contractor will correct such errors at no cost to the Department. The correction of errors which are caused by the Department or the State of New York or another third party under contract to the State will be subject to reimbursement by the Department through the issuance of an *Error Correction Change Order* negotiated between the Parties; the pricing of which shall be based on the Contractor's Fixed Hourly Rates. The actual costs incurred under the *Error Correction Change Order* will not apply to the task's original not-to-exceed amount, however, Task #1, #2, and #4 (if applicable) *Error Correction Change Orders* shall be subject to not-to-exceed payment amounts. The scope of such *Error Correction Change Orders* shall be limited to the correction of errors and the *Error*

Correction Change Order shall not be subject to the prior approval of OSC before becoming effective.

ARTICLE XVII: TERMINATION

In addition to the Termination of Agreement requirements specified in Appendices A and B to this Agreement, the following provisions shall apply:

17.4.0 In the event of the Contractor's default, in addition to availing itself of specific remedies set forth in the Agreement, the State may pursue all legal and equitable remedies for breach. In addition to pursuing any other legal or equitable remedies, the State shall have the right to take one or more of the following actions:

17.4.1 terminate the Agreement in whole or in part; provided, that the State will provide the Contractor with a reasonable opportunity to cure the default unless it reasonably and in good faith determines that cure is impossible.

17.4.2 suspend, in whole or in part, payments due Contractor under the Agreement; and

17.4.3 pursue equitable remedies to compel Contractor to perform.

The Contractor shall be liable for any and all excess costs for remedies pursued by the State, and for the reasonable costs incurred by the State in procuring alternate Services;

ARTICLE XX: SECURITY RESPONSIBILITIES AND FEDERAL OR STATE DISCLOSURE PROHIBITIONS

20.1.0 The Contractor shall maintain the security, nondisclosure and confidentiality of all information in accordance with the following clauses in performance of its activities under the Agreement. Contractor shall ensure that its personnel, agents, officers and subcontractors, if any are fully aware of the obligations arising under this section and shall take all commercially reasonable steps to ensure compliance. The Agreement may be terminated for cause by the Department for a material breach of this Article XX.

20.1.1 Security Responsibilities:

Contractor warrants, covenants and represents that it shall comply fully with all security procedures and policies of NYS, which procedures and policies are communicated to the Contractor by the Department during the performance of the Agreement, including but not limited to Article XI of this Agreement and Department's Information Security Standards (Appendix C-1). Contractor shall ~~hold NYS harmless from any loss or damage to~~ mitigate, to the extent practicable any harm suffered by NYS resulting from the violation by the Contractor, its officers, agents, employees, and subcontractors, if any of such

security procedures or policies resulting from any criminal acts committed by such officers, agents, employees, and subcontractors, while performing services under the Agreement.

20.1.2 Federal or State Disclosure Prohibitions:

In the event that it becomes necessary for Contractor to receive Confidential Information, which Federal or State statute or regulation prohibits from disclosure, Contractor hereby agrees to return or destroy all such Confidential Information that has been received from NYS when the purpose that necessitated its receipt by Contractor has been completed. In addition, Contractor agrees not to retain any Confidential Information which Federal or State statute or regulation prohibits from disclosure after termination of the Agreement.

Notwithstanding the foregoing, if the return or destruction of the Confidential Information is not feasible, Contractor agrees to extend the protections of the Agreement for as long as necessary to protect the Confidential Information and to limit any further use of disclosure of that Confidential Information. NYS acknowledges that Contractor's need to retain Confidential Information for archival purposes related to memorializing advice provided and comply with its document retention and business continuity programs will render return or destruction infeasible. If Contractor elects to destroy Confidential Information, it shall use reasonable efforts to achieve the same and notify NYS accordingly. Contractor agrees that it will use all appropriate safeguards to prevent any unauthorized use or unauthorized disclosure of Confidential Information, which Federal or State statute or regulation prohibits from disclosure.

Contractor agrees that it shall immediately report to the Department the discovery of any unauthorized use or unauthorized disclosure of such Confidential Information. The State may terminate the Agreement if it determines that Contractor has violated a material term of this Article XX. The terms of this Article XX shall apply equally to Contractor, its agents and subcontractors, if any. Contractor agrees that all subcontractors, if any and agents shall be made aware of and shall agree to the terms of this Article XX.

ARTICLE XXIII: DATA SHARING AND OWNERSHIP

23.1.0 All claims and other data related to the Program is the property of the State. If such data is provided to the contractor it is solely for the purposes of allowing the Contractor to fulfill its duties and responsibilities under the Agreement and said materials are the sole property of the NYS. Except as directed by a court of competent jurisdiction, or as necessary to comply with applicable New York State or federal law, the Contractor shall not share, sell, release, or make the materials available to third parties in any manner without the prior consent of the Department. This provision shall survive the expiration or termination of the Agreement.

23.2.0 Within thirty (30) days after the termination or expiration of the Agreement for any reason, the Contractor agrees to return to the Department all data provided to the Contractor by the Department or a third party under contract with Department or, if return is not feasible, destroy any and all such data. In the event returning or destroying such data is not feasible, ~~the Contractor shall provide written notification to the Department of the conditions that make the return or destruction not feasible, in which case~~ the Contractor must continue to protect such data in perpetuity. The Department understands that the Contractor's need to maintain copies of the data for archival purposes related to memorializing advice provided and to comply with its document retention and business continuity programs will render return or destruction infeasible.

5. Appendix B: Sample Copies of Reports

Exhibit III.B Project Abstract

Sample # 2

Project Title:	Health Improvement Program Evaluation and Strategy
Name of the Client for whom services were performed:	Chandler, AZ
Client Contact Information:	
Contact's Name:	[REDACTED]
Contact's Title:	Benefit Program Manager
Phone Number:	[REDACTED]
Email Address:	[REDACTED]
<p>Project Description: The Offeror should submit specific details concerning the project identified in satisfaction of the requirements in RFP Section IV.B.4. The required information should be provided as an attachment to this Abstract Form. Include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Project Description – Project Title "Health Improvement Program Evaluation and Strategy".</p> <p>Segal suggested a strategy to identify the effectiveness of the current program and enhance areas determined to need development. Segal recommended the following projects to assist The City achieve their Wellness initiative's goals and objectives:</p> <ul style="list-style-type: none"> ➤ Inventory and catalog all currently offered Wellness and Disease Management programs and services ➤ Collection and analysis of relevant data, such as aggregate health risk assessment and biometric screening results, top chronic conditions, medical and pharmacy claim data, along with demographic data ➤ Conduct wellness "stakeholder" interviews and focus groups to identify the employees' needs and interests related to wellness initiatives across the various workplaces as well as glean a better understanding of leadership vision and commitment to the program ➤ Benchmark and review of wellness programs of the City's identified peers to serve as a reference point for the benefits offered in the wellness program ➤ Development of a wellness strategic plan to serve as a formal written outline for the advancement of the program to be published to stakeholders and constituents ➤ Identify initial measurement methods (clinical, operational, Return on Investment, etc.) against which wellness program performance can be monitored and measured ➤ Perform a program compliance review to ensure alignment with State and Federal regulations <p>Results:</p> <p>Segal worked closely with the Benefits Department and the Administrative Services Director to accomplish the recommended activities. In its entirety the project took approximately six months to complete and identified the following:</p> <ul style="list-style-type: none"> ➤ The inventory of the existing wellness program clarified that the strategy was suitable for a portion of the population but a study of the claims revealed a number of members with comorbid lifestyle conditions that were not being addressed, such as obesity and depression. ➤ A comparison of the current program with the inventory and claims analysis identified the lack of a focused risk strategy once lifestyle conditions were identified, which opened up opportunities for risk management to achieve plan savings over time. ➤ Focus groups clarified an educational opportunity to explain the relationship between wellness, the incentive offered and the health plan options (i.e. additional financial support when health care needs arise). 	

Project Title:	Health Improvement Program Evaluation and Strategy
<p>Recommendations:</p> <p>The final report contained an extensive listing of recommendations and considerations with a “red / yellow / green light” evaluation based on the difficulty of implementation with regard to financial, administrative and member reaction. The recommendations with the most impact to the City and least impact to the members were:</p> <ul style="list-style-type: none"> > Develop a 5 Year Strategy to enrich the Wellness program > Enhance incentive for biometric and HRA completion > Introduce incentive/penalty for Disease Management (~\$50/month). > Tailor coaching and education recommendations for each member’s risk. > Implement metrics for measuring the Value / Return on Investment for the Wellness Program as a whole. > Develop activities and seminars at “satellite” locations for shift workers / workers who do not work 9-5 or at City Hall. > Consider a feasibility study for an on-site or near-site clinic for increased physician interaction and increased productivity. <p>Consider procurement of a third-party Wellness vendor</p>	
<p>Complexity of Issue: In the space provided below or as an attachment to this Abstract Form, describe the complexities of the sample project. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as “Complexity of Issue”)</p> <p>City of Chandler, Arizona, with approximately 4,250 Active and Pre-65 eligible members, had a wellness program in place for a number of years. They were seeing an increase in participation but less than ideal improvement in biometric results and engagement in lifestyle management programs had diminished year over year. They were also seeing an increase in members identified with chronic conditions. The City was sensitive to public appearance and budget constraints but was interested in taking their Wellness Program to the next level by developing a tailored, targeted strategic plan.</p>	
<p>Urgency: In the space provided below or as an attachment to this Abstract Form, provide an explanation of what caused the undertaking to be urgent in nature. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as “Exigency”)</p> <p>See above.</p>	
<p>Resources: In the space provided below or as an attachment to this Abstract Form, detail the resources used to undertake the project (number and titles of analysts and man-hours expended per title) - (Note: the titles to be used should be the Positions Titles set forth in RFP Section V Assumption 6.) (If provided as an attachment, Include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as “Resources”)</p> <p>Review and use of the following:</p> <ul style="list-style-type: none"> > health risk assessment and biometric screening results > top chronic conditions, medical and pharmacy claim data > demographic data > stakeholder interviews > focus groups > peer data 	
<p>Timeline: In the space provided below or as an attachment to this Abstract Form, detail the timeline (at a minimum provide start and end dates) to undertake and complete the project. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as “Timeline”)</p>	

Project Title:	Health Improvement Program Evaluation and Strategy
The project started the end of May 2016 and was completed the end of January 2017.	
<p>Change Orders: In the space provided below or as an attachment to this Abstract Form, provide a description of any change orders issued in regard to the project. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as “Change Orders”)</p> <p>None.</p>	
<p>Modifications/Corrections: In the space provided below or as an attachment to this Abstract Form, provide an explanation of any modifications/corrections required to secure the client’s approval of the final deliverable(s). (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as “Modifications/Corrections”)</p> <p>None.</p>	
<p>Cost: In the space provided below or as an attachment to this Abstract Form, indicate the initial projected cost of the project and the final cost of the project. Provide an explanation as to any variance in the two amounts. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as “Cost”)</p> <p>The maximum total of this project was \$47,000.00. The fees were billed after each phase of the project was completed.</p>	
<p>Initial Projected Cost: \$47,000.00</p> <p>Final Cost: \$47,000.00</p> <p>Explanation of Variance: None.</p>	
<p>Sample Deliverable: As a separate attachment to this Abstract Form, provide a copy of the final deliverable(s) (e.g., report or documentation) resultant from the project, if permissible. If it is not permissible to release, indicate why and provide a general description of the final deliverable(s). Include the Sample # and Project Title on the attachment and entitle the document as “Sample Deliverable”.</p> <p>Segal has provided a copy of the final report to NYSHIP.</p>	



Chandler



HEALTH IMPROVEMENT PROGRAM EVALUATION and STRATEGY SUMMARY

May 2017



Background

- > The City engaged Segal to assist with the evaluation and strategic planning of its employee health improvement program.
- > In support of Segal's analysis, enrollment demographics and medical and pharmacy claims data was gathered from Blue Cross Blue Shield of Arizona (BCBSAZ), as well as activity of the existing wellness programs available through BCBSAZ and the City.
- > Segal conducted an inventory of the City's wellness and disease management reports and current programs and participation results.
- > Focus groups were held as well as Stakeholder and Wellness Committee Interviews
 - Departmental Representatives
 - Wellness Committee
 - City Manager & Administrative Services Director
- > A benchmarking review of the wellness programs of City's peers was also conducted.

Background

- > The City's benefit plans cover approximately 4,245 Active and Pre-65 eligible members (including spouses and dependent children).
- > The City offers a self-insured health care delivery system that includes:
 - The Red Plan – traditional Preferred Provider Organization (PPO) plan with the highest premiums but lowest deductibles, member coinsurance and copays
 - The Blue Plan – PPO plan with lower monthly premiums but higher deductibles and member coinsurance than the Red plan
 - The White Plan – high deductible health plan, no premiums, lower coinsurance, no copays
- > Of the 1,634 employees in 2016 (122 were retirees), 46.6% were enrolled in Red, 5.1% in Blue, 48.4% in White. In 2015, 49.8%, 5.9%, and 44.3% of the 1,607 employees (115 were retirees) in Red, Blue, and White, respectively.
- > The City offers a points-driven Wellness Program and a robust catalog of wellness activities.
- > The On-Point Wellness Program offers the opportunity for members to earn a \$250 incentive deposit in their Health Savings Account (HSA) or Flexible Spending Account (FSA) for completing a Health Risk Assessment, including biometric results and raffles for gift cards for achieving additional points.

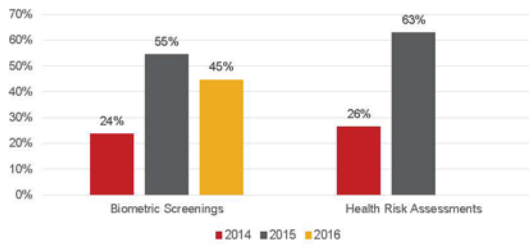
State of the Program

- > Wellness Inventory
 - Participation in the On-Point Wellness Program (in particular biometric screening) increased from 2014 to 2015
 - However, there was less than ideal improvement in biometric results
 - Engagement in lifestyle management diminished year over year
 - There was an increased number of members with chronic conditions identified
- > Segal's SHAPE Analysis identified a number of members with comorbid lifestyle conditions associated with obesity and depression.
- > The average diseased active member cost \$3,492 more per year than a healthy member. If 10% of that diseased group (141 members) shifted to healthy, the plans could save close to a half million dollars (i.e. 141 times \$3,492).
- > The City's preventive screening and treatment compliance rates for the Active population are consistently below the NCQA recommended targets.
- > The City's plan experience exceeds the norm for most measured chronic conditions. There are opportunities for risk management to achieve plan savings over time.



Wellness Program Participation

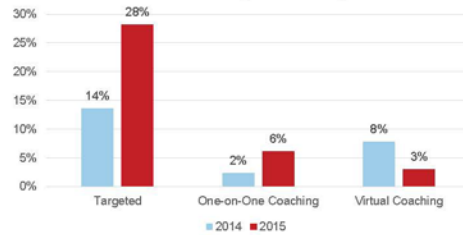
Biometrics and HRA Participation



	# of Biometric Screenings	Average # of Employees*
2014	336	1,417
2015	814	1,492
2016	678	1,517

*No Retirees

Health/Lifestyle Coaching



	Targeted	Engaged in One-on-One Coaching
2014	192	33
2015	421	92

Virtual Coaching

2014	110
2015	45

% compared to average # of employees, not including dependents

✧ Segal Consulting 4

Disease Prevalence

Apr 1, 2015 - Mar 31, 2016

Disease	Count	Actives		
		Pct	Norm	Diff
Asthma	338	8.0%	3.2%	150.0%
Chronic Obstructive Pulmonary Disease (COPD)	17	0.4%	0.6%	-33.3%
Congestive Heart Failure (CHF)	13	0.3%	0.2%	50.0%
Coronary Artery Disease (CAD)	76	1.8%	1.3%	38.5%
Diabetes	187	4.4%	4.1%	7.3%
Hypertension	551	13.0%	7.1%	83.1%
Mental Health	719	17.0%	18.6%	-8.6%
Substance Abuse	103	2.4%	2.1%	14.3%

- This exhibit illustrates the prevalence of disease conditions by member status as stratified by Segal's Health Analysis of Plan Experience (SHAPE) database. The percentage of members with a condition (Pct) is compared to an age/gender adjusted norm and the difference (Diff) represents the percentage difference from the norm.
- The plan's prevalence exceeds the norm for most measured conditions. A common risk factor for many of these chronic conditions is obesity (which is typically under-reported in medical claims experience). It could be contributing to the high prevalence of hypertension and coronary artery disease in the population.
- The prevalence of Asthma, Coronary Artery Disease, Congestive Heart Failure and Hypertension significantly exceed the benchmark for populations with the plan's age/gender distribution.

✧ Segal Consulting 5

Disease Prevalence & Cost By Plan

Apr 1, 2015 - Mar 31, 2016

	Red		Blue		White	
Avg Membership Per Month	2,022		140		2,062	
Medical claims paid PMPM	\$358.05		\$278.52		\$189.38	
RX claims paid PMPM	\$103.95		\$86.41		\$44.33	
TOTAL Medical + Rx Claims	\$462.00		\$364.93		\$233.71	
Chronic Condition	Members	%of Total	Members	%of Total	Members	%of Total
Diabetes	126	6.2%	7	5.0%	54	2.6%
CAD	59	2.9%	0	0.0%	17	0.8%
Asthma	162	8.0%	8	5.7%	168	8.1%
COPD	15	0.7%	0	0.0%	2	0.1%
Hypertension	347	17.2%	165	10.7%	189	9.2%
Mental Illness	350	17.3%	18	12.8%	351	17.0%
Substance Abuse	62	3.1%	1	0.7%	40	1.9%
CHF	8	0.4%	0	0.0%	5	0.2%
TOTALS (Unique)	749	37.0%	35	25.0%	630	30.6%

- > This exhibit shows the total medical and prescription drugs paid Per Member Per Month (PMPM).
- > As expected, the Red Plan paid the highest claims as it is the richest option (with the highest employee premium).
- > The Red Plan has 48% of the population and the most members identified to be with a health risk.
- > The White Plan has the least total medical and prescription drugs paid PMPM (given its plan design) and has 49% of the population enrolled.

✧ Segal Consulting 6

Care Gaps

Apr 1, 2015 - Mar 31, 2016

Disease	Clinical Compliance Metric	# of Members	Compliance Rate	NCQA National Average	Compare to Norm
Asthma	Patients with inhaled corticosteroids or leukotriene inhibitors in the last 12 months	338	86.1%	91.7%	-5.6%
COPD	Patients with spirometry testing within the last 12 months	17	29.4%	40.4%	-11.0%
Congestive Heart Failure (CHF)	Patients currently taking an ACE-inhibitor or acceptable alternative	13	46.2%		
	Patients currently taking a beta-blocker	13	38.5%		
	Patients that had an annual physician visit	13	100.0%		
Coronary Artery Disease (CAD)	Patients currently taking an ACE-inhibitor or ARB Drug	76	47.4%	78.8%	-31.4%
	Patients currently taking a statin	76	76.3%		
	Patients with a myocardial infarction in the past who are currently taking a beta-blocker	13	61.5%		
Diabetes	Patients that had at least 2 hemoglobin A1C tests in last 12 reported months	187	56.1%	87.2%	-31.1%
	Patients that had an annual screening test for diabetic nephropathy	187	66.8%	79.6%	-12.8%
	Patients that had an annual screening test for diabetic retinopathy	187	20.9%	48.8%	-27.9%
Hyperlipidemia	Patients with a LDL cholesterol test in last 12 reported months	650	75.5%	83.6%	-8.1%
Hypertension	Patients on anti-hypertensives that had a serum potassium in last 12 months	377	62.9%		
	Patients that had an annual physician visit	551	94.9%		
	Patients that had a serum creatinine in last 12 reported months	551	60.6%		
Preventive Screening	Breast Cancer	788	43.5%	66.8%	-23.3%
	Cervical Cancer	1,442	39.7%	74.4%	-34.7%
	Colorectal Cancer	839	34.0%	55.2%	-21.2%
	Prostate Cancer	434	43.5%		

- > Preventive screening and treatment compliance rates for the Active population are consistently below the NCQA recommended targets.

✧ Segal Consulting 7

Disease Prevalence – Observations and Recommendations

- Disease prevalence is higher than age-adjusted benchmarks for most measured conditions. The lifestyle conditions (CAD, Diabetes and Hypertension) all exceed benchmarks. This is an indication that behavioral modification programs should be the focus.
- The lifestyle diseases are indicative of a population with a high incidence of obesity (a common risk factor for many chronic conditions). The plan will benefit significantly by getting participants to lose weight.
- Medication compliance for chronic conditions like Diabetes, CAD, CHF and Hypertension is well below optimal levels. Increased compliance can also lead directly to savings. For example, based on the prevalence of CHF in commercially insured populations, employers could save \$2,630 annually per non-compliant CHF patient (Source: Optum Insight research, 2010).
- CAD is a condition that can be reversed with dietary modification. The average CAD patient is costing the plan almost a thousand dollars more per month than the average plan participant. An aggressive campaign to target these individuals should be a high priority.
- The high prevalence of ADHD and pain management prescriptions could be an indication of undiagnosed substance use disorder.

✧ Segal Consulting 8

Peer Programs and Focus Groups

Benchmarking

- The City of Chandler is above the norm in the volume of effective healthy lifestyle and disease management programs compared to benchmarks.
- Local peers are making a more modest investment than the City's incentive of \$250 with additional opportunity to earn \$100 in gift cards.
- Lacking in most programs is a focus on risk strategy – once lifestyle conditions are identified, there needs to be a plan of attack for reducing that risk.

Interviews / Focus Group Themes / Site Visits

- There is an educational opportunity to explain the relationship between wellness, the HRA/FSA incentive, and the health plans (i.e. additional financial support when health care needs arise).
- Differing perceptions of the City's culture of health but agreement on City's commitment.
- Employees consistently expressed frustration with navigating the Alere website, which is offered through BCBSAZ.
- Face to face interaction with Wellness Coordinator is motivating.
- Increase accessibility to wellness activities at other work sites with flexible scheduling to accommodate employee units outside of downtown area.
- Amenities at City sites support a healthy lifestyle.

✧ Segal Consulting 9

Benchmark of Peer Programs

	Chandler	Phoenix	Scottsdale	Mesa	Tucson	State of Arizona
Risk Questionnaire	X	X	X	X	X	X
On-site Biometrics	X		X		X	X
On-site Health Coaching	X	X			X	X
Incentive Program	X	X	X		X	X
On-Site Activities	X	X		X	X	X
Challenges & Competitions	X	X	X	X	X	X
On-site Preventive Screenings (MOM, POP)	X	X	X	X	X	X
Flu shots	X	X		X	X	X
Health Seminars / Lunch & Learns	X	X		X	X	X
Fitness Club Discount	X	X		X	X	
Tobacco Cessation	X	X		X	X	X
On-line Resources	X	X	X	X	X	X
Chronic Disease Management*	X			X	X	X
Tele / Video Health					X	
On or Near-site Wellness Center				X		X

*Chronic Disease Management not integrated with Health Improvement / Wellness; MOM: Mobile Mammogram, POP: Prostate Screening

Segal Consulting 10

Key Findings from Focus Groups and Interviews

- Differing perceptions of the City's culture of health
 - Plan members contrasted with Management's views on employee engagement
 - Strong sponsorship from City officials and the Human Resources Team
 - Central theme among Focus Groups is Management / Supervisory support lacking
- Similar perceptions of health improvement program intention.
 - Better overall personal health
 - Improve morale, productivity, and service to the City population
 - Reduce costs to the City and to the employees
- Employees found navigating the Alere website to be difficult and the Points program can be confusing.
- Point of frustration is the lack of accessibility and availability of programs to field employees.
- Face-to-face interaction with Wellness Coordinator has been a positive experience and having such dedicated resource shows City's commitment to its wellness initiative.
- Tumbleweed Center is well liked by some, but other employees are not aware of the employee discount or do not see it as a value.
- Incentives for biometric screening and wellness participation can be enhanced and given in various ways.

Segal Consulting 11

Strategic Plan, Measurement, and Compliance

Wellness Strategic Plan and Initial Measurement Method

- Vision, Mission and Values Statement on Wellness can be developed to tie in with the City's overarching statements.
- Operational, clinical, performance and quality of care metrics should be implemented to monitor and measure wellness program performance.
- All measures are set to provide a meaningful impact on future direct and indirect cost.
- BCBSAZ should provide periodic performance reporting for ongoing review of the program's impact.

Compliance Review

- The City's wellness program was measured for the 2016 program year.
- The program is a participatory program with no contingency on health outcomes.
- The program meets both HIPAA and ADA/EEOC compliance guidelines.
- Appropriate disclosure notices should be provided to all members.

Key Opportunities

- Enhance incentive for biometric and HRA completion
- Introduce incentive/penalty for Disease Management (~\$50/month).
- Tailor coaching and education recommendations for each member's risk.
- Implement metrics for measuring the Value / Return on Investment for the Wellness Program as a whole.
- Develop activities and seminars at "satellite" locations for shift workers / workers who do not work 9-5 or at City Hall.
- Consider a feasibility study for an on-site or near-site clinic for increased physician interaction and increased productivity.

Comments, Recommendations and Considerations

Recommendation	Financial Impact	Implementation/Administration	Member Reaction
Focus on specific risk reduction of the identified population	●	●	●
Restructure communications and methods of educating members on wellness program resources	●	●	●
Review BCBSAZ criteria for identification of chronic conditions for additional savings and health management opportunities	●	●	●
Concentrate on programs to address high identification areas of Asthma, Coronary Artery Disease, Congestive Heart Failure and Hypertension	●	●	●
Focus on proper nutrition and diet to impact members with chronic conditions that can be reversed through lifestyle management	●	●	●
Implement/promote plan design changes, such as copay waivers, for diabetic tests to impact the chronic condition prevalence as well as costs	●	●	●
Improve preventive screening rates to NCQA norms by encouraging physicals or requiring selection of a PCP or near-site clinic	●	●	●
Develop activities and seminars at "satellite" locations for shift workers / workers who do not work 9-5 or at City Hall	●	●	●
Encourage physician interaction to increase medication compliance	●	●	●
Review prescription drug utilization for prevalence of substance abuse	●	●	●
Include participation of spouses in the wellness programs	●	●	●

✧ Segal Consulting 14

Comments, Recommendations and Considerations

Recommendation	Financial Impact	Implementation/Administration	Member Reaction
Enhance education of members regarding how the HSA dollars can roll over or the FSA dollars can reduce out of pocket costs	●	●	●
Review the wellness website's capabilities and ease of use	●	●	●
Implement metrics for measuring the Value / Return on Investment for the Wellness Program as a whole	●	●	●
Consider a written multi-year strategy	●	●	●
Implement Operational, Participation, Clinical, Quality of Care, Satisfaction metrics against which wellness program performance can be monitored and measured	●	●	●
Consider merging a version of Passport to Health with the current On-Point Wellness program	●	●	●
Assess the opportunity to implement an on-site or near-site clinic for increased physician interaction and increased productivity	●	●	●
Continue biometric screenings / encourage physician visits	●	●	●
Add Online or Chat / Phone Coaching Visit to point awards	●	●	●
Introduce incentive / penalty for Disease Management participation	●	●	●

✧ Segal Consulting 15

Proposed Strategy

- Recommend a long term strategy of transitioning from an Activity-based incentive structure to a Results-based incentive structure using a phased-in approach over a four year period, with program compliance review.
- A multi-year plan and strategy will also maintain program consistency and allow increasing employee familiarity over time.
- Changing programs every year can cause confusion (in both employees' understanding and communication to the employees) and can be perceived as lacking commitment and thus discourage participation.



✧ Segal Consulting 16

Final Deliverable

- 71 page final report with additional appendix documents
- Continued collaboration on prioritizing the City's next steps
- Resulted in assistance developing a 5 Year Health Improvement Strategy
- City is currently going to bid for a third party Wellness vendor to assist with the coordination and further development of their program

✧ Segal Consulting 17



Questions??



Project Abstract Sample # 1

Project Title:	Health Plan Experience Analysis
Name of the Client for whom services were performed:	State of Maryland, Department of Budget and Management
Client Contact Information:	
Contact's Name:	[REDACTED]
Contact's Title:	Director, Employee Benefits Division
Phone Number:	[REDACTED]
Email Address:	[REDACTED]
<p>Project Description: The Offeror should submit specific details concerning the project identified in satisfaction of the requirements in RFP Section IV.B.4. The required information should be provided as an attachment to this Abstract Form. Include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Project Description – Project Title _____".</p>	
<p>Complexity of Issue: In the space provided below or as an attachment to this Abstract Form, describe the complexities of the sample project. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Complexity of Issue")</p>	
<p>Urgency: In the space provided below or as an attachment to this Abstract Form, provide an explanation of what caused the undertaking to be urgent in nature. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Exigency")</p>	
<p>Resources: In the space provided below or as an attachment to this Abstract Form, detail the resources used to undertake the project (number and titles of analysts and man-hours expended per title) - (Note: the titles to be used should be the Positions Titles set forth in RFP Section V Assumption 6.) (If provided as an attachment, Include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Resources")</p>	
<p>Timeline: In the space provided below or as an attachment to this Abstract Form, detail the timeline (at a minimum provide start and end dates) to undertake and complete the project. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Timeline")</p>	
<p>Change Orders: In the space provided below or as an attachment to this Abstract Form, provide a description of any change orders issued in regard to the project. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Change Orders")</p>	
<p>Modifications/Corrections: In the space provided below or as an attachment to this Abstract Form, provide an explanation of any modifications/corrections required to secure the client's approval of the final deliverable(s). (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Modifications/Corrections")</p>	
<p>Cost: In the space provided below or as an attachment to this Abstract Form, indicate the initial projected cost of the project and the final cost of the project. Provide an explanation as to any variance in the two amounts. (If provided as an attachment, include the Sample # and Project Title on the attachment and entitle the document or that section of the document containing the required information as "Cost")</p>	
<p>Initial Projected Cost: _____</p> <p>Final Cost: _____</p> <p>Explanation of Variance:</p>	
<p>Sample Deliverable: As a separate attachment to this Abstract Form, provide a copy of the final deliverable(s) (e.g., report or documentation) resultant from the project, if permissible. If it is not permissible to release, indicate why and provide a general description of the final deliverable(s). Include the Sample # and Project Title on the attachment and entitle the document as "Sample Deliverable".</p>	

Project Description

For the State of Maryland, we have utilized Segal's Health Analysis of Plan Experience (SHAPE), a proprietary data-mining tool to provide in-depth analyses and evidence-based recommendations regarding the ongoing management of the State's health plan. This data warehouse has allows Segal to combine data across the State's medical vendors and Pharmacy Benefits Manager to:

- Determine the medical conditions and treatments that are driving health care costs, allowing Segal and the State to develop more targeted and effective cost containment strategies
- Benchmark cost and utilization patterns of a plan to industry norms and other plan sponsors
- Analyze member out-of-pocket cost burdens relative to other plan sponsors, and to accurately forecast patient disruption
- Assess impact and effectiveness of wellness, disease management and other clinical programs
- Accurately measure the future saving impact of plan modifications being considered
- Profile cost and quality of highly used hospitals, labs, physicians and other medical care facilities
- Validate vendor performance guarantees (e.g., vendors' discounts, generic fill rates, etc.)
- Highlight potential fraud, claims coordination and subrogation opportunities

Complexity of Issue

The State of Maryland currently offers five health plan options through three vendors, as summarized below:

- CareFirst – EPO and PPO plans
- UnitedHealthcare - EPO and PPO plans
- Kaiser Permanente – IHM plan

Additionally, the State provides pharmacy benefits through a PBM contract with ESI. Among these multiple options, the State spends over \$1 Billion per year in health plan expenses for approximately 200,000 employees, retirees and covered dependents. Segal utilizes its proprietary data mining tool, SHAPE, to help the State better understand key cost drivers and make informed decisions across this complex array of health plan options.

Urgency

The State of Maryland's need to actively manage costs across multiple vendors, while continuing to offer competitive, comprehensive health benefits for employees and retirees has created an ongoing need for quick turnaround on claims analyses and insights. Increasing budgetary pressures have exacerbated the State's need to obtain data spanning its multiple vendors in a timely manner.

Resources

Segal's data informatics specialists have worked closely with the firm's actuaries, clinicians, wellness experts and health consultants to extract insights from the SHAPE database.

Timeline

Segal began utilizing the SHAPE database when we began serving the State as its ongoing consultant and actuary in June of 2012. We continue to use SHAPE on an ongoing basis to guide our work with the State.

Change Orders

Segal's utilization of the SHAPE database has remained relatively stable over the 5 years of the current contract. No significant contractual changes relating to SHAPE have been made during this contract period.

Modifications/Corrections

No significant modifications/corrections relating to SHAPE have been made during the current contract period.

Cost

Segal's cost for providing support through the SHAPE data warehouse is considered confidential by the State of Maryland and Segal and cannot be disclosed.



USING THE DASHBOARD TO MONITOR THE HEALTH PROFILE OF THE POPULATION

Sample Client

July 2016

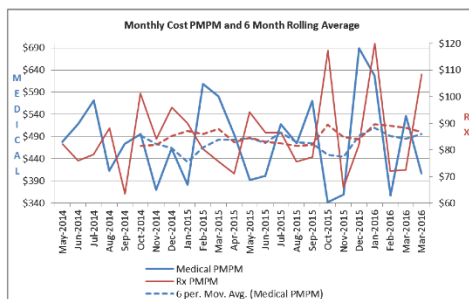
Doc #: 8529964

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

1 Principal Financial Trends – Claims Cost Active + Non-Medicare Retirees



Observations

- > The current period Medical trend decrease of 3.0% on a PMPM allowed basis is well below the 2016 projected Segal trend increase of 7.8%*.
- > The Rx trend of 7.3% is accelerating faster than the Medical trend but is below the 2016 projected Segal trend of 11.3%*.

* Projected trend is per the 2016 Segal Health Plan Cost Trend Survey:

<https://www.segalco.com/media/2138/ps-trend-survey-2016.pdf>

July 2016

2 Claims Summary Active + Non-Medicare Retirees

Place of Service	CURRENT PERIOD			PRIOR PERIOD			% Change in PMPM
	Total Paid Amount	Total Paid PMPM	% of Total	Total Paid Amount	Total Paid PMPM	% of Total	
Outpatient Hospital	\$2,804,903	\$118.48	21.1%	\$3,422,592	\$146.72	25.8%	-19.2%
Inpatient Hospital	\$3,705,066	\$156.50	27.9%	\$3,235,585	\$138.70	24.3%	12.8%
Non-Facility	\$3,021,378	\$127.62	22.7%	\$3,119,395	\$133.72	23.5%	-4.6%
Ambulatory Surg Ctr	\$186,333	\$7.87	1.4%	\$211,536	\$9.07	1.6%	-13.2%
Emergency Room	\$144,478	\$6.10	1.1%	\$155,500	\$6.67	1.2%	-8.4%
All Others	\$1,331,646	\$56.25	10.0%	\$1,226,317	\$52.57	9.2%	7.0%
Total Medical	\$11,193,804	\$472.83	84.3%	\$11,370,924	\$487.44	85.8%	-3.0%
Total Rx	\$2,087,403	\$88.17	15.7%	\$1,917,639	\$82.20	14.4%	7.3%
Total Paid	\$13,281,208	\$561.00	100.0%	\$13,288,563	\$569.64	100.0%	-1.5%
Member Paid	\$1,544,669	\$65.25	11.6%	\$1,406,168	\$50.28	10.6%	8.2%
Plan Paid	\$11,736,538	\$495.76	88.4%	\$11,882,395	\$509.36	89.4%	-2.7%

Observations

- > Member Paid PMPM increased 8.2%, while Plan Paid PMPM decreased 2.7%. Overall, total trend PMPM decreased 1.5%.
- > Drug costs now represent 15.7% of the total paid. This is much lower than other groups, as the Rx component usually represents around 25% of total cost.
- > Inpatient hospital costs increased 12.8% even though admissions per 1,000 decreased slightly (see panel 3).

Recommendations

- > Increasing enrollment in the HSA plans could yield significant savings, as the PMPM for members enrolled in an HSA program is \$282.13 (page 19), compared to \$561.00 for all Active and Non-Medicare Retirees.

Segal Consulting 2

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

3 Key Healthcare Performance Metrics Active + Non-Medicare Retirees

Category	Current Period	Prior Period	% Change	Norm*	Comparison To Norm
Avg Membership Per Month**	1,973	1,944	1.5%	N/A	N/A
Office Visits Per 1000	4,311	4,346	-0.8%	5,060	-15.1%
Inpatient Admissions Per 1000	66	68	-3.7%	67	-2.1%
Inpatient Days Per Thousand	513	481	6.5%	326	57.2%
Average Inpatient Day Cost	\$3,679	\$3,298	11.6%	\$3,270	12.5%
Average Cost Per Admission	\$26,640	\$23,208	23.4%	\$15,320	66.9%
Readmission within 30 days per 1000	169	113	50.1%	N/A	N/A
ER Visits Per 1000	139	137	1.1%	256	-45.8%
Rx Scripts Per 1000	8,747	9,062	-3.7%	11,947	-26.8%

* Varisk BOB Norms

**Based on average medical membership

Observations

- Office Visits decreased slightly and are 15.1% below the norm.
- Inpatient admissions per 1,000 decreased slightly and are in line with the norm but days per 1,000 are very high.
- ER Visits remained flat and continue to be almost half of the norm.

July 2016

4 Major Conditions – Prevalence and Cost Active + Non-Medicare Retirees with Conditions

Chronic Condition	CURRENT PERIOD						% Change		
	Members*	% of Total	Norm	Paid	% of Total	PMPY	Members	PMPY	
1. Diabetes	56	2.8%	5.4%	\$568,400	5.1%	\$10,150	179%	12.0%	-7.6%
2. Coronary Artery Disease (CAD)	40	2.0%	1.9%	\$1,650,113	14.7%	\$41,253	727%	2.6%	52.4%
3. Asthma	145	7.3%	3.0%	\$807,829	7.2%	\$5,571	98%	11.5%	-20.8%
4. Chronic Obstructive Pulmonary Disorder (COPD)	13	0.7%	0.9%	\$71,737	0.6%	\$5,518	97%	-23.5%	-88.5%
5. Hypertension	236	12.0%	9.5%	\$2,576,799	23.0%	\$10,919	192%	2.6%	-12.2%
6. Mental Illness	708	35.9%	18.6%	\$4,596,828	41.1%	\$6,493	114%	12.2%	-1.3%
7. Substance Use Disorder	99	5.0%	2.1%	\$825,340	7.4%	\$8,337	147%	6.5%	-5.3%
8. Congestive Heart Failure (CHF)	5	0.3%	0.4%	\$891,273	8.0%	\$178,255	3142%	0.0%	617.7%
TOTALS (unique)	947	48.0%		\$6,296,058	55.4%	\$6,553	115%	8.6%	-12.9%

(does not include Rx claims)

*Members with co-morbidities and their corresponding claims are combined in each applicable category.

Observations

- PMPM medical claim costs for members with Coronary Artery Disease are more than seven times the average PMPM.
- 35.9% of the population has received a mental health diagnosis, nearly double the norm.
- Five percent of the population has been diagnosed with substance use disorder, more than twice the norm.

Recommendations

- Consider evaluating the behavioral health program to target those members with a chronic condition who also have, or are at risk to develop, a comorbid behavioral health condition for intervention.

Segal Consulting 3

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

5 High Risk High Cost Analysis Active + Non-Medicare Retirees High Cost By Condition

*Chronic Condition For High Cost Claims	CURRENT PERIOD			PRIOR PERIOD			% Change in Members	% Change in PMPY
	Members	% Within Condition	PMPY	Members	% Within Condition	PMPY		
1 Diabetes	3	5.4%	\$101,766	6	12.0%	\$56,486	-50.0%	80.2%
2 CAD	10	25.0%	\$148,626	11	28.2%	\$78,587	-51.1%	89.1%
3 Asthma	8	5.5%	\$49,571	6	4.6%	\$78,577	33.3%	-36.9%
4 COPD	0	0.0%	\$0	5	29.4%	\$147,308	-100.0%	-999.9%
5 Hypertension	21	8.9%	\$80,505	22	9.6%	\$89,643	-4.5%	-10.2%
6 CHF	4	80.0%	\$221,268	2	40.0%	\$37,028	100.0%	497.6%
7 Breast Cancer	3	9.7%	\$81,369	8	30.8%	\$82,193	-62.5%	-1.0%
8 Prostate Cancer	1	50.0%	\$217,469	0	0.0%	\$0	999.9%	999.9%
9 Thyroid Cancer	1	20.0%	\$81,279	0	0.0%	\$0	999.9%	999.9%
TOTALS (unique)	31		\$66,315	35		\$80,743	-11.4%	6.9%

*High Cost Claimants have total medical claims exceeding \$25,000 (does not include Rx claims)

Observations

- 25% of participants with Coronary Artery Disease (CAD) had total medical claims exceeding \$25,000. The average PMPY for this group increased 89.1% from \$78,587 to \$148,626.
- Four of the five Congestive Heart Failure (CHF) patients exceeded \$25K in claims and averaged over \$200K PMPY.

Recommendation

- Develop a targeted educational campaign directed to CAD patients that underscores the dramatic health benefits of proper diet and exercise.

July 2016

6 Clinical Quality Performance Active + Non-Medicare Retirees

Chronic Condition	Clinical Quality Metrics*	Individuals			NCCA National Average**
		Population	Current Period	Prior Period	
Diabetes	- At least 1 hemoglobin A1C tests in last 12 months	56	87.5%	82.0%	87.25%
	- Annual screening for diabetic neuropathy	56	75.0%	64.0%	79.50%
CAD	- Annual screening for diabetic retinopathy	40	50.0%	52.0%	48.80%
	- Patients currently taking an ACE Inhibitor	40	37.5%	41.0%	79.25%
Hyperlipidemia	- Patients currently taking a statin	40	70.0%	74.4%	Not Available
	- Total cholesterol testing in last 12 months	236	79.2%	74.0%	Not Available
COPD	- Spirometry testing in last 12 months	13	15.4%	47.1%	41.50%
Asthma	- Patients with inhaled corticosteroids or leukotriene inhibitors in the last 12 months	145	81.4%	82.3%	80.70%
Preventive Screening	- Cervical cancer	822	24.6%	35.8%	73.50%
	- Breast cancer	506	51.2%	53.5%	66.50%
	- Colorectal cancer	601	27.8%	30.2%	55.50%

*Caps in care are based solely on claims data and may not fully represent the extent of appropriate care being received

**Source: NCCA – State of Health Care Quality 2014 – Accredited Plans 2013 Commercial PPO Averages

Observations

- Compliance by diabetic participants is excellent and compares favorably to national averages.
- COPD compliance with spirometry testing is very low.
- All preventive cancer screening rates are low and have decreased from the prior period.

Recommendation

- Communicate frequently and creatively (e.g. social media) about the benefits of early detection of certain cancers through preventive screening.

Segal Consulting 4

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

7 Summary of Prescription Drug Expenses Active + Non-Medicare Retirees

Category	Non-Specialty		Specialty		Total		
	Current Period	% Change	Current Period	% Change	Current Period	Prior Period	% Change
Total Cost	\$1,497,210	6.6%	\$590,193	15.1%	\$2,087,403	\$1,917,639	6.9%
% of Total Costs	71.7%	-2.1%	28.3%	5.7%			
Total Scripts	17,274	-0.8%	394	-21.7%	17,668	17,918	-1.4%
% of Total Scripts	97.8%	0.6%	2.2%	-20.6%			
Avg Cost PMPM	\$63.24	5.0%	\$24.93	13.4%	\$88.17	\$82.20	7.3%
Avg Cost Per Rx	\$86.67	7.4%	\$1,498	47.0%	\$118.15	\$107.02	10.4%
Number of Scripts PMPM	0.73	-2.3%	0.02	-22.8%	0.75	0.77	-2.8%
Generic Dispensing Rate	80.8%	3.0%	43.9%	25.5%	80.0%	77.3%	3.5%
Member Cost %	16.8%	2.3%	1.5%	-26.5%	12.5%	12.6%	-0.8%

Observation

- The generic dispensing rate improved to 80.0% but is still below the desired level of between 82% and 85%.
- Specialty drugs make up 28.3% of the total claims which is in line with expectations.
- The number of scripts decreased 2.8% on a PMPM basis but the average cost per script increased 10.4%.

Recommendation

- In order to ensure high cost specialty medications are being prescribed to the right patient for the right condition and duration, consider prior authorization and quantity duration edits. Autoimmune disease is the leading disease indication and the highest cost drugs in this indication are Humira and Enbrel, where they are highly utilized for rheumatoid arthritis and psoriasis as well as other expanding medication uses. Consider implementing utilization management edits to manage this high cost specialty area.

8 Prescription Drug Cost Management Analysis Active + Non-Medicare Retirees

Top 10 Indications	Prior Rank	CURRENT PERIOD				PRIOR PERIOD			
		Rxs	Total Cost	Generic Fill Rate	PMPM	Rxs	Total Cost	Generic Fill Rate	PMPM
Autoimmune Disease	4	78	\$204,882	10.3%	\$8.65	71	\$120,840	11.3%	\$5.10
Diabetes	5	511	\$198,330	58.9%	\$8.38	398	\$112,407	50.5%	\$4.75
Multiple Sclerosis	1	28	\$179,450	0.0%	\$7.58	41	\$200,346	0.0%	\$8.46
ADHD	2	638	\$153,323	63.9%	\$6.48	668	\$153,515	59.7%	\$6.48
Asthma/COPD	3	1,017	\$149,768	25.5%	\$6.33	1,028	\$148,412	18.0%	\$6.27
Depression	6	2,265	\$120,946	95.5%	\$5.11	2,072	\$109,311	95.5%	\$4.62
Mental Health / Neurological Disorders	12	156	\$81,061	73.1%	\$3.42	101	\$56,015	29.7%	\$2.37
Anti-Infectives	9	2,052	\$77,849	94.8%	\$3.29	2,243	\$67,412	93.7%	\$2.85
Skin Disorders	7	614	\$72,858	84.4%	\$3.08	595	\$71,740	81.7%	\$3.03
Contraceptives	10	871	\$64,775	82.2%	\$2.74	954	\$62,522	76.6%	\$2.64
Total Top 10:		8,230	\$1,303,242	78.2%	\$55.05	8,171	\$1,102,520	74.9%	\$46.57

Observation

- Autoimmune disease is the leading disease indication due to the high cost of Humira and Enbrel.
- Depression and Mental Health/Neurological Disorders rank 6th and 7th. This is another indication of the scope of Mental Health as a leading cost driver for the plan.
- The PMPM for diabetes nearly doubled from the prior year due mostly to a few Glumetza® prescriptions.

Recommendation

- Glumetza®, a branded form of the widely available generic antidiabetic drug metformin, was acquired by Valeant Pharmaceuticals. Valeant raised the drug's price twice in three months, a total increase of more than 800 percent. Consider excluding Glumetza® since the far cheaper Metformin is clinically equivalent.

July 2016

Segal Consulting 5

SPOTLIGHT ON

Utilization By Disease

- Hospital inpatient admissions are a leading driver of plan costs. Managing the conditions that are most likely to result in a hospital admission could lower the frequency and severity of admissions.
- Coronary Artery Disease is a condition that can be managed and even reversed with a dramatic change in diet. This is a condition that leads to a disproportionate number of admissions and the severity of those admissions is higher than the typical admission.
- Participants with Hypertension and Type II Diabetes are most likely to develop Coronary Artery Disease if they don't already have it.
- Preventing and reversing Coronary Artery Disease should be a core plan management strategy. The target of that strategy should be participants who are already known to have Coronary Artery Disease, Type II Diabetes or Hypertension. In addition to helping the participants who already have coronary Artery Disease, preventing at-risk participants from developing Coronary Artery Disease should be a priority of any educational program.

July 2016

Segal Consulting 7

SPOTLIGHT ON

Utilization By Disease

Disease/Condition	Count	Admissions Per 1,000	ER Visits Per 1,000	Demographic Risk
Asthma	107	80	265	0.88
Chronic Obstructive Pulmonary Disorder (COPD)	14	175	451	1.43
Congestive Heart Failure (CHF)	2	1,997	2,795	0.63
Coronary Artery Disease	33	231	519	1.05
Diabetes	43	48	115	1.21
Mental Health Issue(s)	509	58	209	1.04
Hypertension	200	82	198	1.25
Substance Use Disorder	75	168	435	1.15
All Members	1,552	41	147	1.00

- > Segal analyzed members who were covered by the plan for all 24 months of 2014 and 2015. Utilization statistics are compared by disease condition and adjusted for demographic risk (i.e. age/gender). The statistics cover the time period January 1, 2014 through December 31, 2015.
- > Although CAD patients were only 5% riskier than the total population for the study, they were nearly six times more likely to be admitted to the hospital and almost four times as likely to have an ER Visit.
- > Diabetics had a high demographic risk but their utilization patterns did not diverge much from the overall population.
- > Participants with substance use disorder had very high utilization compared with the total population.

July 2016

Segal Consulting 8

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016
 Prior Period: Paid May 2014 – Apr 2015

Appendix

- > [Dashboard – Actives](#)
- > [Dashboard – Non Medicare Retirees](#)
- > [Dashboard – PPO Plan](#)
- > [Dashboard – HSA \\$1,500](#)
- > [Dashboard – HSA \\$2,600](#)
- > [Dashboard – Both HSAs Combined](#)
- > [Dashboard Overview/Methodology](#)
- > [Benchmarks](#)
- > [Objective of Dashboard Panels](#)
- > [Ongoing Use of Dashboard](#)

July 2016

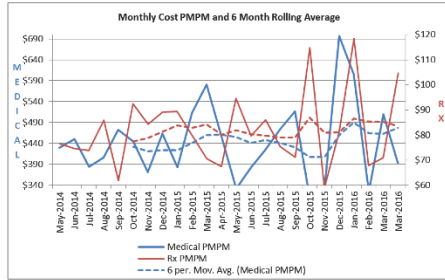
Segal Consulting 8

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

1 Principal Financial Trends – Claims Cost ACTIVE Members



3 Key Healthcare Performance Metrics – ACTIVE Members

Category	Current Period	Prior Period	% Change	Norm*	Comparison To Norm
Avg Membership Per Month	1,936	1,908	1.4%	N/A	N/A
Office Visits Per 1000	4,270	4,309	-0.9%	5,071	-15.8%
Inpatient Admissions Per 1000	60	62	-2.2%	67	-10.2%
Inpatient Days Per Thousand	354	281	25.9%	326	8.8%
Average Inpatient Day Cost	\$4,395	\$3,812	15.3%	\$3,269	34.9%
Average Cost Per Admission	\$25,772	\$17,348	48.6%	\$15,231	69.2%
Readmission within 30 days per 1000	94	34	177.4%	N/A	N/A
ER Visits Per 1000	136	138	-1.4%	256	-46.8%
Rx Scripts Per 1000	8,996	8,879	-3.5%	11,861	-27.8%

*Verisk BOB Norms

July 2016

2 Claims Summary – ACTIVE Members

Place of Service	CURRENT PERIOD			PRIOR PERIOD			% Change in PMPM
	Total Paid Amount	Total Paid PMPM	% of Total	Total Paid Amount	Total Paid PMPM	% of Total	
Outpatient Hospital	\$2,752,398	\$118.50	22.5%	\$3,332,501	\$145.53	27.7%	-18.6%
Inpatient Hospital	\$2,914,235	\$126.47	23.8%	\$2,273,816	\$99.30	18.9%	28.4%
Non-Facility	\$2,550,645	\$127.04	24.1%	\$3,050,037	\$133.20	25.4%	-4.6%
Ambulatory Surg Ctr	\$180,825	\$7.79	1.5%	\$202,697	\$8.85	1.7%	-12.1%
Emergency Room	\$142,280	\$6.13	1.2%	\$149,840	\$6.54	1.2%	-6.4%
All Others	\$1,324,709	\$57.03	10.8%	\$1,208,852	\$52.79	10.1%	8.0%
Total Medical	\$10,285,092	\$441.95	83.8%	\$10,217,744	\$448.21	85.0%	-1.0%
Total Rx	\$1,979,755	\$85.24	16.2%	\$1,804,233	\$78.79	15.0%	8.2%
Total Paid	\$12,244,847	\$527.18	100.0%	\$12,021,976	\$525.00	100.0%	0.4%
Member Paid	\$1,498,346	\$64.51	12.2%	\$1,366,170	\$59.66	11.4%	8.1%
Plan Paid	\$10,746,498	\$462.67	87.8%	\$10,655,806	\$465.34	88.6%	-0.8%

4 Major Conditions – Prevalence and Cost ACTIVE Members with Conditions

Chronic Condition	CURRENT PERIOD						% Change		
	Members*	% of Total	Norm	Paid	% of Total	PMPY	% of Avg PMPY	Members	PMPY
1. Diabetes	56	2.9%	5.3%	\$568,400	5.5%	\$10,150	191%	14.3%	-6.2%
2. CAD	38	2.0%	1.9%	\$1,599,952	15.9%	\$41,948	791%	0.0%	58.4%
3. Asthma	142	7.3%	3.0%	\$791,039	7.7%	\$5,571	105%	11.8%	-20.5%
4. COPD	12	0.6%	0.9%	\$70,957	0.7%	\$5,913	111%	-26.0%	-88.4%
5. Hypertension	225	11.6%	9.4%	\$2,519,755	24.5%	\$11,199	211%	1.4%	-11.7%
6. Mental Illness	695	35.9%	18.6%	\$4,544,378	44.3%	\$6,539	123%	11.7%	0.1%
7. Substance Use Disorder	96	5.0%	2.1%	\$755,098	7.4%	\$7,866	148%	6.0%	-7.5%
8. CHF	5	0.3%	0.4%	\$801,273	8.7%	\$178,255	3361%	0.7%	617.7%
TOTALS (unique)	926	47.8%		\$6,077,893	59.2%	\$6,564	124%	8.3%	-12.5%

*Members with co-morbidities and their corresponding claims are combined in each applicable category

Segal Consulting

9

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

5 High Risk High Cost Analysis – ACTIVE Members High Cost By Condition

Chronic Condition For High Cost Claimants*	CURRENT PERIOD			PRIOR PERIOD			% Change in Members	% Change in PMPY
	Members	% Within Condition	PMPY	Members	% Within Condition	PMPY		
1. Diabetes	3	5.4%	\$101,766	6	12.2%	\$56,486	-50.0%	80.2%
2. CAD	9	23.7%	\$159,176	10	26.3%	\$81,510	-10.0%	95.3%
3. Asthma	8	5.6%	\$49,571	5	4.7%	\$78,577	33.3%	-36.9%
4. COPD	0	0.0%	\$0	5	31.3%	\$147,308	-100.0%	-999.9%
5. Hypertension	21	9.3%	\$80,505	22	9.9%	\$89,643	-4.5%	-10.2%
6. CHF	4	80.0%	\$221,268	2	40.0%	\$37,028	100.0%	497.6%
7. Breast Cancer	3	10.0%	\$81,369	8	30.8%	\$82,193	-62.5%	-1.0%
8. Colon Cancer	1	50.0%	\$217,489	0	0.0%	\$0	999.9%	999.9%
9. Prostate Cancer	1	20.0%	\$81,279	0	0.0%	\$0	999.9%	999.9%
TOTALS (unique)	30		\$87,403	34		\$81,666	-11.8%	7.0%

*High Cost Claimants have total medical claims exceeding \$25,000 (does not include Rx claims)

6 Clinical Quality Performance – ACTIVE Members

Chronic Condition	Clinical Quality Metric*	Individuals			
		Population	Current Period	Prior Period	NOQA National Average**
Diabetes	At least 1 hemoglobin A1C tests in last 12 months	56	87.5%	81.6%	87.20%
	Annual screening for diabetic nephropathy	56	75.0%	63.3%	79.60%
	Annual screening for diabetic retinopathy	56	50.0%	51.0%	48.80%
CAD	Patients currently taking an ACE-inhibitor	38	39.5%	42.1%	79.20%
	Patients currently taking a statin	38	71.1%	73.7%	Not Available
Hyperlipidemia	Total cholesterol testing in last 12 months	220	80.0%	72.9%	Not Available
COPD	Spirometry testing in last 12 months	12	16.7%	50.0%	41.50%
Asthma	Patients with inhaled corticosteroids or leukotriene inhibitors in the last 12 months	142	81.0%	92.1%	90.70%
	Cervical cancer	801	24.2%	36.0%	73.60%
	Breast cancer	487	50.9%	53.4%	66.50%
Preventive Screening	Colorectal cancer	570	27.4%	30.1%	55.80%

*Gaps in care are based solely on claims data and may not fully represent the extent of appropriate care being received

**Source: NOQA – State of Health Care Quality 2014 – Accredited Plans 2013 Commercial PPO Averages

7 Summary of Prescription Drug Expenses – ACTIVE Members

Category	Non-Specialty		Specialty		Total	
	Current Period	% Change	Current Period	% Change	Current Period	Prior Period
Total Cost	\$1,445,198	7.3%	\$534,557	16.7%	\$1,979,755	\$1,804,233
% of Total Costs	73.0%	-2.2%	27.0%	6.4%		
Total Scripts	16,645	-0.4%	365	-23.2%	17,010	17,186
% of Total Scripts	97.9%	0.6%	2.1%	-22.4%		
Avg Cost PMPM	\$82.22	5.8%	\$23.01	15.1%	\$85.24	\$78.79
Avg Cost Per Rx	\$86.82	7.8%	\$1,465	51.9%	\$116.39	\$104.99
Number of Scripts PMPM	0.72	-1.8%	0.02	-24.2%	0.73	0.75
Generic Dispensing Rate	80.7%	2.7%	42.2%	21.5%	79.9%	77.4%
Member Cost %	16.8%	1.6%	1.5%	-26.5%	12.6%	12.8%

July 2016

8 Prescription Drug Cost Management Analysis – ACTIVE Members

Top 10 Indications	Prior Rank	CURRENT PERIOD			PRIOR PERIOD		
		Rxs	Total Cost	Generic Fill Rate	Rxs	Total Cost	Generic Fill Rate
Diabetes	4	487	\$195,448	58.9%	384	\$110,644	50.3%
Multiple Sclerosis	1	26	\$179,450	0.0%	41	\$200,346	0.0%
Autoimmune Disease	7	69	\$163,516	11.6%	54	\$68,802	11.1%
ADHD	2	632	\$152,005	63.9%	666	\$152,944	58.8%
Asthma/COPD	3	1,000	\$146,272	25.8%	1,006	\$144,355	17.8%
Depression	5	2,184	\$102,566	96.3%	1,977	\$97,651	97.0%
Mental Health / Neurological Disorders	13	154	\$79,450	72.7%	97	\$52,802	30.9%
Anti-infectives	9	2,013	\$77,108	94.8%	2,195	\$66,127	94.0%
Skin Disorders	8	590	\$68,623	84.6%	558	\$66,243	82.3%
Contraceptives	10	861	\$64,496	82.0%	844	\$62,071	76.5%
Total Top 10:		8,018	\$1,228,923	78.4%	\$52,917,922	\$1,021,986	75.3%

Segal Consulting

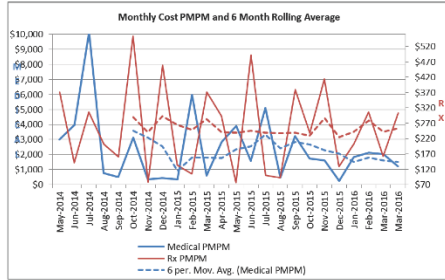
10

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

1 Principal Financial Trends – Claims Cost NON MEDICARE RETIREE Members



3 Key Healthcare Performance Metrics – NON MEDICARE RETIREE Members

Category	Current Period	Prior Period	% Change	Norm*	Comparison To Norm
Avg Membership Per Month	37	36	4.2%	N/A	N/A
Office Visits Per 1000	6,443	6,350	1.5%	5,575	15.6%
Inpatient Admissions Per 1000	349	420	-16.8%	68	415.5%
Inpatient Days Per Thousand	8,752	11,161	-21.6%	353	2378.8%
Average Inpatient Day Cost	\$2,172	\$2,006	-16.7%	\$3,836	-43.4%
Average Cost Per Admission	\$54,458	\$69,308	-21.4%	\$20,022	172.0%
Readmission within 30 days per 1000	846	733	15.4%	N/A	N/A
ER Visits Per 1000	268	84	219.9%	246	9.0%
Rx Scripts Per 1000	18,174	19,651	-7.5%	16,487	10.2%

*Verisk BOB Norms

July 2016

2 Claims Summary – NON MEDICARE RETIREE Members

Place of Service	CURRENT PERIOD			PRIOR PERIOD			% Change in PMPM
	Total Paid Amount	Total Paid PMPM	% of Total	Total Paid Amount	Total Paid PMPM	% of Total	
Outpatient Hospital	\$52,505	\$117.46	5.1%	\$90,091	\$210.00	7.1%	-44.1%
Inpatient Hospital	\$790,831	\$1,769.20	76.3%	\$961,789	\$2,241.88	75.9%	-21.1%
Non-Facility	\$70,734	\$158.24	6.8%	\$69,358	\$161.67	5.5%	-2.1%
Ambulatory Surg Ctr	\$5,507	\$12.32	0.5%	\$8,839	\$20.60	0.7%	-40.2%
Emergency Room	\$2,198	\$4.92	0.2%	\$5,659	\$13.19	0.4%	-62.7%
All Others	\$6,937	\$15.52	0.7%	\$17,465	\$40.71	1.4%	-61.9%
Total Medical	\$928,712	\$2,077.66	89.6%	\$1,153,180	\$2,688.07	91.0%	-22.7%
Total Rx	\$107,848	\$240.82	10.4%	\$113,407	\$264.35	9.0%	-8.9%
Total Paid	\$1,036,560	\$2,318.48	100.0%	\$1,266,587	\$2,952.42	100.0%	-21.5%
Member Paid	\$46,320	\$103.62	4.5%	\$99,998	\$23.24	3.2%	11.1%
Plan Paid	\$990,240	\$2,214.85	95.5%	\$1,226,589	\$2,829.18	96.8%	-22.5%

4 Major Conditions – Prevalence and Cost NON MEDICARE RETIREE Members with Conditions

Chronic Condition	CURRENT PERIOD							% Change	
	Members*	% of Total	Norm	Paid	% of Total	PMPY	% of Avg PMPY	Members	PMPY
1. CAD	2	5.4%	3.1%	\$56,161	6.0%	\$28,081	113%	100.0%	-43.1%
2. Asthma	3	8.1%	2.4%	\$16,790	1.8%	\$5,597	22%	0.0%	-32.0%
3. COPD	1	2.7%	1.4%	\$780	0.1%	\$780	3%	0.0%	14.1%
4. Hypertension	11	29.5%	16.4%	\$57,044	6.1%	\$5,186	21%	37.5%	-2.5%
5. Mental Illness	13	34.9%	18.6%	\$52,450	5.6%	\$4,035	18%	44.4%	-58.2%
6. Substance Abuse	3	8.1%	2.1%	\$70,241	7.6%	\$23,414	94%	0.0%	31.9%
TOTALS (unique)	21	56.4%		\$128,165	13.8%	\$5,103	24%	25.6%	-29.0%

*Members with co-morbidities and their corresponding claims are combined in each applicable category

Segal Consulting 11

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

5 High Risk High Cost Analysis – NON MEDICARE RETIREE Members High Cost By Condition

Chronic Condition For High Cost Claimants*	CURRENT PERIOD			PRIOR PERIOD			% Change	
	Members	% Within Condition	PMPY	Members	% Within Condition	PMPY	Members	% Change in PMPY
1. CAD	1	50.0%	\$53,673	1	100.0%	\$49,355	0.0%	8.7%
TOTALS (unique)	1		\$53,673	1		\$49,355	0.0%	8.7%

*High Cost Claimants have total medical claims exceeding \$25,000 (does not include Rx claims)

6 Clinical Quality Performance – NON MEDICARE RETIREE Members

Chronic Condition	Clinical Quality Metric*	Individuals			
		Population	Current Period	Prior Period	NOQA National Average**
Diabetes	At least 1 hemoglobin A1C tests in last 12 months	0	0.0%	100.0%	87.20%
	Annual screening for diabetic nephropathy	0	0.0%	100.0%	79.60%
	Annual screening for diabetic retinopathy	0	0.0%	100.0%	48.80%
CAD	Patients currently taking an ACE-inhibitor	2	0.0%	0.0%	79.20%
	Patients currently taking a statin	2	50.0%	100.0%	Not Available
Hyperlipidemia	Total cholesterol testing in last 12 months	16	68.8%	100.0%	Not Available
COPD	Spirometry testing in last 12 months	1	0.0%	0.0%	41.50%
Asthma	Patients with inhaled corticosteroids or leukotriene inhibitors in the last 12 months	3	100.0%	100.0%	90.70%
Preventive Screening	Cervical cancer	21	38.1%	42.1%	73.60%
	Breast cancer	19	57.9%	56.3%	66.50%
	Colorectal cancer	31	35.5%	32.1%	55.80%

*Gaps in care are based solely on claims data and may not fully represent the extent of appropriate care being received

**Source: NOQA – State of Health Care Quality 2014 – Accredited Plans 2013 Commercial PPO Averages

7 Summary of Prescription Drug Expenses – NON MEDICARE RETIREE Members

Category	Non-Specialty		Specialty		Total		% Change
	Current Period	% Change	Current Period	% Change	Current Period	Prior Period	
Total Cost	\$52,012	-11.3%	\$55,636	1.6%	\$107,648	\$113,407	-5.1%
% of Total Costs	48.3%	-6.6%	51.7%	7.0%			
Total Scripts	629	-10.7%	29	3.6%	658	732	-10.1%
% of Total Scripts	95.6%	-0.6%	4.4%	15.2%			
Avg Cost PMPM	\$116.36	-14.9%	\$124.46	-2.5%	\$240.82	\$264.35	-8.9%
Avg Cost Per Rx	\$82.69	-0.7%	\$1,918	-1.9%	\$163.60	\$154.93	5.6%
Number of Scripts PMPM	1.41	-14.3%	0.06	-0.6%	1.47	1.71	-13.7%
Generic Dispensing Rate	83.8%	10.9%	65.5%	66.8%	83.0%	74.2%	11.9%
Member Cost %	17.0%	15.9%	1.5%	-26.4%	9.0%	8.3%	8.1%

July 2016

8 Prescription Drug Cost Management Analysis – NON MEDICARE RETIREE Members

Top 10 Indications	Prior Rank	CURRENT PERIOD			PRIOR PERIOD				
		Rxs	Total Cost	Generic Fill Rate	Rxs	Total Cost	Generic Fill Rate		
Autoimmune Disease	1	9	\$41,366	0.0%	\$92.54	17	\$52,038	11.8%	\$116.42
Depression	2	81	\$18,390	75.3%	\$41.14	85	\$11,659	64.2%	\$26.08
Cardio / Heart Disease	40	17	\$12,777	100.0%	\$28.58	2	\$15	0.0%	\$0.03
Seizure Disorder	3	24	\$4,811	87.5%	\$10.76	23	\$5,987	34.8%	\$13.39
Skin Disorders	4	24	\$4,235	79.2%	\$9.47	37	\$5,496	73.0%	\$12.30
Asthma/COPD	6	17	\$3,496	17.8%	\$7.62	22	\$4,057	27.3%	\$9.08
Diabetes	11	24	\$2,882	58.3%	\$6.45	14	\$1,763	57.1%	\$3.94
Migraine	8	16	\$2,647	100.0%	\$5.92	11	\$3,412	100.0%	\$7.63
Cardio / Hypertension	10	90	\$1,741	97.6%	\$3.89	120	\$2,299	97.5%	\$5.14
Mental Health / Neurological Disorders	9	2	\$1,511	100.0%	\$3.60	4	\$3,213	0.0%	\$7.19
Total Top 10:		304	\$93,956	79.3%	\$210.19	345	\$89,938	89.6%	\$201.20

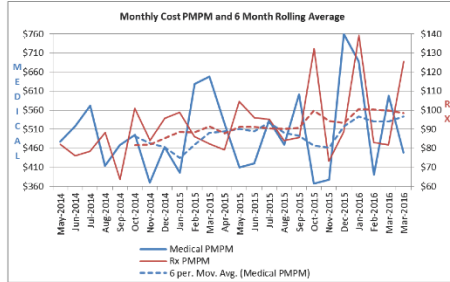
Segal Consulting 12

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

1 Principal Financial Trends – Claims Cost PPO Plan



3 Key Healthcare Performance Metrics – PPO Plan

Category	Current Period	Prior Period	% Change	Norm*	Comparison To Norm
Avg Membership Per Month	1,680	1,852	-9.3%	N/A	N/A
Office Visits Per 1000	4,550	4,521	0.6%	5,113	-11.0%
Inpatient Admissions Per 1000	71	69	2.5%	68	4.2%
Inpatient Days Per Thousand	579	487	18.8%	333	73.9%
Average Inpatient Day Cost	\$3,590	\$3,343	7.4%	\$3,266	9.8%
Average Cost Per Admission	\$29,320	\$23,556	24.5%	\$15,382	90.6%
Readmission within 30 days per 1000	168	109	53.7%	N/A	N/A
ER Visits Per 1000	152	143	6.5%	256	-40.8%
Rx Scripts Per 1000	9,024	9,896	-8.8%	12,091	-25.4%

*Verisk BOB Norms

July 2016

2 Claims Summary – PPO Plan

Place of Service	CURRENT PERIOD			PRIOR PERIOD			% Change in PMPM
	Total Paid Amount	Total Paid PMPM	% of Total	Total Paid Amount	Total Paid PMPM	% of Total	
Outpatient Hospital	\$2,579,799	\$127.98	21.2%	\$3,326,150	\$145.66	25.8%	-14.5%
Inpatient Hospital	\$3,546,617	\$175.90	29.1%	\$3,088,560	\$138.98	24.0%	25.6%
Non-Facility	\$2,737,034	\$135.79	22.5%	\$3,046,954	\$137.10	23.6%	-1.0%
Ambulatory Surg Ctr	\$164,399	\$8.16	1.3%	\$205,094	\$9.23	1.6%	-11.6%
Emergency Room	\$136,111	\$6.75	1.1%	\$150,307	\$6.76	1.2%	-0.2%
All Others	\$1,022,221	\$50.71	8.4%	\$1,196,068	\$53.82	9.3%	-5.8%
Total Medical	\$10,185,148	\$505.29	83.6%	\$11,013,161	\$495.55	85.4%	2.0%
Total Rx	\$1,998,581	\$99.05	16.4%	\$1,878,124	\$84.55	14.6%	17.1%
Total Paid	\$12,183,729	\$604.34	100.0%	\$12,891,285	\$580.11	100.0%	4.2%
Member Paid	\$1,266,599	\$62.84	10.4%	\$1,298,030	\$58.41	10.1%	7.6%
Plan Paid	\$10,917,131	\$541.51	89.6%	\$11,593,255	\$521.70	89.9%	3.8%

4 Major Conditions – Prevalence and Cost with Conditions

Chronic Condition	CURRENT PERIOD						% Change		
	Members*	% of Total	Norm	Paid	% of Total	PMPY	% of Avg PMPY	Members	PMPY
1. Diabetes	50	3.0%	5.9%	\$517,690	5.1%	\$10,354	171%	8.7%	-11.7%
2. CAD	38	2.2%	2.0%	\$1,511,463	14.6%	\$39,775	656%	0.0%	74.6%
3. Asthma	126	7.5%	3.0%	\$671,268	6.6%	\$5,328	88%	8.8%	-29.1%
4. COPD	13	0.8%	0.9%	\$71,737	0.7%	\$5,518	91%	-23.5%	-88.5%
5. Hypertension	209	12.4%	9.8%	\$2,353,791	23.1%	\$11,262	186%	0.5%	-9.4%
6. Mental Illness	625	37.2%	18.6%	\$4,164,031	40.9%	\$6,662	110%	10.4%	2.5%
7. Substance Use Disorder	93	5.5%	2.1%	\$818,268	8.0%	\$8,799	145%	6.9%	0.5%
8. CHF	4	0.2%	0.4%	\$765,064	7.5%	\$191,268	3154%	-20.0%	670.1%
TOTALS (unique)	838	49.9%		\$5,702,655	56.0%	\$6,805	112%	6.6%	-10.8%

*Members with co-morbidities and their corresponding claims are combined in each applicable category

Segal Consulting 13

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

5 High Risk High Cost Analysis – PPO Plan High Cost By Condition

Chronic Condition For High Cost Claimants*	CURRENT PERIOD			PRIOR PERIOD			% Change in Members	% Change in PMPY
	Members	% Within Condition	PMPY	Members	% Within Condition	PMPY		
1. Diabetes	3	6.0%	\$101,766	6	13.0%	\$56,486	-50.0%	80.2%
2. CAD	9	23.7%	\$151,117	10	26.3%	\$67,428	-10.0%	124.1%
3. Asthma	7	5.6%	\$44,790	5	5.2%	\$78,577	16.7%	-43.0%
4. COPD	0	0.0%	\$0	5	29.4%	\$147,308	-100.0%	-999.9%
5. Hypertension	20	9.6%	\$78,220	21	10.1%	\$84,956	-4.8%	-7.8%
6. CHF	3	75.0%	\$262,955	2	40.0%	\$37,028	50.0%	583.1%
7. Breast Cancer	2	6.7%	\$80,536	8	32.0%	\$82,193	-75.0%	-2.0%
8. Colon Cancer	1	50.0%	\$217,489	0	0.0%	\$0	999.9%	999.9%
9. Prostate Cancer	1	20.0%	\$81,279	0	0.0%	\$0	999.9%	999.9%
TOTALS (unique)	29		\$85,053	34		\$77,525	-14.7%	9.7%

*High Cost Claimants have total medical claims exceeding \$25,000 (does not include Rx claims)

6 Clinical Quality Performance – PPO Plan

Chronic Condition	Clinical Quality Metric*	Individuals			
		Population	Current Period	Prior Period	NOQA National Average**
Diabetes	At least 1 hemoglobin A1C tests in last 12 months	50	86.0%	84.8%	87.20%
	Annual screening for diabetic nephropathy	50	74.0%	65.2%	79.60%
	Annual screening for diabetic retinopathy	50	48.0%	54.3%	48.80%
CAD	Patients currently taking an ACE-inhibitor	38	39.5%	42.1%	79.20%
	Patients currently taking a statin	38	71.1%	73.7%	Not Available
Hyperlipidemia	Total cholesterol testing in last 12 months	211	78.2%	73.3%	Not Available
COPD	Spirometry testing in last 12 months	13	15.4%	47.1%	41.50%
Preventive Screening	Cervical cancer	689	24.1%	36.0%	73.60%
	Breast cancer	439	51.9%	53.3%	66.50%
	Colorectal cancer	525	27.8%	29.1%	55.80%

*Gaps in care are based solely on claims data and may not fully represent the extent of appropriate care being received

**Source: NOQA – State of Health Care Quality 2014 – Accredited Plans 2013 Commercial PPO Averages

7 Summary of Prescription Drug Expenses – PPO Plan

Category	Non-Specialty		Specialty		Total		
	Current Period	% Change	Current Period	% Change	Current Period	Prior Period	% Change
Total Cost	\$1,355,473	3.1%	\$533,465	18.3%	\$1,888,938	\$1,765,717	7.0%
% of Total Costs	71.8%	-3.6%	28.2%	10.6%			
Total Scripts	15,191	-6.0%	357	-24.0%	15,548	16,623	-6.5%
% of Total Scripts	97.7%	0.5%	2.3%	-18.8%			
Avg Cost PMPM	\$87.25	13.7%	\$26.47	30.4%	\$93.71	\$79.45	17.9%
Avg Cost Per Rx	\$89.23	9.9%	\$1,494	55.9%	\$121.49	\$106.22	14.4%
Number of Scripts PMPM	0.75	3.7%	0.02	-16.3%	0.77	0.75	3.1%
Generic Dispensing Rate	80.3%	2.2%	41.2%	18.0%	79.4%	77.3%	2.7%
Member Cost %	15.1%	-3.7%	1.4%	-6.3%	11.3%	12.1%	-6.8%

July 2016

8 Prescription Drug Cost Management Analysis – PPO Plan

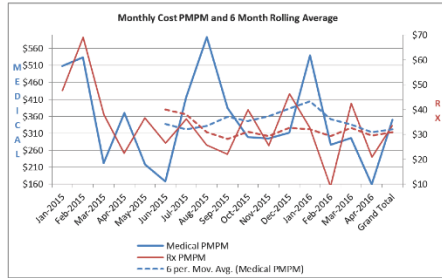
Top 10 Indications	Prior Rank	CURRENT PERIOD			PRIOR PERIOD				
		Rxs	Total Cost	Generic Fill Rate	PMPM	Rxs	Total Cost	Generic Fill Rate	PMPM
Autoimmune Disease	4	78	\$204,882	10.3%	\$10.16	71	\$120,840	11.3%	\$5.99
Diabetes	5	482	\$197,232	57.5%	\$9.78	391	\$111,293	50.6%	\$5.52
Multiple Sclerosis	1	28	\$179,450	0.0%	\$8.90	41	\$200,346	0.0%	\$9.94
ADHD	2	611	\$145,627	64.0%	\$7.22	658	\$150,132	59.6%	\$7.45
Asthma/COPD	3	958	\$143,484	25.3%	\$7.12	995	\$144,662	18.4%	\$7.18
Depression	6	2,062	\$111,851	95.7%	\$5.55	2,021	\$107,161	95.6%	\$5.32
Mental Health/Neurological Disorders	12	152	\$81,033	72.4%	\$4.02	101	\$56,015	29.7%	\$2.78
Anti-infectives	9	1,874	\$74,352	94.7%	\$3.69	2,180	\$66,207	93.9%	\$3.28
Skin Disorders	8	571	\$67,352	84.2%	\$3.34	584	\$89,920	81.3%	\$3.47
Oncology	30	190	\$59,829	58.9%	\$2.97	123	\$17,324	85.4%	\$0.86
Total Top 10:		7,014	\$1,265,090	76.6%	\$62.76	7,165	\$1,043,960	74.9%	\$51.79

Segal Consulting 14

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016
Prior Period: Paid May 2014 – Apr 2015

1 Principal Financial Trends – Claims Cost HSA \$1500 Plan



3 Key Healthcare Performance Metrics – HSA \$1500 Plan

Category	Current Period	Norm*	Comparison To Norm
Avg Membership Per Month	170	N/A	N/A
Office Visits Per 1000	2,891	4,885	-40.8%
Inpatient Admissions Per 1000	59	63	-6.1%
Inpatient Days Per Thousand	224	283	-20.9%
Average Inpatient Day Cost	\$5,309	\$3,297	61.0%
Average Cost Per Admission	\$20,176	\$15,071	33.9%
Readmission within 30 days per 1000	100	N/A	N/A
ER Visits Per 1000	53	254	-79.1%
Rx Scripts Per 1000	4,938	11,101	-55.5%

* Verisk BOB Norms

July 2016

2 Claims Summary – HSA \$1500 Plan

Place of Service	CURRENT PERIOD		
	Total Paid Amount	Total Paid PMPM	% of Total
Outpatient Hospital	\$155,728	\$76.56	23.5%
Inpatient Hospital	\$157,128	\$77.25	23.7%
Non-Facility	\$179,247	\$88.13	27.1%
Ambulatory Surg Ctr	\$11,089	\$5.45	1.7%
Emergency Room	\$4,939	\$2.43	0.7%
All Others	\$36,515	\$18.43	14.9%
Total Medical	\$608,646	\$298.23	91.7%
Total Rx	\$55,072	\$27.08	8.3%
Total Paid	\$661,719	\$325.33	100.0%
Member Paid	\$169,425	\$83.30	25.6%
Plan Paid	\$492,294	\$242.03	74.4%

4 Major Conditions – Prevalence and Cost with Conditions HSA \$1500 Plan

Chronic Condition	CURRENT PERIOD						
	Members*	% of Total	Norm	Paid	% of Total	PMPY	% of Avg PMPY
1. Diabetes	6	3.5%	4.6%	\$50,710	8.4%	\$8,452	236%
2. CAD	2	1.2%	1.4%	\$138,650	22.9%	\$69,325	1937%
3. Asthma	11	6.5%	3.0%	\$113,235	18.7%	\$10,294	288%
4. Hypertension	18	10.6%	0.6%	\$210,639	34.7%	\$11,702	327%
5. Mental Illness	51	30.1%	18.6%	\$361,172	59.5%	\$7,082	198%
6. Substance Abuse	4	2.4%	2.1%	\$4,408	0.7%	\$1,102	31%
7. CHF	1	0.6%	0.2%	\$126,209	20.8%	\$126,209	3526%
TOTALS (unique)	66	38.9%		\$414,832	68.3%	\$6,282	178%

*Members with co-morbidities and their corresponding claims are combined in each applicable category

Segal Consulting 15

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016
Prior Period: Paid May 2014 – Apr 2015

5 High Risk High Cost Analysis – HSA \$1500 Plan High Cost By Condition

Chronic Condition For High Cost Claimants*	CURRENT PERIOD		
	Members	% Within Condition	PMPY
1. CAD	1	50.0%	\$126,209
2. Asthma	1	9.1%	\$83,035
3. Hypertension	1	5.6%	\$126,209
4. CHF	1	100.0%	\$126,209
5. Breast Cancer	1	100.0%	\$83,035
TOTALS (unique)	2		\$104,822

*High Cost Claimants have total medical claims exceeding \$25,000 (does not include Rx claims)

6 Clinical Quality Performance – HSA \$1500 Plan

Chronic Condition	Clinical Quality Metric*	Individuals			
		Population	Current Period	Prior Period	NCOA National Average**
Diabetes	At least 1 hemoglobin A1C tests in last 12 months	6	100.0%	68.7%	87.20%
	Annual screening for diabetic nephropathy	6	83.3%	66.7%	79.60%
	Annual screening for diabetic retinopathy	6	66.7%	33.3%	48.80%
CAD	Patients currently taking an ACE-inhibitor	2	0.0%	0.0%	79.20%
	Patients currently taking a statin	2	50.0%	100.0%	Not Available
Hyperlipidemia	Total cholesterol testing in last 12 months	16	87.5%	85.7%	Not Available
COPD	Spirometry testing in last 12 months	0	0.0%	0.0%	41.50%
Asthma	Patients with inhaled corticosteroids or leukotriene inhibitors in the last 12 months	11	72.7%	100.0%	90.70%
Preventive Screening	Cervical cancer	70	28.6%	39.7%	73.60%
	Breast cancer	41	53.7%	55.9%	66.50%
	Colorectal cancer	45	26.7%	44.4%	55.80%

*Gaps in care are based solely on claims data and may not fully represent the extent of appropriate care being received
**Source: NCOA – State of Health Care Quality 2014 – Accredited Plans 2013 Commercial PPO Averages

7 Summary of Prescription Drug Expenses – HSA \$1500 Plan

Category	Non-Specialty	Specialty	Total
Total Cost	\$54,371	\$701	\$55,072
% of Total Costs	98.7%	1.3%	
Total Scripts	868	3	871
% of Total Scripts	99.7%	0.3%	
Avg Cost PMPM	\$26.73	\$0.34	\$27.08
Avg Cost Per Rx	\$62.64	\$234	\$63.23
Number of Scripts PMPM	0.43	0.00	0.43
Generic Dispensing Rate	84.9%	68.7%	84.8%
Member Cost %	35.9%	4.0%	35.5%

July 2016

8 Prescription Drug Cost Management Analysis – HSA \$1500 Plan

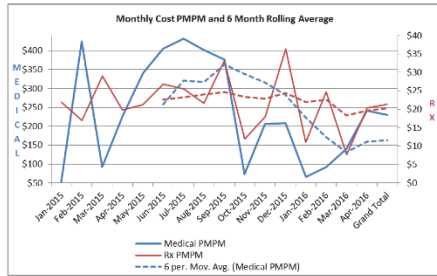
Top 10 Indications	Rxs	Total Cost	Generic Fill Rate	PMPM
Depression	110	\$6,136	90.0%	\$3.02
Male Hormone Replacement	16	\$4,742	25.0%	\$2.33
Contraceptives	77	\$4,579	75.3%	\$2.25
Lipid/Cholesterol Disorders	40	\$4,563	90.0%	\$2.24
Cardiovascular / Hypertension	84	\$3,675	100.0%	\$1.81
Dental Products	10	\$3,253	100.0%	\$1.60
Asthma/COPD	35	\$2,909	37.1%	\$1.43
Viral Infection/Herpes	7	\$2,820	71.4%	\$1.39
Seizure Disorder	34	\$2,517	70.6%	\$1.24
Anti-infectives	104	\$2,241	95.2%	\$1.10
Total Top 10:	517	\$37,435	83.8%	\$18.40

Segal Consulting 16

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016
Prior Period: Paid May 2014 – Apr 2015

1 Principal Financial Trends – Claims Cost HSA \$2600 Plan



3 Key Healthcare Performance Metrics – HSA \$2600 Plan

Category	Current Period	Norm*	Comparison To Norm
Avg Membership Per Month	155	N/A	N/A
Office Visits Per 1000	2,428	4,880	-50.2%
Inpatient Admissions Per 1000	6	64	-89.9%
Inpatient Days Per Thousand	13	291	-95.6%
Average Inpatient Day Cost	\$16,216	\$3,265	396.7%
Average Cost Per Admission	\$32,432	\$14,811	119.0%
Readmission within 30 days per 1000	1000	N/A	N/A
ER Visits Per 1000	64	257	-74.9%
Rx Scripts Per 1000	3,775	11,042	-65.8%

* Verisk BOB Norms

July 2016

2 Claims Summary – HSA \$2600 Plan

Place of Service	CURRENT PERIOD		
	Total Paid Amount	Total Paid PMPM	% of Total
Outpatient Hospital	\$69,409	\$37.26	15.9%
Inpatient Hospital	\$0	\$0.00	0.0%
Non-Facility	\$105,097	\$56.41	24.0%
Ambulatory Surg Ctr	\$10,845	\$5.82	2.5%
Emergency Room	\$3,428	\$1.84	0.8%
All Others	\$213,231	\$114.46	48.7%
Total Medical	\$402,010	\$215.79	91.8%
Total Rx	\$35,750	\$19.19	8.2%
Total Paid	\$437,759	\$234.98	100.0%
Member Paid	\$108,846	\$58.32	24.8%
Plan Paid	\$329,113	\$176.66	75.2%

4 Major Conditions – Prevalence and Cost with Conditions HSA \$2600 Plan

Chronic Condition	CURRENT PERIOD						
	Members*	% of Total	Norm	Paid	% of Total	PMPY	% of Avg PMPY
1. Asthma	8	5.2%	3.0%	\$23,326	5.8%	\$2,916	113%
2. Hypertension	9	5.8%	8.0%	\$12,369	3.1%	\$1,374	53%
3. Mental Illness	32	20.5%	18.6%	\$71,624	17.8%	\$2,238	86%
4. Substance Abuse	2	1.3%	2.1%	\$2,664	0.7%	\$1,332	51%
TOTALS (unique)	43	27.7%		\$88,771	22.1%	\$2,064	80%

*Members with co-morbidities and their corresponding claims are combined in each applicable category

Segal Consulting 17

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016
Prior Period: Paid May 2014 – Apr 2015

5 High Risk High Cost Analysis – HSA \$2600 Plan High Cost By Condition

Chronic Condition For High Cost Claimants*	CURRENT PERIOD		
	Members	% Within Condition	PMPY
TOTALS (unique)	0		\$0

*High Cost Claimants have total medical claims exceeding \$25,000 (does not include Rx claims)

6 Clinical Quality Performance – HSA \$2600 Plan

Chronic Condition	Clinical Quality Metric*	Individuals			
		Population	Current Period	Prior Period	NCOA National Average**
Diabetes	At least 1 hemoglobin A1C tests in last 12 months	0	0.0%	0.0%	87.20%
	Annual screening for diabetic nephropathy	0	0.0%	0.0%	79.60%
	Annual screening for diabetic retinopathy	0	0.0%	0.0%	48.80%
CAD	Patients currently taking an ACE-inhibitor	0	0.0%	0.0%	79.20%
	Patients currently taking a statin	0	0.0%	0.0%	Not Available
Hyperlipidemia	Total cholesterol testing in last 12 months	9	88.9%	80.0%	Not Available
COPD	Spirometry testing in last 12 months	0	0.0%	0.0%	41.50%
Asthma	Patients with inhaled corticosteroids or leukotriene inhibitors in the last 12 months	8	75.0%	60.0%	90.70%
Preventive Screening	Cervical cancer	63	26.4%	43.6%	73.60%
	Breast cancer	26	34.6%	53.8%	66.50%
	Colorectal cancer	31	29.0%	32.3%	55.80%

*Gaps in care are based solely on claims data and may not fully represent the extent of appropriate care being received
**Source: NCOA – State of Health Care Quality 2014 – Accredited Plans 2013 Commercial PPO Averages

7 Summary of Prescription Drug Expenses – HSA \$2600 Plan

Category	Non-Specialty	Specialty	Total
Total Cost	\$35,354	\$390	\$ 35,744.70
% of Total Costs	100.0%	1.1%	
Total Scripts	588	5	591
% of Total Scripts	99.2%	0.8%	
Avg Cost PMPM	\$18.96	\$0.21	\$19.19
Avg Cost Per Rx	\$60.33	\$78.09	\$60.48
Number of Scripts PMPM	0.31	0.00	0.32
Generic Dispensing Rate	84.6%	100.0%	84.8%
Member Cost %	50.3%	100.0%	50.8%

July 2016

8 Prescription Drug Cost Management Analysis – HSA \$2600 Plan

Top 10 Indications	Rxs	Total Cost	Generic Fill Rate	PMPM
Contraceptives	85	\$7,435	82.4%	\$3.99
ADHD	21	\$6,893	52.4%	\$3.70
Asthma/COPD	26	\$3,376	15.4%	\$1.81
Skin Disorders	20	\$3,301	85.0%	\$1.77
Depression	93	\$2,958	98.9%	\$1.59
Impotence	6	\$1,364	0.0%	\$0.73
Viral Infection/Herpes	14	\$1,343	71.4%	\$0.72
Cardiovascular/Hypertension	47	\$1,309	100.0%	\$0.70
Anti-Infectives	74	\$1,256	95.9%	\$0.67
Anaphylaxis	2	\$1,023	0.0%	\$0.55
Total Top 10:	388	\$30,257	83.0%	\$16.24

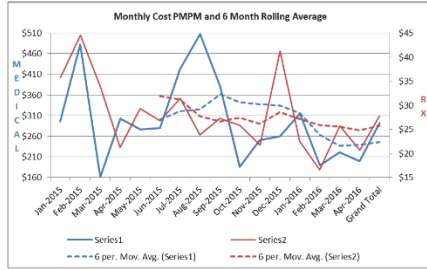
Segal Consulting 18

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

1 Principal Financial Trends – Claims Cost Both HSA Plans



3 Key Healthcare Performance Metrics – Both HSA Plans

Category	Current Period	Norm*	Comparison To Norm
Avg Membership Per Month	325	N/A	N/A
Office Visits Per 1000	2,670	4,883	-45.3%
Inpatient Admissions Per 1000	34	63	-46.5%
Inpatient Days Per Thousand	123	287	-57.1%
Average Inpatient Day Cost	\$5,855	\$3,282	78.4%
Average Cost Per Admission	\$21,290	\$14,947	42.4%
Readmission within 30 days per 1000	182	N/A	N/A
ER Visits Per 1000	59	256	-77.1%
Rx Scripts Per 1000	4,382	11,073	-60.4%

*Verisk BOB Norms

July 2016

2 Claims Summary – Both HSA Plans

Place of Service	CURRENT PERIOD		
	Total Paid Amount	Total Paid PMPM	% of Total
Outpatient Hospital	\$225,137	\$57.77	20.5%
Inpatient Hospital	\$159,449	\$40.92	14.5%
Non-Facility	\$284,344	\$72.96	25.9%
Ambulatory Surg Ctr	\$21,934	\$5.63	2.0%
Emergency Room	\$8,367	\$2.15	0.8%
All Others	\$309,425	\$79.40	28.1%
Total Medical	\$1,008,656	\$258.83	91.7%
Total Rx	\$90,822	\$23.31	8.3%
Total Paid	\$1,099,478	\$282.13	100.0%
Member Paid	\$278,071	\$71.36	25.3%
Plan Paid	\$821,407	\$210.78	74.7%

4 Major Conditions – Prevalence and Cost with Conditions Both HSA Plans

Chronic Condition	CURRENT PERIOD						
	Members*	% of Total	Norm	Paid	% of Total	PMPY	% of Avg PMPY
1. Diabetes	6	1.8%	4.6%	\$50,710	5.0%	\$8,452	272%
2. CAD	2	0.6%	1.4%	\$138,650	13.7%	\$69,325	2232%
3. Asthma	19	5.9%	3.0%	\$136,550	13.5%	\$7,187	231%
4. Hypertension	27	8.3%	0.6%	\$223,008	22.1%	\$8,260	266%
5. Mental Illness	83	25.6%	18.6%	\$432,796	42.9%	\$5,214	168%
6. Substance Abuse	6	1.8%	2.1%	\$7,072	0.7%	\$1,179	38%
7. CHF	1	0.3%	0.2%	\$126,209	12.5%	\$126,209	4063%
TOTALS (unique)	109	33.6%		\$503,403	49.9%	\$4,618	148%

*Members with co-morbidities and their corresponding claims are combined in each applicable category

Segal Consulting 19

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

5 High Risk High Cost Analysis – Both HSA Plans High Cost By Condition

Chronic Condition For High Cost Claimants*	CURRENT PERIOD		
	Members	% Within Condition	PMPY
1. CAD	1	50.0%	\$126,209
2. Asthma	1	9.1%	\$83,035
3. Hypertension	1	5.6%	\$126,209
4. CHF	1	100.0%	\$126,209
5. Breast Cancer	1	100.0%	\$83,035
TOTALS (unique)	2		\$104,822

*High Cost Claimants have total medical claims exceeding \$25,000 (does not include Rx claims)

6 Clinical Quality Performance – Both HSA Plans

Chronic Condition	Clinical Quality Metrics*	Individuals			
		Population	Current Period	Prior Period	NCOA National Average**
Diabetes	At least 1 hemoglobin A1C tests in last 12 months	6	100.0%	50.0%	87.20%
	Annual screening for diabetic nephropathy	6	83.3%	50.0%	79.60%
	Annual screening for diabetic retinopathy	6	66.7%	25.0%	48.80%
CAD	Patients currently taking an ACE-inhibitor	2	0.0%	0.0%	79.20%
	Patients currently taking a statin	2	50.0%	100.0%	Not Available
Hyperlipidemia	Total cholesterol testing in last 12 months	25	88.0%	84.2%	Not Available
COPD	Spirometry testing in last 12 months	0	0.0%	0.0%	41.50%
Asthma	Patients with inhaled corticosteroids or leukotriene inhibitors in the last 12 months	19	73.7%	85.7%	90.70%
Preventive Screening	Cervical cancer	133	27.1%	41.4%	73.60%
	Breast cancer	67	46.3%	55.0%	66.50%
	Colorectal cancer	76	27.6%	38.8%	55.80%

*Gaps in care are based solely on claims data and may not fully represent the extent of appropriate care being received

**Source: NCOA – State of Health Care Quality 2014 – Accredited Plans 2013 Commercial PPO Averages

7 Summary of Prescription Drug Expenses – Both HSA Plans

Category	Non-Specialty	Specialty	Total
Total Cost	\$89,725	\$1,092	\$90,817
% of Total Costs	98.8%	1.2%	
Total Scripts	1,454	8	1,462
% of Total Scripts	99.9%	0.5%	
Avg Cost PMPM	\$23.02	\$0.28	\$23.30
Avg Cost Per Rx	\$61.71	\$138	\$62.12
Number of Scripts PMPM	0.37	0.00	0.38
Generic Dispensing Rate	84.8%	87.5%	84.8%
Member Cost %	41.6%	38.3%	41.5%

July 2016

8 Prescription Drug Cost Management Analysis – Both HSA Plans

Top 10 Indications	Rxs	Total Cost	Generic Fill Rate	PMPM
Contraceptives	162	\$12,015	79.0%	\$3.08
Depression	203	\$9,095	94.1%	\$2.33
ADHD	27	\$7,856	63.0%	\$1.97
Asthma/COPD	61	\$6,285	27.9%	\$1.01
Skin Disorders	43	\$5,506	86.0%	\$1.41
Cardiovascular/Hypertension	131	\$4,984	100.0%	\$1.28
Lipid/Cholesterol Disorders	51	\$4,763	92.2%	\$1.22
Male Hormone Replacement	16	\$4,742	25.0%	\$1.22
Viral Infection/Herpes	21	\$4,163	71.4%	\$1.07
Anti-Infectives	178	\$3,497	95.5%	\$0.90
Total Top 10:	893	\$62,745	84.8%	\$16.10

Segal Consulting 20

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

Dashboard Overview

The purpose of this monthly dashboard is to:

- Highlight key metrics to monitor progress against strategic opportunities
- Provide a mechanism to track:
 - **Claims and trends:** determine cost trend drivers plus analyze data on effective alternatives to manage those trends
 - **Utilization metrics vs. benchmark:** compare the plan's utilization to benchmarks and desired targets
 - **Population health status:** assess disease burden and recommend solutions to lessen future trend increases; uncover opportunities for the plan to better control plan cost and improve the health of the covered population

Methodology/Definitions

- Eligibility, medical claims and pharmacy claims data is provided by -----.
- Generally, financial metrics are reported on a total cost/allowed basis (i.e., total cost includes plan paid and member cost sharing). This allows for tracking of population health status for improvement over time.
- Claims are reported on a paid basis for the periods May 1, 2015 – April 30, 2016 (current period) and May 1, 2014 – April 30, 2015 (prior period).

July 2016

✦ Segal Consulting 21

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

Norms/Benchmarks

- Where benchmarks are shown, we are using the book-of-business trends reported to us by our data warehouse partner, Verisk Health. Their database represents in excess of 10 million lives across plan types. Benchmark data was adjusted on an age basis
- In certain instances, we use NCQA HEDIS benchmarks for accredited commercial PPO plans, which are nationally recognized health care data standards.

July 2016

✦ Segal Consulting 22

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

Objective of Dashboard Panels

1. Principal Financial Trends

Objective: Provide a visual representation of how claims are trending over the short term.

- Seasonality in claims paid is expected with the highest monthly claims generally occurring in winter; 6-month rolling average is used to smooth the effect of seasonality.
- Monthly claims can fluctuate at the beginning and end of a plan year as members determine if their contribution to the out-of-pocket maximum warrants getting medical treatment in the current year or waiting until the next plan year.

2. Claims Summary

Objective: Provide a comparative overview of claims based on treatment setting. Also provides a summary of plan paid, member paid and total plan allowed costs

- Place of Service can be helpful when investigating changes in utilization patterns or when trying to understand the impact of plan design changes.

July 2016

Segal Consulting 23

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

3. Key Healthcare Performance Metrics

Objective: Provide some key comparative utilization metrics to track sources of claims increases

- This table allows the plan to understand whether changes in cost are driven by price or change in utilization.

4. Major Chronic Conditions—Prevalence and Cost

Objective: Provide metrics to monitor the cost and utilization of chronic conditions.

5. High Risk High Cost Analysis High Cost by Condition

Objective: Provide key metrics to monitor cost and utilization of high risk and high cost chronic conditions. Target high risk groups for medical management interventions

6. Clinical Quality Performance

Objective: Provide clinical metrics related to preventive screening, treatment compliance rates, and quality of care performance measures. This report enables the plan to determine the degree to which participants are receiving adequate care from an NCQA / HEDIS perspective.

July 2016

Segal Consulting 24

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

7. Summary of Prescription Drug Expenses

Objective: Provide metrics to evaluate year-over-year growth in pharmacy spend, cost and utilization.

- This report enables the plan to determine the effectiveness of the current drug benefit design in terms of cost and utilization, and may help identify improvement opportunities.

8. Prescription Drug Cost Management Analysis

Objective: Provide a list of the top 10 drug indications that are driving pharmacy claim expenses.

- It enables the plan to determine what categories of drugs are driving utilization and cost over time. This may help identify those areas where opportunities exist for improved utilization management or plan design.

July 2016

 Segal Consulting 25

Healthcare Dashboard

Current Period: Paid May 2015 – Apr 2016

Prior Period: Paid May 2014 – Apr 2015

Ongoing Use of the Dashboard

- View the current dashboard as a starting point
- Dashboard metrics can be added to be current with ongoing plan objectives
- Provide insights into plan design alternatives that could be used to encourage behavioral change that will lower risk factors
- Monitor the effectiveness of efforts by vendors to support participants in their efforts to improve their personal health and lower health risk factors

July 2016

 Segal Consulting 26



2019 Base Rate Development and 2014 – 2017 Composite Rate Study

Preliminary Results

XXXXXXX State Health Plan

Segal Consulting

Copyright © 2017 by The Segal Group, Inc. All rights reserved.

Objectives of Study

- Develop 2019 Base Rates and review experience for 2014 to 2017 for Each Medical Option
 - Develop Base Rates and Composites based on separate rates by network and plan type
 - Develop Alternative Base Rates and Composites based on blended PPO and blended HMO rates to avoid problems of risk segmentation inherent in current approach
 - Develop Recommended Reserves for XXXX Program
- Model impact of changing Employer Contribution percent on Alternative Base Rates and Composites
- Model cost of recommended Wellness, Screening and Disease Management alternatives

Segal Consulting 2

Development of 2019 Base Rates

- > Collected 2014 to 2016 paid claims data from vendors to analyze case specific trend rates by coverage
- > Developed trend recommendation based on comparison of carrier assumptions, projected national trend and case specific trend rates
- > Projected 2018 and 2019 claims PMPY based on historical claims plus trend
- > Added in anticipated fees received from vendors
- > Allocated claims and fees by family coverage category to develop 2019 Base Rates

HMO Trend

	Premier Blue	Coventry HMO	PPK
Enrollment on 1/1/2017	19,134	2,523	2,384
Average 2016 PMPY Claims Paid	\$1,819	\$2,107	\$1,715
Average 2017 PMPY Claims Paid	\$2,160	\$2,409	\$1,823
% Increase	18.79%	14.33%	6.26%
Carrier Trend	8.18%	12.80%	7.80%
National Trend	11.10%	11.10%	11.10%
Recommended Trend	11.30%	11.30%	11.30%
Recommended Margin	0.00%	0.00%	0.00%

PPO & Senior C Trend

	XXXXX Choice	Coventry PPO	Senior C
Enrollment on 1/1/17	19,593	956	6,188
2016 PMPY Claims Paid	\$2,281	NA	\$1,375
2017 PMPY Claims Paid	\$2,620	\$1,818	\$1,440
% Increase	14.86%	NA	4.70%
Carrier Trend	NA	12.80%	NA
National Trend	11.60%	11.60%	9.80%
Recommended Trend	11.30%	11.30%	9.80%
Recommended Margin	0.00%	0.00%	0.00%

✧ Segal Consulting 5

Rx & Dental Trend

	Rx	Dental
Enrollment on 1/1/17	44,762	51,290
2016 PMPY Claims Paid	\$637	\$371
2017 PMPY Claims Paid	\$635	\$390
% Increase	-0.26%	5.24%
National Trend	11.90%	6.20%
Recommended Trend	6.00%	6.20%
Recommended Margin	0.00%	0.00%

✧ Segal Consulting 6

ASO Fees

Plan	Rate	Basis
XXXXX	\$20.55	PEPM
XXX	\$28.08	PEPM
XXXXX	\$27.30	PEPM
XXXXXX	\$24.88	PEPM
XXXXXX	\$0.95	per script
XXXXXXX	\$0.00	PEPM
XXXXXXX	\$1.29	PEPM
Wellness	\$2.05	PEPM
State Administration	\$6.30	PEPM
Newsletter	\$0.50	PEPM

Estimated XXX Fees

	Assumed Enrollment	Annual ASO Fees
XXXXX	19,593	\$4,831,634
XXXXXX	6,188	\$1,525,961
XXX	2,384	\$803,313
XXX PPO	956	\$313,186
XXXXX HMO	2,523	\$826,535
XXXXXX HDHP	172	\$56,347
Premier Blue	19,134	\$5,712,647
PBM ¹	44,590	\$1,592,494
XXXXXX Dental	45,686	\$707,219
Wellness, State Administration	40,759	\$3,483,113
Newsletters	50,950	\$305,700

¹ PBM Fee Estimate based on 1,676,309 scripts.

Tier Factors

> Employee	1.000
> Employee and Child	1.800
> Employee and Spouse	2.000
> Employee and Family	2.800
> Medicare Eligible	0.344

Unblended Base Rates by Tier

- > Assumes each plan stands on its own experience (i.e., rates are not blended with other plans except for Prescription Benefits which use a common experience pool for all medical plan participants).
- > Based on the slightly higher than trend increase in XXXXX Choice and minimal increase in XXXXX PPO due to the shift to self funding, there is now a significant rate difference between these plans.
- > Our preliminary composite calculations do not take into account the inevitable but impossible to predict enrollment shift between XXXXX and XXXXX PPO that would likely come about under the current contribution strategy. The current strategy bases the State Contribution on the low cost PPO in the PPO Only and Transition counties.
- > We do have a concern that lives in XXXXX that migrate to XXXXX PPO will result in unanticipated burden on unencumbered reserves and long term increases in the Indicated Composites to cover the loss of employee contributions as a result of the lower Employee Contribution Rates developed for XXXXXX PPO. If 10% of the XXXXX Choice population migrated uniformly, the loss of employee contributions would be \$1,520,000.

XXXXX
Unblended Base Rates

	EE	ESC
2017	\$318.79	\$892.61
2018	\$359.19	\$1,005.73
\$ Change	\$40.40	\$113.12
% Change	12.67%	12.67%

XXXXXXXX PPO
Unblended Base Rates

	EE	ESC
2017	\$309.11	\$865.51
2018	\$312.74	\$875.67
\$ Change	\$3.63	\$10.16
% Change	1.17%	1.17%
Insured Renewal	9.20%	

XXXXXXXX HMO
Unblended Base Rates

	EE	ESC
2017	\$331.85	\$929.18
2018	\$333.23	\$933.04
\$ Change	\$1.38	\$3.86
% Change	0.42%	0.42%
Insured Renewal	33.10%	

XXX
Unblended Base Rates

	EE	ESC
2017	\$273.33	\$765.32
2018	\$298.29	\$835.21
\$ Change	\$24.96	\$69.89
% Change	9.13%	9.13%
Insured Renewal	6.23%	

XXXXXXXXXX
Unblended Base Rates

	EE	ESC
2017	\$278.77	\$780.56
2018	\$307.49	\$860.97
\$ Change	\$28.72	\$80.41
% Change	10.30%	10.30%
Insured Renewal	11.98%	

Senior C Medical

	1 MER	2 MER	3 MER
2017	\$185.50	\$371.00	\$556.50
2018	\$209.42	\$418.84	\$628.26
\$ Change	\$23.92	\$47.84	\$71.76
% Change	12.89%	12.89%	12.89%

MER refers to Medicare Eligible Retiree

XXXXXXX HDHP
Unblended Base Rates

	EE	ESC
2017	\$199.35	\$558.18
2018	\$199.35	\$558.18
\$ Change	\$-	\$-
% Change	0.00%	0.00%
Insured Renewal	-10.10%	

We recommend not reducing rates since this plan is not credible with only 172 members as of January 2017 and we can anticipate significant claim variation from year to year

Rx
Base Rates

	EE	ESC
2017	\$77.42	\$216.78
2018	\$68.83	\$192.72
\$ Change	\$(8.59)	\$(24.06)
% Change	-11.10%	-11.10%

A decrease in Rx rates will partially offset the medical increase in most plans

Dental Base Rates

	EE	ESC
2017	\$26.38	\$73.86
2018	\$25.99	\$72.77
\$ Change	\$(0.39)	\$(1.09)
% Change	-1.48%	-1.48%

An alternate recommendation is to leave 2018 dental rates at 2017 levels

Current Composite Assumptions

		Employee	Dependent	Spouse	Children
FT1	State pays	97.5%	47.5%		
	Non-State pays	97.5%	47.5%		
FT2	State pays	95.0%	45.0%		
	Non-State pays	95.0%	45.0%		
FT3	State pays	92.5%	42.5%		
	Non-State pays	92.5%	42.5%		
PT	State pays	75.0%	35.63%		
	Non-State pays	75.0%	35.63%		
Healthy Kids	State pays	97.5%		47.5%	90.0%
	Non-State pays		NA		

Unblended Rate Composites State FT

State Full Time (assumes no change in enrollment)

	Published 2017	Published 2018	Indicated 20108	Published 2019	Indicated 2019	Indicated 2020
Employee	\$401.06	\$401.06	\$378.98	\$413.09	\$404.14	\$444.69
34,803	\$167,497,094	\$167,497,094	\$158,275,691	\$172,521,255	\$168,783,413	\$185,718,553
Dependent	\$185.60	\$185.60	\$227.86	\$191.17	\$242.71	\$266.92
14,598	\$32,512,666	\$32,512,666	\$39,915,603	\$33,488,396	\$42,516,967	\$46,757,978
Total	\$200,009,760	\$200,009,760	\$198,191,295	\$206,009,651	\$211,300,380	\$232,476,531

✧ Segal Consulting 21

Unblended Rate Composites State PT

State Part Time (assumes no change in enrollment)

	Published 2017	Published 2018	Indicated 2018	Published 2019	Indicated 2019	Indicated 2020
Employee	\$319.46	\$319.46	\$300.50	\$329.04	\$321.13	\$353.34
749	\$2,871,306	\$2,871,306	\$2,700,894	\$2,957,412	\$2,886,316	\$3,175,820
Dependent	\$146.76	\$146.76	\$181.06	\$151.16	\$192.92	\$212.07
263	\$463,175	\$463,175	\$571,425	\$477,061	\$608,856	\$669,293
Total	\$3,334,481	\$3,334,481	\$3,272,319	\$3,434,472	\$3,495,172	\$3,845,113

✧ Segal Consulting 22

Unblended Rate Composites Non-State FT

Non-State Full Time (assumes no change in enrollment)

	Published 2017	Published 2018	Indicated 2018	Published 2019	Indicated 2019	Indicated 2020
Employee	\$446.24	\$487.00	\$396.79	\$531.00	\$419.65	\$461.69
5,081	\$27,208,145	\$29,693,364	\$24,192,960	\$32,376,132	\$25,587,065	\$28,149,858
Dependent	\$206.55	\$225.00	\$244.14	\$245.00	\$259.31	\$285.09
2,234	\$5,537,192	\$6,031,800	\$6,545,004	\$6,567,960	\$6,951,621	\$7,642,693
Total	\$32,745,338	\$35,725,164	\$30,737,963	\$38,944,092	\$32,538,686	\$35,792,551

✧ Segal Consulting 23

Unblended Rate Composites Non-State PT

Non-State Part Time (assumes no change in enrollment)

	Published 2017	Published 2018	Indicated 2018	Published 2019	Indicated 2019	Indicated 2020
Employee	\$355.25	\$388.00	\$312.06	\$423.00	\$335.84	\$369.38
126	\$537,138	\$586,656	\$471,835	\$639,576	\$507,783	\$558,495
Dependent	\$163.42	\$179.00	\$191.04	\$195.00	\$204.72	\$224.67
44	\$86,286	\$94,512	\$100,871	\$102,960	\$108,095	\$118,626
Total	\$623,424	\$681,168	\$572,707	\$742,536	\$615,878	\$677,121

✧ Segal Consulting 24

Recommended Reserves for Self Funding as of 12/31/2018

	Medical	Dental	Rx	Total
Estimated Claim Total	\$350,080,000	\$18,330,000	\$71,010,000	\$439,420,000
IBNR Factor	20.0%	16.0%	4.2%	
IBNR Reserves	\$70,016,000	\$2,932,800	\$2,982,420	\$75,931,220
Claim Fluctuation Factors	25.0%	8.0%	10.0%	
Claim Fluctuation Reserve	\$87,520,000	\$1,466,400	\$7,101,000	\$96,087,400
Total Reserve Recommendation	\$157,536,000	\$4,399,200	\$10,083,420	\$172,018,620

Segal Consulting 25

Wellness, Screening and Disease Management Initiatives

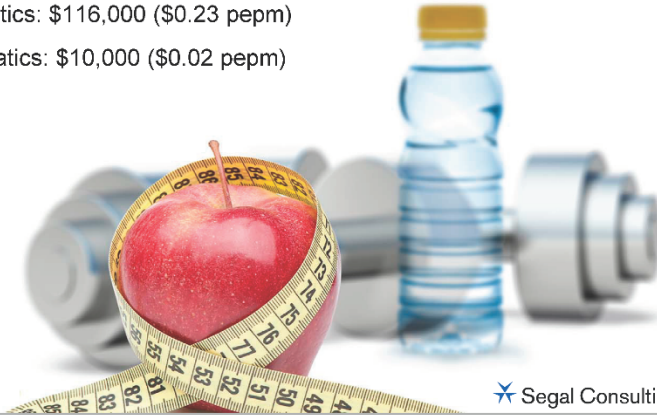
- > Anticipated but unpredictable ROI
- > Recommend paying from unencumbered balances in first year and build into base rates in subsequent years
- > Reduce prescription coinsurance for diabetes and asthma to 20%: \$1,266,000 (\$2.46 pepm) or...
- > Reduce prescription copays for diabetes, asthma and hypertension to \$0: \$5,299,000 (\$10.30 pepm)
- > Cover OTC Claritan and Prilosec at \$5 copay: -\$104,000 (-\$0.20 pepm)
- > Colorectal Cancer Screening: \$1,241,000 (\$2.41 pepm)
- > Ultrasound Screening for Abdominal Aortic Aneurysm: \$70,000 (\$0.14 pepm)
- > Self Help Books: \$481,000 (\$0.93 pepm)



Segal Consulting 25

Wellness, Screening and Disease Management Initiatives *continued*

- > Weight Loss Rx at 35% coinsurance: \$858,000 (\$1.67 pepm)
- > Bariatric Surgery: \$18,165,000 (\$35.30 pepm)
- > Tobacco cessation coaching: \$1,282,000 (\$2.49 pepm)
- > Tobacco cessation drugs to \$300: \$389,000 (\$0.76 pepm)
- > Educational CPT codes: \$72,000 to \$232,000 (\$0.14 to \$0.45 pepm)
- > Routine Foot Care for diabetics: \$464,000 (\$0.90 pepm)
- > Dental prophylaxis for diabetics: \$116,000 (\$0.23 pepm)
- > Peak flow meters for asthmatics: \$10,000 (\$0.02 pepm)



Segal Consulting 27

Questions?



Segal Consulting 28

Appendices

> Complete Unblended Base Rates by Plan and Tier

XXXXX Choice *Unblended Base Rates*

	EE	ES	EC	ESC	MER
2017	\$318.79	\$637.58	\$573.82	\$892.61	\$102.01
2018	\$359.19	\$718.38	\$646.54	\$1,005.73	\$123.55
\$ Change	\$40.40	\$80.80	\$72.72	\$113.12	\$21.54
% Change	12.67%	12.67%	12.67%	12.67%	21.12%

XXXXXXXX PPO
Unblended Base Rates

	EE	ES	EC	ESC	MER
2017	\$309.11	\$618.22	\$556.40	\$865.51	\$185.47
2018	\$312.74	\$625.48	\$562.93	\$875.67	\$107.57
\$ Change	\$3.63	\$7.26	\$6.53	\$10.16	\$(77.90)
% Change	1.17%	1.17%	1.17%	1.17%	-42.00%
Insured Renewal	9.20%				

XXXXXXXX HMO
Unblended Base Rates

	EE	ES	EC	ESC	MER
2017	\$331.85	\$663.70	\$597.33	\$929.18	\$199.11
2018	\$333.23	\$666.46	\$599.81	\$933.04	\$114.62
\$Change	\$1.38	\$2.76	\$2.48	\$3.86	\$(84.49)
%Change	0.42%	0.42%	0.42%	0.42%	-42.43%
Insured Renewal	33.10%				

XXX
Unblended Base Rates

	EE	ES	EC	ESC	MER
2017	\$273.33	\$546.66	\$491.99	\$765.32	\$164.00
2018	\$298.29	\$596.58	\$536.92	\$835.21	\$102.60
\$ Change	\$24.96	\$49.92	\$44.93	\$ 69.89	\$(61.40)
% Change	9.13%	9.13%	9.13%	9.13%	-37.44%
Insured Renewal	6.23%				

XXXXXXX
Unblended Base Rates

	EE	ES	EC	ESC	MER
2017	\$278.77	\$557.54	\$501.79	\$780.56	\$167.26
2018	\$307.49	\$614.98	\$553.48	\$860.97	\$105.77
\$Change	\$28.72	\$57.44	\$51.69	\$80.41	\$(61.49)
%Change	10.30%	10.30%	10.30%	10.30%	-36.77%
Insured Renewal	11.98%				

Senior C Medical
Base Rates

	1 MER	2 MER	3 MER
2017	\$185.50	\$371.00	\$556.50
2018	\$209.42	\$418.84	\$628.26
\$ Change	\$23.92	\$47.84	\$71.76
% Change	12.89%	12.89%	12.89%

XXXXXXX HDHP
Unblended Base Rates

	EE	ES	EC	ESC	MER
2017	\$199.35	\$398.70	\$358.83	\$558.18	N/A
2018	\$199.35	\$398.70	\$358.83	\$558.18	N/A
\$Change	\$-	\$-	\$-	\$ -	N/A
%Change	0.00%	0.00%	0.00%	0.00%	N/A
Insured Renewal	-10.10%				

We recommend not reducing rates since this plan is not credible with only 172 members as of January 2017 and we can anticipate significant claim variation from year to year

Rx
Base Rates

	EE	ES	EC	ESC	MER
2017	\$77.42	\$154.84	\$139.36	\$216.78	\$240.00
2018	\$68.83	\$137.66	\$123.89	\$192.72	\$179.83
\$ Change	\$(8.59)	\$(17.18)	\$(15.47)	\$(24.06)	\$(60.17)
% Change	-11.10%	-11.10%	-11.10%	-11.10%	-25.07%

A decrease in Rx rates will partially offset the medical increase in most plans

Dental
Base Rates

	EE	ES	EC	ESC	MER
2017	\$26.38	\$52.76	\$47.48	\$73.86	\$26.38
2018	\$25.99	\$51.98	\$46.78	\$72.77	\$25.99
\$ Change	\$(0.39)	\$(0.78)	\$(0.70)	\$(1.09)	\$(0.39)
% Change	-1.48%	-1.48%	-1.47%	-1.48%	-1.48%

An alternate recommendation is to leave 2018 dental rates at 2017 levels

6. Appendix C: Insurance Certifications



Workers' Compensation Board

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

<p>1a. Legal Name & Address of Insured (use street address only) Segal Company, Inc. 333 West 34th St., 3rd Floor New York, NY 10001</p> <p>Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)</p>	<p>1b. Business Telephone Number of Insured 212-251-5347</p> <p>1c. NYS Unemployment Insurance Employer Registration Number of Insured</p> <p>1d. Federal Employer Identification Number of Insured or Social Security Number 060839113</p>
<p>2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</p> <p>NYS Dept of Civil Service Employee Benefits Division Albany NY 12239</p>	<p>3a. Name of Insurance Carrier Pacific Indemnity Company</p> <p>3b. Policy Number of Entity Listed in Box "1a" 71738381</p> <p>3c. Policy effective period 02/28/2017 to 02/28/2018</p> <p>3d. The Proprietor, Partners or Executive Officers are <input checked="" type="checkbox"/> included. (Only check box if all partners/officers included) <input type="checkbox"/> all excluded or certain partners/officers excluded.</p>

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under **item 3A** on the **INFORMATION PAGE** of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? YES NO

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Stephen Ballinger
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Joseph Bullerji 5/22/17
(Signature) (Date)

Title: Senior Vice President

Telephone Number of authorized representative or licensed agent of insurance carrier: (516) 745-8220

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

C-105.2 (9-15)

www.wcb.ny.gov

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.
2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

C-105.2 (9-15) REVERSE

STATE OF NEW YORK
WORKERS' COMPENSATION BOARD

CERTIFICATE OF INSURANCE COVERAGE UNDER THE NYS DISABILITY BENEFITS LAW

PART 1. To be completed by Disability Benefits Carrier or Licensed Insurance Agent of that Carrier	
<p>1a. Legal Name and Address of Insured (Use street address only)</p> <p>The Segal Company 333 West 34th Street New York, New York 10001</p>	<p>1b. Business Telephone Number of Insured 212.251.5987</p> <p>1c. NYS Unemployment Insurance Employer Registration Number of Insured</p> <p>1d. Federal Employer Identification Number of Insured or Social Security Number 13-1835864</p>
<p>2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</p> <p>NYS Dept of Civil Service Employee Benefits Division Albany, NY 12239</p>	<p>3a. Name of Insurance Carrier CIGNA LIFE INSURANCE COMPANY OF NEW YORK</p> <p>3b. Policy Number of entity listed in box "1a": NYD074846</p> <p>3c. Policy effective period: 01/01/2017 to 01/01/2018</p>
<p>4. Policy covers:</p> <p><input checked="" type="checkbox"/> a. All of the employer's employees eligible under the New York Disability Benefits Law</p> <p><input type="checkbox"/> b. Only the following class or classes of the employer's employees:</p>	
<p>Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability Benefits insurance coverage as described above.</p> <p style="text-align: right;"><i>Amy K. Guinan</i></p> <p>Date Signed May 22, 2017 By _____</p> <p style="text-align: center;">(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)</p> <p>Telephone Number <u>1.866-761-4236</u> Title <u>Underwriting Director</u></p>	
<p>IMPORTANT:</p> <p>If box "4a" is checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.</p> <p>If box "4b" is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the Disability Benefits Law. It must be mailed for completion to the Workers' Compensation Board, DB Plans Acceptance Unit, 328 State Street, Schenectady, New York 12305.</p>	
PART 2. To be completed by NYS Workers' Compensation Board (Only if box "4b" of Part 1 has been checked)	
<p>State Of New York Workers' Compensation Board</p>	
<p>According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability Benefits Law with respect to all of his/her employees.</p> <p>Date Signed _____ By _____</p> <p style="text-align: center;">(Signature of NYS Workers' Compensation Board Employee)</p> <p>Telephone Number _____ Title _____</p>	

Please Note: Only insurance carriers licensed to write NYS disability benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.

DB-120.1 (12-13)

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in box "3" on this form is certifying that it is insuring the business referenced in box "1a" for disability benefits under the New York State Disability Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in box "2". ***This Certificate is valid for the earlier of one year after this form is approved by the insurance carrier or its licensed agent, or the policy expiration date listed in box "3c".***

Please Note: Upon the cancellation of the disability benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability Benefits Law.

DISABILITY BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits for all employees has been secured as provided by this article.

7. Appendix D: “Representative Lists of GASB 43/45 Valuations”

Name of Entity	State	Actuarial Service Performed	Date Services Initiated
East End Health Plan	NY	GASB/OPEB Valuation for plan and eight employers	2003-Ongoing
Suffolk School Employees Health Plan	NY	GASB/OPEB Valuation for plan and three employers	2003-Ongoing
Alameda County Employees' Retirement Association	CA	GASB/OPEB Valuation	2003-Ongoing
Los Angeles City Employees' Retirement System	CA	GASB/OPEB Valuation	2004-Ongoing
City of Los Angeles Department of Water & Power	CA	GASB/OPEB Valuation	2003-Ongoing
City of Los Angeles Fire & Police Pension Plan	CA	GASB/OPEB Valuation	2006-Ongoing
City of Santa Clara	CA	GASB/OPEB Valuation	2011-Ongoing
East Bay Municipal Utility District	CA	GASB/OPEB Valuation	2007-Ongoing
Colorado Springs School District	CO	GASB/OPEB Valuation	2006-Ongoing
City of West Haven	CT	GASB/OPEB Valuation	2014-Ongoing
Town of East Haven	CT	GASB/OPEB Valuation	2013-Ongoing
Town of Hamden	CT	GASB/OPEB Valuation; health consulting services; pension valuation	2010-Ongoing (health) / 1985-ongoing (pension)
Town of North Haven	CT	GASB/OPEB Valuation; pension valuations for 5 plans	2006-ongoing (health) / 30+ years (pension)
City of Hartford	CT	GASB/OPEB Valuation; health consulting services	2013-ongoing
Town of Ledyard	CT	GASB/OPEB Valuation; pension valuation	2014-ongoing (health) / 10+ years (pension)
Town of Middlebury	CT	GASB/OPEB Valuation; pension valuation	2009-ongoing (health) / 2001-ongoing (pension)

Name of Entity	State	Actuarial Service Performed	Date Services Initiated
Town of Wolcott	CT	GASB/OPEB Valuation; pension valuations for 3 plans	2010-ongoing (health) / 20+ years (pension)
City of Savannah	GA	GASB/OPEB Valuation	2003-Ongoing
Georgia Municipal Employees Benefit System	GA	GASB/OPEB Valuations; pension valuations	2005- Ongoing
Davenport Community School District	IA	GASB/OPEB Valuation	2007-2012
McHenry County	IL	GASB/OPEB Valuation	2008-Ongoing
Chicago Transit Authority Retiree Health Care Trust	IL	GASB/OPEB Valuation	2008-Ongoing
Indian Prairie Community Unit School District No. 204	IL	GASB/OPEB Valuation	2008-Ongoing
Chicago Teachers Pension Fund	IL	GASB/OPEB Valuation; health consulting; pension valuation services	2015-Ongoing / 2012 Pension
Municipal Employees' Annuity and Benefit Fund of Chicago	IL	GASB/OPEB Valuation	2014-Ongoing
Naperville Community Unit School District No. 203	IL	GASB/OPEB Valuation	2008-2012
Purdue University	IN	GASB/OPEB Valuation	2007-Ongoing
City of Cambridge	MA	GASB/OPEB Valuation	2007-Ongoing
City of Worcester	MA	GASB/OPEB Valuation	2006-Ongoing
City of Boston	MA	GASB/OPEB Valuation; health consulting services, pension valuation services	2007-Ongoing
City of Gloucester	MA	GASB/OPEB Valuation; pension valuation services	2011-Ongoing
City of Holyoke	MA	GASB/OPEB Valuation; pension valuation services	2007-Ongoing
City of Quincy	MA	GASB/OPEB Valuation	2014-Ongoing
City of Revere	MA	GASB/OPEB Valuation	2012-Ongoing
City of Salem	MA	GASB/OPEB Valuation; pension valuation services	2007-Ongoing

Name of Entity	State	Actuarial Service Performed	Date Services Initiated
City of Woburn	MA	GASB/OPEB Valuation	2007-Ongoing
Town of Acton	MA	GASB/OPEB Valuation	2006-Ongoing
Town of Andover	MA	GASB/OPEB Valuation	2013-Ongoing
Town of Bourne	MA	GASB/OPEB Valuation	2006-Ongoing
Town of Boxborough	MA	GASB/OPEB Valuation	2008-Ongoing
Town of Brookline	MA	GASB/OPEB Valuation; pension valuation services	2005-Ongoing
Town of Burlington	MA	GASB/OPEB Valuation	2007-Ongoing
Town of Chelmsford	MA	GASB/OPEB Valuation	2011-Ongoing
Town of Dracut	MA	GASB/OPEB Valuation	2006-Ongoing
Town of Holliston	MA	GASB/OPEB Valuation	2007-Ongoing
Town of Nantucket	MA	GASB/OPEB Valuation	2011-Ongoing
Town of Reading	MA	GASB/OPEB Valuation	1995-Ongoing
Town of Sutton	MA	GASB/OPEB Valuation	2007-Ongoing
Town of Wakefield	MA	GASB/OPEB Valuation	2009-Ongoing
Town of Wellesley	MA	GASB/OPEB Valuation; pension valuation services	2001-Ongoing
Town of Westwood	MA	GASB/OPEB Valuation	2013-Ongoing
Town of Wrentham	MA	GASB/OPEB Valuation	2007-Ongoing
Boston Water and Sewer Commission	MA	GASB/OPEB Valuation; pension valuation services	1995-Ongoing
Dedham-Westwood Water District	MA	GASB/OPEB Valuation	2008-Ongoing
South Essex Sewerage District	MA	GASB/OPEB Valuation	2007-Ongoing
Springfield Water and Sewer Commission	MA	GASB/OPEB Valuation	2014-Ongoing
Acton-Boxborough School District	MA	GASB/OPEB Valuation	2007-Ongoing
Nashoba Regional School District	MA	GASB/OPEB Valuation	2006-Ongoing
Massachusetts School Building Authority	MA	GASB/OPEB Valuation	2013-Ongoing
Barnstable County/Cape Cod Municipal Health Group	MA	GASB/OPEB Valuation; pension valuation services (for Barnstable County)	2000-Ongoing
Berkshire Region Group Purchasing Program	MA	GASB/OPEB Valuation	2008-Ongoing

Name of Entity	State	Actuarial Service Performed	Date Services Initiated
Cambridge Health Alliance	MA	GASB/OPEB Valuation	2007-Ongoing
Quincy College	MA	GASB/OPEB Valuation	2014-Ongoing
Itasca County	MN	GASB/OPEB Valuation	2007-Ongoing
Grand Village Nursing Home	MN	GASB/OPEB Valuation	2007-Ongoing
University of Missouri	MO	GASB/OPEB Valuation	1997-Ongoing
State of New Hampshire	NH	GASB/OPEB Valuation; general health benefit consulting; RFPs and procurements; health benefit vendor claims audits	2007-Ongoing
University System of New Hampshire	NH	GASB/OPEB Valuation; pension valuation services	2015-Ongoing
Town of Seabrook	NH	GASB/OPEB Valuation	2012-Ongoing
New Mexico Retiree Health Care Authority	NM	GASB/OPEB Valuation	2007-Ongoing
State Teachers Retirement System of Ohio	OH	GASB/OPEB Valuation; Pension actuarial valuations and experience studies	2013-Ongoing
City of Providence	RI	GASB/OPEB Valuation; pension actuarial valuations services	2014-Ongoing
Memphis Light, Gas & Water Division	TN	GASB/OPEB Valuation	2004-Ongoing
City of Alexandria	VA	GASB/OPEB Valuation	2003-Ongoing
University of Virginia	VA	GASB/OPEB Valuation; Health Actuarial Consulting & Compensation Consulting	2002-Ongoing
Fairfax County Public Schools	VA	GASB/OPEB Valuation and Health Consulting	2004-Ongoing