

February 10, 2009

Mr. Dan Hinderliter
Department of Human Resource Management
Commonwealth of Virginia
101 N. 14th Street
James Monroe Building, 13th Floor
Richmond, VA 23219

Dear Mr. Hinderliter,

Optima Health, a Service of Sentara Healthcare (Optima), is pleased to offer the Commonwealth of Virginia (COVA) an innovative proposal under the Public-Private Education Facilities and Infrastructure Act, Public Notice OHB08-2, which supersedes our previous submissions. Our proposal is based on over 20 years of experience making clinical quality and wellness a priority in Virginia. Our solution for COVA leverages our experience in providing an integrated data repository of medical and behavioral information, lab results, pharmacy utilization, dental utilization and health risk assessment data with our proven strategies for clinical care services and employer-funded incentive-based wellness and disease management programs.

This solution will be based on aggregated data and predictive modeling to correctly identify high-risk, high-impact members and enroll them in appropriate health management programs. Optima Health has previously used predictive modeling to enroll members in appropriate health management programs, which produced sustained savings of millions of dollars for our customers. As a Virginia-based, not-for-profit health plan, Optima Health is the ideal partner to provide COVA with reliable, actionable information and ability to offer your employees with the services they need to improve their health.

By joining with Optima to achieve its stated goals, COVA will enjoy significant improvement in its employee's health status, satisfaction with their benefits and enhanced engagement in their work environment. Moreover, COVA will see a reduction in its future cost of providing health benefits to its employees.

Optima is pleased to offer its services to COVA. We look forward to a partnership that is mutually beneficial for years to come.

Sincerely,



John E. DeGruttola
Senior Vice President, Marketing and Sales
Optima Health

Contents

Introduction

- Optima Health – The Right Partner..... 1
- Public-Private Education Facilities and Infrastructure Act (PPEA)..... 2
- Situation Analysis..... 3
- Optima’s Solution..... 4
- Rationale For Our Approach..... 5
- Organizational Structure and Qualifications 6
 - Reputation for Excellence..... 6
 - Virginians Serving Virginians 7
 - Optima’s Community Involvement 9
 - Optima’s Economic Support..... 10
 - A Multidisciplinary Team Committed to COVA 10
- Organizational Experience 10

Project Characteristics

- Project Overview..... 12
- Phase I: Data Aggregation and Employer Reporting 13
- Phase II: High-Touch Integrated Care Model with Expanded Employer Reporting 15
 - MyLife MyPlan..... 15
 - Clinical Care Services 17

Project Financing

- Establishing the Baseline/ Project Success Measures 22
- Phase I Financing 23
- Phase II Financing 23
- Reward-sharing Arrangement 23
- Charge Structure..... 23
- Settlement and Payments 24
- Requirements of COVA 24
- Termination/Separation Options 24

Project Benefits and Compatibility 24

Attachments

Introduction

Optima Health – The Right Partner

Optima Health, a Service of Sentara Healthcare (Optima), is pleased to offer the Commonwealth of Virginia (COVA) an innovative proposal under the Public-Private Education Facilities and Infrastructure Act, Public Notice OHB08-2.

Optima’s mission is to “improve health every day,” and the passion behind our mission statement is what drives our team to improve the health of COVA employees every day. This translates into better control of healthcare costs for COVA. We are in a unique position to provide a quality health plan to COVA employees and their dependents and to work with COVA in a collaborative manner to improve both the health outcomes of COVA employees and reduce COVA’s total cost of health benefits. As a Virginia-based, not-for-profit health plan, Optima has an established, well-proven information technology capability that provides for an integrated data repository of medical and behavioral health information, lab, pharmacy and dental utilization, and health risk assessment data. Optima’s technology capability will be used to address COVA’s need for reliable, actionable information which will provide COVA with increased ability to manage its total cost for health benefits.

For more than 20 years, Optima has provided healthcare services to Virginia and surrounding areas. Today, Optima serves more than 500,000 members throughout the state through our commercial, government and Employee Assistance Program (EAP) products. We are committed to providing all of our Virginia neighbors with the highest quality of care.

Optima’s proposal offers COVA:

- A distinct member-centric benefit design that:
 - Gives employees the access to **COVA Care benefits** – comparable to those they currently have;
 - Helps members navigate the healthcare system and coordinate care through our **Member Advocate program**;
 - Helps employees reach their health goals through an innovative **Rewards Program** that features employer-based incentives to stay healthy, get healthy or manage their health conditions;
- a compelling financial solution that will yield substantial medical savings based on forecasted enrollment, with more savings possible through increased membership;
- integrated clinical care solution to advance the health of COVA employees while providing the greatest opportunity to reduce costs and maximize potential return on investment; and

- an opportunity to work with a locally owned and operated not-for-profit company. Almost every dollar COVA spends with Optima stays in Virginia, retaining and creating jobs and supporting the economic success of COVA.

Optima is pleased to offer its services to COVA. We look forward to a partnership that is mutually beneficial for years to come.

Public-Private Education Facilities and Infrastructure Act (PPEA)

Executive Orders 42 and 55 call for achieving COVA's goals through innovative application of information technologies designed to provide COVA leadership with actionable information and total transparency of health status of its employees and cost of care provided.

Optima's proposal offers COVA the transparency it seeks through proven information technologies. Optima brings over 20 years of experience with managing large data bases of claims and clinical information, as well as the ability to extract and analyze the data through predictive modeling software that will provide COVA with greater insight into the health status of its employees and how to improve the health of its employees.

Optima's information technology infrastructure is designed for sophisticated analytics for population identification and segmentation for targeted clinical risk categories. Our demonstrated capability will be used to address COVA's need for and utilization of healthcare information.

Optima's plan offers a full spectrum of programs to address varying states of wellness. Optima offers COVA wellness and disease management programs and employer-based incentives designed to encourage COVA employees to engage in their own health and wellbeing. Such programs have demonstrated sustained savings in medical costs as well as reduced absenteeism, improved productivity, and consumer satisfaction. Further, Optima will work closely to identify high-risk, high-cost members, enroll them in appropriate health management programs and support them in navigating the complex healthcare system.

Optima proposes a regional pilot to demonstrate our abilities as the ideal partner for COVA. In order to ensure statistical validity and success for this pilot, we propose an integrated delivery system of care with mandatory enrollment for approximately 10 percent (10%) of the total COVA population in a defined zip code area. In conjunction Optima will provide EPO benefits with an option to buy up to a PPO plan to members in the defined zip code area. In support of the PPEA we will leverage technology and data analysis to engage COVA employees to improve health and wellness. Once the defined zip code area is determined, Optima will incorporate historical data into our data warehouse, as well as add emerging data, to establish a baseline and set-up all TPA functions (i.e. designated customer service, claims processing, enrollment materials and network education), further description of TPA functions can be found in our COVA Care response.

Optima will provide COVA with an integrated product which will include:

- Medical services
 - Care Management
 - Disease Management
 - Pregnancy Management
 - Health Coaching/Navigation
- Behavioral Health services and management
- Employee Assistance Program
- Laboratory services, and
- Pharmacy benefits

In addition, Optima will interface with COVA's dental vendor to streamline all efforts and member communications.

There are two phases to Optima's program. In Phase one, Data Aggregation and Employer Reporting, Optima will dedicate a team that will build and populate a Health Care Informatics data warehouse to include medical, behavioral health, lab, pharmacy and dental benefits. In Phase two, High-Touch Integrated Care Model with Expanded Employer Reporting, Optima will work with COVA to implement an integrated solution of clinical care services and **MyLife MyPlan**, an employer incentive-based wellness and disease management program. This solution will be based on the aggregated data and predictive modeling developed in Phase one, to correctly identify high-risk, high-impact members and enroll them in appropriate health management programs.

By joining with Optima to achieve its stated goals, COVA employees will have the opportunity for significant improvement in health status, satisfaction with their benefits and enhanced engagement in their work environment. Moreover, COVA will see a reduction in its cost of providing health benefits to its employees. Optima's return on its investment will follow successful achievement of the objectives.

Situation Analysis

According to the U.S. Centers for Disease Control and the Kaiser Family Foundation, as many as 58 percent of all Virginians are overweight or obese, 23 percent do not exercise on a regular basis and an estimated 25 percent of Virginians smoke or use other tobacco products. In fact, obesity in Virginia has jumped 10 percent in just the last decade—more than any other state in the nation.¹ COVA employees may reflect the patterns of the general population, or they may have even higher incidents of obesity and use of tobacco products. In Virginia, lifestyle-related conditions represent about 35 percent of all inpatient hospital costs for the state employee health benefits program; 35 percent of state employees do not exercise regularly, and 20 percent smoke.²

After Medicaid, spending on state employees' health benefits is COVA's next-largest health expenditure. In 2006, COVA spent nearly \$570 million in medical, behavioral health

¹ Healthy Virginians Web site, <http://www.healthyvirginians.virginia.gov>.

² National Governors Association Center for Best Practices, "State Employee Wellness Initiatives," Issue brief 5/18/05.

and pharmacy costs for approximately 93,000 employees, up 5.8% from the previous year.³

To encourage state employees to get and stay healthy, the Healthy Virginians program has implemented wellness programs which include:

- Informational Programs - State employees have access to health programs, special challenges, and other fun health-related initiatives.
- CommonHealth also provides onsite bi-annual health checks which tests an employee's blood pressure, cholesterol and blood glucose.
- Walk 15. State employees are encouraged to use a daily 15-minute break for walking or other exercise.
- Free Online Tracking of Health Routines. State employees are encouraged to participate in the America on the Move™ walking program so they can record individual daily walk and exercise routines at www.americaonthemove.org.⁴

Governor Kaine's Executive Orders 42 and 55 direct COVA leadership to identify areas where health information technology can lower healthcare costs for COVA as an employer and health insurer and demonstrate its commitment to healthcare accountability and transparency. Despite significant wellness programs and initiatives, COVA is still experiencing rising healthcare costs. Understandably, COVA is seeking additional ways to mitigate the rate of increase to its healthcare costs.

COVA is concerned about the annual amount of healthcare expenditures for its employees and is striving to minimize the rate at which expenditures are increasing. COVA has indicated that a contributing factor in its ability to manage employee healthcare costs more effectively is a lack of information, data analysis and actionable recommendations to help COVA's leadership understand the drivers behind the healthcare spend. A detailed understanding of the cost drivers is critical in developing a healthy solution to manage costs.

Optima is the ideal partner for COVA to work with to address this problem. Optima has well-established, well proven information technology capabilities that provide for an integrated data repository of medical and behavior information, pharmacy, lab and dental utilization, and health risk assessment data. Optima is also a proven leader in partnering with large employers in the development and implementation of employer-funded incentive-based programs and providing integrated clinical care services that successfully encourage employees to engage in healthy lifestyles.

Optima's Solution

Optima's solution consists of two phases:

Phase I – Data Aggregation and Employer Reporting, in which an Optima team of professionals will be dedicated to COVA to build, populate and update with future enrollee

³ Commonwealth of Virginia's Health Benefits Program 2006 Annual Report.

⁴ Healthy Virginians Web site, "Healthy Employees," <http://www.healthyvirginians.virginia.gov/Employees/index.cfm>

information, a Health Care Informatics data warehouse – to include five years of historical data, all ongoing data collected under this pilot program (medical, behavioral health, lab and pharmacy utilization) as well as data from COVA’s dental carrier.

Phase II – High-Touch Integrated Care Model with Expanded Employer Reporting, is an integrated solution of clinical care services with member advocates and employer-funded incentive-based wellness and disease management program for COVA employees, based on aggregated data and predictive modeling to correctly identify high-risk, high-impact members and enrolling them in appropriate health management programs. This model incorporates Total Population Management (TPM), a concept of care delivery at the member level. Unlike traditional disease management programming, TPM does not stratify and silo clinical services by selected disease states, but rather offers services designed to support prevention of illness, and management of existing risk factors.

Rationale For Our Approach

The need for integrated, coordinated care is well documented. Virginians are living longer due, in part, to advances in medical science and technology, and with an aging population comes increased prevalence of chronic illness. Conditions such as heart disease, diabetes and respiratory illness are now the leading cause of death and disability.⁵ Additionally, research indicates that 25 percent to 40 percent of outpatient populations have a co-occurring mood, anxiety, somatoform, eating, or alcohol-related disorders⁶. To insure efficacy in the management of such conditions, a multidisciplinary infrastructure is needed to provide a full complement of services.

The Institute of Medicine recommends patient-centric care, in which support, education and practical skills for success are delivered in a variety of methodologies to impact patient development of good self-management techniques. The cornerstones of patient-centric care are at the core of Optima’s Integrated Clinical Care Services Delivery model which include: enhanced patient disease self-management, organized delivery system build on evidenced-based support for clinical decisions, secure, user-friendly information technology, and links to community support groups⁷. Quality Improvement activities are employed utilizing the Best Clinical and Administrative Practices (BCAP) Quality Framework⁸, allowing Optima frequent and consistent evaluation of the ways in which we identify, stratify, outreach, and intervene with our members.

Optima uses claims, lab, pharmacy, predictive modeling, physician and member self-identification, as well as dental data from COVA’s dental carrier, to enroll members in appropriate health management programs which produced sustained savings of

⁵ Institute of Medicine; Committee on Quality of Healthcare in America. [Crossing the Quality Chasm: A New Health System for the 21st Century](#). National Academy Press: 2001.

⁶ Kathol, R., Saravay, S., Lobo, A., Ormel, J., Epidemiologic Trends and Costs of Fragmentation. *Med Clin N Am* 90 (2006) 549-572.

⁷ Arvantes, J., “Patient-Centered Medical Home Is Key to Health Care”.

<http://www.aafp.org/online/en/home/publications/news/news-now/government-medicine/20070514kmantestimony.html>

⁸Center for Health Care Strategies Inc . “A Guide to the BCAP Quality Framework”. June 2006

approximately \$7 million.⁹ We will utilize this expertise to identify opportunities for improvement in health and financial outcomes for COVA and its employees.

Organizational Structure and Qualifications

At Optima, our proven ability to deliver innovative customization and flexibility, and excellent customer care is the cornerstone of our approach. In fact, we have long standing relationships with many of our public sector clients. Some relationships span over three decades. Optima has made clinical quality and wellness a priority. Our innovative and integrated approach will maximize the value of COVA's healthcare dollar. Through our efforts, COVA employees will receive best-in-class service and coverage as well as access to numerous programs and discounts that will help guide them toward better health.

Reputation for Excellence

Our commitment to being a high quality provider of health benefits is illustrated by some of our most recent accomplishments. These include:

- **URAC** awards Optima's Web site, optimahealth.com, accreditation from the American Accreditation Healthcare Commission, a Washington, DC-based healthcare accrediting organization that establishes quality standards for the healthcare industry. Optima's Web site has been evaluated against more than 50 standards for content, privacy, security and quality oversight. Plan members can trust that optimahealth.com is a reliable and privacy protected source of health content and services.
- **The Street (formally Weiss)** ratings agency gives Optima an A+ credit rating. According to TheStreet.com Ratings, Inc., September 11, 2008, "This rating recognizes Optima Health Plan as an outstanding insurer offering excellent financial stability for its customers, vendors and employees. Please know that fewer than five percent of the nation's HMOs and health insurers meet the TheStreet.com Ratings' criteria for exceptional financial strength, making this distinction truly one to be proud."

Optima is also recognized for its **commitment to quality service delivery** as demonstrated by:

- National awards for our Partners in Pregnancy Program (Disease Management Association of America)
- Excellence Award for Best Provider Engagement Initiative for our LifeCoach Diabetes Program (Disease Management Association of America)
- National Environmental Leadership Award in Asthma Management (US Environmental Protection Agency)



⁹ Zimbardo, K.S., Mountie, T.W., Addaun-Anderson, C., Bray, K.J., Ingram, B., Rutledge, C.M., "Predictive Modeling: Turning Predictions into Measurable Results." (Pending Publication).

- Recognition for our LifeCoach Model for Type 2 Diabetes (Disease Management Association of America)
- National award for our home-based Sickle Cell (Disease Management Association of America)

Optima's unique advantage lies in its relationship with Sentara Healthcare, a nationally recognized, integrated healthcare delivery system headquartered in Norfolk, Virginia. Sentara is consistently ranked among the nation's top integrated healthcare networks by Modern Healthcare. Our focus spans the entire spectrum of care – from preventative and maintenance services to disease and medical management. Optima's vision is to provide services that surpass many of the national and larger managed care organizations by bridging the gap between our services and how they impact healthcare at the local level. We strive to provide the highest quality service to our business partners and our members with programs that have been designed to address health needs and customer service to ensure the highest level of satisfaction. Our physician leadership within Optima administration and our Board of Directors provides valuable perspective for the importance of effectively managing chronic conditions using evidence-based and documented methodologies. Underscoring our commitment to customer service, Optima was recently awarded the Customer Care Award by the National Research Corporation (NRC). This annual survey of over 200,000 households across the nation asks consumers to rank health plans. NRC then awards the top health plan for each state.

We believe the most effective strategy for improving health is a collaborative approach. By working together with our customers, Optima members receive the best chance for a healthy lifestyle. A key component of this strategy centers on a strong health and prevention agenda. Optima serves as a resource for our employers to help educate and empower members to make healthy lifestyle choices that keep them well or help them effectively manage their health for optimum quality of life. We provide analysis and support for a number of programs and services, in addition to on-site subject matter experts to support a good working relationship on an ongoing basis.

Virginians Serving Virginians

At Optima, we are Virginians. We live here and work here. We touch more than half a million Virginians through our comprehensive portfolio of health management services and innovative programs as we live our mission of improving health everyday. As members of the community, our associates devote significant time, talent and financial support to organizations and agencies focusing on the health of the community.

Optima Senior Leadership involvement includes:

Michael M. Dudley, President and CEO of Optima: Prior to joining Optima in 1996, Mr. Dudley served as President of Kaiser Permanente Insurance Company, President of the Northeast Region of Kaiser Permanente in Hartford Connecticut, and President of Kaiser's Vallejo Medical Center in California. He earned his bachelor's degree from Brigham Young University and his master's degree of health administration from the University of

Colorado where he was Class Valedictorian and recipient of the Foster G. McGaw Scholarship. He completed Stanford University's executive management program and is a Fellow of the American College of Health Care Executives. Mr. Dudley serves as a Director on the Boards of America's Health Insurance Plans (AHIP) – the nation's principal association of health plans and insurance companies, the Virginia Association of Health Plans and the Hampton Roads Chamber of Commerce.

Darleen S. Anderson, Senior Vice President and Chief Operating Officer: Ms. Anderson has been with the Sentara Healthcare system for 30 years in a variety of staff, management, and executive administrative positions. She served as a Vice President for hospital services from 1992 until 2004 and is currently Optima's Senior Vice President and Chief Operating Officer. Key areas of operational responsibility included surgical services, imaging services, neurosciences, cancer services, emergency services, and liaison to EVMS for Graduate Medical Education Coordination. Prior to joining Optima, Ms. Anderson served as the Vice President and Site Administrator of Sentara Norfolk General Hospital. She earned her bachelor's degree from Old Dominion University in Norfolk, Virginia, graduating Magna Cum Laude, and her master's degree in Advanced Adult Nursing and Administration from Hampton University in Hampton, Virginia, completing her thesis research on air-ambulance transport of trauma victims. In support of the Trauma Services and Trauma Center Program, Ms. Anderson served on Virginia State EMS Advisory Board, representing the Virginia Hospital Association from 1992 to 1999. She also served on Tidewater EMS Board of Directors from 1992 to 2004, representing the Regional Council of Hospitals (VHHA).

George K. Heuser, MD, CHIE - Vice President, Senior Medical Director: Dr. Heuser is a native of Virginia Beach and returned to attend medical school in Norfolk after his undergraduate education in Chemical Engineering at the University of Virginia. He attended the Eastern Virginia School of Medicine, and remained there for his internship and residency. He is Board Certified in Internal Medicine. Dr. Heuser began his career with the Veterans Affairs Medical Center in Hampton, Virginia. There, he developed his interest in Quality Improvement and administrative medicine. While at the VA Center, he filled the positions of Chief, Spinal Cord Injury Unit and Associate Chief of Staff for Ambulatory Care. He joined Sentara in 1998, spending three years as the Medical Director for Sentara Hampton General Hospital. Currently, Dr. Heuser is the Vice President and Senior Medical Director for Optima, with programmatic and oversight responsibility for all clinical programs.

John E. DeGruttola, Senior Vice President for Sales and Marketing: Mr. DeGruttola has over 22 years of experience in healthcare consulting, sales, marketing, advertising, product development and health plan operations. He earned a bachelor's of science degree from Westminster College, Pennsylvania. Prior to joining Optima Health Plans in December 2006, Mr. DeGruttola was the Central Ohio Executive Leader for UnitedHealthcare. He was responsible for the sales and retention of the small and large group markets. Other prior experiences include various healthcare management positions with Highmark Blue Cross Blue Shield, UPMC Health Plan, and Towers Perrin in Pittsburgh, Pennsylvania. Mr. DeGruttola is responsible for the overall growth of Optima Health. His primary focus is the strategic positioning of Optima Health to include

identifying, developing, promoting, and distributing new products and services that produce overall profitable growth.

Natalie Kaszubowski, MBA, Vice President of Information Services: Ms.

Kaszubowski's responsibilities include managing highly motivated technical and management teams with responsibilities including application development and support for hospital billing and registration, Health Information Services, Financial Services (AP, AR, GL), Human Resources, Materials Management, Systems Integration, Physician Information Services (both owned and community based), Long Term Care, Optima Health Plan, Homecare, and other outpatient related services. In addition, Ms. Kaszubowski is responsible for setting and executing Sentara's Web presence and enterprise-wide data strategy. The technologies implemented within Optima Health have been nationally recognized as being innovative and leading edge. Ms. Kaszubowski has over twenty years of experience in managing highly complex technology applications and services. She holds a BS Degree in Industrial and Operations Engineering from The College of Engineering at The University of Michigan, and is currently completing her Masters in Business Administration at Old Dominion University.

Kathie S. Zimbro, Ph.D., R.N., Director of Clinical and Business Intelligence: Dr.

Zimbro leads Optima in planning and implementing enterprise wide information systems to enable both distributed and centralized business and clinical intelligence. She provides technology vision and leadership for developing and implementing information-engineering initiatives that improve clinical and business intelligence, healthcare service quality, and business development in a rapidly changing, competitive marketplace. Her designs improve integrity of system-wide data repositories for Optima and improve validity and reliability of information assets. She has over 32 years experience in healthcare and is a certified Six Sigma Black Belt through the Juran Institute. Dr. Zimbro serves as an Adjunct Associate Professor for the College of Health Sciences, Old Dominion University and has published extensively in the area of the use of performance measures in hospitals, physician offices, and managed care settings.

Optima's Community Involvement

Community service for other members of the Leadership team includes:

- Serving on the Hampton Roads United Way Board of Directors
- Serving on the Board of Volunteer Center of Virginia Peninsula (recruit volunteers for crisis response and disaster planning)
- Serving on the Governors Health Information Technology Council (an appointed position)
- Served on the Governor's Work Group on Rural OB Care (an appointed position)
- Member of the Virginia Diabetes Council
- First Vice-President on the Board of Director's, Central VA Health Planning Agency
- Serving on the Board of Directors of A Grace Place (not-for-profit adult daycare facility in Richmond)
- Member of First Book Hampton Roads Advisory Board
- Serving on Peninsula Institute for Community Health Board

- Serving on Petersburg Children’s Foundation
- Serving on Greater Richmond Urban League
- Serving on Life in Richmond Center – Norfolk Board of Directors
- Serving on Salvation Army of Southside Virginia Board of Directors.

Optima’s Economic Support

Optima is committed to helping realize Governor Kaine’s vision of supporting small, women and minority businesses (SWaM). We ensure that the diverse nature of our community is reflected in the composition, attitude and culture of our workforce. We have incorporated this commitment in the development of our distinct offering to COVA. In fact, approximately one-third of our total administrative expenses associated with fulfilling the proposed services, are attributed to the use of Virginia certified SWaM businesses.

As a not-for-profit Virginia based company, Sentara Healthcare, the parent organization of Optima, continues to reinvest in the communities we serve. Sentara Healthcare currently employs approximately 17,000 Virginians, growing and creating new jobs as we expand our services across our state. Plus, almost every dollar COVA spends with Optima stays right here in Virginia, benefiting our community.

A Multidisciplinary Team Committed to COVA

One of our most important commitments to you and your employees is a total partnership between COVA and Optima’s multidisciplinary team. Katherine Terribile, Regional Senior Client Executive, and Christopher Haase, Senior Client Specialist, will provide oversight of the program. Their 30+ combined years of experience will facilitate high-level program discussions and expedited problem solving. Ms. Terribile and Mr. Haase, as well as our medical directors, pharmacists, behavioral health clinicians, healthcare professionals, information technology and clinical and business experts bring a broad range of experience and expertise in addressing COVA’s health plan needs. Our wellness and prevention programs are provided by registered nurses, registered dietitians, and certified health education specialists who have published articles in peer review journals, presented at national conferences and created award-winning health improvement educational materials. These wellness professionals will work in concert with Ms. Terribile and COVA to facilitate the development of customized programs that address the particular needs of your employees. The Optima team, at all levels of the organization, is absolutely committed to working with COVA in a direct, open, and collaborative partnership as we provide support and assistance to COVA, its management and employees.

Organizational Experience

Our proposal strives to minimize COVA’s healthcare costs while maximizing the healthcare benefits. Optima is committed to providing the latest innovations in technology and clinical expertise in order to ensure optimal outcomes for our members.

Optima’s technological and clinical expertise include:

Information Technology: Optima’s information technology is the result of our 15 year investment in the development of internal performance improvement initiatives. In concert with the Clinical and Business Intelligence (CBI) division, we utilize our information technology capabilities to drive results in its health plan and hospitals. Our infrastructure was built over time, with the addition of staff and technology to focus on quality, safety, length of stay, complications, and financial improvement. In addition, Optima cultivated partnerships with select software firms to develop unique reporting tools and proprietary information databases to enable performance improvement. At the same time, Optima staff have become knowledgeable and experienced at applying these tools. The combination of these skills makes Optima the ideal choice to partner with COVA in performance and quality improvement initiatives.

Clinical and Business Intelligence (CBI) Division transforms the volume of data that Optima collects and stores into actionable information that can be used in day-to-day activities. Actionable information in accessible reports and their analysis gives Optima decision-makers a 360-degree view of all company operations, enabling better and timelier clinical and business decisions. CBI delivers this actionable information through comprehensive, fully integrated clinical and business intelligence solution sets. They also ensure that these solution sets provide the same consistent set of facts, regardless of which department is using them. More importantly, CBI provides the means to understand the “why” behind clinical and business performance.

In 1996, Optima chose Risk Navigator Clinical (*RNC*), provided by MEDai, as our predictive modeling solution. MEDai’s predictive modeling process, using artificial intelligence (AI), is relatively new in the healthcare industry¹⁰. Data used by MEDai’s neural net models are more comprehensive than data elements used by rules-based models. The Intelligent Data Cleanup[®] process eliminates noise and misleading data from the member population before forecasts are made. The neural net technology provides strong, precise statistical modeling turning forecasts into measurable results. Through continuous data review, Optima has learned that *RNC* provides a proactive approach to maximizing the match between available health management resources and the provider community to meet needs identified for at-risk populations with actionable disease states.

Over the past six years, the Clinical and Business Intelligence (CBI) division has demonstrated that the *RNC* model is empirically sound and provides accurate forecasts. Analysis of our predictive model enables Optima to look beyond traditional return on investment criteria to empirically measure *RNC*’s contribution to business effectiveness. Specifically, *RNC* provides a proactive approach to identifying members at-risk for high health resource use. Optima is able to a) accurately predict high-users, b) identify cost drivers, c) forecast future costs, d) evaluate utilization patterns over time, and e) improve outcomes. Information derived from the *RNC* model is used in business scorecards.

¹⁰ Axelrod, R.C. & Vogel, D. Predictive modeling in health plans. *Disease Management Health Outcomes* 2003;11(12),779-787.

These scorecards currently offer employer groups and Virginia Medicaid an understanding of the overall health risk of their beneficiaries.

Integrated Clinical Care Health Services: Optima's many health management programs underlie the organization's focus on teaching its members how to manage chronic diseases. The methods used to identify the "right" members at the "right" time and place them in the "right" health management programs have become more exact over the last ten years through the health plan's use of predictive modeling. This practice is becoming more widely used in the health plan community as an effective way to more accurately predict and to manage large segments of healthcare consumers.

Our strong clinical focus is evidenced by our continued recognition by the Disease Management Association of America (DMAA). Most recently, in December 2006, we were recognized as the Outstanding Medicaid Disease Management Program for our Sickle Cell Disease Management Program. This award recognizes excellence in the design, development, implementation and operation of a disease management program resulting in measurable, favorable outcomes, and the demonstration of a unique level of leadership and innovation in the industry. Additionally, Optima has won awards from the DMAA for its LifeCoach Diabetes management program and Partners in Pregnancy, a program to help women with high-risk pregnancies achieve full-term healthy babies. Optima has also won a national award from the Environmental Protection Agency for Asthma management in people's homes.

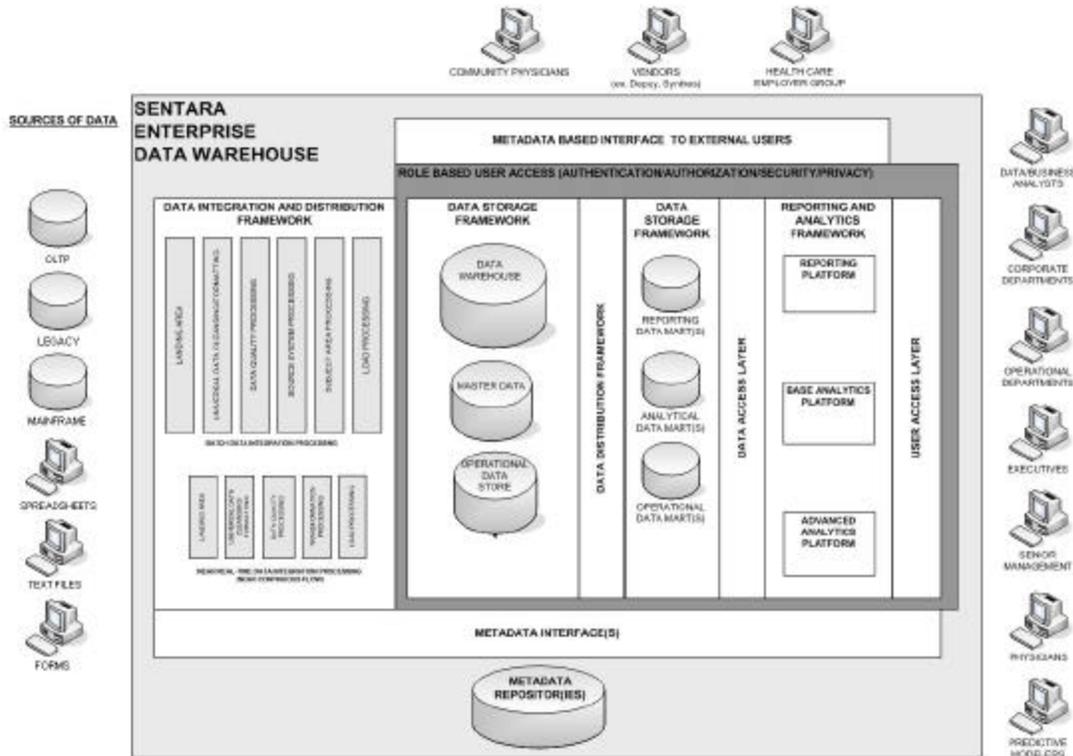
In 2005 (the last year for which complete data are available) Optima's disease management programs for asthma, diabetes and pregnancy demonstrated significant impact on the health of our members. By providing programs to coach members toward better health, Optima documented reductions in Emergency Department visits and hospitalizations for asthma and diabetes patients. Our Partners in Pregnancy program contributed to a decrease of NICU admits per 100 babies born from 11.5 to 10.4.

Project Characteristics

Project Overview

The foundation of the proposed analytics platform is an established, well-proven data repository of medical and behavioral health information, pharmacy and dental utilization, lab values and health risk assessment data, which is required to incorporate self reported medical information from a personal health record. This integrated information provides a robust platform for a unified view of medical history via our secure Web portal. The same infrastructure is designed for sophisticated analytics for population identification and segmentation for targeted clinical risk categories. Our Health Performance Modeling Analytic Technology is structured for sophisticated analytics for population identification and segmentation of targeted clinical risk categories. Targeting the right population segment with the right interventional strategy is the key to enabling COVA to manage its costs.

Figure 1
Application Technology Visual Representation



Optima’s existing data repository provides a rich data source for predictive modeling capabilities designed by Sentara’s Clinical and Business Intelligence (CBI) division as illustrated above in Figure 1. The predictive capabilities provide a unique approach to identifying new health management outreach programs to engage members earlier to encourage adoption of healthy lifestyles and early prevention opportunities. The analytic toolset, linked together with experienced Health Data Analysts, ensures that, working collaboratively with COVA, we will effectively impact utilization, quality, and health management for COVA’s employees and their dependents.

Phase I: Data Aggregation and Employer Reporting

In Phase I of our proposed project, upon award prior to July 1, 2009 and with COVA’s assistance with existing vendors, a team of Optima professionals will be immediately dedicated to build and populate a Healthcare Informatics data warehouse to include medical, behavioral health information, lab values, pharmacy and dental utilization for COVA.

Orientation and System Overview: Optima will work with COVA throughout the initial orientation and product overview. During orientation, we will describe our extensive first-hand experience with the processes used to drive significant improvements in cost

structure, quality, and safety of performance improvement. Optima will collaborate with COVA on successful methods to establish an internal reporting structure, develop a culture of accountability, plan for success, and celebrate milestones. The initial orientation will focus on the processes and infrastructure needed to maximize results for COVA.

In addition, we will describe the Health Performance Modeling Analytic Technology product portfolio during the orientation session. The portfolio consists of three components and is based on a progressive approach designed to maximize client understanding, implementation, effectiveness, and results. Optima will review each component of the portfolio with COVA and provide a high level description of the tools used to achieve results and examples of findings from our extensive experience. To help COVA better understand technical requirements, key Optima technical personnel will be available to discuss interfaces and data requirements, data base products, and Web access tools to ensure a smooth implementation.

Performance Review and Data Model Development Optima will collaboratively work with COVA and their business partners to define data requirements and will complete a defined implementation plan within 60 days of project approval. We will then begin work according to the identified project milestones to build COVA Health Performance Modeling Analytics Technology data structures. The actual implementation is will be structured to include dedicated personnel to:

- develop and manage project plan and milestones,
- complete a comprehensive file specification document,
- review data validation and re-fresh recommendation, and
- identify test plans and verification processes.

Working in conjunction with COVA, Optima staff will conduct a review of COVA's base (five year) performance data. This will be accomplished utilizing the three components of our Health Performance Modeling Analytics Technology and the extensive experience of our Clinical and Business Information (CBI) division.

- Data Transfer and Staging will be accomplished through our industry-standard secured file transfer protocol (FTP) service. This will involve operational processing of data transmissions which are then moved into a staging area. The staging will serve as a holding place for validation of complete transmissions and error handling. From the staging area, the ETL (Extraction, Translation, and Load) processes will be run to map and tag data based on COVA-defined business rules. The data will process through person-identity management algorithms to ensure accurate aggregation of disparate data sources.
- Data Aggregation and Analysis will involve loading data into a data repository at which time clinical tagging, segmentation and modeling analytics will be performed. At this point, predictive modeling and trending algorithms will be applied for creation of targeted data cubes.
- Data Presentation and Collaboration will involve utilization of a secure portal by which COVA will access their transformed data. The portal will allow for a

sophisticated data presentation, as well as collaboration between Optima and COVA. Additional capabilities will include automated notification and alerts for secure e-mail transmissions.

The proposed Health Performance Modeling Analytics Technology platform will be supported by Optima's robust, well-established technology infrastructure and sophisticated call center technology. Staffed 24 hours, 7 days a week, our centralized computer facility ensures high availability via built in redundancy, automated alerting, and failover technology. To further ensure high availability, Optima has developed a disaster recovery hot site, tested annually with a full execution of the disaster recovery policies to ensure timeliness and accuracy of recovery goals. High speed wide-area network service provides secure access to all remote business locations. Redundant Web service access and firewall design enable secure transactions for employees, patients, physician, and members authorized access to their information. And Optima's infrastructure is architected to ensure secure and monitored access to appropriate systems and data by only authenticated and authorized users. A fully established Information Security Office works directly with our Chief Privacy Officer to manage Protected Health Information.

Phase I Deliverables will consist of information in the form of an Employer Group Report. This report will be available when at least one year of claims, lab, dental and pharmacy utilization data is available. A Clinical Consultation will also be provided. The aggregated data collected and analyzed in Phase I will be the basis for recommendations that lead to clinical improvement, improved compliance and improved quality for COVA's health benefits program.

Phase II: High-Touch Integrated Care Model with Expanded Employer Reporting

In Phase II, of our proposed activities, Optima will implement an integrated solution of clinical care services and **MyLife MyPlan**, employer-funded incentive-based Total Population Management program. This solution will be based on aggregated data and predictive modeling to correctly identify high-risk, high-impact members and enroll them in appropriate health management programs. Optima has previously used this methodology to enroll members in appropriate health management programs which produced sustained savings of approximately \$7 million.¹¹ Optima will utilize our expertise to identify opportunities for improvement in health and financial outcomes for COVA and its employees.

MyLife MyPlan

Optima's **MyLife MyPlan** *Getting Started and Staying Healthy* programs provide employees the opportunity to reduce their annual health premiums based on participation

¹¹ Zimbardo, K.S., Mountie, T.W., Addaun-Anderson, C., Bray, K.J., Ingram, B., Rutledge, C.M., "Predictive Modeling: Turning Predictions into Measurable Results."

in appropriate interventions identified by our health risk assessment. **MyLife MyPlan Improving Health** program provides employer-funded financial incentives for employees who engage with a Health Coach and actively participate in evidence-based guidelines of care. Correctly identifying high-risk, high-impact members and enrolling them in appropriate health management programs has produced sustained savings of approximately 17 percent (17%) over a five year period for Optima. Optima will utilize this knowledge and experience to partner with COVA to achieve optimal results.

Getting Started with a personal health profile (PHP) allows Optima to quickly identify the health needs of COVA membership. The PHP can be completed online at the member's convenience, offers immediate feedback regarding health risks and lifestyle change opportunities, and allows Optima to understand readiness-to-change across a variety of risk factors.

Staying Healthy includes unique, self-paced, award winning educational, fitness and screening programs that can be customized for each member. This broad selection of programs is designed to help members prevent illness and stay healthy.

- Fitness, health education and screening programs, including biometrics measurements are offered at various worksites to encourage member engagement in Optima programs and to identify members who can benefit from health management programs.
- *Healthyroads* is a health coaching and wellness program utilizing effective coaching interventions and self-help Web tools.

The comprehensive suite of services to be offered to the COVA population includes:

- **Healthyroads Online Program:** a comprehensive interactive Web site for wellness and health improvement including a personal health assessment, online fitness coach with personalized resistance and cardio exercise planning and demonstration, meal and nutrition planning and health library.
- **Healthyroads Coaching Program:** a comprehensive health-coaching program for weight management, tobacco cessation and healthy living. This program is principally telephone based with Web and printed tools to support members. Telephone sessions are 30 minutes in length and include over 50 sessions annually. Sessions are goal driven based on participant's interests and needs.
- **Healthyroads information and participation** is integrated into the Optima clinical team information to allow seamless support for health risks identified.

Improving Health offers programs that address all aspects of member health by assembling a LifeCoach team that is dedicated to developing a health plan based on member-specific health status and needs.

- *Saving More* provides discounts and savings for products and services that help members get, and stay, healthy. These discounts include massage therapy, natural supplements, eyewear, hearing aids and more.

- *Managing Your Meds* is an innovative pharmacy program that helps ensure the safety, effectiveness and affordability of the prescription medication covered by member pharmacy benefits. Additionally, the LifeCoach team encourages and facilitates appropriate medication adherence to insure effective condition management.
- *Partners in Pregnancy* is a multi-disciplinary team that coaches expectant mothers through their pregnancies and encourages good prenatal behavior and regular physician checkups. This program is population based, meaning that all expectant mothers are encouraged to participate. Partners in Pregnancy incorporates the knowledge of the member’s total health picture, including dental care, into managing the pregnancy, as this has been identified as a risk factor for pre-term birth.

Optima Member Advocate: Optima offers designated experts to help members find information, make the right healthcare decisions, and understand their healthcare options. The healthcare system is complex and can be confusing. Optima Member Advocates provide a point of entry for the member – a contact for all questions providing a seamless, quality consumer experience with member engagement in their overall health outcome.

Clinical Care Services

At the heart of Optima’s Clinical Care Services Integrated Delivery Model (Figure 2) are the clinicians – nurses, licensed professional counselors and social workers – who are co-located to allow them to manage members in an organized, cross-trained team focus.

Figure 2

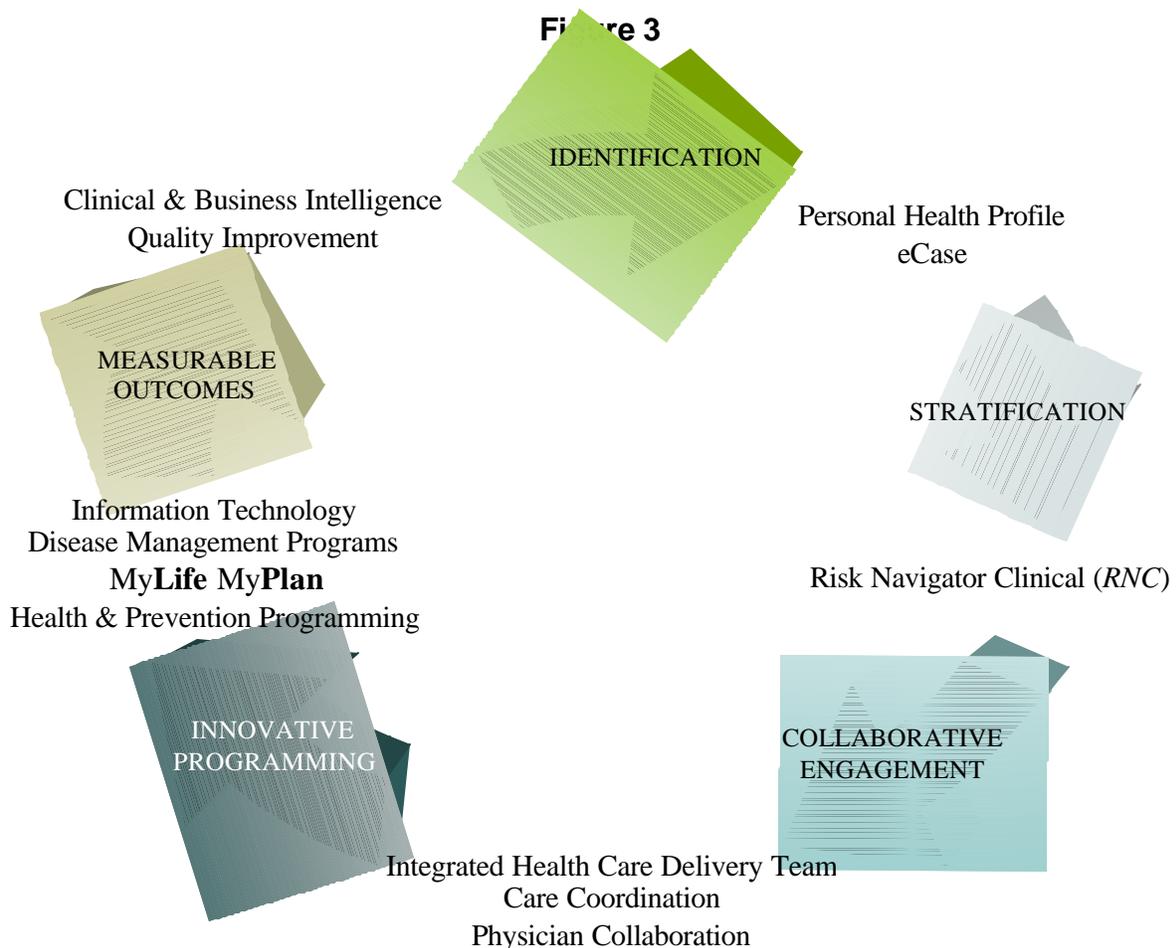


Using this delivery model means that a member with diabetes and asthma does not have multiple care managers. One care manager coordinates all elements of the members

health needs. Supporting the clinical staff are Patient Service Coordinators (PSC), who are non-clinicians with training in supporting member behavior change. The PSC helps the member to develop action plans that are achievable to support better self-management of chronic or acute illness.

Clinical Care Services is closely aligned with Health and Prevention and Pharmacy services to ensure that medication compliance is achieved and to communicate and transition to a clinician any member who may have a health risk identified at a screening. Finally, Optima’s Quality Improvement department supports clinical teams to evaluate continuous improvement of the Plan-Do-Check-Act cycles of continuous quality improvement and the Clinical and Business Intelligence (CBI) department assesses the program on a regular basis to measure clinical and financial success. This model also allows us to offer comprehensive employer-funded incentive programs to groups who wish to offer financial incentives to members for following physician orders, taking medication appropriately, and meeting the evidence-based testing guidelines that can prevent or reduce the burden of chronic illness.

Implementation of Optima’s proposed integrated Clinical Care Services delivery model will involve activities in five categories as illustrated in Figure 3. Description of the model is described below.



Identification

The foundation of Optima’s integrated Clinical Care Services (CCS) delivery model is the development of a health risk assessment – the Personal Health Profile (PHP) – for each member. Supporting the model is an internally developed clinical record system called eCase.

- *Personal Health Profile:* The initial Personal Health Profile (PHP) assesses member risk status in the areas of biometrics, laboratory results, lifestyle habits, health status and management, chronic conditions, and future disease risk. Members are provided a report indicating their results, assessed risk level, and national clinical targets for each measure. Subsequent PHP updates allow members to track changes in assessment measures in each category. PHP data populate the clinical database to identify members for targeted programs.
- *eCase:* eCase draws information from claims, lab, pharmacy and authorization data, and functions as an integrated care management documentation system. All clinical staff use eCase to document contacts and interactions with members. A health assessment is completed upon establishing a relationship with the member, and this assessment is updated as necessary to develop a care management plan that includes goals and timelines. Productivity and quality standards are built into the system to ensure that members receive appropriate care based on established guidelines and policies.

This information will be augmented by dental claims data to ensure a full picture of the member’s state of wellness.

Stratification

Optima uses Risk Navigator Clinical (*RNC*), provided by MEDai, as our predictive modeling solution. *RNC* allows for a proactive approach to identifying members at-risk for high health resource use. To accomplish correct member classification, Optima’s predictive modeling experiences have identified five health risk profile categories:

- “Well” members have the least risks for developing chronic disease and the best chance for living a healthy life. This group generally makes up 50 percent of a large population, and accounts for 10 percent of healthcare costs.
- “Low Risk” members have some risks for developing chronic disease, but are generally healthy. This group generally makes up 20 percent of a large population and accounts for 10 percent of healthcare costs.
- “Moderate Risk” members may have already developed early chronic illness states, and probably have more than one risk factor. This group generally makes up 25 percent of a large population and accounts for 25 percent of healthcare costs.
- “High Risk, Multiple Diseases” members are at significant risk for developing chronic disease, and may already have done so. They are also likely to have multiple risk factors leading to progression of chronic illness. This group generally makes up 4 percent of a large population and accounts for 30 percent of healthcare costs.

- “Complex and Intensive Care” members have significant illness burden. They generally have multiple disease states, which may rise to a catastrophic level. This group generally makes up 1 percent of a large population, and accounts for 25 percent of healthcare costs.

RNC will support COVA’s efforts to a) accurately predict high-users, b) identify cost drivers, c) forecast future costs, d) evaluate utilization patterns over time, and e) improve health and financial outcomes.

Collaborative Engagement

Optima’s collaborative engagement activities are grounded in the Transtheoretical Model of intentional change theory, working with people ‘where they are’ in all aspects of their life. This allows staff to assist members in formulating effective plans for their health management and wellness. All activities are implemented by Integrated Health Care Delivery teams comprised of a Health Coach and clinical staff members from medical care management, behavioral health, disease management and pharmacy. Health Coaches are trained to help members navigate complex health systems and to provide education on practical skills to improve personal health behaviors. Team members undergo cross training regarding their various competencies, and, as they are co-located within work units, can easily interact and communicate within the team to discuss and solve member issues. This allows Optima to assign each member only one clinical resource, thus solving the problem of fractured and disjointed care as multiple specialty care managers interact with the member in a disease-centric model. Our model is member-centric, and allows the team to move beyond focusing on the condition or illness to focus on the individual needs of the member.

Care Coordination care management services are provided to members who have patterns of high utilization or utilization that could be provided more efficiently in another setting. Optima’s technology allows us to identify members with specific patterns of care, cost or predicted exacerbation to assign the appropriate support staff. These staff identify needs of the member and the provider and coordinate and facilitate communication to optimize outcomes of care. In addition to acute care coordination, Optima provides high quality disease management programs for chronic-illness populations.

Recognizing that the success of patient-centered, integrated programming depends in large part on becoming a partner in care with the practicing physician, Optima team members are familiar with practicing in a provider-based organization, and have a history of developing strong partnerships with providers. Our staff will work collaboratively with COVA’s physician providers to maintain good will and communication which translates into a model of care that facilitates best practices.

Innovative Programming

As outlined above, Optima offers a comprehensive list of health management strategies and resources. We believe that our greatest strength is the integrated provision of information and services by a strong team of clinicians committed to working with members and care providers to improve the quality and cost of healthcare delivery to our

members. While traditional disease management programming available to COVA employees and their dependents includes Asthma Disease Management, Cardiovascular Disease Management, COPD Disease Management, Diabetes Disease Management, and Partners in Pregnancy, Optima's Total Population Management concept allows all conditions to be managed along an intuitive health cycle concept. Members in the Optima program are assessed for risk factors and need, as well as readiness to effect behavior change. Mutual goal setting between the member and the Optima care manager are established, and a plan to meet those goals is agreed upon. Goals are evaluated and modified as necessary to insure success. Health and Prevention programming is also provided to all employees and their dependents including Health Publications, Patient Identification Reminders, computer-based direct mail programming, Healthy Edge Planning magazine, Healthy Pregnancy Self-Care Handbook, and Health Programming offerings such as Get Off Your Butt: Stay Smokeless for Life; Healthy Heart Education and Support, Eating for Life, WalkAbout, Flu Patrol, Healthy Heart Express, and Healthy Heart Yoga.

In addition to the programs listed above, Optima's comprehensive wellness and disease management incentive programs may be made available to COVA employees, based on employer funding. Optima recommends COVA focus initially on incenting completion of the Personal Health Profile, for early identification of chronic illness risk factors. Additionally, Optima recommends initiating incentive-based diabetes and asthma programs to improve compliance with evidence-based guidelines for those disease states, as well as medication adherence to the 80 percent or greater level. In these programs, the employees who actively engage with a Health Coach, follow evidence-based guidelines of care for physician follow up and testing, and meet medication adherence criteria can receive employer-funded financial rewards into a Flexible Spending Account or Health Savings Account to help offset the costs of managing their chronic illness.

Measurable Outcomes

Optima takes our program metrics and evaluation very seriously. As described in Phase I, we have developed a rigorous evaluation methodology using predictive modeling software to evaluate whether the right people were being identified for programs, and whether those programs were effective. Our model demonstrates that we are able to accurately identify high-risk, high-impact individuals and populations and target our programs and interventions. Additionally, those accurate predictions can be traced to the bottom-line through improved management, more focused programs, and better resource decisions. Correctly identifying high-risk, high-impact members and enrolling them in appropriate health management programs has produced sustained savings of approximately 17 percent over a five-year period for Optima. We are committing to utilizing our knowledge and experience to work collaboratively with COVA to attain optimal results.

Project Financing

Redacted.

Project Benefits and Compatibility

For more than 20 years, Optima has made clinical quality and wellness a priority. Our innovative and integrated approach maximizes the value of COVA's healthcare dollar. Through Optima's aligned efforts, COVA employees will receive best-in-class service and coverage as well as access to numerous programs and discounts that will help guide them toward better health. Optima offers services that are comparable to large industry providers, while bringing the benefit of a local company with intimate knowledge of Virginians and the needs of COVA. In addition to helping COVA manage its healthcare costs, an equally important objective will be achieved: Keeping COVA employees healthy.

Outcomes of our proposed collaborative initiative would offer COVA:

- an opportunity to share in profits; we believe this is within the expectation set forth in the Public-Private Education Facilities and Infrastructure Act (PPEA),
- a significant savings opportunity for COVA,
- an opportunity to offer Optima's employer-funded incentive based programs to help change behavior of COVA employees in the higher risk health categories,
- financial commitment from Optima related to our ability to deliver actionable information as well as disease management programs to COVA leadership,
- numerous Health and Wellness programs, such as, the WalkAbout exercise program, self-paced individual wellness programs, continuous direct mail reminders, educational material including the Healthwise Handbook, onsite classroom sessions and wellness coordinator training,
- quarterly Clinical Consultation, and
- Web resources for members and benefit administrators.

With our established, well-proven health information technology capabilities and innovative approach to clinical care services, Optima is well aligned with Executive Orders 42 and 55 and uniquely positioned as a partner for COVA. As a result of Optima's innovative integrated approach, there will be higher employee and dependent satisfaction for COVA, improved health quality and more affordable healthcare.